University of Bath

**UNIVERSITY OF BATH**

**PHD**

**A critical ethnography of teacher development and change in a collaborative group setting to improve practice**

Salleh, Hairon

*Award date:*
2008

*Awarding institution:*
University of Bath

[Link to publication](#)

**A Critical Ethnography of Teacher Development and Change**
**in a Collaborative Group Setting to Improve Practice**

Hairon Salleh

A thesis submitted for the degree of Doctor of Philosophy

University of Bath

Department of Education

February 2008

# TABLE OF CONTENTS

# APPENDICES

# DIAGRAMS

# TABLES

# PHOTOGRAPHS

# ACKNOWLEDGEMENTS

# ABSTRACT

The research study provided a cultural description and interpretation of how Teachers Network Learning Circle's participants related, worked and learned with each other, and how they developed and changed within a predominantly symmetrical or consensual power relationship. The participants, consisting of six Singapore primary teachers at grade 4, were engaged in group discussions that were spread over a period of one year to complete an action research project which is integrated in day-to-day work. Teachers Network Learning Circle, a formal professional development platform. employs distinctive tools for dialogue and inquiry based on the principles of voluntary participation, reflection, change and trust. The fundamental reason for choosing this site is its potential to empower and emancipate teachers evident from not only the principles and practices it espouses, but also its vision and mission that is consistent with its motto "For Teachers, By Teachers". The literature on education change and reforms has point towards teacher empowerment for successful education change. In this regard, investing in teacher professional development and professionalism is important. The literature also point towards embracing a sociological perspective evident in the notions of community and socio-cultural theory, and bringing to bear emotions, values and identity in teacher learning – and thus investing in the 'whole person' (Day, 1997). As power underlies all social relations and activities including teachers' learning, the research study took into consideration the perspectives of critical theory of Habermas, Brookfield and Mezirow. The findings of the study found that symmetrical power relation contributed to teacher development and change. First, it had contributed to a collegial collaborative relationship that took into account of emotions, moral, identity development and group solidarity. Second, it had contributed to the consciousness, critique and co-construction of professional knowledge. Third, it had empowered participants insofar as it built participants' capacities to act successfully within an existing system and structures of power. The symmetrical power relation was undergirded by rules and principles of democratic participation as outlined by Habermas' discourse ethics. The findings also revealed the importance of support given by the school principal and Teachers Network personnel in protecting democratic spaces, or Habermas' concept of the lifeworld, from the system imperatives of power and money.

# CHAPTER 1

# INTRODUCTION

**THE SEARCH FOR TEACHER EMANCIPATION**

My initial interest in pursuing a doctoral study that is slanted towards teachers' learning in small groups began when I was carrying a research study for my master dissertation at the Institute of Education, University of London in 1999 to 2000. The title of my dissertation was "The Impact of Educational Change – Within the Context of Globalisation, on Primary School Teachers in Singapore, England and Uganda. I wanted to find theoretical solutions to the challenges that teachers face in coping with education change and reforms. What I discovered had to do with the need for teacher empowerment and teacher emancipation (Hairon, 2003). While the former is defined as building people's capacities such as knowledge, energy and authority to act successfully within an existing system and structures of power - working within the system, on their own behalf (Inglis, 1997; Maynard, 2004), the latter is defined as enabling people to critically analyse, resist and challenge structures of power – trying to change the system, by separating themselves from constraining modes of thinking or acting that limit perception and action toward realising alternative possibilities (Inglis, 1997; Thomas, 1993). Both of them are closely related insofar as the former is a necessity to the latter.

I proposed that, for the recognition and legitimation of teachers' 'autonomous status', teachers needed to be given the autonomy to exercise their professional judgement in matters pertaining to decisions within the classroom and decisions outside the classroom that impinge on their professional practice. However, 'autonomous status' ought to be established through negotiation. School leaders need to widen the 'field of negotiation' by providing platforms where discussions and debates are valued for teachers to affect school policies through participatory decision-making. Teachers likewise need to widen this 'field of negotiation' by investing time and energy to create platforms for their voice to be heard in order to influence school policies. What is proposed is essentially a 'top-down and bottom-up integration' (Hargreaves, 1999), and a move towards greater school democratisation (Apple and Beane, 1999; Glickman et. al., 1998). I also proposed that in situations where platforms for widening the 'field of negotiation' are absent or given low priority, individual teachers ought to initiate the move towards

greater empowerment and democratisation. However, individual initiatives ought to determinately translate to collective initiatives and empowerment. This form of empowerment is defined as a "stepping stone from dependency and domination to a social and political circumstance in which interdependence and the importance of human agency are paramount" (Fielding, 1996, p. 412).

I am proposing that the social site which could bring about teacher empowerment and emancipation are learning sites such as Teachers Network Learning Circles. On the one hand, a social site that emphasises learning is perceived as a potential social milieu for teachers to become reflective, collaborative and 'activist' practitioners, and thus liberated from the system's deprofessionalising effects. On the other hand, a learning social site can be seen as contributing to the system's need for a workforce that are suited for the knowledge economy, and thus to remain relevant and sustainable in response to changes that are taking place at the global level.

## SINGAPORE'S EDUCATION LANDSCAPE

Singapore, as a nation that seeks to be an active player in global economic competition, is evidently not immune from the changes that are taking place at the global level. The announcement of a new vision "Thinking Schools, Learning Nation" (TSLN) by the former Prime Minister in 1997 marked the dawn of the Singapore government's efforts to respond to an uncertain changing future which is perceived to be characterised by highly economic global competition especially in the area of knowledge and technological innovation (Goh, 1997). Using the United States, Britain and Japan as examples, life-long education, training and learning for every Singaporean citizen were identified as critical for future wealth creation of the nation. 'Thinking Schools' were considered to be –

> "sites of learning for everyone, including those who shape our educational policies. Schools will provide lessons on how policies are working out on the ground, and give feedback on whether policies need to be changed. This process, of knowledge spiralling up and down the system, will be a defining feature of education for the future." (Goh, 1997)

The government's belief that schools play a key role in preparing young lives for the future workforce echoes with not only the People's Action Party (PAP) government's

longstanding strategy of closely linking education with the economy, but also the global consensus that education "has moved up the political agenda … is seen as the key to unlocking not just social but also economic problems" (OECD, 2001, p. 48).

Since the inception of TSLN, education in Singapore has gone through significant changes under the leadership of several education ministers covering matters of curriculum, assessment, pedagogy, staff appraisal, professional development, management and systems administration. These changes are substantive as they reflect the Ministry of Education's (MOE) gradual paradigm shifts – from isolated to systemic changes; from hardware and software to 'heartware' changes; and from technical changes to changes in beliefs. Understandably, these paradigm shifts cut across all public services. The changes in education do however have a common distinctive objective – that is, substantive changes in classroom teaching and learning. This was aptly evident in the education minister's comments at the MOE Work Plan Seminar 2004 entitled "To Light a Fire: Enabling Teachers, Nurturing Students".

> "I&E (Innovation and Enterprise) described the spirit of inquiry, and the tenacity, that we have to nurture in our students. It was also a call to all our teachers and stakeholders to re-look at the way we do things, and to reassess our assumptions and beliefs, so as to better realise the goals of an ability-driven education system … We are introducing greater flexibility into our educational structures and curriculum. But at its core, I&E is about a qualitative change in the interactions between teachers and students, in and out of the classroom. It is about teaching less and learning more, about spurring independent thinking and learning, and about encouraging students to follow their passions. It requires that we reassess the 'why' and the 'how' of teaching and learning … We will enable our teachers, so that they can take education to a higher plane. We will provide them with more time and space to reflect on their teaching and innovate, and to motivate and inspire their students. We will also help them to build up their capabilities as teaching professionals." (Tharman, 2004)

The education minister recognised not only the importance of substantive changes in pupils' learning, but also the intimate linkage with building teachers' professional lives

and learning. In addition, he has recently affirmed this commitment by providing top-down support for bottom-up initiatives and freeing up an average of two hours per week for each teacher (Tharman, 2005). While one hour timetabled time will be given to teachers to reflect, plan lessons and engage in professional sharing, another hour is in the form of reduced administrative workload.

Although the importance placed on improving teachers' standards has been stressed since 1998, it was mainly focused on matters relating to staff recruitment and retention, and at best 100-hour of in-service training entitlement. However, the in-service model that has been commonly and pervasively used in the education service has not been substantially and critically questioned. Nevertheless, professional development has now received an increased importance especially in view of the current MOE discourse on I&E and TLLM (Teach Less, Learn More) and the broader discourse on educational change.

## THE ESTABLISHMENT OF TEACHERS NETWORK

The launch of Teachers Network in April 1998 spearheaded by Nicholas Tang Ning and his colleagues has been significant in introducing and promoting the notions of reflective practice and action research. The vision and mission of Teachers Network are as follows (Tang, 2000; Tripp, 2004):

- "To build a fraternity of reflective teachers dedicated to excellent practice through a network of support, professional exchange and learning"

- "To serve as a catalyst and support for teacher-initiated development through sharing, collaboration and reflection leading to self-mastery, excellent practice and fulfillment."

The establishment of Teachers Network is not only a mark of innovation, but also a revolutionary approach in the professional development of teachers. Its distinction lies in its bottom-up approach towards change as opposed to the commonly held practice of top-down change. This is affirmed by the previous education minister.

> "It (our education system) must go beyond head knowledge and skills if
> we are to achieve the goal of Thinking Schools, Learning Nation. The

school culture needs to change and our teachers must set the example and lead the way. Our teachers must be the catalysts of change … The Teachers' Network is one initiative which will help bring about this change. It will complement the comprehensive in-service training programme we have put in place for teachers." (Teo, 1998)

The above comments suggest that the system recognises the need for a type of professional development that encourages and affords teachers to initiate change in matters of both professional development and classroom teaching and learning. This is where I think Teachers Network Learning Circles can function to satisfy both the system's needs or needs of policy-makers and teachers' need for greater degree of professional autonomy.

**TEACHERS NETWORK LEARNING CIRCLES**

Teachers Network Learning Circles adopt a form of self-directed professional development where a group of teachers engage in action research to solve problems that have been collectively identified in relation to classroom pedagogy and practice. Participants attend eight 2-hour discussion sessions, which contribute to their annual 100 hours of training entitlement, over a period of 4 to 12 months. These sessions are facilitated by Teachers Network Professional Development Officers whose roles consist of providing leadership to discussions and research, identifying resource persons, functioning as critical friends, and assisting in the publication and/or presentation of research findings. However, the responsibility for facilitating Learning Circles is gradually placed in the hands of school staff over a two to three year period. The facilitators adopt a type of discussion that is democratic in nature. Teachers Network also promotes the idea of rotation of the facilitation function. Furthermore, resource persons such as an educator who has experience in teaching mathematical problem solving are also invited to provide professional input to the discussion.

Learning Circles' participants are involved in an action research cycle of initial reflection, planning, action, observation, critical reflection and documentation. The 2-hour discussion sessions spread throughout the year provide the time and space for participants to accomplish the action research cycle. The first two to three discussion sessions are to explore and agree on the Area of Concern (AOC) and Research Question (RQ). This constitutes the initial reflection phase. The following one to two discussion

sessions are to explore and agree on the intervention framework. This constitutes the planning phase. The action phase is for participants to implement the intervention programme. However, participants could spend one to two discussion sessions to modify or refine the intervention programme. The observation phase is when participants collect and analyse data to find out about the effectiveness of the intervention programme. One to two discussion sessions could be used to discuss on how and what had been collected and analysed. The critical reflection phase takes place last where participants make meaning between the findings and their research questions, and explore the implications of the group's action research project in terms of future Area of Concern and Research Question.

The major tenets of Learning Circles are voluntary participation, reflection, change and trust. On the whole, the espoused purposes, principles and espoused practices of Teachers Network Learning Circles point to a new identity for a teaching profession that embraces the following characteristics –

- Collegial
- Collaborative
- Team spirit – supporting each others' work and learning
- Reflective practitioners
- Enquirers
- Life-long learners
- Activists in education change

The initial conceptualisation of Teachers' Network Learning Circles was influenced by Senge's five discipline of a learning organisation – systems thinking, personal mastery, mental models, building shared vision and team learning (1990), in addition to notions of constructivism promoted by Dewey, Bruner, Piaget and Vygotsky, 'androgogy' (Knowles, 1980); 'community of practice' (Wenger, 1998); knowledge building through social networks (Freire, 1973); and 'open systems' (Wheatley, 1992).

Teachers Network Learning Circles are an attempt at not only challenging traditional discourses, but also proposing new discourses relating to professional development. Based on its espoused principles, practices and purposes, Teachers Network Learning Circles may provide the medium for the accomplishment of an 'unconstrained

*6*

discursive will formation' proposed by Habermas (Alway, 1995) which is needed to raise the level of consciousness and autonomy, and therefore empowerment, of teachers in response to the current needs of the education system which has the tendency to favour system imperatives of power and money. This translates to crises such as intensification of teachers' work and the alienation of teachers. In a nutshell, Teachers Network Learning Circles are potential sites for not only teacher professional learning, but also teacher empowerment and emancipation.

**ORGANISATION OF THE THESIS**

There are altogether six chapters in the thesis including the first chapter (Introduction). In the second chapter (Literature Review) I will provide the theoretical framework which has influenced my decision to investigate Teachers Network Learning Circles. The third chapter (Methodology) contained the description to the rationale, methods (data collection and data analysis), ontological and epistemological justifications, ethical issues, and limitations in the adoption of the critical ethnography proposed by Carspecken (1996, 2001). I will also state the main research task along with the research questions of the study in this chapter. In the fourth chapter (Findings), I will provide a description of the findings based on the hierarchical scheme of codes generated from the data analysis. Key findings will be highlighted along with selected segments of the data analysis in order to give readers an idea of how the findings are linked to data. In the fifth chapter (Discussion), I will provide a brief summary of the findings followed by a discussion on four aspects of significance that contribute to the knowledge about teachers learning in groups. Finally, in the sixth chapter (Conclusion), I will summarise the research study followed by an outline of key implications emanating from the research study.

# CHAPTER 2

# LITERATURE REVIEW

In this chapter, I will describe the theoretical framework that forms the conceptual rationale and basis for my research study. The theoretical framework will also provide justification for my decision to select Teachers Network Learning Circles as the site of my research study. The framework is based on the integration of several discourses: education change and reforms, teacher professional development and learning, and teacher change.

The literature review starts with an exploration on issues and problems pertaining to education change and reforms alluding to three key aspects of analysis comprising teacher professionalism, learning organisation and systemic coherence. My concern is focused centrally on how teachers are coping, or rather not coping well, with education change and reforms which are closely linked to forces of globalisation. And within this discourse, I will explore how teachers could gain back or protect their professional status and identity. In this sense, I am in support of Apple's 'intensification thesis' (Apple, 1986; Ballet *et al.*, 2006) and 'labour process theory of teachers' work' (Smyth *et al.*, 2000). A possible response which has emerged from the literature on education change and reforms is teacher learning within conducive, facilitative or supportive organisational and system structures. It has been observed that continuing professional development of teachers has become increasingly associated with educational change particularly in terms of school reform efforts and improving student achievement (Ashdown, 2002). Day and Sachs (2004) even claimed that continuing professional development is no longer an option but an expectation of all professionals. Hence, teacher professional development and learning is intimately linked with education change and reform.

Although the literature on teacher professional development and learning proposed several conditions necessary for successful teacher professional development and learning, one condition stood out most among the rest – that is, the need for teacher professional development and learning to be emancipatory. In this regard, learning is considered as any other social activity, and therefore cannot escape the power relations

and dynamics that underlie all social relations and activities. Echoing Bourdieu, power is indeed not a separate domain of study but stands at the heart of all social life – *"For Bourdieu, no expression of sociability or its symbolic representations can be detached from its constitutive power relations"* (Swartz, 1997, p. 6). Furthermore, the study of power relations in teacher professional development and learning has yet to be explored extensively and in depth. The analysis of power relations of teacher professional development and learning will also provide a sociological contribution to the current discourse on teacher professional development. It will provide a rich, contextual and holistic description of how teachers learn, and the changes that take place at the individual and collective levels. Teachers Network Learning Circles are appropriate sites for such an analysis because they not only contain characteristics of new forms of teacher professional development and learning, but also cultural values that promote emancipatory ideals.

## EDUCATION CHANGE AND REFORM

Attempts at education change for the past twenty years or more had been unsuccessful as a result of several conditions: the neglect of teachers' professional practice and development (Caldwell, 1997; Hargreaves and Evan, 1997; House, 2000; Wideen, 1994); silencing of teachers' voices (Calderhead, 2001; Goodson, 1997; Sarason, 1996) non-collaborative school culture (Hargreaves, 1994); the decentralisation-recentralisation paradox (Caldwell, 1993, 1997; Elliot, 2000); and lack of resources (Fullan and Hargreaves, 1991; Sarason, 1990, 1996). Although the conditions for the failure of education change and reform are multi-faceted, the literature suggests that the central problem lies in policy-makers' tendency to rely on top-down approaches to change and reform, and the neglect of teachers' professional practice and development, and silencing of teachers' voice. These issues are directly related to issues of power relations. The reliance on a top-down approach is understandable because of the historical bureaucratic legacy commonly resident in modern states. The effectiveness of this top-down approach to change, however, has been put in question. It is now established that the move from policy conception to implementation is not without problems, contradictions or tensions. In this sense, it is therefore understandable that teacher resistance persists. Other issues such as non-collaborative school cultures, the paradox of recentralisation and decentralisation, and lack of resources only serve to exacerbate the problems.

A review of the literature on education change suggests three areas worth considering when considering failures in education reform – teacher professionalism, learning organisations (Hargreaves, 1999; Miles, 1998; Senge, 1990) and systemic coherence (Hargreaves, 1999; Townsend, 1998). Although notions of teacher professionalism are closely related to the issue of power, notions of learning organisation and systemic coherence are no less relevant. How professionals learn within organisations and how system structures support teacher professionalism matter.

## Teacher Professionalism

Fullan and Hargreaves (1991) stressed the importance of treating *teachers as persons* – in other words, beyond the technical role. In this sense, personal development is equally important to professional development. The value of treating teachers as persons was also stressed by Hargreaves and Evans (1997) who stated that in order to make a difference there needs to be a professional culture that takes account both the emotional and intellectual strengths of teachers. This resonates with Day's (1997) proposal of professional development that invests in the whole person. With respect to responding to educational reforms, Fullan (1993) urged teachers to claim back their moral purpose in teaching which included facilitating critical enculturation; providing access to knowledge; building an effective teacher-student connection; and practising good stewardship. He claimed that many teachers enter the profession because they want to make a contribution – *"they want to make a difference" (p. 11)*. He proposed that teachers become change agents – being conscious about the nature of change and the change process, and proposed four core capacities required for building greater change capacity: *personal vision building*, *inquiry*, *mastery* and *collaboration*.

The second aspect of teachers' professionalism that surfaced in the educational change literature promoted the idea of *teachers as learners* – individually and collectively (Fullan, 1993). Fullan (1993) identified two kinds of learning for teachers: inner learning and outer learning. For the former, teachers are encouraged to find their own subjective meaning of life and learn even to become *'autotelic'* learners – thinking for oneself. For the latter, teachers are encouraged to find connectedness through collaboration. Teachers must build more connectedness which is balanced, authentic and involves the total person (colleagues, family members and friends). Further, Fullan and Hargreaves (1991, pp. 3-4) promoted the notion of outer learning through the concept of *'interactive professionalism'*. This embodies the notion that teachers, within

a collaborative culture, are allowed greater powers of discretion in making decisions with and on behalf of children. These joint decisions extend beyond sharing of resources, ideas and other immediate practicalities to critical reflection on the purpose and values of what and how they teach. Teachers must be more fundamentally accountable – engaging in dialogue, action and assessment of their work with other adults inside and outside schools. Fullan and Hargreaves (1991) also proposed practical action for teachers to help them become learners.

The third aspect of teachers' professionalism promotes the notion of teachers as change agents – that is, teachers being empowered to make decisions within the context of educational change. Fullan (1993) supported this notion by stating, "Individuals must take the initiative if we are to avoid becoming helpless, overworked, dependent victims of change forces." (p. 123). Similarly, in his review of the teaching profession in Australia during a period of change, Ingvarson (2000) suggested that teachers must be empowered. This power must both be given or delegated to teachers by government and taken up or developed by teachers – arriving at a new and non-coerced consensus on beliefs that exist within all levels of the school organisation. This needs to be formalised and systemised (Elliot, 2000). In this regard, Hargreaves and Evans' (1997) proposed that a professional body of teachers be formed that determines the following questions: What is professional knowledge? Who defines it? How can it be shared? How can it be made public? This concurs with Goodson's (1997) proposal of reviving and reinstating of the relationship between research knowledge, theoretical knowledge and teachers' professional knowledge. As professionals, teachers must speak with a united voice (Kelly, 1995). Developments in teacher professionalisation should also be supported by developments in the sociological, technical and economic processes of teachers gaining status and privilege (Darling-Hammond, Wise and Klein, 1999).

### Learning Organisations

As well as focusing on teachers as the unit of change, another unit of change should be the school as an organisation. Miles (1998) argued that school change efforts should not target primarily on individuals but the organisation as a whole. Individuals making up the organisation need to respond to change forces by being clear on the focus of change, making change organisational and systemic, and managing ongoing change processes (Cox and deFrees, 1991, cited in Fullan, 1993). Hargreaves (1999) argued that learning organisations are "not just about adopting ideas from outside but having the capacity to

create its own knowledge in its response to the challenges it faces." (p. 55) The role of school leadership therefore cannot be overstated. Its relationship with school structures and culture is crucial in the change process (Stoll, 1999). Furthermore, greater recognition has to be given to how changes to the ways organisations are put together, sometimes called second-order changes (Cuban, 1988), rather than working on efficiency and effectiveness (first-order changes). Hence, at the organisation level, successful change efforts must be accompanied by change in cultural values.

Learning at the organisation level also needs to materialise at the level of *'institutionalisation'* (Poster, 1999) where everyone is involved at all levels of the change process. Goodson (1998) stressed a similar concept but in a more progressive and extended sequence: *invention* (activities or ideas of educators), *promotion* (possibility of basic improvements in occupational role and status), *legislation* (accepted, established and institutionalised), and *mythologisation* (automatic support and licence granted). This leads to the need for systemic coherence in matters of educational change and reform.

## System Coherence

With regard to the connection between education change and system coherence, Fullan (2000) argued that teachers function within certain environments, or 'infrastructures'. emphasised that weak, unhelpful and contradictory infrastructures are why reforms failed. He further argued that governments play a huge part of the infrastructure to schools. In this respect, Townsend (1998) proposed that governments 'steer rather than row', and 'empower rather than serve'. This calls for systemic coherence with regard to education change and reforms agenda. A form of systemic coherence could also be found in the form of 'top-down' and 'bottom-up' integration (Hargreaves, 1999). He suggested that policies and resources be directed to allow schools to inventively fashion and evaluate new educational designs (bottom-up) that the centre (government) can later disseminate through the system in a form of a reform (top-down).

The call for systemic coherence also demands that change is balanced with stability (Miles, 1998). This also implies that successful education change and reforms must balance pressure and support, and avoid the 'pressure greater than support' syndrome (Fullan, 1991) common in past education change and reforms. Although there is the need for systemic coherence, there is also the need for 'contextuality' in change efforts.

In this regard, no two schools are alike. In their study comparing two schools in London and two from Singapore, which had been successful in improving 'against the odds', Mortimore and his colleagues (2000) found that

> "there is no one way of achieving improvement, no single recipe for turning round a school … improvement techniques must fit with the grain of the society rather than go against it … the will and effort to change have to come from within" (p. 143).

Hence, education change and reforms must take into consideration the uniqueness of each school in context of its community and society as opposed to using a blanket or 'one-size-fits-all' model. Governments are thus encouraged to re-assess their assumptions and policies on educational change and reforms – to go beyond the technical view of change (Wideen, 1994), steer rather than row and empower rather than serve (Townsend, 1998), devolve power locally (Angus, 1998; Caldwell, 1997), allow schools to be more 'reflexive' given the broad guidelines and framework of the government (Porter, 1999), and thus provide legitimacy in the professionalisation process of the teaching profession.

The principles and purposes of Teachers Network Learning Circles would appear to be consistent in addressing the primary concerns relating to teacher professionalism, learning organisations, and system coherence. With regard to teacher professionalism, the new teacher identity which Teachers Network seeks to propose resonates with notions of teachers as persons, learners and change agents. The value placed on reflective practice and enquiry is consistent with the notion of teachers as learners. The value placed on collegial and collaborative relationships among teachers is consistent with the notion of teachers as persons as it sees the learner as human beings who have social needs. The value placed on teacher-initiated development is consistent with the notion of teachers as change agents.

With regard to system coherence, Teachers Network Learning Circles have been successful at theoretically integrating its conceptual principles into the overall education system structure. Teachers could in principle choose to participate in Learning Circles and their commitment in number of hours is recognised as constituting part and parcel of teachers' professional development. In principle, the structure of Learning Circles is

consistent in matters of efficiency and quality ubiquitous of the education service in Singapore. And in principle, the official recognition given to Learning Circles would help school leaders buy-in to its principles and practices. In this way, schools are in good position to provide the infrastructure conducive for Learning Circles to be accepted and, perhaps, thrive.

## TEACHER PROFESSIONAL DEVELOPMENT AND LEARNING

Besides finding concurrence with the discourse of education change, the principles, purposes and espoused practices of Teachers Network Learning Circles directly or indirectly support current directions in teacher professional development and learning that have the following characteristics:

1. Learning that espouses notions of continual learning or lifelong learning.
2. Learning as being complex and diverse.
3. Learning as being collective-, collaborative- and community-oriented.
4. Learning as being practical and integrated with work.
5. Learning as being linked to educational processes and outcomes (student outcomes).
6. Learning that is personally meaningful – linking to values, morals and emotions.
7. Learning that is reflective- and inquiry-based and involves the interrogation of knowledge.
8. Learning as being supported by the organisational structure of the school.
9. Learning as being supported at the institutional or system level.
10. Learning as having a critical or emancipatory element.

These characteristics also depict the conditions necessary for effective teacher professional development and learning. However, before elaborating on the above characteristics, it is worth stating that I have decided to lump together the terms professional development, teacher development, continual professional development, professional learning and teacher learning as having more or less congruent characteristics. I share the loose definition stated by Villegas-Reimers (2003) that "professional development, in a broad sense, refers to the development of a person in his or her professional role" (p. 11). This would include other definitions that attempt to add detailed specific characteristics. For example, Glatthorn (1995) considered teacher development as the "professional growth a teacher achieves as a result of gaining

increased experience and examining his or her teaching systematically" (p. 41). Guskey (2000) defined professional development as "those processes and activities designed to enhance the professional knowledge, skills and attitudes of educators so that they might, in turn, improve the learning of students" (p. 16). Day (1999) provided a lengthy definition of professional development as consisting of

"all natural learning experiences and those conscious and planned activities which are intended to be of direct or indirect benefit to the individual, group or school and which contribute, through these, to the quality of education in the classroom. It is the process by which, alone and with others, teachers review, renew and extend their commitment as change agents to the moral purposes of teaching; and by which they acquire and develop critically the knowledge, skills and emotional intelligence essential to good professional thinking, planning and practice with children, young people and colleagues through each phase of their teaching lives" (p. 4)

Within the voluminous literature on professional development (Huberman, 2001), Kelchtermans (2004) observed that the amalgamation of the variant definitions of professional development has made it a new 'container concept' in the educational research discourse.

**Learning that espouses Notions of Continual Learning or Lifelong Learning**
The notion that learning should be continual, or lifelong, is now well established. Lifelong learning can be defined as –

"The development of human potential through a continuous supportive process which stimulates and empowers the individuals to acquire all the knowledge, values, skills and understanding they will require throughout their lifetimes and to apply them with confidence, creativity and enjoyment in all roles, circumstances and environments." (Longworth, 2001, p. 592)

In their attempt to philosophically distinguish between lifelong education and lifelong learning, Aspin and Chapman (2001) asserted that

"it is now becoming clear that policy-makers in countries, agencies and institutions widely across the international arena are devoting increasing attention to the notion that 'lifelong learning' is an idea to be promoted in education policies for the next century." (p. 11)

It was claimed that the term 'lifelong learning' was derived from three conceptions (Aspin *et al.*, 2001) – the instrumental need to prepare societies for the economy through the promotion of necessary skills and competences; the intrinsic need of learning for its own sake; and the need to provide educational opportunities over the whole of people's lifespan in bringing about informed and effective participation in society by all citizens. Lifelong learning in educational settings helps "construct and realize a satisfying and fulfilling life in a society that is mutually supportive, inclusive and just" (p. xxi).

In her review of literature on teacher professional development, Villegas-Reimers (2003) identified lifelong learning as a central process that begins from initial teacher education to retirement. Guskey (2000) stressed three defining characteristics, or processes, of professional development: intentional, ongoing and systemic. He argued that educators at all levels must be continuous learners throughout the entire span of their professional careers in view of the expanding knowledge in nearly every subject area and academic discipline. The notion of continual learning was also emphasised by Alexander and Murphy (1998), and surfaced the importance of learning that proceeds through common stages of development which are influenced by both inherited and experiential and environmental factors. In her attempt to promote an 'inside-outside' staff development model, Peery (2004) suggested that the process of learning ought to be emphasised over product, and "the continuous learning of teachers is valued above all" (p. 18).

However, it has been noted that the notion of continuity in lifelong learning requires support (Hawley and Valli, 1999). McKenzie (2001) emphasised that for lifelong learning to materialise, both individuals and organisations must play their part in investing in lifelong learning, and that authorities need to create an environment in which individuals and enterprises have greater incentives to invest on their own behalf.

The notion of lifelong learning or continual professional development is also related to the notion of duration of professional development. In their literature review on professional development, Garet and his colleagues (2001) identified three structural features that could contribute to the effectiveness of professional development: type of activity, duration and collective participation. They observed the necessity of professional development to be sustained over time, stating that the longer the professional development activities, the more likely they are to provide opportunity for in-depth discussion of content, student conceptions and misconceptions, and pedagogical strategies. Also, professional development activities that extend over time are more likely to allow teachers to try out new practices in the classroom and obtain feedback on their teaching. The most persuasive argument for lifelong or continual learning was made by Darling-Hammond (1998) – that is, greater achievement for students is inspired by teachers who have ongoing learning opportunities themselves.

**Learning as being Complex and Diverse**
Guskey (2000) questioned the effectiveness of the traditional approach of professional development, which regards professional development as special events that are restricted to three or four days during the school year, graduate courses and qualifications to attain better paid salaries, and the accumulation of time-based activities. Current discourse on professional development offers a much wider range of approaches to professional development (Day and Sachs, 2004; Guskey, 2000; Villegas-Reimers, 2003).

Literature pertaining to adult learning has also suggested a similar trend of adopting a more holistic view of learning. Merriam (2001) gave recognition to various forms of adult learning: andragogy and self-directed learning, transformative learning, informal and incidental learning, women's learning, context-based adult learning, and critical and postmodern perspectives on adult learning. In his book entitled 'Key Concepts in Adult Education and Training', Tight (2000) had alluded to the importance of adopting an eclectic and inclusive approach to learning concepts such as distance, open and flexible learning; experiential, problem-based, independent and self-directed learning; and androgogy, conscientisation and communities of practice.

Villegas-Reimers (2003) argued that professional development models have become more diverse but identified two main models.

<u>Organisational partnerships models</u>

- Professional development schools
- Other university-school partnerships
- Other inter-institutional collaborations
- Schools' networks
- Teachers' networks
- Distance education

<u>Small group or individual models</u>

- Supervision: traditional and clinical
- Students' performance assessment
- Workshops, seminars, courses, etc.
- Case-based study
- Self-directed development
- Co-operative or collegial development
- Observation of excellent practice
- Teachers' participation in new roles
- Skills-development model
- Reflective models
- Project-based models
- Portfolios
- Action research
- Use of teachers' narratives
- Generational or cascade model
- Coaching methods

Boyle and his colleagues (2004) came to the same conclusion as Guskey (2000) and Villegas-Reimers (2003) and argued that although traditional approaches foster teachers' awareness or interest in deepening their knowledge and skills, they appear "insufficient to foster learning which fundamentally alters what teachers teach or how they teach." (p. 47). They suggested other forms of professional development platforms such as study groups, coaching or mentoring; networks and immersion to enquiry. Perhaps, as teachers' practice is more often than not complicated and complex it is

understandable that teacher professional development and learning take on a more diverse and complex outlook.

Huberman (2001) understood the developments in professional development within the changing discourse of educational change, and speculated that these developments point to a network form of professional development. This would require movements from 'Closed Individual Cycle' to 'Open Individual Cycle', and from 'Closed Collective Cycle' to 'Open Collective Cycle'. These movements imply that teachers learn not only with teachers belonging to the same school, but also with teachers from other schools.

Day and Sachs (2004) understood the complexity in the purposes, design and processes of professional development as linked to the interconnections of teachers' biographies, social histories and working contexts, peer groups, teaching preferences, identities, phase of development and broader sociopolitical cultures. This notion has also been considered by Woods (2002) who maintained that although teachers' practice might be informed by certain principles, it is also loosely and variably influenced by social and cultural context, personal biographies and professional experience.

The increasing complexity that is evident in the discourse of professional development could also explain the different emphases and interpretation given to the term 'professional development'.

### Learning as being Collective-, Collaborative- and Community-oriented

Literature on professional development suggests the importance placed on notions of collectivity, collaboration and community (Day and Sachs, 2004; Garet *et al.*, 2001; Hoban, 2002; Huberman, 2001; Lester, 2003; Lieberman, 1994; Newmann, 2004; Peery, 2004; Rogers and Babinski, 2002; Villegas-Reimers, 2003). Garet and his colleagues (2001) provided several reasons to warrant the necessity of collaboration in the professional development discourse. First, teachers who collaborate with each other are more likely to have the opportunity to discuss concepts, skills and problems that arise during their professional development experiences. With regard to resolving problems, Hawley and Valli (1999) claimed that although learning relates to individual needs, for the most part individual needs are organised around collaborative problem solving. Second, teachers from the same school, department or grade level are likely to share common curriculum materials, course offerings and assessment requirements, and

to better integrate what is learnt to other aspects of instructional context such as assessment, administrative constraints and home-school relationships. Third, teachers who share the same students can discuss students' across classes and grade levels. Fourth, group collaboration help sustain changes in practice over time in the midst of incoming and outgoing members. Fifth, collaboration contributes to shared professional culture where common understanding of instructional goals, methods, problems and solutions can be developed. Sixth, collaboration can provide a forum for debate. Seventh, collaboration contributes to organisational routines, culture, learning and support that facilitate individual change effort. This is congruent with Sparks and Hirsh's (1997) suggestion for staff development to shift from individual development to individual and organisation development. Garet and his colleagues (2001) observed that little research is available on the effects of collective approaches to professional development, but there is some evidence that it can be effective in changing teaching practice. In addition to the benefits of teacher collaboration, it has also been perceived as being an important part of the teacher-professionalisation process (Klette, 2000).

In his review of literature on adult learning, Smylie (1995b) identified four conditions that could promote workplace learning. First, the need for ongoing opportunities for individual members to work together and learn from each other. Second, the need for opportunities for collegial collaboration in an open atmosphere that allow communication and the examination of taken-for-granted assumptions and beliefs. Third, collaboration that affords shared power and authority, and participatory decision-making. Fourth, the promotion of a certain degree of autonomy and choice for individual members within collaborative environment.

In his assertion to move away from cognitivist and situated perspectives on learning, and their implications to professional development, to a system thinking approach of professional development, Hoban (2002) surfaced the importance of collaboration that leads to the formation of communities. In doing so, he perceived learning and professional development within the discourse of situated theory of learning, and linked collaboration to the social nature of learning. He supported his stand by referring to Dewey's (1916) notion of a community as sharing in each others' activities and in each others' experiences as a result of common ends and purposes. This has also been affirmed by Alexander and Murphy (1998) who stated that learning "is as much a socially shared undertaking as it is an individually constructed enterprise (p. 38).

The importance placed on shared experiences has been observed by McLaughlin (2002) who situated collaborative practice in the notion of communities of practice. In this regard, he emphasised the importance of "building or rebuilding of shared understanding and language" (p. 113). This is also emphasised by Nelson and Hammerman (1996) especially in relation to teachers' professional knowledge. They conceived knowledge as the "dynamic and conditional product of individuals working in intellectual communities, not a fixed body of immutable facts and procedures" (p. 4). They claimed that providing a culture that supports teachers working and learning in communities is an appropriate response to education change and reforms. This implies the need for school leaders to encourage a school culture that supports and promotes teachers to lead and learn from one another (Lieberman, 1994). This is also in concurrence with the notion of 'teacher leadership' (Lieberman and Miller, 2004) which involves teachers in becoming inquirers, and agents of change in the globalised era, through collaborative and collegial means. The concept of communities within the discourse of professional development is, however, limited to individual teachers working in collaboration and within a community of teachers, although it could encompass wider communities including student, teachers, principals and support staff (Sparks and Hirsh, 1997).

The importance of collectivity, collaboration and community are also evident in the growing field of PLCs (Professional Learning Communities). Bolam and his colleagues (2005, p. i) defined PLCs as having the following eight characteristics:

1. shared values and vision
2. collective responsibility for pupils' learning
3. collaboration focused on learning
4. individual and collective professional learning
5. reflective professional enquiry
6. openness, networks and partnerships
7. inclusive membership
8. mutual trust, respect and support

They claimed that there is no universal definition of PLCs, and that the term may have shades of interpretation in different contexts but there is a broad international consensus

suggesting that PLCs are groups of people sharing and interrogating their practice in an ongoing, reflective, collaborative, inclusive, learning-oriented, growth-promoting way. Huffman and Jacobson (2003) defined PLCs within school discourse as referring to a school organisation in which all stakeholders are involved in joint planning, action, and assessment for student growth and school improvement. Bolam and his colleagues (2005) further claimed that the idea of PLCs is one worth pursuing as a means of promoting school and system-wide capacity building for sustainable improvement and pupil learning, and can thus be understood as a form of professional community within education reform discourse (Huffman and Jacobson, 2003; Lieberman and Grolnick, 2005).

Another concept that is related to collectivity, collaboration and community is community of practice (COP) which has been propounded by Lave and Wenger (1991) and Wenger (1998). In contrast to PLCs, COP has taken onboard more social aspects of learning. In my view, the popularity for COP in teacher professional development indicates the importance of including social theory to teacher learning. Social theory of learning resides within a range of other learning theories. In this regard, Wenger (1998) argued that theories of learning have been dominated by the field of psychology, and presented a chronological list of the developments in learning theories (Wenger, 1998, pp. 279-280).

- Behavioural theories focus on behaviour modification via stimulus-response and selective reinforcement. *(Skinner, 1974)*
- Cognitive theories focus on internal cognitive structures and views learning as transformations in these cognitive structures. *(Anderson, 1983; Wenger, 1987; Hutchins, 1995)*
- Constructivist theories focus on the processes by which learners build their own mental structures when interacting with an environment. *(Piaget, 1954)*
- Social theories take social interactions into account, but still from a primarily psychological perspective. They place the emphasis on interpersonal relations involving imitation and modeling, and thus focus on the study of cognitive processes by which observation can become a source of learning. *(Bandura, 1977)*

Wenger (1998) had also observed that some learning theories are moving away from an exclusively psychological approach to include others such as activity theory (Vygotsky, 1934; Wertsch, 1985; Engeström, 1987), socialisation theories and organisational theories (Argyris and Schön, 1978; Senge, 1990), and proposed that his theory on COP is substantively unique in relation to these learning theories.

COP was recently defined as "groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis" (Wenger, McDermott and Snyder, 2002, p. 4). In terms of developing COP, they identified three elements for consideration: domain, community and practice. The domain is primarily about a negotiating a shared interest. A community must ask itself, "What topics and issues do we really care?" and "What is in it for us? Negotiating a shared domain would help the community in developing a shared understanding of its domain, finding its legitimacy in the organisation, and engaging the passion of its members. In pursuing the interest of its domain, members engage in joint activities and discussion, help each other, build relationships and share information. This constitutes the community element. Questions that could be ask include "What roles are people going to play" and "What kinds of activities will generate energy and develop trust?" The practice element focus on developing a shared repertoire of resources: experiences, stories, tools, ways of time and sustained interaction. Questions that can be asked include "What knowledge to share, develop and document" and "When should processes be standardised and when are differences appropriate?" The three elements – domain, community and practice – are the essential constituents of COP.

Although this definition looks rather simplified, the substantive definition of COP is much richer than this. The simplicity of this definition is, in my view, the result of the attempt to make COP palatable and usable to lay practitioners. However, this definition could also diminish the understanding of the social aspects of learning which was previously propounded. Earlier, Wenger (1998) provided a more detailed exposition to the notion of COP which gives importance to the intersections of concepts relating to community, social practice, meaning and identity. In this book, he made following assertion –

*Communities of Practice* presents a theory of learning that starts with this assumption: engagement in social practice is the fundamental process by which we learn and so become who we are. The primary unit of analysis is neither the individual nor social institutions but rather the informal "communities of practice" that people form as they pursue shared enterprises over time. In order to give a social account of learning, the theory explores in a systematic way the intersection of issues of community, social practice, meaning, and identity. The result is broad conceptual framework for thinking about learning as a process of social participation. (p. i)

Wenger's (1998) key assumptions about learning and its relation to the nature of knowledge, knowing and knowers in the following way (p. 4):

- We are social beings. Far from being trivially true, this fact is a central aspect of learning.
- Knowledge is a matter of competence with regard to valued enterprises such as singing in a tune, discovering scientific facts, fixing machines, writing poetry, being convivial, growing as a boy or a girl, and so forth.
- Knowing is a matter of participating in the pursuit of such enterprises, that is, of active engagement in the world.
- Meaning, our ability to experience the world and our engagement with it as meaningful, is ultimately what learning is to produce.

Learning is understood as social participation which involves more than just engagement in certain activities with certain people. Rather, social participation refers to "a more encompassing process of being active participants in the practice of social communities, and constructing identities in relation to these communities" (p. 4). Social participation is said to shape what we do, who we are and how we interpret what we do. It is evident that Wenger's priority lies in the practice of social participation. Wenger (1998) conceptualised the components of a social theory of learning in the following diagram –
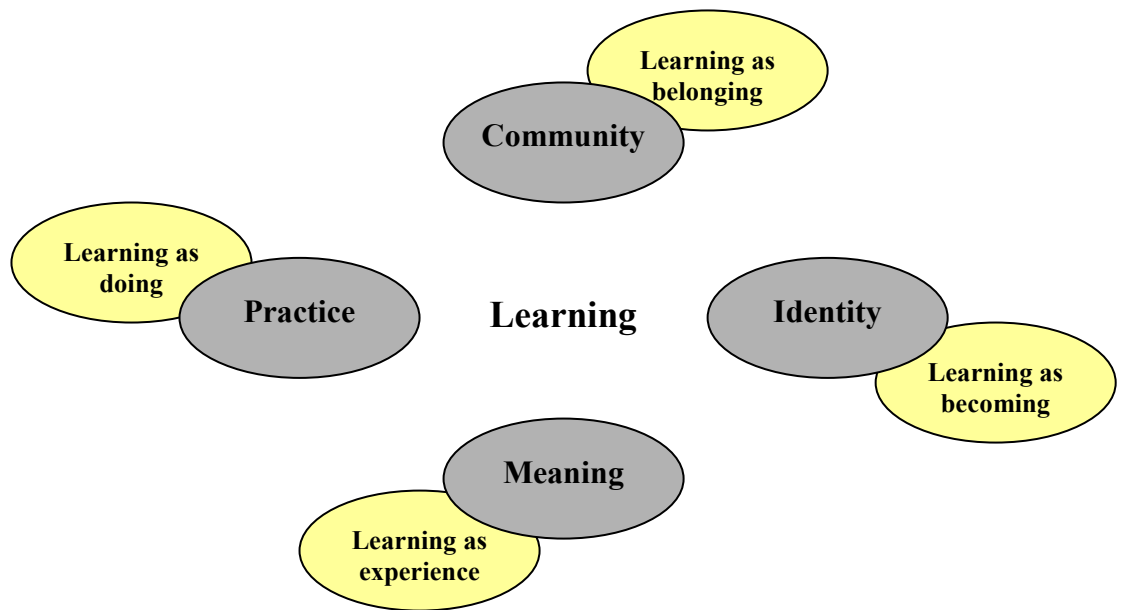
*Diagram 1: Components of a social theory: an initial inventory*

Meaning is considered as a way of talking about our (changing) ability – individually and collectively – to experience our life and the world as meaningful. Practice is a way of talking about the shared historical and social resources, frameworks and perspectives that can sustain mutual engagement in action. Community is a way of talking about the social configurations in which our enterprises are defined as worth pursuing and our participation is recognisable as competence. Identity is a way of talking about how learning changes who we are and creates personal histories of becoming in the context of our communities. Wenger (1998) claimed that these components are deeply interconnected and mutually defining.

From my observation, Wenger (1998) demonstrated a preference towards viewing structure and agency, or his preferred term 'situated experience', as a form of duality or interdependence as opposed to dualism or dichotonomy. Furthermore, the fact that Wenger (1998) had included concepts such as identity, meaning and power, showed him to be true in his attempt at including the fields of anthropology, sociology, cognitive and social psychology. This eclectism is consistent with the notion that conceptualisations of learning needs to be broadened (Diagram 2).
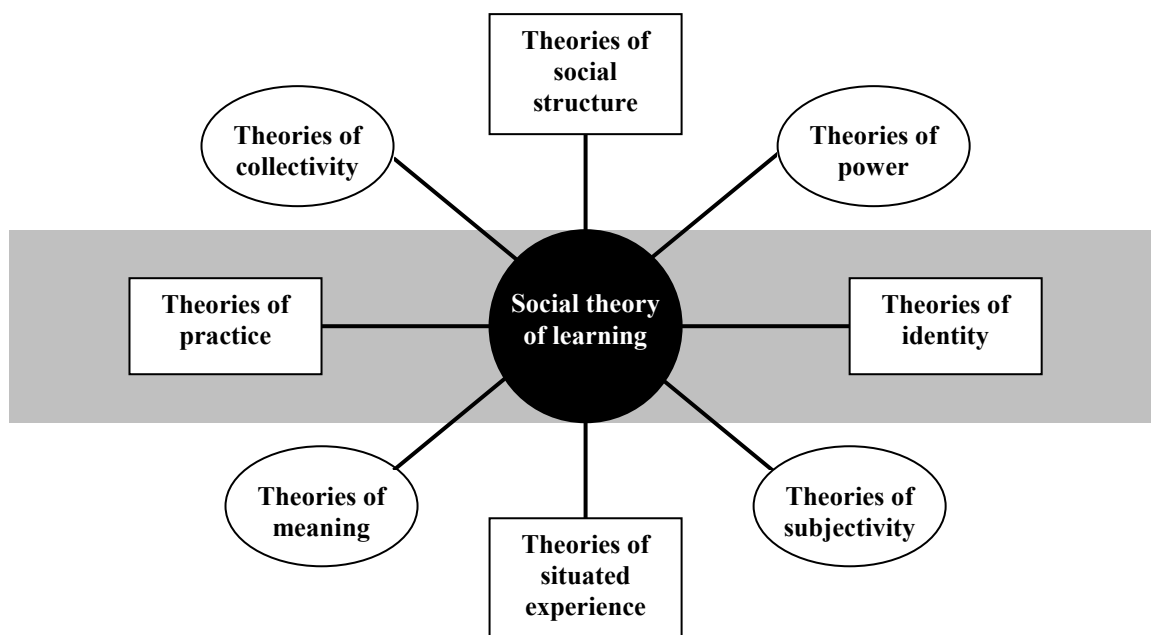
***Diagram 2: Refined intersection of intellectual traditions***

In his attempt at integrating the different intellectual traditions in building up a substantive theory of COP which include a series of dialectic relationships between relevant concepts, the integration is nevertheless, in my view, not a coherent one. While I can concede and agree to the material existence of the duality of structure and agency, the duality between practice and identity which Wenger attempted to spell out does not have the same oppositional character. Using the same argument, the oppositional character between power and meaning is also weak. What is definite in Wenger's (1998) theoretical framework is that he focused on practice and identity at the expense of the duality of structure and agency. The series of conceptual dualities such as practice-reification, identification-negotiability, communities-economies of meaning, which he had discussed in much detail throughout the book, are essentially located within the discourse of social participation. It is, therefore, true to say that Wenger (1998) is proposing the theory of communities of practice – simply stated, the study of how communities are formed through individual endeavouring to participate in communities through shared practice and meaning. Indeed, Wenger (1998) himself claimed that he has no intention of proposing a grandiose synthesis or resolution of the debates that are inherent in these intellectual traditions.

Besides COP, another form of learning that is related to collectivity, collaboration and community is Community of Practice (COP) which has been propounded by Lave and

Wenger (1991) and Wenger (1998), and which has potential to broaden the conceptualisations of teacher learning is what is termed as socio-cultural theory of learning which was systematised and applied by Vygotsky and his Russian collaborators in 1920s and 1930s. Socio-cultural theory of learning is understood as involving not only social, but also cultural aspects of learning. Language, thus, plays an important role in not only the transmission of culture, but also the means by which individuals learn from one another. Socio-cultural approaches, thus, emphasise the interdependence of social and individual processes of co-construction of knowledge (John-Steiner and Mahn, 1996). Individual development is thus derived from interaction with the vast experiences of others within a person's life. In this regard, Vygotsky developed the concept of the zone of proximal development (ZPD) – "the distance between the actual developmental level as determine through independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978, p. 86). John-Steiner and Mahn (1996) further claimed that socio-cultural theorists further expanded the concept of ZPD by conceptualising learning as distributed, interactive, contextual, and the result of the learners' participation in a community of practice.

The key assumption in socio-cultural theory is that human activities take place in cultural contexts; are mediated by language and other symbol systems; and can be best understood when investigated in their historical development (John-Steiner and Mahn, 1996). It is claimed that Vygotsky attempted to "construct accounts of the formation of the mind which, to varying degrees, acknowledge social, cultural and historical influences" (Daniels, 2006, p. 164). It can be said that Vygotsky's work stood in stark contrast to reductionistic psychological conception of learning as he proposed the development of a rich and multifaceted theory of learning. Vygotsky's socio-cultural or socio-historical theory of learning has, however, been interpreted and expanded in diverse ways (John-Steiner, 1996; Mahn, 1999).

Besides looking at learning from social, cultural and historical perspectives, socio-cultural theory also gives priority to mediation which centrally involves cultural artefacts such as speech or activity (Daniels, 2006). In terms of teacher learning, this provides a conceptual potential at analysing teachers' dialogue or discussion in collegial and collaborative settings. While the first generation of activity theory links human actions (subject to object) to cultural artefacts or mediational means such as writing,

speaking and music, the second generation of activity theory expanded the first generation of activity theory by integrating three social elements: rules, community and division of labour (Engeström, 1999). The third generation of activity theory considers the conflictual nature of social practice as a source of social transformation not only to the subject, but also the environment through interacting activity systems (Daniels, 2006). In his developmental analysis of first, second and third generations of activity theory, Daniels (2004, 2006) sought to emphasise the importance of power and control within developing activity systems, and the role of discourse – as of cultural artefact, which mediates subject-object relations, and hence the transformation of the mind.

## **Learning as being Practical and Integrated with Work**

Another defining feature of new modes of professional development is that learning needs to be practical in nature and be closely linked to, and integrated in, day-to-day work. Guskey (2000) observed the tendency for educators to adopt a narrow view of professional development which does not link professional development with the day-to-day work of teachers. He proposed that changing classroom practices ought to be a key goal of professional development, along with changing students' learning outcomes and teachers' attitudes and beliefs. This implies that if professional development does not address the practices of classroom teaching, changes in learning outcomes of students and teachers' attitudes and beliefs will not materialise. The shift towards the kind of learning that needs to be practical in nature and closely linked to and integrated in day-to-day work perhaps explains the necessity for learning to be considered as *"job-embedded activities"* (Lester, 2003, p. 53). Sparks and Hirsh (1997) alluded to this when they proposed that training ought to shift "from training conducted away from the job as the primary system for staff development to multiple forms of job-embedded learning" (p. 12). This could shift the focus more on changes in on-the-job behaviours, student needs and learning outcomes rather than adult needs and satisfaction. Essentially, there is a need to link professional development to changes in classroom practices (Garet *et al.*, 2001; Guskey, 2002, Villegas-Reimers, 2003)

Professional development that focuses on classroom practices would imply the need for professional development to have a close link with content (Garet *et al.*, 2001), teaching strategies (Boyle *et al.*, 2004) and knowledge about teaching (Corcoran, 1995; Garet *et al.*, 2001). Changes in classroom practices would also imply changes to knowledge about teaching (Corcoran, 1995), and teachers' judgement (Little, 1992).

Garet and his colleagues (2001) identified the importance of active learning in effective professional development projects. They conceptualised active learning as involving the following actions: observing, planning and implementation, reviewing students' work, presenting, leading and writing. This implies the promotion of professional development platforms that locate, or are embedded, squarely within the work of teachers. This embeddedness is also implied when Rogers and Babinski (2002) proposed that beginning teachers ought to be involved in problem-solving in new modes of professional development. Likewise, Hoban (2002) pointed to the importance of job-embedded learning when he stressed the importance of teachers being engaged in experiential learning within authentic contexts. All in all, successful professional development experiences should have a noticeable impact on teachers' work both in and out of the classroom (Villegas-Reimers, 2003).

The idea of learning in the workplace or informal learning has also been generally recognised in organisations outside of education. Perhaps, the movement of informal learning has been from organisations outside of education to school organisations. Garrick (1998) reckoned that the importance of informal learning as being concomitant to economics – that is, our post-industrial workplaces, where organisations have to be more innovative and competitive, and be better able to manage knowledge. Informal learning may include self-directed learning as promoted by Knowles (1975), networking, coaching, mentoring and performance planning (Marsick and Watkins, 2001).

## **Learning as being Linked to Educational Processes and Outcomes (Student Outcomes)**

The stress made in linking learning as being practical and integrated with work points to the need for professional development experiences that lead to students' outcomes which include both academic and non-academic aspects. With regard to academic outcomes, Villegas-Reimers (2003) had observed that a number of studies reported that the more professional development teachers have, the higher the levels of student achievement. However, the kinds of characteristics of professional development that link to student achievement is still relatively not known. Garret and his colleagues (2001) pointed to the importance of linking professional development with students' outcomes, but made the claim that relatively little research has been conducted on the

effects of alternative or new forms of professional development which include, among others, the goal of improving students' achievement. Boyle and his colleagues (2004) had also made a relatively similar remark when they claimed that little high-quality research has been conducted on either the relationship between characteristics of professional development and gains in student achievement. They also postulated that the link between characteristics of professional development and student achievement could be the changes in pedagogy or classroom practices.

This is supported by Guskey (2002) when he proposed a model of teacher change that required changes in professional development that lead to changes in teachers' classroom practices, which led to changes in student learning outcomes. He further proposed that changes in student learning outcomes would lead to changes in teachers' beliefs and attitudes. Hence, the importance of the forms of professional development that would effectively lead to changes in student outcomes. Sparks and Hirsh (1997) alluded to the need for professional development experiences that focus on student needs and learning outcomes and lead to changes in teachers' on-the-job behaviours. The link between professional development and student outcome is so important that Hawley and Valli (1999) identified it as the first eight principles of effective professional development. They stated that professional development "should be driven by analyses of the differences between goals and standards for student learning and student performance" (p. 139). Darling-Hammond (1998) is therefore correct to claim that teachers are motivated by students' learning. It is therefore understandable that Hoban (2002) included students' feedback as one of the components of a system thinking approach of professional development.

**Learning that is Reflective- and Inquiry-based and Involves the Interrogation of Knowledge**

The discourse on learning at the turn of 21st century brought to the fore the importance of knowledge creation and interrogation. Knowledge has now become the foundation for all future learning (Alexander and Murphy, 1998). Likewise, the discourse on learning in teacher professional development must now be grounded in knowledge about teaching. This was emphasised by Corcoran (1995) who proposed that learning in teacher professional development must model constructivist teaching. Nelson and Hammerman (1996) echoed the same emphasis when they asserted that current reform agenda requires teachers to focus more on reconceptualising and reinventing the overall

nature of their teaching practice than on mastering new technical skills. They proposed that teaching needs to "become an intellectual endeavour, one in which teachers and their students inquire deeply into the nature of knowing rather than a technical craft in which teachers arrange activities that lead students to having the 'right' concepts" (p. 4). Adopting a socio-constructivist epistemological position, they considered knowledge as a dynamic and a conditional product of individuals working in intellectual communities, and not a fixed body of immutable facts and procedures.

Nelson and Hammerman (1996) also cited research findings that pertained to mathematics teachers engaging in socio-constructivist learning. Primarily, teachers who were engaged in socio-constructivist learning experienced a set of four changes – in their beliefs about learning; in the nature of mathematical knowledge; in the depth and flexibility of their own mathematical knowledge; and in their repertoire of instructional practices. They also reported that the speed of these changes was considerably enhanced when teachers were part of a group working collaboratively within a supportive school system – that is, when teachers were part of a professional culture that supports inquiry.

The importance of knowledge in teachers' practice had been emphasised by Cochran-Smith and Lytle (1999). They distinguished three substantively and strategically different conceptions of knowledge that relate to teachers' learning and change – knowledge for practice, knowledge of practice and knowledge in practice. Knowledge for practice is the formal knowledge and theory generated by researchers and university-based scholars. Knowledge of practice is generated when teachers critically examine their own classrooms and schools as sites of inquiry and examine them in terms of broader social and political issues such as social justice, equity and student achievement. It is neither formal nor practical knowledge. It can be produced by teachers themselves or may involve data analysis provided by outside evaluators or researchers working with or without teachers' involvement. Knowledge in practice is what teachers come to understand as they reflect and systematically inquire on their practice. It is practical knowledge. All three forms of knowledge are deemed important and relevant to current calls for reform in teaching and learning (McLaughlin, 2002).

Besides these three types of knowledge, Day and Sachs (2004) added a fourth type of knowledge – Knowledge of self. This is knowledge generated by teachers engaging regularly in reflection in, on and about their values, purposes, emotions and

relationships. In this sense, Day and Sachs (2004) placed importance on the value of reflection. The importance of teachers being reflective practitioners has already been well accepted since Schön's (1983, 1987) work on reflective practice. In fact, some writers take reflective practice to the extreme as being both active and militant – in other words, "infusing action with a sense of power and politics" (Smyth, 1995, p. 109).

Besides questioning and interrogating public knowledge, Day and Sachs (2004) also pointed to the importance of questioning and interrogating the knowledge that resides in the teacher – that is, their assumptions, beliefs and knowledge. Hoban (2002) echoed this when he proposed that teachers situated within a system thinking approach to professional development ought to be engaged in reflection which entails the questioning of their assumptions, beliefs and knowledge. In addition, Forde and her colleagues (2006, p. 69) argued that "the models of reflection which are most beneficial tend to be those that are based on encouraging practitioners to critique their practice and the values that underlie it". This supports the concept of double-loop learning as proposed by Schön (1983, 1987), which essentially involves the learner to question and change the governing variables such as values and rules that influence actions instead of just operationalising these variables in action common in single-loop learning. Guskey (2002) also pointed to this when he claimed that one of the goals of professional development is to change teachers' attitudes and beliefs. It would seem that reflection, reflective practice or reflective dialogue and inquiry seem to go hand-in-hand (Fiszher, 2004).

Besides reflection, systematic inquiry has the potential to engage and interrogate teachers' beliefs. Hawley and Valli (1999) proposed for information rich environment where the provision of multiple sources of information helps engage teachers' beliefs, experience and habits. Day and Sachs (2004) emphasised the importance of inquiry oriented and evidence-based professional development practices that serve to interrogate the needs and purposes of teachers' complex worlds of teaching and learning. It would seem that inquiry-oriented approaches fit well with current developments of teacher professional development. Byrd and McIntyre (1999) had alluded to the importance of inquiry-based approaches to professional development when they cited the four primary goals of PDS (Professional Development Schools). And research-related efforts came in first. What is suggested here is that research-

related efforts have significant relations with the other three: teacher as decision-maker, teacher as teacher educator, and teacher as political activist.

In this regard, systemic inquiry in the form of action research or teacher research is also closely linked to the professional status of teachers. Bottery and Wright (2000) claimed that within a more facilitatory framework, action research could have a major effect upon the development of a reconstructed teaching profession. The close link between action research and teacher professional status had already been established starting from the work of Lawrence Stenhouse (1975), especially in his notion of the 'extended professionals' where teaching and researching are closely related. Teachers were perceived to be the best judges of their own practice. By taking responsibility for their own action, they inadvertently examine and influence their own practice. Extended professionals are committed to –

> "systematic questioning of one's own teaching as a basis for development; the commitment to and the skills to study one's own teaching; the concern to question and to test theory in practice by the use of those skills." (Stenhouse, 1975, p. 144)

However, the kind of teacher research or action research that has potential to contribute to a reconstructed teaching profession embraces the critical or emancipatory turn, and therefore must address the issue of power in social and institutional relations. Grundy and Kemmis (1982) alluded to this when they defined action research as –

> "research into practice, by practitioners, for practitioners … all actors involved in research process are equal participants, and must be involved in every stage of the research … The kind of involvement required is collaborative involvement. It requires a special kind of communication … which has been described as 'symmetrical communication', … which allows all participants to be partners of communication on equal terms … Collaborative participation in theoretical, practical and political discourse is thus a hallmark of action research and the action research."
> (p. 87)

Therefore teacher professional development and learning need to embrace the critical or emancipatory turn, and this will be discussed later in greater depth.

Interrogation of knowledge is also perceived to be important not only within communities of colleagues, but also and more so, within communities of dissent, diversity and discussion. Achinstein (2002) claimed that conflict is central to community. Furthermore, the community's potential for professional development and organisational learning is determined when teachers embrace their differences during conflicts. Hence, the community and collaborative aspects of reflection and systematic inquiry is important for knowledge creation. In his review of continual professional development, Kelchtermans (2004) asserted that continual professional development results from the continuous interactions of the individual teachers with their context. Reflection and inquiry must therefore take place within a context of inter-interactions among teachers. However, this context must allow taken for granted assumptions, beliefs and knowledge to be communicated and examined (Kelchtermans, 2004). The fundamental point of teachers engaging in reflection and inquiry for knowledge creation and interrogation is to move away from the "transmission of knowledge and skills to teacher by experts to the study by teachers of the teaching and learning process" (Sparks and Hirsh, 1997, p. 12).

**Learning that is Personally Meaningful – linking to Values, Morals and Emotions**
Another defining feature of new modes of professional development is learning that is personally meaningful (Day and Sachs, 2004). In this regard, teacher professional development ought, therefore, to go hand-in-hand with teacher personal development and growth (Day, 1999). What can be concluded here is that the needs of formal organisational aspect of professional development ought to coincide with the needs of informal personal aspect of professional development. Ashdown (2002) discussed this in her analysis of an in-service course – the Reading Recovery project. Besides positive experiences, teachers involved in the in-service course had negative experiences which resulted from the professional development experiences that were felt to be undermining, time-consuming, isolating and frustrating. The feelings of being undermined came as a result of being exposed to their own inadequacies. They felt resentful of the amount of work that needed to be completed, as it took time away from other more desirable activities. They also felt that they were missing out on the opportunities to meet with colleagues. Teachers' social need to interact and build bonds

with each other was therefore denied. They expressed feelings of frustration especially during the initial phase of the change process. Frustrations were also brought about by not being able to see the benefits of increased knowledge and skills, and the persistence of feelings of incompetence and failure.

Kelchtermans (2004) recognised the personal aspect of professional development by stressing the need to situate teachers within their different stages of career within their own biographies. He proposed that "teacher learning at a certain moment of time can only be understood against the background of earlier experiences on the one hand and in terms of the teachers' expectations about the future on the other" (p. 224). The work context must therefore take into consideration teachers' biographies. He further elaborated on the need for professional development to take into account of what teachers' find personally meaningful in terms of costs and benefits. He concluded the benefits always have to do with personal interests of teachers, and that professional development has to eventually improve pupils' learning. In this sense, "teaching and teacher development can't escape an inherent moral dimension" (Kelchtermans, 2004, p. 223).

Grimmett and Neufeld (1994) had touched on the moral aspect of teacher professional development with their notion of 'authenticity'. Extending and modifying the concept of moral leadership promoted by Sergiovanni (1992), they proposed that teachers strive "to do not what the organisation rewards, not what they themselves find intrinsically and professionally satisfying, but what is good and important for learners in any given context and set of circumstance" (p. 4). They claimed that the struggle for authenticity is a moral quest requiring teachers to transcend traditional and alternative forms of motivation to engage in the pursuit of moral aims, questions and interpretations of teaching. Eventually, the struggle for authenticity involves "teachers in negotiating the necessary tension between creative originality and self-definition through dialogue around horizons of significance" (Grimmet and Neufeld, 1994, p. 3).

Leitch and Day (2001) alluded to the importance of personal biographies of teachers when they claimed that adult learning ought to combine personal and professional learning histories of teachers. Ball (1996) had also pointed to this importance by stating that what teachers bring to the process of learning to teach affects what they learn –

"teachers' own personal and professional histories are thought to play an important role in determining what they learn from professional development opportunities" (p. 501).

Goodson (2003) proposed teachers return to the role of the 'scribe' – that is, return to teachers' narratives and stories. In doing so, teachers' knowledge would become more and more personal and practical over time. He is thus proposing for a new 'vernacular of the particular, the personal and the practical' which is specific to teachers. However, teachers' knowledge ought to be located within its social milieux. This is important in view of the tendency for teachers to become divorced from what might be called the 'vernacular of power' – that is, the ways of talking and knowing which then become the prerogative of managers, administrators and academics. In this regard, he is alluding to the critical and emancipatory dimension of being a teacher.

The notion of linking professional development to personal development would also imply the need to include teachers' emotions – "Thoughts and emotion – cognition and affect – are intertwined" (McCulloch *et al.*, 2000, p. 82). Peery (2004) stated that in order to be an effective teacher, "one cannot be disconnected emotionally from self, subject matter, or students" (p. 13). Rogers and Babinski (2002) emphasised the need for new teachers to move away from traditional modes of professional development to embrace notions of emotional and personal narratives. Alexander and Murphy (1998) went a step further by proposing a link between emotions and agency. They claimed that motivational or affective factors such as intrinsic motivation, attributions for learning, and personal goals, along with motivational characteristics of the learning tasks, play a significant role in the learning process – the motivation/affect principle (p. 33). Hargreaves (2002a) went another step further to propose that emotions are moral phenomenon as they are intimately and inextricably bound up with our purposes. Purposes, the things that are important to us, "often drive or trigger our emotions" (Hargreaves, 2002a, p. 13). Also, emotions are not just personal matter but are "bound up with people's experiences of power and powerlessness" (Hargreaves, 2002a, p. 18).

Integrating personal and professional development also has close link with collaboration. In their study of identifying factors and barriers for promoting educational educational learning, Garcia-Morales and his colleagues (2006) found that personal development – understood as personal mastery – significantly and positively affects shared vision and team learning. And shared vision and team learning has an

impact on organisational learning. Hence, they proposed that educational organisations must encourage members to develop themselves both personally and professionally.

All this would suggest that learning in new modes of professional development need to take into consideration the 'whole person' (Day, 1999; Peery, 2004) – intellectual, emotional and spiritual aspects.

## <u>**Learning as being Supported by the Organisational Structure of the School**</u>

Another defining feature of new modes of professional development is the need for organisational support in teacher learning. The importance of school organisational support for effective teacher professional development has now been well established (Bolam and McMahon, 2004; Darling-Hammond, 1994; Guskey, 1995; Guskey, 2000; King and Newmann, 2004a, 2004b; Lester, 2003; Villegas-Reimers, 2003). King and Newmann (2004a) observed that although the aim of teacher professional development is to enhance student achievement, it is profoundly influenced by the organisations in which students and teachers work.

> The design of professional development should be grounded not only in how individual teachers learn, but also in a conception of how schools as organisations affect, and are affected by, teachers' learning (King and Newmann, 2004a, p. 26)

King and Newmann (2004a, 2004b) asserted that school capacity is influenced by three factors – teachers' knowledge, skills and dispositions; professional community and programme coherence. With regard to programme coherence, they stressed the need for coherence between programmes for students and staff learning. They also stressed the need to avoid reforms in professional development for the sake of change which are short-term in nature, but stressed the connectedness between reforms in professional development and school goals which are sustained over time. They also perceived programme coherence as important in promoting the building of teachers' knowledge, skills and dispositions individually and collectively, and hence building professional communities at the same time.

The need to integrate the conceptualisation of teacher learning and organisational support could be illustrated by the claim made by Richardson and Placier (2001) that

individual and organisational change literatures in the past had the tendency to stand on their own - almost entirely uninformed by the other. They alluded to the importance of understanding teacher change not entirely as an individually determined or only a psychological phenomenon, and suggested the need to understand both how organisations nurture or influence teachers' growth, and how teachers' growth influences organisation change.

Guskey (2000) understood organisational support to professional development as a systemic process, stressing that 'true professional development is a systemic process that considers change over an extended period of time and takes into account all levels of the organisation" (p, 20). In this regard, he asserted that fragmented, 'one-shot' and faddish approaches to professional development do not work. Teachers implementing faddish professional development innovations may see these approaches as passing fancies only, and thus undermining their motivation to carry through these innovations. Educators who organise these professional development approaches, on the other hand, may be unclear or misleading about the kind of organisational support required for implementation. In other words, organisers ought to understand structural or procedural barriers that exist within organisations which might hinder effective professional development. Essentially, when viewed systemically, professional development is understood as individual improvements as well as improvements in the capacity of the organisation to solve problems and renew itself (Guskey, 2000).

The need for coherent or systemic approach to professional development is also warranted by the fast and complex nature of educational change and reforms (Guskey, 2000). Lester (2003) noted the need for structure in professional development programmes within hectic school environment. Teachers are already so busy with administrative, curricular and extra-curricular matters, and getting them involved in professional development activities might exacerbate teachers' stress which will only render the professional development endeavour ineffective.

In their review of literatures pertaining to effective teacher professional development Garet and his colleagues (2001) noted the importance on fostering coherence – that is, "the extent to which professional development activities are perceived by teachers to be a part of a coherent programme for teacher learning" (p 927). Here, they identified three ways of assessing coherence. First, is the extent to which professional development

builds on what teachers have already learnt. Teachers must find integration with what they know in the past and link it to future work. Second, is the extent of alignment of content and pedagogy with national, state and local standards, frameworks and assessments. Misalignment could create tensions and inhibit effective professional development. Bolam and McMahon (2004) concurred with the notion of coherence when they proposed that professional development must shift from fragmented and piecemeal improvements to a clear, coherent strategic plan for school district, school or department. Third, is the extent of ongoing professional communication with other teachers who are trying to change their teaching in similar ways. Professional communication is important as it is perceived to help with change processes by encouraging the sharing of solutions to problems and a sense of collective ownership to change efforts.

In their research study involving analyses of the relationship between different features of professional development to teacher outcomes (content focus, active learning and coherence), Garet and his colleagues (2001) found that time span and contact hours had a substantial influence on opportunities for active learning and coherence. Examples of the former include opportunities to plan for classroom implementation, classroom observations, review of students' work, and giving presentations and demonstrations. Examples of the latter include connections to teachers' goals and experiences, alignment with standards, and professional communication with other teachers. They postulated that "professional development is likely to be of higher quality if it is both sustained over time and involves a substantial number of hours" (p. 933). School organisational structures must therefore provide for sustained period of time and contact hours for teachers to learn in order to make professional development efforts effective. In other words, schools must provide sustained support for professional development to be successful (Hawley and Valli, 1999).

In essence, new approaches to professional development must be able to jointly address the needs of both individual teachers and the school in a productive and purposeful manner (Ashdown, 2002). Guskey (1995) too supported the interdependence of meeting both teachers' and school's needs when he proposed that successful professional development approaches should not focus on finding the 'right answers' but on understanding context. In this regard, he proposed finding "the optimal mix of

individual and organisational processes that will contribute to the success in a particular context" (p, 119).

What is implied in the above discussion is the importance of school leaders and administrators to provide the necessary organisation support for successful professional development. Fullan (1987) recognised the importance of school leaders for successful staff development, and Futrell and his colleagues (1995) made a similar claim in a study of nine school districts in the USA – identifying local leadership as crucial in the relationship between educational reform and teachers' professional development. Finally, the importance of support by school leaders and administrators for professional development was raised as one of the six recommendations made by an international study conducted by the OECD from 2002 to 2004. The report stated that policy should be in place to provide schools with more responsibility for teacher personnel management (OECD, 2005, pp. 12-14).

## **Learning as being Supported at the Institutional or System Level**

The notion of support for professional development is not limited only to the school as an organisation but also includes a wider notion of support which cuts across organisations – that is, at the institutional level. In their review of professional development literature, Villegas-Reimers (2003) identified two main models or types of teacher professional development. One group pertains to small scale professional development models such as supervision, workshops, seminars, courses, case-based study, self-directed development, reflective models, action research and portfolios. Another group pertains to large scale professional development models such as professional development schools (PDS), university-school partnerships, inter-institutional collaborations, schools' networks, teachers' networks and distance education. The second group would imply the need of providing support beyond the school organisation – that is, support at the institutional level.

Just as support at the organisational level must exhibit clarity and coherence, support at the institutional level must likewise be so (Bolam and McMahon, 2004), and even more so in view of the increasing degree of complexity in the current change agenda. And just as the structures of school organisations affects teachers' work and learning, the structures of institutions affect schools and hence indirectly affecting teachers' work and learning. Policies that pervade at the institutional level therefore have much effect

on schools' practices. Kelchtemans (2004) emphasised the impact of policies at the institutional level on schools when he claimed that "policy environment deeply affects teachers' professional identities, as well as the goals, content and form of their professional learning" (p. 224). Darling-Hammond (1994) echoed the same importance by stating that institutional challenges affect the success and sustainability of Professional Development Schools (PDS). These could include tradition, low status of teachers and lack of incentives, financial and policy support.

## **Learning as having a Critical or Emancipatory Element**

The final key feature that had surfaced in my reading of the literature pertaining to professional development has to do with its critical or emancipatory dimension. This aspect pertains to notions of critical theory such as autonomy, agency, democratic practices, emancipation and social justice. These notions of emancipation are also related to the notions of professionalism such as seeing teachers as persons as opposed to objects of resources (Fullan and Hargreaves, 1991; Hargreaves and Evans, 1997), teachers as change agents (Fullan, 1993), and empowerment (Ingvarson, 2000) mentioned earlier. While some literature points directly to the critical feature of teacher professional development, some do so indirectly.

In his attempt to sketch characteristics of future professional development needs, Leithwood (1992) recommended that professional development programmes ought to focus on the following:

- Developing survival skills.
- Becoming competent in the basic skills of teaching.
- Expanding one's instructional flexibility.
- Acquiring instructional expertise.
- Contributing to the professional growth of colleagues.
- Exercising leadership and participating in decision-making.

In this list, it is interesting to observe that while Leithwood (1992) started by focusing on technical skills, he ended by stressing on the social aspect of professional development including building relationships with fellow colleagues to develop collegiality, collaboration and joint decision-making. The last would imply that teachers need to play a more active role in the political aspect of teacher learning and practice.

The act of exercising leadership and participating in decision-making is synonymous to empowerment. And in terms of relating with others, teachers need to be co-decision-makers in their day-to-day professional practice. Tickle (2000) had also made similar proposal when he emphasised the following key characteristics of teaching which were originally proposed by Zimpher and Howey (1987):

- Technical competence.
- Clinical competence.
- Personal competence.
- Critical competence.

With regard to critical competence, he proposed that teachers ought to rationally critique social institutions, social structures, and the norms and values, or ideologies, which operate within them in order to bring about change. This, in essence, is emancipatory. It is therefore important to place teachers' agenda at the forefront. This has been observed by Day and Sachs (2004) who emphasised that identifying teachers' agenda is crucial to learning and change.

The importance of bringing to the fore teachers' political role in the discourse of professional development has been established by many (Ball, 1996; Byrd and McIntyre, 1999; Cochran-Smith and Lytle, 1996; Day and Sachs, 2004; Fiszher, 2004; Ford *et al.*, 2006; Lester, 2003). Day and Sachs (2004) maintained that professional development is political as it serves the interests of some groups better than others. Here, the question that deserves answering is "Whose interests are served more in professional development arrangements and efforts?" Enhancing teachers' political roles would also mean enabling and encouraging teachers to be decision-makers. Frankes and his colleagues (1998) (cited in Byrd and McIntyre, 1999) stressed this point when they related teachers as decision-makers to teacher empowerment and development of new roles and democratic structures. This would imply that teachers are not only individual decision-makers, but co-decision-makers. Forde and his colleagues (2006) added the idea that teachers need to reclaim their identity as decision-makers in their professional practice.

Another aspect of teachers' political role is the notion of voice. In his evaluation of professional development, Lester (2003) observed that teachers want their voices heard.

In terms of knowledge creation within the discourse of professional development, Cochran-Smith and Lytle (1996) surfaced the absence or lack of input of teachers' voice in the planning and organisation of professional development arrangements, claiming that

> "What is missing from the knowledge base for teaching are the voices of teachers themselves, the questions teachers ask, the ways teachers use writing and intentional talk in their work lives, and the interpretive frames teachers use to understand and impose their own classroom practices." (p. 93)

Ball (1996) argued in the same vein by stating that "teacher development is considered especially productive when teachers are in charge of the agenda and determine the focus and nature of the programming offered" (p. 502). Teachers should therefore determine the shape and course of their own development. They should have input into the planning of these events in order to help make professional development efforts more applicable to their situations (Guskey, 2000) and encourage their commitment (Fiszher, 2004).

What is clear is that teacher professional development efforts cannot be mandated. Using the language of critical theory, teachers cannot be controlled, coerced and manipulated to be involved in professional development practices. Eekelen and his colleagues (2006) alluded to this in their study exploring teachers' will to learn. They postulated that a will to learn must be present before teachers engage in actual learning activities. They outlined six observable behaviours that indicated teachers' will to learn.

1. The teacher is alert while guiding the class learning process.
2. The teacher is open to others, attentive to others (mostly an individual student, a small group of students, a colleague, or someone from outside the school).
3. The teacher is critical of his or her role/performance in the classroom, his or her role in interactions with others, his or her subject knowledge, him/herself as a person, his or her role in the organisation, etc.
4. The teachers asks him/herself questions with regard to how to deal with critical situations in the classroom, in interactions with others, with respect to his or her

subject knowledge, him/herself as a person, his or her role in the organisation, etc.

5. The teacher makes resolutions and/or puts such resolutions into action.
6. The teacher learns how to deal with critical classroom situations, others, new knowledge of his or her subject, him/herself as a person, his or her role in the organisation, etc.

Teachers must therefore be actively involved in professional development matters (Hawley and Valli, 1999). They must take the initiative to identify what they need to learn in the development of the learning opportunity and the process to be used. This also implies that school leaders and policy-makers facilitate rather than lead in professional development efforts. Darling-Hammond and McLaughlin (1999) concurred with Hawley and Valli (1999) that teachers' participation in solving the problems of teaching practice is essential, and "policy-makers cannot mandate what matters most, which is the combination of knowledge, skills, and commitments that practitioners bring to their work and to their engagement with any innovation" (p. 379). The tendency to mandate can become so natural, and therefore becomes less noticed, that practices of "collegiality can be used as a managerial tool in the guises of a professional development process to coerce teachers into doing the bland work of economic reconstruction" (Smyth, 1995, p. 87).

The notion that teachers ought to be politically active in professional development matters also suggests concepts of autonomy and agency. These concepts have been identified by Forde and her colleague (2006) as "the concepts of autonomy and agency are crucial if we are to consider a process of continual professional development" (p. 5). This suggests that teachers ought to be able to make decisions and take actions based on their professional judgement. Guskey (2000) alluded to the notion of autonomy and agency when he made the claim that professional development is an intentional process. Teachers ought to begin with a clear statement of the purposes and goals of professional development; ensure that the goals are worthwhile; and determine how the goals can be assessed. All these require teachers' intentional decision and action. Alexander and Murphy (1998) also mentioned to the importance of autonomy and agency when they proposed five learner centred principles – one of which is the strategic processing principle. This is the ability to "reflect on and regulate one's thoughts and behaviours is

essential to learning and development" (p. 28). This would also require the teacher to have a sense of 'inwardnesss' (Peery, 2004) – an awareness of one self.

In his attempt to identify conditions that promote learning in the workplace, Smylie (1995b) suggested the following:

1. Opportunity for individual members of a school to work together and learn from each other should be provided on an ongoing basis.
2. Teachers should be given the chance to work together in groups, as colleagues, in an open atmosphere that allows taken for granted assumptions and beliefs to be communicated and examined.
3. The presence of shared power and authority, as well as participatory decision making in the workplace … implies the acknowledgement that expertise and position or formal status are not necessarily equivalent.
4. Professional learning is also promoted by a certain degree of autonomy and choice for individual members.

Smylie (1995b) surfaced the importance of not only autonomy in teacher learning, but also participatory teacher learning – and thus collective and collaborative – decision making. Goodson (2003) captured this essence when he proposed that a new conception of professionalism, which he and Andy Hargreaves termed as principled professionalism, was to embrace the notion of heteronomy – where teachers work authoritatively, yet openly and collaboratively with other partners in the wider community who have a significant stake in students' learning. But collaboration in itself does not automatically lend itself to teacher learning. In this regard, Clement and Vandenberghe (2000) found that collaboration in itself is not the most promising path in professional development. They proposed for a positive balancing between collegial collaborative work and individual autonomous work. However, they proposed that this balance would have to take different forms in different schools and for different teachers. But looking at how teachers positively collaborate with each other balancing both collegial collaborative work and individual autonomous work is not sufficient. The context within which teachers collaborate with each other, and which has effect on teachers' collaboration, is equally important. Wilson and Berne (1999) allude to the importance of context when they contended that future research in professional development should look at why and what teachers learn, and the contexts that enable

teacher learning. In this regard, they claimed that little effort has been put into explaining how contexts enable learning.

Achinstein (2002) shares the same concern for balance between collegial collaborative work and individual autonomous work, but understood it within the concept of conflict. He claimed that conflict is inherent in any community, and that communities of colleagues are arenas of dissent, diversity and discussion. Hence, close collegial communities can block opportunities for growth and development if they exclude conflict. What is crucial is how conflict is managed. How members embrace each others' differences would make a difference in a community's potential for professional development and organisational learning.

Kelchtermans (2004) concurred with the need for balance between individual autonomous work and collegial collaborative work as both personal professional and organisational development need to go hand-in-hand. Fullan (1995) argued in the same vein when he claimed that teachers and leaders need to collaborate with each other in professional development matters. In addition, Kelchtermans (2004) went further by alluding to the need to disentangle the relationship between working conditions and professional development, and showing how the ongoing processes of negotiation, power and influence, and the explicit and implicit attempts to control the working conditions actually determine whether and in what way teachers can develop professionally. He therefore placed the issue of power relations at the centre of teacher professional development and teacher learning. Furthermore, he also proposed that besides understanding negotiation and power in relation to working conditions, we should also understand negotiation and power in relations to values, norms and goals of education or schooling. The moral and political aspect of teaching and teacher learning are thus closely interlinked.

The notion of teacher professional development and learning that has features of political activism is intimately related to teacher professionalism. In this regard, Sachs' (2003) proposed for an 'activist teacher professional' which is premised on concepts of trust, active trust and generative politics. Trust is important in reducing complexity by creating social cohesion through collaboration and mutual respect. Active trust requires outward strong commitment of time, energy and intellectual resources to make joint decisions. Generative politics implies fostering of conditions under which desired

outcomes can be achieved without being imposed; involves creating situations in which active trust can be built and sustained; demands giving autonomy to those most affected by specific programmes or political outcomes; and requires the decentralisation of power.

Further, Sachs (2003) proposed that teacher research has potential to contribute to the larger political project of creating an activist teaching profession in addition to improving teachers' practice and providing opportunities for teacher professional renewal. This concurred with the earlier point regarding the need for teacher professional development and learning to be inquiry-based. Teacher research or/and action research is seen to be important in the promotion of teacher professionalism. According to Sachs (2003, p. 92), teacher research helps to –

- validate and affirm practice;
- create strong links between theory and practice;
- contribute to theory-building and knowledge application;
- connect important issues that are facing teachers in their classrooms;
- understand the conditions that stand in the way of student learning;
- provide a systematic way for teachers to engage in ongoing conversations about their practice and come to collaborative solutions;
- break down the barriers of isolation and privatism through collegiality and collaboration;
- open up classrooms to critical investigation; and thus
- contribute to the broader project of teacher professionalism.

Sachs (2003) claimed that the professional development potential of teacher research lies not so much in the idea of skill development by either teachers or academics, but in the opportunities that new forms of association provide. First, to disrupt previously taken-for-granted understandings of the world of practice and of the nature of knowledge in use. This is congruent with the earlier argument for teacher professional development and learning that interrogate teachers' knowledge. Second, to raise questions about whose interests are served by the implementation of new policies and curriculum practices, and what are the effects on and implications for teachers' work practices. Teacher research helps to question and reinvent the whole idea of a knowledge base, disrupting the existing relationships of power among knowers and

known – who decides what 'knowledge' and 'practice' mean? Who decides how knowledge ought to be interpreted and used in order to improve practice? Who decides to improve practice? Who decides what kinds of 'change' and 'improvements' are possible/desirable in schools? Sachs (2003) further claimed that when links between theory and practice are strong and contribute to theory-building and knowledge application they become a fundamental strategy to support an activist teaching profession. The concept of an activist teaching profession essentially seeks to extend the democratic way of life.

## 1. Emancipation and Social Theory of Learning

The importance of emancipation in teacher professional development and learning has also been alluded to within the discourse of the social theory of learning. For example, Day and Hadfield (2004) alerted us to the difficulties and dilemmas of initiating and sustaining change through networks, such as PLCs, within imposed and centralised education systems. There are tensions pertaining to power in terms of knowledge, interest and ownership in communities (Lieberman and Grolnick, 2005). With regard to COP, Wenger's (1998) focus on practice attests to his commitment to give priority to agency – that is, how individuals within a community negotiate meaning and practice in order to reach shared identity, meaning and practice. Furthermore, Wenger (1998) had also claimed that the "question of power is a central one in social theory" (p. 15). Power relations are central in the formation of communities of learners.

The centrality of power relations in social learning theory has also been emphasised by Contu and Willmott (2003) especially in relation to situated learning theory espoused by Lave and Wenger (1991). In this regard, learning is located or 'situated' within everyday practices; is an integral part of generative social practice in the lived-in world; is embodied and historically and culturally embedded; involves acquisition, maintenance and transformation of knowledge through processes of social interaction; integral to social participation; and involves becoming a member of a socio-cultural community.

Contu and Willmott (2003) essentially proposed that popularised versions of situated learning theory tend to ignore or suppress Lave and Wenger's (1991) understanding that learning processes are integral to the exercise of power and control, rather than external or unrelated to the operation of power relations. Concepts of legitimacy and

peripherality are essentially, in their view, concepts of power relations. Contu and Willmott (2003) also proposed the need to study macro structural relations that exist outside the realm of the community that influence power relations and interactions within the community.

## 2. Emancipation and Socio-cultural Theory of Learning

The importance of emancipation in teacher professional development and learning can also be alluded to in the discourse of socio-cultural theory of learning. For example, Daniels (2006) had observed that the concept of power has yet to be developed by proponents of activity theory, and proposed employing Bernstein's concepts of analysis and description at the structural and interactional levels. While the former is analysed in terms of the strength of the boundary, or specialisation, between social divisions of labour it creates (classification), the latter is analysed in terms of social relations (framing). Daniels (2004) was attracted to Bernstein's thesis because it sought to link semiotic tools with the structure of material activity, and stated that Bernstein's work is concerned with "inter-relations between changes in organisational form, changes in modes of control and changes in principles of communication" (p. 128). Daniels' interest is therefore on conceptions of power proposed by Bernstein.

"How do principles of power and control translate into principles of communication and how do these principles of communication differentially regulate forms of consciousness with respect to their reproduction and possibilities for change." (Bernstein, 1996, p. 18)

This idea essentially puts power at the centre of the structure-agency dialectic in learning activities in general including teacher learning. In other words, the study of how agents (within individual or social setting) draw upon structure (rules and resources) to produce, reproduce or transform social practice. How agents draw upon structure with other agents is therefore brought to the fore. Even if we were to take the path of situated cognitive theory proposed by theorists such as Greeno (1993) and current initiatives which blend traditions of anthropology and critical theory, and attempt to include a broader range of disciplines such as psychoanalysis, neurology and semiotics (Kirshner and Whitson, 1997), situated cognitive theory cannot escape the social dimension of learning and the centrality of power in social relations and interactions.

### 3. Emancipation and Critical Theory of Learning

Last, but not least, the importance of emancipation in teacher professional development and learning can be alluded to by proponents of critical theory such as Habermas, Brookfield and Mezirow. In general, the critical theorist perspective of learning essentially places power at the heart of any research pursuit to understand human learning. Kilgore (2001) observed that critical theorists are interested in –

> "power as a factor in determining what and how we come to know a lot
> about certain things and not others, and have certain ideas while not
> others. Different individuals and groups see the world from different
> positions, some having more power than others ... learning is a process
> of receiving and creative communicative messages or 'discourses' about
> the social world." (p. 54)

With regard to learning, critical theorists perceived knowledge as socially constructed and is situated in a particular context where rationality is a means to better knowledge (Kilgore, 2001). In terms of knowledge-constitutive interests (Habermas, 1972), the knowledge ought to go beyond the 'technical' and 'practical' to adopt the 'emancipatory' dimension where there is the need to act rationally by being self-reflexive and self-determined in order to liberate consciousness from forces of domination – that is, free from oppression. It is an understanding of the contradiction between what we know is true or best and how this understanding can be oppressive when put into practice (Usher, Bryant and Johnston, 1997). Furthermore, this understanding ought to be challenged by demonstrating how it serves the interests of certain individuals and groups at the expense of other individuals and groups.

Knowledge is thus related to power insofar as true knowledge can free individuals and groups from the oppressive force of power. Modern capitalistic states have the tendency to produce human beings who are 'unfree' as a result of ideological beliefs, cognitive structures or consciousness that are false, which are usually self-imposed upon the individual – a kind of self-imposed coercion and an 'unfree existence' (Geuss, 1981). Human beings in societies imposed societal and institutional ideology, cognitive structures or consciousness on themselves by participating in them and accepting them without question, and in so doing reproducing relations of coercion.

Learning is, therefore, essentially about reflecting and challenging what we know and how we know it, and perhaps acting to change material and social conditions of oppressed people as well as the commonly held assumptions that reinforce their oppression (Kilgore, 2001). Learning is therefore explicitly political and in support to the relentless criticism of all existing conditions (Marx, 1983). Learning is also to enlighten and emancipate human beings from forces of ideological beliefs, cognitive structures or consciousness that are false through reflectivity and reflexivity. While reflectivity brings about a critique or realisation that their ideological beliefs, cognitive structures or consciousness are false and the coercion from which they suffer is self-imposed, reflexivity brings about the change in actions to move from false knowledge to true knowledge. When both reflectivity and reflexivity are fulfilled, the coercion loses its power and human persons are enlightened and emancipated. Learning involves the actualisation of both reflectivity and reflexivity to gain knowledge that is unmasked, true and emancipatory.

### a) Critical Theory of Adult Learning

A key figure who had placed critical theory at the heart of learning, specifically adult learning, is Stephen Brookfield. He argued that adult learning is essentially about being critical of what we believe to be true – that is, the theories that we hold which influence our day-to-day actions (Brookfield, 2005a). In his view, critical theory is argued to be the perfect response to meet the need of adult learning. Brookfield (2005a, p. 39) captured this essence in the following manner:

> "… critical theory is normatively grounded in a vision of a society in which people live collectively in ways that encourage the free exercise of their creativity without foreclosing that of others. In such a society people see their individual well-being as integrally bound up with that of the collective. They act toward each other with generosity and compassion and are ever alert to the presence of injustice, inequity, and oppression. Creating such a society can be understood as entailing a series of learning tasks: learning to recognize and challenge ideology that attempts to portray the exploitation of the many by the few as a natural state of affairs, learning to uncover and counter hegemony, learning to unmask power, learning to overcome alienation and thereby

accept freedom, learning to pursue liberation, learning to reclaim reason, and learning to practice democracy … We cannot pursue liberation without uncovering and then challenging the hegemony of capitalist values and practices. And, of course, a central component of hegemony is the dissemination of an ideology that serves the interests of the few while purporting to represent the many."

The seven learning tasks of a critical theory of adult learning outlined above culminate in the attainment of democratic participation. In this regard, the influence of Habermas' theory of democracy where the creation of the conditions for democracy is privileged. Habermas, in turn, was influenced by the writing of Marcuse stating that "the true conditions of democracy still have to be created" (Marcuse, 1970, p. 80). Habermas identified adult's capacity to learn as having the capacity to recognise and expand the democratic processes inherent in human communication. As learning is contemporaneous to communicating, communicating is contemporaneous to existence. It is "not learning, but not-learning is the phenomenon that calls for explanation" (Habermas, 1975, p. 15). He claimed that people are not continually and conspicuously learning because contemporary political and economic systems, and their various steering media attempt to foreclose the possibility of any learning that challenges system imperatives. If learning is to question or critique threatens system imperatives, then the system tries to stop it at the outset by diverting the energy generated into learning to channels that confirm the legitimacy of the existing order. However, as he sees learning as "an automatic inability not to learn" (1975, p. 15) it becomes the potential for system critique.

Habermas' theory of democracy is also closely tied to his notion of the 'public sphere' where people come together to explore how to organise and conduct their communal affairs. However, instrumental reasoning pervasive in modern capitalistic societies, in addition to the technological developments of the mass media and cyberspace, has led to the disappearance of opportunities for people to informally meet with others to discuss small and large matters of mutual concern which could affect formal political and legislative deliberations (Habermas, 1996). The decline of the public sphere would then lead to the growth of destructive privatism which is a focus on the self. The condition of a "structurally depoliticized public realm" (Habermas, 1996, p. 37) encourages people to pursue private goals without regard to the effects on others. The public sphere is

therefore perceived by Habermas as the potential for the political will formation where opinions are coalesced in order to do something about a situation.

The disappearance of the public sphere is also closely linked to the invasion of the 'lifeworld' (Habermas, 1987a). The lifeworld can be described as the preconscious, taken-for-granted presuppositions, understandings and perceptual filters that determine how people experience reality. It is the "unquestioned ground of everything given in my experience, and the unquestionable frame in which all the problems I have to deal with are located" (Schutz and Luckmann, 1973, p. 4). It forms a blurred and shadowy backdrop to all we think, speak and do. The lifeworld

> "forms the indirect context of what is said, discussed, addressed in a situation … the intuitively present, in this case familiar and transparent, and at the same time vast and incalculable web of presuppositions that have to be satisfied if an actual utterance is to be at all meaningful, that is valid, or invalid." (Habermas, 1987a, p. 131)

Brookfield (2005b) understands the lifeworld as "the background rules, assumptions and commonsense understandings that structure how we perceive the world and how we communicate that perception to those around us" (p. 1141) – a kind of primordial, pre-reflective knowledge that hovers in the background of existence that frames all we think and do. As the lifeworld "only exists in the distinctive, pre-reflective form of background assumptions, background receptivities or background relations (it) dissolves and disappears before our eyes as soon as we try to take it up piece by piece" (Habermas, 1992, p. 109), and "no sooner has it been thematized, and thereby cast into the whirlpool of possible questions, then it decomposes" (Habermas, 1996, p. 23). In other words, the lifeworld is unknowable, inaccessible and impenetrable.

However, in action situations where day-to-day disappointments, contradictions, contingencies and critique abound, the lifeworld's horizon becomes a little less hazy as a segment of it "comes into view" (Habermas, 1987a, p. 132). In situations when we try to resolve day-to-day disappointments, contradictions, contingencies and critique, we begin to see that the lifeworld's knowledge and assumptions may not be accurate, true and dependable. And in situations where goals and actions have to be taken, "the

relevant segment of the lifeworld acquires the status of a contingent reality that could also be interpreted another way" (Habermas, 1987a, p. 131).

The lifeworld undergoes what Habermas called a symbolic reproduction when it is continually being renewed and re-created as we involve ourselves in communicative action. In fallibly interpreting a given situation, we inevitably draw from resources supplied by our lifeworld which are not under our control. However, we are not at the mercy of our lifeworld as it "can in turn reproduce itself only through communicative action" (Habermas, 1996, p. 324). In other words, when we communicate with each other in action situations, we are bound to create and re-create the lifeworld.

It is therefore understandable that Habermas (1987a) sees the lifeworld as intersubjective – that is, representing a set of shared meanings which make it possible for people to communicate with each other. In this regard, the lifeworld is determined by linguistic and communicative structure. In other words, the rules and patterns of speech people intuitively accept end up determining how the lifeworld is shaped. The lifeworld serves to fulfill three functions (Habermas, 1987b). First, the propagation of cultural traditions. Second, the integration of groups by norms and values. Third, the socialisation of succeeding generations. All these functions are accomplished within communicative action. Not only does the lifeworld strive to ensure continued social solidarity through the transmission of "culturally ingrained background assumptions" (Habermas, 1987b, p. 298), it also contains the unacknowledged rules and conventions in speech, or symbolic structure, which frames how we form our identities, how we acquire cultural knowledge, and how we develop group solidarity (Brookfield, 2005a).

However, in modern capitalist and bureaucratic societies, the lifeworld has become 'colonised' and uncoupled by the system which consists of the social processes that regulate the exchange of power and money (Habermas, 1987b). The system can be said to have invaded or colonised the lifeworld when its imperatives become the predominant influence on people's behaviour, morality, ethics and rationality. The lifeworld is said be uncoupled  from people's everyday experiences when the system's imperatives have become reified – that is, they are perceived as general beliefs and rules that have an existence independent of people's lives. 'Internal colonisation' takes place when the "subsystems of the economy and state become more and more complex as a

consequence of capitalist growth, and penetrate even deeper into the symbolic reproduction of the lifeworld" (Habermas, 1987b, p. 367).

Promoting democratic participation would therefore entail the protection of the public sphere and lifeworld. As the public sphere is "an intermediary between the political system, on the one hand, and the private sectors of the lifeworld and functional systems, on the other (Habermas, 1996, p. 373), its survival ensures that people are in position of critique of the system imperatives of power and money. And in this way, the lifeworld is also protected from effects of uncoupling and colonisation by the system.

Habermas' democratic theory is also closely tied to his theory of communicative action (Habermas, 1987a), where actions are "coordinated not through egocentric calculations of success but through acts of reaching understanding" (p, 286). The ideas related to the theory of communicative action "starts from the trivial assumption that subjects capable of speech and action cannot help but learn" (Habermas, 1990, p. 165). This is related to the claim that it is not that "people want to act communicately but that they have to" (Habermas, 1994, p. 111). In other words, when people come together to coordinate their actions they inevitably communicate, and when this happens, they inevitably learn. Also, reaching mutual understanding is said to be dependent on contexts characterised by a capacity for learning, both at the cultural and personal level (Habermas, 1996, p. 324). Brookfield (2005a) argued that when we act communicatively, we inevitably try to step out of our normal frames of reference to see the world as someone else sees it. Thus what hinders adult learning is less to do with the conditions under which adults learn, but more to do with the conditions that hinder our membership of speech communities in which we pursue intersubjective understanding.

In the theory of communicative action, Habermas argued that the desire for mutual understanding is at the core of human speech – "reaching understanding is the inherent telos of human speech … the concepts of speech and understanding reciprocally interpret each other (Habermas, 1984, p. 287). He further emphasised the ideal that when people agree they experience "the intersubjective mutuality of reciprocal understanding, shared knowledge, mutual trust and accord with one another" (Habermas, 1979, p. 3). This is closely tied to his notion of democracy since a communicatively achieved agreement "cannot be imposed by either party either instrumentally through intervention or strategically through undue influence (Habermas,

1984). Brookfield (2005a) observed three democratic norms that were outlined by Habermas:

1. Coming to understanding requires the rider (communicating participant) uncoerced (Habermas, 1984, p. 392).
2. Coming to understanding is a process of mutually convincing one another in which the actions of participants are coordinated on the basis of motivation by reason. (Habermas, 1984, p. 287).
3. Coming to understanding means that participants in communication reach an agreement concerning the validity of an utterance; agreement is the intersubjective recognition of the validity claim the speaker raises for it. (Habermas, 1987a, p. 121).

Underpinning these democratic norms is Habermas' notion of 'validity claims'. He argued that "in action oriented to reaching understanding, validity claims are 'always already' implicitly raised" (Habermas, 1979, p.57), that "communicative action can continue undisturbed only as long as participants suppose that the validity claims they reciprocally raise are justified (1979, p. 3). These validity claims consist of the 'claim of comprehensibility', 'claim of truth', 'claim of rightness', and 'claim of authenticity' (Habermas, 1973, p. 18):

Giving validity claims in communicative actions is inevitable and universal as it is synonymous to giving reasons. And reasons "are the primary currency used in a discursive exchange that redeems criticizable validity claims" (Habermas, 1996, p. 35). Asserting, challenging and defending validity claims or reasons in communicative actions is crucial in not only democratic participation in general, but also democratic participation in the public sphere. However, Habermas (1992, p. 260) specified three discourse rules to fulfill democratic participation.

1. All relevant voices are heard.
2. The best of all available arguments, given the present state of knowledge are accepted.
3. Only the non-coercive coercion of the better argument determines the affirmations and negations of the participants.

These discourse rules were influenced by the writings of Alexy (1978):

(2.1) Every speaker may assert what he really believes.

(2.2) A person who disputes a proposition or norm under discussion must provide a reason for wanting to do so. (p. 88)

These discourse rules are also congruent to Habermas' (1995) own writing on the rule of openness:

(3.1) Every subject with the competence to speak and act is allowed to take part in a discourse.

(3.2) a. Everyone is allowed to question any assertion whatever.

b. Everyone is allowed to introduce any assertion whatever into the discourse.

c. Everyone is allowed to express his attitudes, desires and needs.

(3.3) No speaker may be prevented by internal or external coercion, from exercising his rights as laid down in (3.1) and (3.2). (p. 89)

The above contributions by Habermas encapsulate his two key principles of discourse ethics: the universality principle U and the discourse principle D. The universality principle U is fulfilled when –

"All affected can accept the consequences and the side effects its general observance can be anticipated to have for the satisfaction of everyone's interests (and these consequences are preferred to those of known alternative possibilities for regulation)." (Habermas, 1995, p. 65)

The discourse principle D is fulfilled when –

"Only those norms can claim to be valid that meet (or could meet) with the approval of all affected in their capacity as participants in a practical discourse." (Habermas, 1995, p. 66)

Furthermore, these two key principles of discourse ethics contribute to the materialisation of Habermas' notion of an 'ideal speech situation' and democratic

participation where "all motives except that of the cooperative search for truth are excluded" (Habermas, 1975, p. 108), and that deliberations ought to be conducted around "a common interest ascertained without deception … in the constraint-free consensus permits only what all can want" (Habermas, 1975, p. 108).

Habermas further asserted that in an ideal speech situation "all motives except that of the cooperative search for truth are excluded" (Habermas, 1975, p. 108), and that deliberations ought to be conducted around "a common interest ascertained without deception … in the constraint-free consensus permits only what all can want" (Habermas, 1975, p. 108). He is, however, cautious to the practical problem attached to these discourse rules that constitute an ideal speech situation. Nevertheless, he argued that they remain to be the best hope for democratic participation to materialise, and form the basis for assessing decisions made within democratic decision-making processes. Decisions made within non idealistic conditions can be considered reasonable insofar as it represents "the rationally motivated, although fallible, result of a discussion which was prematurely ended under the pressure of the need for a decision" (Habermas, 1992, p. 256). What is central is his assertion that democratic decision making represents "a consensus arrived at in discussion free from domination" (Habermans, 1970, p. 7). He further asserted that in a society that maintains itself by subtly discrediting or marginalizing certain voices, "communication between participants is then systematically distorted or blocked" (Habermas, 1975, p. 27).

Habermas' notions of ideal speech situation, communicative action and public sphere are also consistent with his notion of reflexive learning. Reflexive learning is to question and challenge everyday social arrangements, practices and decisions by discussing with others the extent to which these can be justified. Reflexive learning

> "takes place through discourses in which we thematize practical validity claims that have become problematic or have been rendered problematic through institutionalized doubt, and redeem or dismiss them on the basis of arguments." (Habermas, 1975, p. 15)

The counterpart is non-reflexive learning, where learning is without a critical element, and hence learning to submit without resistance to rules of debate, argument assessment

and decision-making processes that the dominant culture favours. Non-reflexive learning

> "takes place in action contexts in which implicitly raised theoretical and practical validity claims are naïvely taken for granted and accepted or rejected without discursive considerations." (Habermas, 1975, p. 15)

Hence, in reflexive learning, we question in discussion with others the crises that exist in the system. In other words, crises within the system are seen as opportunities for sites for reflexive learning where theoretical and practical validity claims can be given their due critique. However, reflexive learning is not immune to social determination. If the culture in which we reside in considers questioning the system as culturally inappropriate, reflexive learning will be stunted. Thus, even in the presence of system crises, we may not have the disposition to critique the validity claims that exist in day-to-day action contexts. The development of an individual's reflective capacities is thus always culturally bounded – "there is a circular process between societal and individual learning" (Habermas, 1979, p. 121). Habermas' notions of non-reflexive and reflexive learning point to the importance of the emancipatory element in human learning.

The ideal of democracy can, however, become reified and work to support capitalist hegemony. People can come to see the democratic process as existing independent of their daily lives and disconnected from their concerns. Using Lindeman's thesis on democracy, most people "are democratically speaking, illiterate; they do not know how to operate in and through groups" (Brookfield, 2005a, p. 150). They lack the skill to deal respectfully with difference, live with unresolved conflict, and accept that proposed solutions to complex social problems should always be viewed as temporary and contingent. Lindeman believed democracy is present when "ultimate power resides in the people, in the collectivity" (Brookfield, 2005a, p. 147) so that a relationship of "power with" between people – "to be so related to you that our powers will be multiple" (Ibid, 2005a, p. 144) – replaced that of "power over".

On the whole, Habermas' democratic theory encompassing concepts of the public sphere, communicative action, lifeworld, discourse ethics and ideal speech situation are consistent with the recommendations made earlier such as teachers need to participant in democratic decision-making with either fellow practitioners or policy-makers

(Achinstein, 2000; Clement and Vandenberghe,2000; Forde *et al.*, 2006; Goodson, 2003; Frankes *et al.*, 1998, cited in Byrd and McIntyre, 1999; Lester, 2003; Leithwood, 1992; Sachs, 2003; Smylie, 1995b), teachers's voice being heard and taken into consideration in professional development matters (Lytle, 1996; Ball, 1996; Fiszher, 2004; Guskey, 2000; Kelchtermans, 2004).

The persistent pursuit for democratic participation in the form of what Habermas termed as the 'unrestrained discursive will formation' is understood as his hope for the needed transformation for a better world (Alway, 1995). The protection of the public sphere, communicative action, lifeworld and ideal speech situation would therefore guarantee the protection democratic participation. In her analysis of key critical theorists such as Horkheimer, Adorno, Marcuse and Habermas, Alway observed that

> "the practical intent of the theory of communicative action is not a
> revolutionary transformation of society, but the creation and protection
> of spaces within which a radical concept of democracy, as a process of
> shared learning carried out in and through communicative action, might
> flourish" (Alway, 1995 p. 127).

On the whole, in the eyes of critical theorists, human learning and human emancipation are therefore inseparable.

*b) Transformation Learning Theory*

The writings of Habermas had also influenced the Transformation Learning Theory (TLT) established by Mezirow (1991; 1997; 2000) which is basically defined as the "process of effecting change in the frame of reference." (1997, p. 5). The frame of reference can be said to be a coherent body of experience consisting associations, concepts, values, feelings and conditioned responses that define a person's life world. As humans inevitably make meaning of experience, the frame of reference is also called a 'meaning perspective' – that is, "the structure of assumptions and expectations through which we filter sense impressions" (Mezirow, 2000, p. 16). Meaning perspective involves cognitive, affective and conative dimensions. It also "selectively shapes and delimits perception, cognition, feelings and dispositions by predisposing our intentions, expectations and purposes" (Mezirow, 2000, p. 16).

The frame of reference is composed of two dimensions: a habit of mind and the resulting point of view. A habit of mind is "a set of assumptions – broad, generalised, orienting predispositions that act as a filter for interpreting the meaning of experience" (Mezirow, 2000, p. 17), it could cover areas of sociolinguistic, moral ethical, epistemic, psychological, aesthetics. A point of view, which results from a habit of mind, comprises "clusters of meaning schemes – sets of immediate specific expectations, beliefs, feelings, attitudes and judgements – that tacitly direct and shape a specific integration and determine how we judge, typify objects, and attribute causality" (Mezirow, 2000, p. 18). In this sense, a habit of mind is therefore synonymous to structure of assumptions and a point of view is synonymous to a structure of expectations.

The process of transformation is said to refer to "a movement through time of reformulating reified structures of meaning by reconstructing dominant narratives" (Mezirow, 2000, p. 19), and the role of critical reflection is primary in this regard. Mezirow (2000) argued that transformative learning refers to transforming a problematic frame of reference to make it more dependable in the adult life by generating opinions and interpretations that are more justified, and thus the importance of reasoning, and reasoning that questions ideology. Perspective transformation is the process of

> "becoming critically aware of how and why our assumptions have come to constrain the way we perceive, understand, and feel about our world; changing these structures of habitual expectation to make possible a more inclusive, discriminating, and integrative perspective; and, finally, making choices or otherwise acting upon these new understandings" (Mezirow, 1991, p. 167).

Moore (2005) asserted that a change in perspective is personally emancipating in that one is freed from previously held beliefs, attitudes, values, and feelings that have constricted and distorted one's life.

In addition, a change in perspective takes place within the context of action in response to dissonance in life circumstances. In this regard Mezirow (2000) proposed ten steps in the transformation of perspective:

1. A disorienting dilemma.
2. Self-examination with feelings of fear, anger, guilt, or shame.
3. A critical assessment of assumptions.
4. Recognition that one's discontent and the process of transformation are shared.
5. Exploration of options for new roles, relationships, and actions.
6. Planning a course of action.
7. Acquiring knowledge and skills for implementing one's plans.
8. Provisional trying of new roles.
9. Building of competence and self-confidence in new roles and relationship.
10. A reintegration into one's life on the basis of conditions dictated by one's new perspective.

The notion of a disorienting dilemma has resemblance to Habermas' concept of crises in the system which brings about the potential for learning. Mezirow (2000) also proposed that

> "democracies inherently create opportunities for self-transformation … creates understandings for participatory democracy by developing capacities of critical reflection on taken-for-granted assumptions that support contested points of view and participation in discourse that reduces fractional threats to rights and pluralism, conflict, and the use of power, and foster autonomy, self-development and self-governance – the values that rights and freedoms presumably are designed to protect" (p. 28).

On the whole, Mezirow had integrated several of Habermas' key concepts that pertain to democratic participation such as reflexive learning, public sphere and communicative action. In terms of adult learning, Mezirow (1991) asserted that

> "freedom, democracy, equality, justice, and social cooperation are among the necessary conditions for optimal participation in critical discourse … (adult educators) should assist learners to understand what is involved in taking collective social action" (p. 226).

Even though Mezirow had been accused at lacking the radical impetus of Habermas' writing (Hart, 1990), his assertions for critical reflection, which questions dominant narratives, and democratic participation in critical discourse for social action testify to his general support for critical theory. His attempt at integrating disciplines from diverse disciplines exemplifies one of the key elements of early critical theorists – that is, for being multidisciplinary. Finally, in her attempt at developing further the theory of transformative learning, Cranton (2006) had proposed the importance of empowerment as a prerequisite for transformative learning instead of the often described notion that learner empowerment is an outcome of transformative learning – "people who feel powerless are less likely to engage in critical self-reflection" (p. 133). She had essentially placed empowerment as the foundation of human learning, and at the same time alluded to the need to prevent transformative learning from being colonised by instrumental rationality – that is, empowerment affords transformative learning, and not so much self-reflection or critical self-reflection that brings about empowerment. The former is seen as more necessary than the latter in bringing about empowerment and emancipation.

The characteristics of teacher professional development and learning thus far are largely consistent with the espoused principles and practices of Teachers Network Learning Circles. These principles and practices consistent with a form of learning that values lifelong learning; collaboration or community-building; learning integrated with work; close linkage to students' learning; learning that is personally meaningful; reflection, inquiry and knowledge interrogation; organisational and institutional/system level support; and most importantly, linking learning with emancipatory ideals such as autonomy, agency, and democratic participation.

## TEACHER PROFESSIONAL DEVELOPMENT AND CHANGE

Having established the close relationship between the espoused principles and practices of Teachers Network Learning Circles that pertain to emancipatory ideals of autonomy, agency and democratic participation and the current discourse of teacher professional development and learning, what would be of interest is how participants of Teachers Network Learning Circles learn, relate and work with each other during Learning Circles' discussions, and how these discussions bring about teacher change.

In this research study, I am in agreement with Smith and his colleagues' (2006) conceptualisation of teacher change - that is, "allowing for the broadest range for what 'counts' as change" (p. 26). What I intend to do in the research study is to move beyond the common research framework of teacher change which covers teachers' beliefs, understanding/knowledge and practices (Borko *et. al.*, 2000; Boyle *et. al.*, 2005; Broaddus and Bloodgood, 1999; Carroll, 1994; Guskey, 1986; Haggarty and Postlethwaite, 2003; Hartzler-Miller, 2002; Hunsaker and Johnston, 1992; Johnston, 1994; Pennington, 1995; Richardson and Anders, 1994a; Senger, 1999; Smylie, 1988; Spillane, 2002) to embrace a sociological research framework which attempts to understand teacher change at a holistic human social level.

Teacher change would include all aspects of being a human social being which include changes in thought, values, morals, emotions, identity and action. A sociological research framework is consistent with Richardson and Anders' (1994a) proposal of going beyond understanding teacher change within the school effectiveness and process/product model of teacher change. A sociological approach in investigating teacher change had been alluded to by Clewell and Campbell (2005) when they proposed that research in teacher change should embrace both the individual and collective levels of change. This move towards a sociological approach is consistent with the arguments which had been raised earlier with regard to understanding teacher professional development and learning in sociological terms.

A sociological approach would also require adopting a research paradigm that uncovers contextual and descriptive phenomenon of cases which is common in qualitative research (Richardson and Anders, 1994b). This would imply the preference at looking at the type of change rather than the overall amount of change as observed by Smith and his colleagues (2006) – a descriptive approach rather than a stability approach of personal change (Martini and Dion, 2001). A sociological approach would also imply the need to look at broader issues or structural factors at the organisation and system levels which influence teacher change (Barowy, 2004; Fenstermacher, 1987; Haggarty and Postlethwaite, 2003; Pace, 1992; Richardson and Anders, 1994a, 1994b; Smylie, 1988, Spillane, 2002). For example, Pace (1992) surface three organisational constraints and are effectively sources of tension to teacher change: old beliefs versus new ideas; implementing new curriculum and instruction while maintaining existing curriculum; and relations with teachers who were not making changes. At the system level, Pace

(1992) identified mandated legislature as a source of tension for positive teacher change. Fenstermacher (1987) had also surfaced the problem of mandated change as a source of tension for positive teacher change. He termed system level mandated change as the 'Make-them-eat-cake' approach which is common in bureaucratic organisations.

Richardson and Anders (1994b) observed the popularity of structural and systemic change policies that seem easy to propose although inexplicably difficult to implement. In this regard, many national and state educational change policies focus on altering structural relationships between and among organisations, changing the roles of educators, and developing standards and assessment systems designed to alter teachers' behaviour through a carrot-and-stick approach. They also commented that "official policies and the actions of policy-makes still reveal a strong need to control educational goals and sometimes the instructional means for reaching them." (p. 211). The tensions between the system and teacher change that had been described thus far is consistent with the literature that pertain to the system's failure to understand the roles and practices of teachers in schools (Caldwell, 1997; Wideen, 1994) and the need for teachers to be empowered in order to engage in the generation of policies – and therefore, not neglecting on issues of power (Bowe *et al.*, 1992; Goodson 1997; House, 2000; Sarason, 1996). The tensions between the system and teacher change is also consistent with Habermas' analysis and notion regarding the system and its imperatives for power (control) and money (efficiency) in modern capitalist states which have the tendency to colonise the lifeworld.

The tensions between teacher change and system structures that had been raised are closely related to teacher-initiated or bottom-up initiated professional development endeavours (Anderson, 1997; Fenstermacher, 1987; Pace, 1992; Richardson and Anders, 1994b). Anderson (1997) proposed the importance of investigating how teachers experience implementing changes at their own choosing or making as it is to teachers responding to changes they are encountering as a result of outside decisions, demands, or incentives He claimed that

> "How well the model anticipates and explains bottom-up changes
> initiated by the participating teachers, versus teacher response to
> changes advocated or mandated by others, is a question that has not been

systematically explored, and one that would be worthy of future research." (Anderson, 1997, p. 333)

Pace (1992) placed empowerment at the centre of bottom-up and grassroots change efforts in order to support teachers as decision makers and change agents and securing successful, substantive, and lasting change in schools. Fenstermacher's (1987) proposed moving from the 'Make-them-eat-cake' approach to 'You can have your cake and it, too' approach of teacher change, which he also termed as educative approach. In this approach, teachers are given access to new knowledge and understanding in ways that assist them to take possession of that knowledge, to work out its implications and its consequences for their own settings and contexts. This approach requires teachers to enter into conversations and practical argument with each other and other stakeholders of change. This is consistent with Richardson and Anders' (1994b) proposal for a 'communitarian approach' (Pendlebury, 1990, cited in Richardson and Anders, 1994b) to teacher autonomy, which requires an ongoing involvement of community members in critical discussion of the goods, standards and procedures necessary for a thriving practice.

The importance of teacher-initiated or bottom-up initiated professional development endeavours and teacher change is consistent with the earlier discussion of closely linking teacher professional development and learning with emancipation ideals such as autonomy, agency and democratic practice. Although research studies have been carried out to investigate empowerment in the personal change literature (Adams, Hayes and Hopson, 1976; French and Delahaye, 1996) and teacher change literature as mentioned above, there is still room for further investigation especially at the micro-sociological level. The examination of teacher change remains to be a complex task (Clewell and Campbell, 2005). Furthermore, research studies that look at teacher professional development and learning that are grounded in Habermas' democratic theory which includes concepts of the 'public sphere', 'communicative action', 'lifeworld', 'discourse ethics' and 'ideal speech situation', and investigates power relations among teacher participating in collaborative and inquiry learning are absent.

In summary, Teachers Network Learning Circles become attractive sites for the research study because of the following reasons:

1. They are new forms of professional development such as work-imbedded, collaborative, reflective and inquiry learning.
2. They promote the importance of teacher professionalism.
3. They are aligned to the education ministry's policy for teacher-initiated learning.
4. They receive support from the school organisation and education system.
5. They value emancipatory ideals such as democratic practices.

# CHAPTER 3

# METHODOLOGY

The methodological position that I have adopted for the research study is essentially qualitative in nature. Although the research study adopts the interpretive paradigm as the core or fundamental research paradigm (Denzin and Lincoln, 2000; Marshall and Rossman, 2006; Merriam, 2002; Turner and Roth, 2003), it has also been influenced by the philosophical concepts of critical social science (Kincheloe and McLaren, 2000). This is consistent with Merriam's (2002) proposal that qualitative research could draw upon a range of philosophical stances such as critical social theory, postmodern theory and poststructural theory. Furthermore, qualitative research is used along with several disciplines and methodologies which can crosscut each other (Denzin and Lincoln, 2000).



**Human Emancipation**

**Change Social Conditions**

**Verstehen (Understanding)**

**Erklären (Explanation)**

**Knowledge Creation**
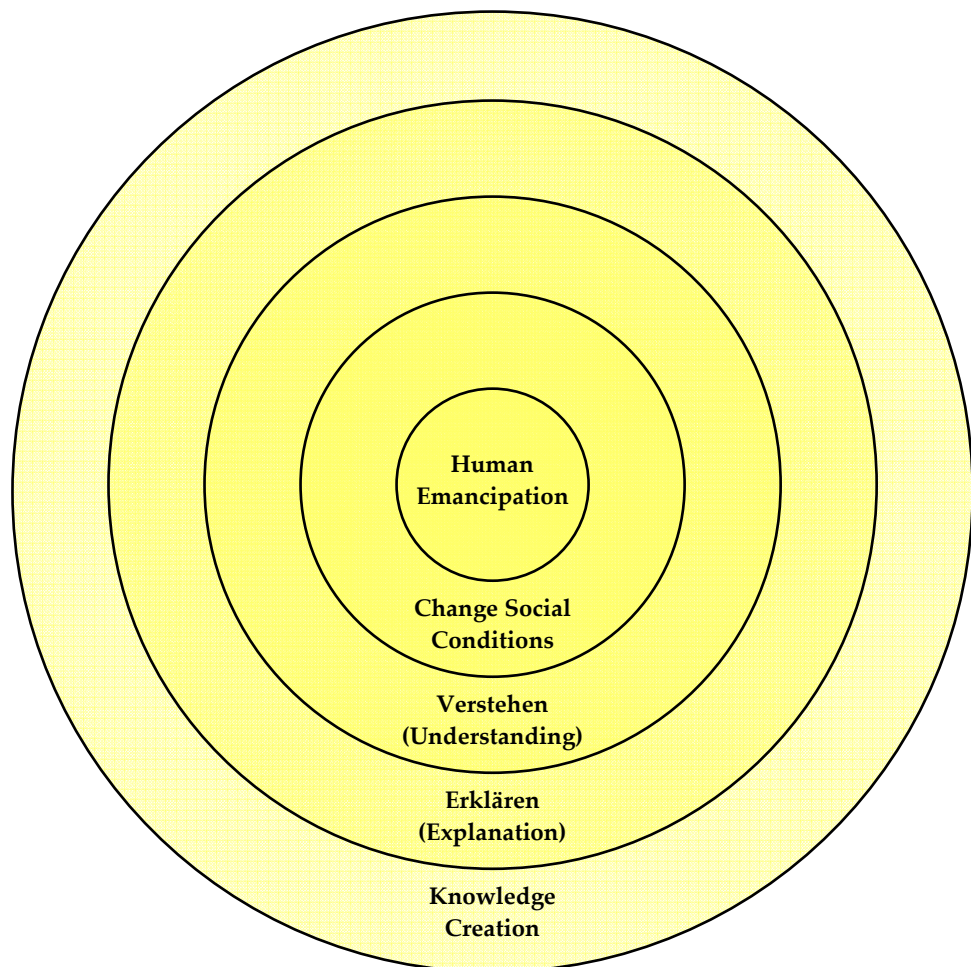
*Diagram 3: Conceptual Teleological Framework*

The influence of critical social science in the research study can be illustrated in Diagram 3.

**RATIONALE FOR USING CRITICAL ETHNOGRAPHY**

In this research study, I had chosen to use the critical ethnography proposed by Carspecken (1996, 2001) as the primary practice for inquiry for several reasons. Firstly, Carspecken's critical ethnography is essentially about the study of culture. In this research study, it is the study of the culture of Teachers Network Learning Circles' participants engaged in collaborative, reflective and inquiry learning. The study of culture is also consistent with the need to study teacher change at the micro-sociological level. Although ethnography can be said to be under the umbrella of qualitative research with the following characteristics - naturalistic study, descriptive data, process focus, inductive analysis and finding participants' meaning (Bogdan and Biklen, 2003), it is essentially the study of human society with the goal of describing and interpreting the culture of a group (Merriam, 2002).

> Ethnographers immerse themselves in a society to collect descriptive data via fieldwork concerning the culture of its members from the perspective of the meanings members of that society attach to their social world and render the collected data intelligible to fellow academics and other readers … The ethnographer is part insider, since he or she is a participant in the social world that is the object of investigation, and part outsider, since, although prior frameworks are to be eschewed in favour of contaminating the field of observation as little as possible, the results of the fieldwork must be transmitted to professional (and other) audiences and thereby interpreted in the context of frameworks that bestow credibility on the fieldwork. (Bryman, 2001, p. x)

Although the term culture can be a slippery, chaotic and 'hard to pin down' concept, it -

> "indicates a space within which competing visions of the role of human existence can be played out, all of which seek to fix the meaning of culture … an open window through which we can identify the

*69*

assumptions, values and classification systems at work in a particular location" (Smith, 2000, p. 20).

Gall and his colleagues (1999) defined culture as the pattern of traditions, symbols, rituals, and artifacts that characterise a particular group of individuals. They see culture as allowing -

> "a particular group of people to live together and thrive through a system of shared meanings and values, but that same system also may lead them to oppose or oppress groups with different shared meanings and values … certain aspects of human culture have a particularly strong influence on individual and group life." (Gall *et al.*, 1999, p. 331)

Swartz (1997) views culture - beliefs, traditions, values, and languages – as providing the very grounds for human communication and interaction which make use of symbolic systems such as arts, science, religion and language to shape our understanding of reality in order to mediate practices by connecting individuals and groups and in so doing establish and maintain social and institutionalised hierarchies. Swartz (1997) also considers culture as embodying power relations in the form of dispositions, objects, systems and institutions. In addition, many cultural practices in advanced societies constitute relatively autonomous arenas of struggle for distinction.

It is also worthwhile to mention that critical ethnography is embedded within conventional ethnography and thus shares several characteristics such as reliance on qualitative interpretation of data, core rules of ethnographic method and analysis, adherence to a symbolic interactionist paradigm, and a preference for developing grounded theory (Thomas, 1993). However, Thomas (1993) claimed that critical ethnography does have fundamentally distinctive features (Table 1).

| Conventional Ethnography | Critical Ethnography |
| --- | --- |
| Traditional cultural description and analysis that displays meanings by interpretation. | Reflective process of choosing between conceptual alternatives and making value-laden judgements of meaning and method to challenge research, policy and other forms of human activity. |
| Asks what is. | Asks what could be. |
| Speak for their subjects, usually to an audience of other researchers. | Accept an added research task of raising voice to speak to an audience on behalf of the subjects as a means of empowering them by giving them more authority to the subjects' voice. Attempts to use knowledge for social change by modifying consciousness or invoking a call to action. |
| Describes culture. | Changes culture. |
| Recognises the impossibility and undesirability of research free of normative and other biases, but believe that these biases need to be repressed. | Celebrates normative and political position as a means of invoking social consciousness and societal change. |
| Assumes the status quo and affirms assumed meanings when others might exist, and seldom reveals the perspective of research subjects on the researcher. | Study oppressed or socially marginal groups, and uses their work to aid emancipatory goals or to negate the repressive influences that lead to unnecessary social domination of all groups. |
| Hermeneutics. | Simultaneously hermeneutic and emancipatory. |

*Table 1: Differences between Conventional and Critical Ethnographies*

Secondly, ethnography would provide an insider view of what happens in the research sites with regard to the cultural aspects of human interactions – specifically how teachers learn, work and relate to each other in collaborative, reflective and inquiry

learning setting. In ethnography, the researcher has the advantage of being both an observer and a participant in his or her pursuit of cultural description and interpretation.

Thirdly, the choice in choosing critical ethnography is consistent with the need to study power dynamics and relations in the culture of participants in the Teachers Network Learning Circles. As mentioned in the previous chapter, I tend to agree with the premise that a sociological analysis of human lives cannot escape the study of power. One of the central ideas guiding critical ethnography is that "social life is constructed in contexts of power" (Noblit, 2004, p. 184). Critical ethnography places importance on not only how power relations materialise in the lives of the participants that are being observed, but also how power relations between the observer and research participants influence the practice of research activities and knowledge creation. The latter would help in preventing or minimising the problem or issue of knowledge generation being reduced to or the outcome of the exercise of power. The critical component of critical ethnography is also consistent with the notion of not only minimising acts of disempowerment or domination, but also maximising acts of empowerment and emancipation in the lives research participants.

The attempt to emancipate people from different forms of oppression and domination, critical social science inevitably goes beyond understanding (Verstehen) and explanation (Erklären) to challenging the status quo or privileged power positions, along with exposing the forces of domination and resistance, within social sites and institutions. It thus seeks to change social conditions through emancipatory experiences that encourage more reflexive (individual and collective) agent and agency or 'habitus' – a matrix of perceptions, appreciations and actions (Bourdieu, 1977, p. 83).

Fourthly, critical ethnography provides the methodological framework for the study of other social sites that have meaningful relationships with the primary social site of the research study – what is termed as 'system relations' (Carspecken, 1996). These social sites could include the school where participants of Teachers Network Learning Circle are located, the Teachers Network, the training of Teachers Network Learning Circles' facilitators and documents that pertain to teacher professional development in Singapore. What is most salient about my research agenda is to uncover actional, mediational and systemic properties of social relations (Morrow 1994) that are both liberating and emancipating, and dominating and disempowering.

Critical ethnography also provides the sociological framework for power analysis at different layers of social reality. This is quite consistent with Clegg's (1989) notion of the 'circuit of power' arguing that power exists at three levels in society: agency (causal/episodic power), social integration (dispositional power) and system integration (facilitative power).
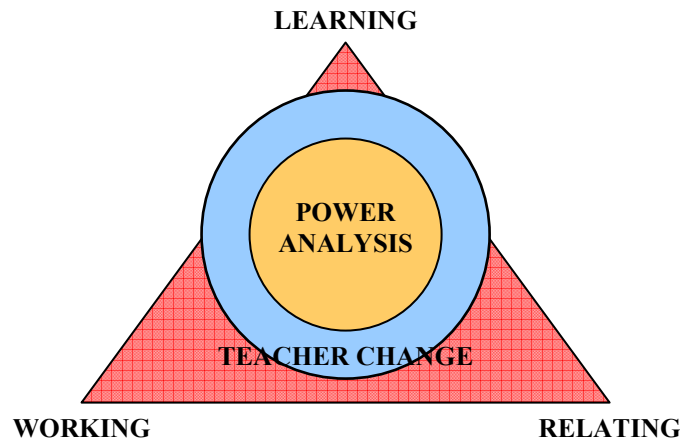


***Diagram 4: Research Agenda***

In summary, the primary task in the research study is the cultural description and interpretation of power relations in the social interactions of Teachers Network Learning Circle's participants as they relate, work and learn with each other, and develop and change (Diagram 4).

Before describing in detail the methodology that I had adopted in this study, it is worth mentioning that the critical ethnography proposed by Carspecken (1996, 2001) was not used on a wholesale basis. This is consistent with Carspecken's (2001) claim that the critical ethnography that he had developed is still undergoing continual construction even though its basic features are in place. It was encouraged that researchers aspiring to use his model of critical ethnography to invent methods or borrow existing methods to produce an analysis consistent with the core concepts of 'meaningful action', 'culture' and 'social systems' (p. 10). These core concepts do more or less have close correspondence to three moments of research processes in the critical methodology outlined by Morrow (1994) – the interpretive analyses of social action by individual and group agents *(actional properties)*; mediational analyses that reveal simultaneous operation of agency and structure *(mediational properties); and* structural analyses of system integration *(systemic properties)*.

The five stages of critical qualitative research that underpin critical ethnography proposed by Carspecken (1996) consist of the following –

***Preliminary Steps:***
> *Creating a list of research questions, a list of specific items for study, and examining researcher value orientations.*

***Stage 1:*** *Compiling the primary record through the collection of monological data.*

***Stage 2:*** *Preliminary reconstructive analysis.*

***Stage 3:*** *Dialogical data generation.*

***Stage 4:*** *Discovering system relations.*

***Stage 5:*** *Using system relations to explain findings.*

**PRELIMINARY STEPS**

The research questions which I had established at the commencement of my fieldwork consist of the following –

1. What is the predominant power relation that governs how members of the Learning Circle relate, work and learn?
2. What are the cultural values that underlie the predominant power relation?
3. How do the cultural values that underlie the predominant power relation influence teacher change and development?
4. How do the cultural values and practices of other social sites relate to the Learning Circle site?

The specific items for study include the following –

<u>*Actions (social routines)*</u>
*Learning Circle Site*

- Common social practices.
- Learning Circle phases – reflection, planning, action, observation and publication.
- Conversations among participants.
- Non-verbal communications among participants.
- Consensus decision-making routines.

*School Site*

- Common social practices.
- Participants' daily job routines.
- Pupils' daily routines.
- School's daily routines.
- Presentation of Learning Circle project in Learning Symposium.

*Teachers Network Site*

- Common social practices.
- Daily job routines of Teachers Network's professional development officers.

*Learning Circle Facilitators' Training Site*

- Common social practices.

*North Zone Cluster 4 Learning Symposium*

- Social practices – formal and informal.

*North Zone Action Research Education Symposium*

- Social practices – formal and informal.

<u>*Artifacts*</u>

- Learning Circle materials – action plan, reflection booklet, report, publication, intervention worksheets and Learning Circle handbook,
- School's logo, posters, banners, magazines, students' handbook, teachers' handbook and noticeboards.
- The Ministry of Education's EPMS (Enhanced Performance Management System) information kit.
- Political speeches relating directly and indirectly to professional development and the teaching profession.
- Learning Circle Facilitators' Training materials.

- Learning Circle facilitator.
- Learning Circle participants.
- Principal.
- Teachers Network Learning Circle Co-ordinator.
- Teachers Network professional development officers.
- Teachers Network Deputy Director.

With regard to my value orientations as a researcher, the following summarise key salutary values which I brought along into this study –

- Research is a social activity that is not devoid of power.
- Teachers are considered to have the least power in contrast to middle and senior management in schools by virtue of their economic and social status. Their silence contributes to the perpetuation of their disempowerment.
- Teaching is more or less a de-professionalised profession –
  - Deskilling of teachers.
  - Silencing of teachers' voice.
  - Alienation of teachers in the policy-making at both macro and micro contexts.
  - Negation of teachers' discretion.
  - 'Dehumanisation' of teachers.
    - Cannot name the very conditions that affect their lives.
    - Cannot objectify these conditions.
    - Unable to explain the conditions of their work.
    - Even if they could, they are not able to voice them or change them.
    - The monopolistic nature of the teaching industry removes choice on the part of teachers.
    - The reification of social practices contributes to their alienation.
- At the system level, the pursuit for economic pragmatism and therefore need for efficiency creates conditions that lock teachers within their limited professional power.
- Action research is a medium that can bring about emancipation. Learning Circles therefore have potential to bring about emancipation of teachers.

However, action research could be reified to become a tool for domination on teachers.

- Reflection within action research helps to heighten 'reflexivity', 'consiousness' and 'conscientisation' of teachers which are pre-requisites for emancipation.

- Action research projects carried out by teachers increase the capacity of teachers to engage in the democratisation change processes that take place in schools.

- Action research projects compel schools to provide time and space for teachers to reflect and inquire into their professional practice.

- Action research can deepen professional learning of teachers more than traditional modes of professional development such as mentoring, coaching, supervision, workshops, courses and conferences.

- The 'discursive will formation' which is espoused by Habermas is an appropriate response to current pathologies existing in capitalistic modern states.

- The need to balance 'system' and 'lifeworld' espoused by Habermas is also an appropriate response to current overemphasis on system priorities.

With respect to examining researcher value orientations, I found that my experience with critical theory was a direct response to my colleague's challenge in 2002 about the epistemological foundations of action research, which was my initial research programme preference. Previous to this, my understanding and experience of research have been limited to positivist forms of research study employing questionnaire and statistical analyses, and forms of qualitative study that not only serve to support quantitative research studies, but also contain problematic overlapping of primarily interpretive with positivist elements. For example, after qualitatively analysing interview transcripts, there were tendencies to theorise or form universal objective relations even though the number of interview participants was quantitatively small.

With hindsight, the inclination to initially employ action research as the central methodologies for this study was very much motivated by my aspiration to liberate teachers from their disempowered position. This conviction I suspect was borne from my early experiences of engaging in action research projects in my teaching stints from 1998 to 2003 in primary, secondary and tertiary education. Interestingly, I was unaware of the term action research for the first few projects that I was involved in. My experiences with the undergraduate dissertation project and participation in modules relating to social issues in education at the University of Loughborough had not only

caused me to be more critical and self-critical, but also provided the skills for systematic inquiry. These experiences had significantly heightened my motivation, capacity and confidence to engage in evidence-based practices. The emancipatory impact that I had experienced in these practices were overwhelmingly empowering in the midst of disempowering practices so much so that I was compelled to take upon myself the moral obligation to share my experiences with other educators.

The almost Messianic call to liberate teachers from the shackles of disempowerment could probably be due to several life experiences. Firstly, being a teacher in the public education service for about seven years made me understand the feelings of disempowerment as a result of trying to meet almost impossible multiple deadlines in stressful work conditions that substantially undermines teachers' autonomy and within an education system that is responding to increasing pace of change and intensification of work. Coupled with the moral obligation to serve pupils and parents' education needs, disempowerment easily leads to disillusionment.

Secondly, instances of being treated as second class in contrast to graduate teachers during the first four and a half years of my full-time teaching had helped me to empathise with what it means to be subjugated intellectually and politically. Teachers with a diploma in education are generally in my view perceived to have lower intellectual and cultural competences as a teacher and a person in contrast to teachers with basic degrees and a post-graduate degree in education. The cultural value underlying such psyche could well be attributed to the Singapore version of meritocracy which in my view has helped form a society that privileges both ability and effort, and academic achievements and qualifications as being significant indicators to both ability and effort. The identity and worth of the individual is therefore highly contingent on academic achievements and qualifications.

Thirdly, being an ethnic minority Malay in Singapore brings along with it experiences of having less worth than the majority Chinese population. Although in terms of numbers there are other smaller ethnic minority groups such as Indians and Eurasians, the Malay community's general cultural values of contentment and acceptance of lower life achievements and standards of living in contrast to other ethnic groups, are perceived to be socially and culturally pathological.

Fourthly, my conversion from Islam to Christianity had led me to experience situations of being ostracised from members of Malay-Muslim communities including my immediate direct family members. Such experiences had raised the level of empathy towards oppressed and ostracised groups of people.

Lastly, the experiences of my Christian faith have inculcated a habitus toward affirmative actions for people who are disadvantaged by capitalistic modes of production, including the field of research production and reproduction. On the whole, it can be said that both critical theory and I have found each other in the course of history.

**<u>Access</u>**

With regard to access, permission in written form was first sought from the Ministry of Education in 2002. Access to do research in schools was granted with a six-month renewable term. The second level of access was from Teachers Network which was secured by the end of 2003. Through a meeting with the Deputy Director for Teachers Network, Assistant Deputy Director for Teachers Network and Learning Circle Co-ordinator I presented my research proposal which received strong support partly because they could benefit from the findings of my research study and possible future collaborative work with me. Teachers Network provided further access to Professional Development Officers (PDOs) who are Learning Circles facilitators to Learning Circles in schools. The intention was to attach myself to PDOs who were willing to take me in as a researcher and help me grant access to schools. This plan was however not without problems.

The first problem I faced was to do with the timing of the start of Learning Circles. Although most Learning Circles started at the beginning of the year, schools usually plan and confirm their intention to embark on Learning Circles at the end of year before the end of the year holiday in mid-November of the previous year. This is so especially for schools doing Learning Circles for the first time. There are however schools that confirm their intention in the beginning of the year. There are also schools that prefer to start Learning Circles in July although such cases are rare. Starting Learning Circles at the beginning of the year gives participants more time to involve professional development and greater flexibility in the choice of Learning Circle meetings. Hence, by the time I was asking for permission for access at the beginning of 2004, Learning Circles were already in motion. Asking for access was difficult as Learning Circles'

participants and school principals were less willing to include an outsider and a stranger within a very short period of time. This was the case for one primary school. The window of time to ask for school access is therefore small within the month of November.

The second problem I encountered was the conditions which I had originally set for my research site. First, Learning Circles' participants that I was to study must be new to the principles and practice of Learning Circle. Second, the PDOs facilitating Learning Circles must have at least two years experience in facilitating Learning Circles. This inadvertently narrowed down PDOs to one person only and the other person is the Learning Circle Co-ordinator who was too involved with administrative matters. The rest of the PDOs were relatively new to Learning Circles. All these conditions were subsequently dropped in order to increase the number of research sites.

The third problem was to do with access from school principals who have the greatest say with regard to research access to schools. PDOs understandably and rightfully take on a service role to schools. In terms of the research study, they primarily played the role of the middle person and as a result may not be able to convey my research framework as effectively as I could. Communications using third parties also used up more time than I had anticipated.

The third level of access was from school principals. The first school principal whom I had a chance to talk to about my research study was available at the beginning of the second semester. In my visit to the secondary school I sensed that the principal was not so keen to take me in as she was not familiar with me although she did mention that she would be agreeable if participants were all right with the research study. Subsequently, I met the Learning Circle participants when they were having the first Learning Circle meeting. I introduced myself and summarised my research study. Participants consisted of a senior management team member and teachers who were not new to the teaching profession. I informed the participants that all of them needed to agree with my request if not I would not proceed. Throughout, most of them were quiet except for the teacher who was a member of the senior management team. She was the only person who was forthcoming about my research study in contrast to the rest and was willing to make the decision on the spot to take me in. I left by requesting that participants give time to consider my request. I could only guess that participants were not keen to be in

Learning Circle and their participation might have been imposed. A few weeks later, I was told by the PDO that the participants had decided not to take me in. I could not however ascertain if the reasons were attributed to participants' or the principal's unwillingness, or both. This issue points to the next level of access – Learning Circle participants. On hindsight, I could imagine that if I were to have accepted the welcome from the senior management team, I would have secured a research site but I would also have gravely contradicted my own belief that researchers should not abuse their power in imposing their will on research participants, especially if they were already imposed to involve themselves in Learning Circles.

The greatest difficulty was reaching consensus by all Learning Circle participants to agree on my coming in. I made it a point to emphasise that if one participant was not willing to take me in as a researcher the majority ought not to impose their decision. This was in step with my belief in civil liberty and democratic consensus decision-making. In a secondary school where I could ask permission for access from three Learning Circles one of the Learning Circles had decided not to take me in because there were a few teachers older in age who felt uncomfortable with my presence. Their insecurity comes from their lack of confidence that discussions within Learning Circles would be kept confidential. Although the principal was quite supportive of my research study, my relationship with the principal might have brought about a greater sense of insecurity especially when the principal was perceived to be a difficult principal to work with. The greater threat would probably have come from my close relationship with the HODs who played an important role in promoting Learning Circles in the school. This was further aggravated by the need for me to audio-tape discussions. Although eventually only one group of Learning Circle was willing to take me in as a researcher for 2005, the group was disbanded because of the incoming new principal's decision of not wanting to emphasise Learning Circles for the new calendar year.

Although the teachers' reluctance to be involved in Learning Circles could be attributed to principal's imposition, I suspected that the workload required in Learning Circles also added to their already heavy workload. In one school which I had visited, a group of primary teachers who were already involved in a form of collaborative learning quite similar to Learning Circles had decided eventually not to take on Teachers Network Learning Circles because they were happy with the less formal and less structured approach to collaborative learning. At the beginning, the principal, a former

acquaintance whom I knew through a Christian organisation welcomed me and expressed his support in terms of access if the primary teachers wished to adopt Teachers Network Learning Circle for the coming year. Both teachers and principal were initially forthcoming about my research study. However, the teachers eventually decided not to embark on Teachers Network Learning Circle. I could only suspect that the group of primary teachers was comfortable with the flexibility of time and space for engaging in collaborative and reflective practice. Although they share principles of Learning Circles, they were not keen to adopt the formal practices of Teachers Network Learning Circles which could be seen as more rigid and requiring more time.

The above issues that I have surfaced had collectively prevented me from gaining access to Learning Circles in schools. Within the period 2004 I had experienced rejections from a total of five schools. By end of 2005, one of my colleagues recommended me to talk to two school principals whom he knew were doing Learning Circles in their schools. He made the initial connections via email. Out of the two, one principal was very forthcoming and requested me to contact her. I managed to meet her in January 2005. I shared with her my research study and she shared with me her vision for her school. She also showed me around the school. At the end of the meeting, she expressed her support and assured me that one out of six Learning Circles would be willing to take me in as a participant or non-participant observer.

As a follow up I emailed the school's Learning Circle facilitator and stated the details of my research study. She was very forthcoming and indeed played a significant part in helping me gain entry to the group which was made up of six Primary 4 teachers in total. After having cleared the details of the research study, I attended the second Learning Circle discussion session. In the midst of the communications between the principal and facilitator, and the facilitator with the participants I had missed the first session. I was given time to summarise the details of my research study during their second discussion session which was my first meeting with them. At the end of the first meeting with the Learning Circle participants I observed that the participants were generally comfortable with my presence as an observer.

After a few Learning Circle sessions I found that gaining access is not a one time event, although the initial acceptance is critical. It is not static but constantly changing. Good ethnography is in my view one which enjoys a growing degree of access along with a

growing degree of familiarity, openness and trust in the relationship between the researcher and research participants. This positive relationship requires a good deal of effort, sensitivity and reflexivity on the part of the researcher.

**STAGE 1: BUILDING A PRIMARY RECORD (JAN 05 – DEC 05)**

In Stage 1, interactions among Learning Circle's participants were observed as unobtrusively as possible via participant observation. Although my role was a participant observer, the level of participation was minimal with regard to verbal and non-verbal interactions. In terms of power dynamics, I took on the posture of an outsider who essentially sought to understand the group's project through Learning Circle's discussions. Participants knew that I was not well-versed with the practical routines that take place during Learning Circles. The group was the first Learning Circle which I had access to. The fact that I was doing a study of a Learning Circle in practice for the first time and for my doctoral study had helped to significantly diminish the 'expertise' status that I hold. In addition, I had explicitly made clear the intention of the study – that is, not to see how successful Learning Circles work out in schools, or how successful Learning Circles are in relation to pupil academic achievement. Throughout my fieldwork, I tried to maintain supportive, nonauthoritarian relationships with participants; actively encourage participants to question my own perceptions; assure that participants were protected from any harm in the course and as a result of the research study (Carspecken, 1996).

I also took on the posture of a resource person during instances when my opinion was sought by participants which were very rare. This in itself is good indicator of how much they perceived themselves to be experts in their own rights with regard to Learning Circles. There were however a few occasions when I made interjections with respect to research methods, albeit using suggestive as opposed to assertions and tone and posture.

In total, four Learning Circle meetings were completed in 2005 which involved seven participants including myself. I was however absent for the first meeting. Hence, primary data collection of first meeting is not available. Each Learning Circle meeting lasted for one to two hours. Discussions during these Learning Circles were audio-recorded using a digital voice recording device (Olympus DS-660) along with an analog voice recording device (Sony TCS-60DV) as back-up. Learning Circle's discussions were transcribed verbatim along with informal utterances and non-verbal expressions. The possibility of using video recording was considered but was eventually discarded for fear that it might compound the observer effect or Hawthorn effect which contradicts the aim for more naturalistic observations. Voice recording is therefore

deemed as a better alternative as conversations between participants are primary data needed to be analysed in the research study. By the end of the second Learning Circle meeting I observed that participants were less conscious of the recording devices. I suspected participants were not overly concerned about the presence of the voice recording device because of the need to get on with discussions. The relatively young age of participants had also in my view helped participants to be less conscious, or not at all conscious, of the recording devices. In trying to gain access to previous schools, I had observed that younger teachers were more open, comfortable and less suspicious of technology in contrast to older teachers. They also seemed to be less concerned about the political consequences of their actions during discussions. Conversations between participants were transcribed word for word. These transcriptions were accompanied by fieldnotes written immediately after every Learning Circle meeting.

General observations of the school were made during the second half of the year via school visits. Fieldnotes were made based on these school visits which totaled 12. The intention was to gradually immerse myself in the school. The visits had the purpose of understanding the school culture as a whole through naturalistic observations and field note-taking in diverse sites of the school such as the canteen, library, staffroom, principal's office, general office and classrooms; naturalistic interviews or conversations with pupils, teachers, the principal and parents; and artifact analyses on cultural products such as school banners, magazines and noticeboards. The use of a digital camera (Canon Ixus) had been very helpful in capturing images of artifacts which could be analysed after school visits.

Information gathered from participant observation during Learning Circle meetings, observation during school visits and artifact analyses provided information to build an intensive primary record. The information collected is considered 'monological' as the researcher speaks alone when writing the primary record and takes a purely third-person position, and an uninvolved observer, in relation to Learning Circle's participants.

In total, there were six members in the Learning Circle. In order to protect members' confidentiality, the names mentioned in this thesis are fictitious. In terms of sampled transcripts used in this thesis, the first letter of their names indicates their identity. Surhana [S], who was the Learning Circle facilitator, is a Malay female teacher with five years teaching experience. Maimuna [M] is a Malay female teacher with 12 years

of teaching experience. Edward [E] is a Chinese male teacher with three years teaching experience. Bob [B] is a Chinese male teacher with two years teaching experience. Karna is an Indian female teacher with two years teaching experience. Teresa [T] is a Chinese female teacher with six years teaching experience. A more detailed description is given in Appendix A.

Below is a sample extract of a primary record or transcript.

S: Edward was saying, self-confidence.
M: *(Laughs)* But it doesn't break down the research question what *(tickled)* – How to get our students to be more proficient. You might as well – how do I get my pupils to have less difficulty in identifying. Right, you are re-writing the top to the bottom. You are – you're going to break it down, right, what is the research question. Number one, are our pupils equipped with the knowledge first. The second question - right. Firstly, in order for them to answer - identify the question answer the question, first, their knowledge base must already be there. Give me a concept of matter – but if you students still, er, guess indefinite volume, still not sure indefinite volume definite volume, then we have not – passed by the first stage. If we say how we get our pupils to be more proficient in answering it might as well change the word more proficient to have less difficulties. You are re-writing your area of concern … Is, is that what I mean or or did I get myself, did I get it wrong? I mean, what what is the research question supposed to be? *(Bob laughs)* S: We have to ask Edward because –
M: No, I have to ask the boss *(Slightly Assertive)*
E: No, no, no.
M: I'm asking you … what usually comes in a research, research question. Is it a breakdown of this – the, the question that will you you ask yourself in order for you to, to pick the first one, pick the second one, the third one. Then you can come a – ultimate goal.
S: Okay. The research question is more towards, em, so that it guides us in our planning stage.
M: Okay. Okay. First we set the question, are our pupils, do our pupils have a, a, grasp, or, or, are they well equipped with the knowledge first. With the sound knowledge and concept. Firstly, they must have a sound knowledge. So my first question, how do we get our pupils to have – you know, to imbue in them the the Science concepts that they just rattle off when you ask them. Because one of the difficulties with them not answering the question because the knowledge necessary is so poor *(Stressed)*.
S: Wouldn't how to make it better?
M: First we get the, the facts there first. They, they have to you know, they have to do well first in the –
S: First, how do we, em, –
M: Remember how we we we, we observe teachers. We have to look at how – what is their subject knowledge like. The same thing with the pupils. Their subject knowledge must already be good for them to be able to answer harder higher order questions. But if their subject knowledge is already – is poor, then their case, to answer case case of questions, knowledge questions. Then they can't answer a questions, I mean xxx questions.
K: I was wondering if this is our research question, then what she said will be under the research question right. Not the research question itself.
S: *(Laughs)* I'm confused.
M: No, that's why. I don't don't know what xxx.
K: I know that this is okay but she said will be okay how do we get our pupils to be more proficient. Okay, before we do this we have to make sure they have whatever knowledge.
S: How do we get to have to the skills?
M: Yes.
K: Ah.

**STAGE 2: PRELIMINARY RECONSTRUCTIVE ANALYSIS**
**(DEC 05 – FEB 06)**

In Stage 2, speculations were made with regard to the meanings of interactions recorded in the primary record, to tease out normative and subjective references, and to articulate normative themes tacitly referenced in consistent ways on the research site. At the same time, analyses based on second-order concepts were also made. These included roles, interactive sequences, embodied meaning, intersubjective structures, routine modes of interactive power and power relations to name a few. The analysis is reconstructive because it articulated cultural themes and system factors that are not observable and are unarticulated by actors themselves. The analysis involves taking conditions of action constructed by people on nondiscursive levels of awareness and reconstructs them linguistically. In other words, it reconstructs social interactions into explicit discourse, and cultural and subjective factors that are largely tacit in nature. The analysis is also preliminary as it must be checked, expanded and changed through procedures employed in Stage 3 when interview data is collected. All in all, the preliminary reconstructive analysis involves the interplay between low-level coding, initial meaning reconstruction and pragmatic horizon analysis.

**Initial Meaning Reconstruction**

As initial meaning reconstruction involves a movement from initial holistic and tacit or intuitive modes of understanding (undifferentiated) toward a more explicit and delineated modes of understanding (differentiated) which in turn modify one's holistic grasp of meaning (Carspecken, 1996, p. 95), the following were undertaken –

1. Read through the primary record which included, in chronological order, reading through the fieldnotes of each Learning Circle's meeting, listening through the voice-recorded Learning Circle's meetings, and reading through each transcript.
2. Made mental notes of possible underlying meanings.
3. Suggested patterns.
4. Highlighted unusual events that were relevant to the study.
5. Employed low-level coding procedures to mark out both routine as well as unusual events. Low-level codes fall close to the primary record, require little abstraction, aim to reference mainly objective features of the primary record and refer to activities that are open to multiple access.

6. Selected 40 segments for explicit initial meaning reconstruction which was made in light of the progress of low-level coding and research questions, and which was representative of action patterns, along with some segments that were considered anomalies in the patterns *(15 segments from transcript 2; 18 from transcript 3; and 7 from transcript 4).*

7. Copied selected segments into new word processing files in order to preserve the primary record in its original form. Line by line reconstructions were then made on selected segments by adding discursive articulations of tacit modes of meaning which were believed to underlie the interactions recorded. These additions were made within brackets to clearly distinguish them from the primary record. Selectivity is important as the task of reconstruction is time-consuming.

The central concept of the initial meaning reconstruction is 'Meaning Field' (MF). Meaning field is a range of possible meanings, which are understood holistically – all at once, in understanding and interpreting actions carried out or received by actors. Meaning field requires a hermeneutic process that involves a movement from an initial implicit holistic understanding to more explicit and delineated modes of understanding. The inherent uncertainty and indeterminacy – but within boundaries, are due to the fact that meanings are always experienced as possibilities within a field of other possibilities. Initial meaning reconstruction nevertheless require researchers to raise meaning fields from the tacit to the discursive as much as possible albeit recognising that reconstructed meaning fields may not be the same as the meaning fields experienced by the subjects of study. Reconstructed meaning fields therefore use statements of "or", "and" and "and/or" to indicate the ambiguities that meaningful acts possess for all parties involved – actors, those addressed by the act, those witnessing the act, and the researcher. The concept of meaning field is both analytical and substantive.

Below is an example of an Initial Meaning Reconstruction. The abbreviation OC stands for Observer Comment, and MF stands for Meaning Field.

S: Edward was saying, self-confidence.

M: *(Laughs)* But it doesn't break down the research question what *(tickled)* – How to get our students to be more proficient. **[OC: Maimuna sounds assertive]** You might as well – how do I get my pupils to have less difficulty in identifying. Right, you are re-writing the top to the bottom. You are – you're going to break it down, right, what is the research question. Number one, are our pupils equipped with the knowledge first. The second question - right. Firstly, in order for them to answer - identify the question answer the question, first, their knowledge base must already be there. Give me a concept of matter – but if you students still, er, guess indefinite volume, still not sure indefinite volume definite volume, then we have not – passed by the first stage. If we say how we get our pupils to be more proficient in answering it might as well change the word more proficient to have less difficulties. You are re-writing your area of concern … Is, is that what I mean or or did I get myself, did I get it wrong? I mean, what what is the research question supposed to be? *(Bob laughs)* **[OC: Maimuna sounds slightly exasperated]**

S: We have to ask Edward because – **[OC: Surhana tries to direct Maimuna's question to Edward]**

**[MF: Surhana wants Edward to elaborate on his previous suggestion (AND/OR) Surhana wants to lessen the tension]**

M: No, I have to ask the boss *(Slightly Assertive)* **[OC: Maimuna wants Surhana to respond to her previous question]**

E: No, no, no. **[OC: Edward tries to deflect attention away from him]**

**[MF: Edward does not want to be seen as the expert or person who is influencing the decision in this matter (AND/OR) Edward does not want to get into any quarrel with Maimuna]**

M: I'm asking you … what usually comes in a research, research question. Is it a breakdown of this – the, the question that will you you ask yourself in order for you to, to pick the first one, pick the second one, the third one. Then you can come a – ultimate goal.

S: Okay. The research question is more towards, em, so that it guides us in our planning stage. **[OC: Surhana responds in a calm manner]**

**[MF: Surhana feels that since she is the facilitator, she needs to respond to Maimuna's queries (OR/AND) Surhana thinks that she has no choice but to respond to Maimuna's queries]**

M: Okay. Okay. First we set the question, are our pupils, do our pupils have a, a, grasp, or, or, are they well equipped with the knowledge first. With the sound knowledge and concept. **[OC: Maimuna calmly articulates her proposition]** Firstly, they must have a sound knowledge. So my first question, how do we get our pupils to have – you know, to imbue in them the the Science concepts that they just rattle off when you ask them. Because one of the difficulties with them not answering the question because the knowledge necessary is so poor *(Stressed)*.

**[MF: Maimuna is frustrated with her students' inability to learn]**

Carspecken (1996, p. 102) summarised the purpose of initial meaning reconstruction as follows –

1. To clarify the impressions of meaning received from observations which are largely tacit, and therefore being aware of what might be missing, biases in play, and cultural forms necessary to understand through further analysis.

2. To calibrate the researcher in making further reconstructions of meaning early through a peer debriefer whose role is to check and challenge biases and blindness and in so doing increases the researcher's own awareness.

3. To provide the material for illustration in the final write-up where selected meaning reconstructions are inserted into the final research report.

4. To lay the groundwork for validity reconstructions and horizon analysis.

**Pragmatic Horizon Analysis**

Carspecken's (1996) notion of pragmatic horizon analysis borrows the term 'horizon' from phenomenology and relocates it within the pragmatic theory of meaning associated with Habermas' work. Instead of using the concepts of foregrounding and backgrounding in analysing sense perception and perception of inner states and ideas – 'horizons of intelligibility', pragmatic horizon analysis analyses actions as it is understood to be most primary in experience. Perceptual object only becomes fully foregrounded when it is symbolised and therefore located within generalised contexts of possible communication. In other words, perception is knowledge imparting only when it becomes a possible reference in communicative acts. Perceptual horizon is therefore understood to be a special case of a pragmatic horizon.

Pragmatic horizon analysis essentially consists of analyses of meaningful social actions along temporal and paradigmatic axis. Along the temporal axis, meanings of social acts are reconstructed taking into consideration the location or context of the act within participants' awareness of prior events and within their expectations of events about to come. All acts occur within a stream of interaction, or interactive syntax, which displays a certain rhythm and which is intersubjective as it works through assumptions of each other about a shared awareness of previous acts and their significance plus an assumedly shared set of expectations of what acts could come next. Along the paradigmatic axis, meanings of social acts are reconstructed and understood all at once – holistically and tacitly – through structures of similarity, complementarity, contrast, opposition, hierarchical inclusion and inference that exist 'virtually' outside space and time. These paradigmatic structures help in the constitution of pragmatic meaning structures and semantic meaning structures – both of which help in the construction and reading of validity claims. Semantic and pragmatic structures are cultural structures that actors draw upon to reproduce or alter while engaging in social acts as opposed to structure determining social acts.

Semantic meaning structures are cultural categories of meaning that words and phrases designate. Words and phrases are often parts of semantic structures in which contrasts and similarities to other terms work together. Pragmatic meaning structures are cultural categories of meaning which are conveyed through the manner of speaking and pertain to such things as roles and role-sets, pragmatic metaphors and pragmatic allusions

(pragmatic units). Roles are holistic modes of action that are tacitly recognised as singularities by members of the culture in which they exist. Also, the entire set of roles must be grasped to understand the significance of a particular role. A pragmatic unit is therefore understood in contrast to other possible pragmatic units that the actor has not employed. As mentioned, both semantic meaning structures and pragmatic meaning structures aid in the construction and reading of validity claims.

Validity claims carried out by an act help with the intensive reconstruction of meaning of the act resulting in what is termed as 'validity horizon' which is located within the 'pragmatic horizon'. Claims of an act, which are usually tacitly referenced and employed, may be differentiated along two axes. First, a continuous axis running from 'highly backgrounded' claims toward 'most foregrounded' (vertical analysis). Second, an axis separated into the discrete categories of objective, subjective and normative-evaluative claims (horizontal analysis). These claims are usually tacitly understood, referenced and employed by actors but at times articulated to defend positions or clear up misunderstandings usually termed as 'reasons'.

Objective validity claims are made within acts that are open to multiple access where all humans in principle have access through their senses. These claims involve a notion of a single world which is 'the same' for all people, and are structured through the opposition between appearance and reality. Subjective validity claims are made within acts which are constituted by the principle of privileged access and therefore not open to outsiders unless through acts of disclosure. Acts of disclosure are however not subjective states disclosed rather representations of these subjective states which include among others emotions, desires, intentions and levels of awareness. Since subjective states are by nature not perceivable through sense observation, subjective claims are therefore inferred. Normative-evaluative validity claims are made within conditions not open to multiple and privileged access rather within a condition of reaching consensus to what are considered to be proper, appropriate and conventional (norms) which involve values – what is right, wrong, good and bad. These claims concern the nature of 'our' world as opposed to 'the' world (objective claims) and 'my' world (subjective claims).

Validity claims of all three categories are generally synthesised by semantic and pragmatic units. They are however influenced but not determined by semantic and

pragmatic units. This is because validity claims are carried out not by the semantic or pragmatic units alone rather by the entire meaningful act. Every meaningful act uniquely claims a certain configuration of validity claims that are not tied to the pragmatic and semantic units employed but rather reproduce or slightly change the sense of such units.

Below is an example of a Pragmatic Horizon Analysis based on the previous Initial Meaning Reconstruction where complex intersections of semantic units, pragmatic units and validity claims were reconstructed.

S: Edward was saying, self-confidence.
M: *(Laughs)* But it doesn't break down the research question what *(tickled)* – How to get our students to be more proficient. **[OC: Maimuna sounds assertive]** You might as well – how do I get my pupils to have less difficulty in identifying. Right, you are re-writing the top to the bottom. You are – you're going to break it down, right, what is the research question. Number one, are our pupils equipped with the knowledge first. The second question - right. Firstly, in order for them to answer - identify the question answer the question, first, their knowledge base must already be there. Give me a concept of matter – but if you students still, er, guess indefinite volume, still not sure indefinite volume definite volume, then we have not – passed by the first stage. If we say how we get our pupils to be more proficient in answering it might as well change the word more proficient to have less difficulties. You are re-writing your area of concern … Is, is that what I mean or or did I get myself, did I get it wrong? I mean, what what is the research question supposed to be? *(Bob laughs)* **[OC: Maimuna sounds slightly exasperated]**
S: We have to ask Edward because – **[OC: Surhana tries to direct Maimuna's question to Edward]**
**[MF: Surhana wants Edward to elaborate on his previous suggestion (AND/OR) Surhana wants to lessen the tension]**
M: No, I have to ask the boss *(Slightly Assertive)* **[OC: Maimuna wants Surhana to respond to her previous question]**
E: No, no, no. **[OC: Edward tries to deflect attention away from him]**
**[MF: Edward does not want to be seen as the expert or person who is influencing the decision in this matter (AND/OR) Edward does not want to get into any quarrel with Maimuna]**
M: I'm asking you … what usually comes in a research, research question. Is it a breakdown of this – the, the question that will you you ask yourself in order for you to, to pick the first one, pick the second one, the third one. Then you can come a – ultimate goal.
S: Okay. The research question is more towards, em, so that it guides us in our planning stage.
**[OC: Surhana responds in a calm manner]**
**[MF: Surhana feels that since she is the facilitator, she needs to respond to Maimuna's queries (OR/AND) Surhana thinks that she has no choice but to respond to Maimuna's queries]**
M: Okay. Okay. First we set the question, are our pupils, do our pupils have a, a, grasp, or, or, are they well equipped with the knowledge first. With the sound knowledge and concept. **[OC: Maimuna calmly articulates her proposition]** Firstly, they must have a sound knowledge. So my first question, how do get our pupils to have – you know, to imbue in them the the Science concepts that they just rattle off when you ask them. Because one of the difficulties with them not answering the question because the knowledge necessary is so poor *(Stressed)*.
**[MF: Maimuna is frustrated with her students' inability to learn]**

**Possible subjective claims**

*Foregrounded*

- M: I'm frustrated that our thoughts are not in order. I'm frustrated that the Research Question does not seem to make sense to me. My students are really weak in answering Science questions.

*Highly Backgrounded*

- S: I'm not that quite sure about the rightness or wrongness to a Research Question.
- M: I don't want to put Surhana under bad light.

**Possible objective claims**

*Foregrounded*

- Maimuna thinks that before students are able to identify the Science concepts of a Science question, they must first have the knowledge base of the Science concepts. Maimuna wants to clarify the definition of the Research Question. Maimuna wants the Research Question to be phrased chronologically in order that it reflects the logical order of the Area of Concern. Maimuna wants Surhana to define what a Research Question is. Maimuna wants to empthasise that the Research Question must have a logical order in the same manner as the Area of Concern.
- Edward does not want and does not like to antagonise Maimuna.

*Slightly Backgrounded*

- The task of constructing the Research Question directs participants to further refine their Area of Concern.
- Maimuna is open for correction.
- Surhana is not so sure about the definition of the Research Question based on Maimuna's arguments. Surhana wants Edward to reply to Maimuna's question on the definition of a Research Question.

*Quite Backgrounded*

- Surhana does not want to show to others that she is not sure about the definition of a Research Question based on the arguments that have been raised by Maimuna.

**Possible normative-evaluative Claims**

*Foregrounded*

- It is only appropriate that the Research Question corresponds well with the Areas of Concern.
- It is only right that the Research Question and Area of Concern has logical coherence.

*Backgrounded*

- It is all right to have strong assertions but be open for correction.
- It is not all right to displease one another.
- It is important to remain calm in the midst of a heated debate.
- It's not polite to embarrass colleagues in the open.

*Quite Backgrounded*

- The strength of an argument or assertion is based on the coherence and soundness of its premises.
- It is all right for participants to express their own views even if they could be wrong.
- It is not okay for Learning Circle facilitators to not know their job well.

*Highly Backgrounded*

- It is all right to have strong objections because we are peers.
- It is appropriate to express strong objections if one is an experienced teacher.
- It is okay to express strong objections because each of us is different and unique from each other.

The analyses that are involved in Stage 2 can be captured from the diagram below.
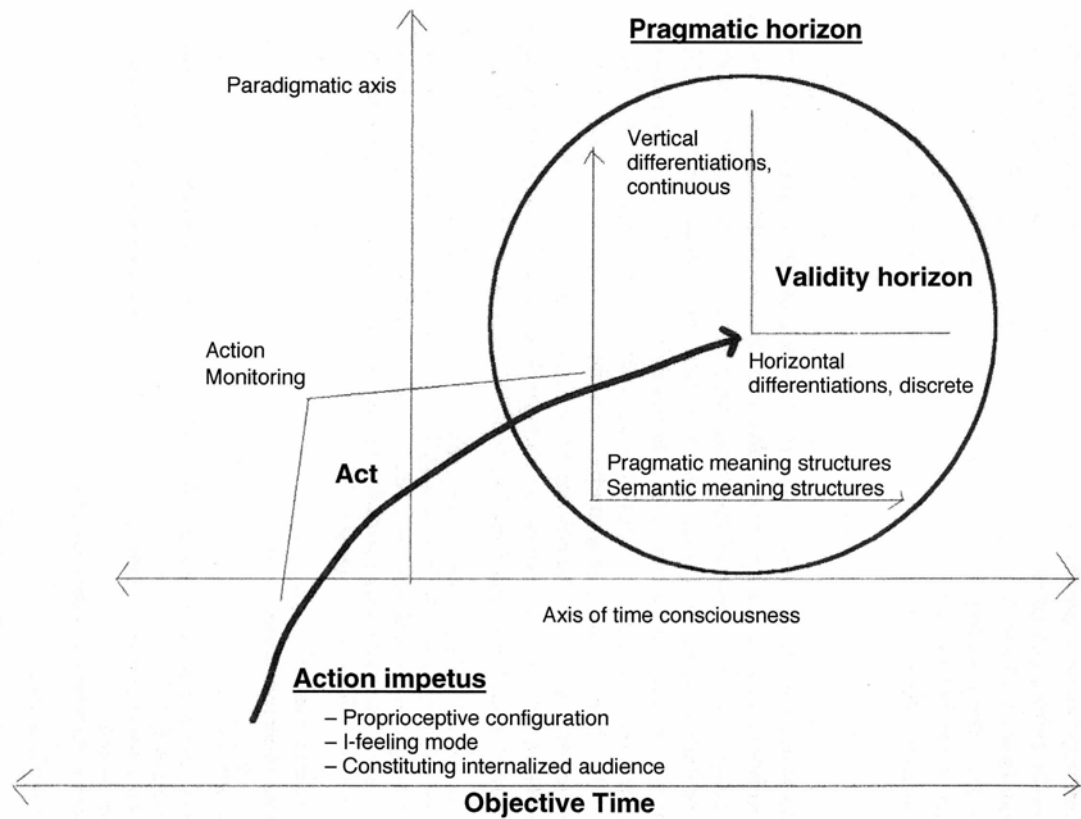


*Diagram 5: A Meaningful Act (Carspecken, 2001)*

**Ontological Assumptions**

In terms of ontological support to the knowledge claims made in the research study, I share with interpretive researchers' claim that human beings are value-laden, and that their world views influence their interpretations and representations of the world and reality. However, in sharing a critical posture in social science inquiry, I go further to surface the dialectical relationship between the subject and object – that is, both constitute each other in terms of existence. Without the former, the object cannot be known. Likewise, without the latter, the former will not be known. Consciousness is aware of itself only by the existence of the material world, which is only captured in existence of consciousness. Critical theory researchers claim that although objective reality cannot be represented literally and absolutely, we can assume confidently that it has a "consistently identifiable nature, and hence is imbued with inherent causal powers that can be represented indirectly by concepts" (Morrow, 1994, p. 137).

The subject-object dialectical nature places equal value and respect to both the subject and object of reality, which in my view is closely tied to the notion of power. Critical theory researchers therefore avoid and reject the positivist tendency to manipulate researched subjects on the basis that they are value-biased and their inability or lack of ability for thought, rationality and determinacy in research contexts. This also runs counter to their utopian vision for humans to be emancipated from forces of domination and disempowerment, and towards social democracy. The relationship between the researcher and researched subjects ought to therefore strive for symmetrical power relations.

In terms of making validity claims, critical theory researchers embrace the notion of critical realism as defended by Bhaskar (1986) who stressed the need to make a fundamental distinction between thought and objects of thought, and correspondingly between 'intransitive' and 'transitive' objects of scientific knowledge. While the former are the unchanging real objects which exist outside and perdure independently of the scientific process, the latter are the changing cognitive objects which are produced within science as a function and result of its practice (Bhaskar, 1986). Without the former, the result will be postempiricist relativism, and without the latter, "thought becomes a mere impress, effluxion, internalisation or Doppelgänger of things, bereft of intra-discursive conditions and rational controls" (Bhaskar, 1986, p. 52). The transitive objects of science therefore cannot be reduced to the external objects they seek to represent, but rather exist in "more or less historically specific, symbolically mediated and expressed, praxis-dependent, ineradicably social forms" (Bhaskar, 1986, p. 52). Critical realism, unlike naïve realism, avoids the basic polarised opposition between positivism and postmodernist relativism.

While positivist researchers seek objective understanding about reality from the third-person perspective (etic) and interpretive researchers seek subjective understanding from the first-person perspective (emic), critical theory researchers seek an inter-subjective understanding from the second-person perspective, which inevitably requires both first- and third-person understanding. Understanding occurs not through occupying one position or the other but rather in learning the cultural movement between them (Carspecken, 1996). It is inter-subjective because both the researcher and researched subjects have equal power status with regard to truth claims. Using Habermas' critical theory, claims to validity are justified through objective, subjective and inter-subjective

understanding of the real world through acts of communication involving four implicit validity claims of "comprehensibility, truth, truthfulness, and rightness" (Habermas, 1979, p. 3). Within this context,

> "the interpreter establishes nothing more than the possibility of more and perhaps better interpretation and thus the possibility of future dialogue or interpretive exhange." (Bohman, 2003, p. 105)

## Epistemological Assumptions

In terms of epistemological support to the knowledge claims made in the research study, critical social science shares with the general qualitative research to the interpretive requirement. In this regard, the research study relies on the hermeneutic process where social phenomena are considered as

> "text to be decoded through imaginative reconstruction of the significance of various elements of the social action or event … social science is radically unlike natural science because it unavoidably depends on the interpretation of meaningful human behaviour and social practices" (Little, 1991, p. 68).

In addition, hermeneutics, specifically philosophical hermeneutics, is distinct from other interpretive traditions such as symbolic interactionist, phenomenology and ethnomethodology. Although all view human action as meaningful, support ethical commitments to respect for and fidelity to the lifeworld, and share a neo-Kantian emphasis on the contribution of human subjectivity to knowledge without sacrificing the objectivity of knowledge, philosophical hermeneutics challenges the role of the uninvolved observer in interpreting social life (Schwandt, 2000). Philosophical hermeneutics, as propounded by Gadamer, argues that –

- understanding is a very condition of being human, and not merely a procedure- or rule-governed undertaking.
- understanding requires the engagement of one's biases, and not a matter of setting aside, escaping, managing or tracking one's own standpoint, prejudgements, biases, or prejudices.
- understanding is participative, conversational and dialogic.

- understanding is at once a kind of "application" – a practical experience in and of the world that, in part, constitutes the kinds of persons that we are in the world.

The above description relating to hermeneutics is congruent to critical theory as they point to the importance and value of the social human being. It avoids objectification and reification of a primordial human life – that is, in understanding and communicating with each other it avoids domination of humans through research activities. Lastly, it accords humans as being social, historical and cultural in nature.

"… (hermeneutic) is not to develop a procedure of understanding but to clarify the conditions in which understanding takes place. But these conditions are not of the nature of a 'procedure' or a method which the interpreter must of himself bring to bear on the text." (Gadamer, 1975, p. 263)

The close relationship between hermeneutics and social life is so closely tied up that Carspecken (1996) claimed that there is no definite procedure in meaning reconstruction because "the distinction between shared access (objectivity) and privileged access (subjectivity) must always be in play for there to be meaning" (p. 98) especially in gaining holistic impression of meaning. In this regard, he proposed that there are distinctive features of the 'hermeneutic circle'.

1. Inferences to meaning are *intersubjective* – that is, taking the position of the actor, the ones addressed by the act, and other people present but unaddressed; in other words, position-taking.
2. Meanings are recognised through *cultural typifications and generalities*, grasped tacitly.
3. Meanings are recognised through *normative reflection* – that is, by being clear of the norms that researchers themselves employ in understanding social actors.
4. Reconstruction of meanings involves the *normative circle* – a process of making tacit comparisons between the normative realms the researcher is familiar with and the normative realm that social actors seem to claim as valid.
5. Meanings are not only culturally, but also individually reconstructed as *personality factors* contribute to meaning-making besides cultural factors.

**STAGE 3: DIALOGICAL DATA GENERATION (MAR 06 – APR 06)**

In Stage 3, I took in the voice of Learning Circle participants to build up the primary record through more formal conversations with participants in the form of individual interviews and focused group discussion. The importance of dialogical data generation lies in its purpose of democratising the research process. This stage serves to give *"participants a voice in the research process and a chance to challenge material produced by the researcher"* (Carspecken, 1996, p. 155). In this regard, Research practices thus become social activities that treat research participants (the researcher and research subjects) as having basic intrinsic individual human worth and therefore power but towards an agreement for possible collective purposes. This act is a check against research practices that consciously or unconsciously promote the domination-subordination divide between the researcher and research subjects. The effect is to bring about greater degrees of autonomy and human agency towards what is considered cognitively and normatively just, equal and democratic. Bohman (2003) sees critical social science that seeks for a possible future audience that can appropriately verify a critical claim – an idealisation which is

> "at heart dialogical, articulating an expanded we-perspective of free and
> equal citizens in a more open and self-reflective democratic practice that
> is the generalised second-person perspective evaluating our current
> community." (Bohman, 2003, p. 106)

As these interviews were more formal, I adopted the role of the facilitator instead of a participant observer which I had adopted throughout the fieldwork. I maintained a supportive and safe environment with participants by stating the intent of the interviews – that is, to give them the chance to critique and affirm my findings, and that strictly confidentiality was to be adhered on my part. All interviews were digitally voice recorded. They were, however, not transcribed as they served as a form of members' check. The primary analysis is the dialogue that had taken place during Learning Circle sessions.

Coding continued in this stage but giving emphasis to high level coding. High level coding is constructed based on high level of abstractions. After Stage 3, the focus of

analysis was established based on the thick set of codes which were translated into a hierarchical scheme.

## **Validity Requirements**

With regard to the validity requirements proposed by Carspecken (1996), although I have used most of the guidelines for validity requirements for Stages 1, 2 and 3, a slight departure that I had made is his notion of requiring peer reviewers and member checks for Stage 1, 2 and 3. Due to time constraints, I was only able to get one peer reviewer to critique my assumptions and biases at the initial phase of the research study. Although I find this helpful, I found that member checks are essentially more 'validating' than peer reviewers. The necessity of attending to members' categories and meanings has been cited as one of four distinctive characteristics in ethnography (Emerson, 2001). Furthermore, peer reviewers are, in my view, far less indigenous than the participants that I was with. However, the positive experience that I had with the peer reviewer is that the experience of explaining certain assumptions and standpoints which she was unsure of or found questionable is enriching to my understanding of these assumptions and standpoints. Member checks were carried out only at Stage 3 during my individual and collective interviews with the Learning Circle participants.

## **STAGE 4: DISCOVERING SSYTEM RELATIONS (MAY 06 – DEC 06)**

In Stage 4, I examined system relations between the Learning Circle social site and other specific social sites which had relations to it. These included sites within the immediate locale such as the school, Teachers Network, TN LC Facilitators' Training, North Cluster 4 Learning Symposium, and North Zone Action Research Educational Symposium; and sites that produce cultural artifacts such as the Enhanced Performance Management System (EPMS) Kit and policy documents pertaining to teacher professional development and professionalism (Diagram 6). Actions that take place at the Learning Circle site are not totally immune to the cultural values that reside at the school and system levels. As the cultural values of Teachers Network Learning Circles appear to be counter to the system's values insofar as it espouses for change from the bottom, it would be valuable to empirically corroborate the extent of this assumption with regard to teacher professional development. It would also be valuable to understand how Teachers Network, which is an organisation outside of schools, co-ordinate and negotiate with school leaders in promoting the values and practices of Teachers Network Learning Circles. In doing so, I will understand how the values and

practices that take place at the Learning Circle site are historically brought into existence.

In order to understand the culture of these sites I employed the use of participant and non-participant observations and critical discourse analysis. While Stages 1, 2 and 3 focused on social integration, Stage 4 focused on system integration. Social integration is defined as the coordination of action on one site through face-to-face interaction (Giddens, 1979, p. 74). System integration is defined as the coordination of action between social sites separated in space and time (Giddens, 1979, p. 74).
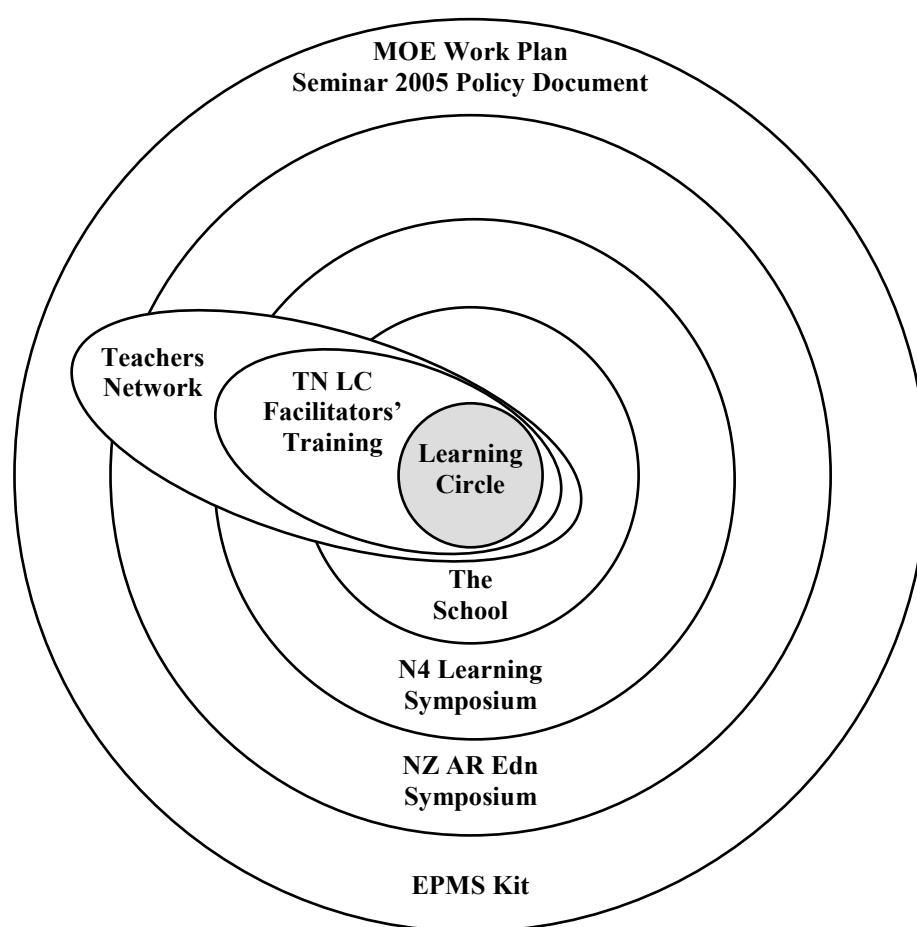


*Diagram 6: Discovering System Relations (Stage 4)*

Carspecken (1996) makes use of concepts from Willis' theory of 'cultural reproduction' (1977) to support the methodology for Stage 4. The 'cultural reproduction' model emphasises the development of culture through the volition of social actors; the drawing upon of cultural themes or resource that they are already familiar with; and a series of isomorphism between the cultural realms of a number of related social sites. Johnson's theory of 'circuit of cultural production' (1983) has also influenced the methodology of

Stage 4. Carspecken (1996) observed four main characteristics of Johnson's circuit model:

- The conditions of production.
- The autonomous possible meaning of the product.
- The interpretations given the product by various cultural groups.
- The effect of the product on routine activities of various cultural groups.

A circuit is said to be completed when the effects of the product come back to influence its further production (Carspecken, 1996). Carspecken (1996) summarised the key concepts in the identification of system relations in the following points (p. 186):

1. "Society" is not regarded as a single entity, like a machine or an organism, but rather as a complex set of intersecting factors.
2. Thus, there is no social system but rather many system relations that bring about varying degree of integration between social groups and social sites. Monitoring activities will put into place one type of system relation.
3. The factors that integrate social action between groups and sites may be regarded as conditions of social action. Actors act with volition, with agency. But actors act only within specific contexts; all actions are conditioned. The distribution of action conditions will be a series of system relations.
4. Conditions of action vary in nature. Some operate internally by the volition of actors as systems of values, beliefs, and desired identities; these are cultural. Others operate externally to the volition of actors; they are resources and constraints that will face any actor, with any set of beliefs, given a certain social location. These are not strictly cultural in nature but are rather economic and political.
5. People themselves produce and reproduce system relations, but under the influence of conditions. To describe social systems, then, is to describe both typical social routines and their connections with other typical social routines through the distribution of action conditions.

Although I generally share Carspecken's summary of concepts in the identification of system relations, I do not agree with the dichotomy of cultural (internal to the actor) and non-cultural (external to the actor) factors that impact on the conditions of action. In my

view, political factors such as laws, contractual rules, human rights and job descriptions are cultural in essence. Their material evidence written down in black and white only speaks of the cultural norms that people generally agree to and value. It is not what is written in print that influences one's decision and action, rather the cultural norms and values – that meaning behind them – or the spirit of the law, that one draws upon that influences one's decision and action.

The economic factor is in my view closer to the concept of being external to the actor. It is directly related to the idea of material resource that either constrains and affords or enables agency. However, the decisions and actions of actors in this regard are still influenced by his or her cultural norms and values. And, in my view, the latter has a greater influence than the former. Cultural norms and values shape how material resource is being used and distributed. It is the unquestioned cultural norms, beliefs and values that actors draw upon in their daily non-discursive practices – or in Gidden's (1984) term, 'practical consciousness'. Hence, I wish to propose using the dichotomy of symbolic and material factors that constrain and afford or enable agency, and thus central in influencing the condition of action.

Furthermore, within a social milieu the condition of action is influenced by how actors use their symbolic and material resources to influence decisions and actions. Power thus takes centre stage. For example, a school principal might draw upon the cultural norm and value of the official role of a leader to determine the allocation of teachers to respective classes. In this case, she is using a symbolic resource in the form of cultural themes or meanings pertaining to the official role of a school principal. A board member of the school may, however, intervene by asking the school principal to let him or her determine the allocation of teachers to respective classes in exchange for a recommendation for double increment for the school principal. In this case, the board member is using his or her symbolic resource to influence the distribution of material resource.

Also, the act of influencing decisions and actions within a group setting in day-to-day social practices is, in my view, non-discursive – that is, actors are usually not fully conscious of the cultural norms or values that they draw upon in daily activities. These cultural norms and values are more often than not implicit, undifferentiated and unnoticed. This characteristic makes for the success or perpetuation of cultural

reproduction. The reproduction of power inequality – or equality – is also guaranteed in this fashion

With regard to power in social setting, I could only think of two main models of power at work – symmetrical or consensual power where the cultural norm or value is for collectivity or solidarity and the idea of sharing of symbolic and material resource; and asymmetrical or conflictual power where the cultural norm or value is for individuality and the idea of competition for symbolic and material resource. My analysis of social integration and system integration will therefore include the notion of symmetrical and asymmetrical power relations.

## **1) The School**

The school where the Learning Circle site was located is considered a typical 'neighbourhood' primary school – that is, government funded as opposed to privately funded; has no affiliation or support from alumni members or associations; does not have a long history and image of academic achievements; and mainly takes in students from the neighbouring residential area in the North-East of Singapore which consists mainly of government owned flats. As primary school enrollment is mainly dependent on proximity of school within 1km to 2km radius and sibling attendance, the school generally takes in students from average income families. The school was founded in 1997, and belongs to a cluster of primary and secondary schools under the supervision of a Cluster Superintendent. The school principal has been the principal since 2003. Her previous position in the education ministry was a vice-principal. She was also one of the pioneers of Teachers Network, and had helped in shaping the content and form of Teachers Network Learning Circles.

In total, 13 school visits and fieldnotes were carried out which include both non-participant and participant observations covering several locations, events and routines such as classroom teaching, recess, flag-raising ceremonies, Math Trail Day, concerts, staff meeting and senior management committee meeting. Naturalistic interviews were carried out with the school principal and the Learning Circle participants. The main artifact that was analysed was the school noticeboard displays at the general office. The mode of analysis for the artifact analysis for this site, and the rest of the sites which employed artifact analysis, is semiotics. Semiotics seeks to understand "how signs perform or convey meaning in context" (Manning, 1987, p. 25) or the "structure of

representation and its functions" (Manning, 2004, p. 567). It works to uncover the rules that govern the convention of signification by directing attention to signs and how they signify the association among a series or set of signs, and between a signifier and a signified. It is not a descriptive technique, nor does it seek to describe the motives of individual actors.

### 2) The North Cluster 4 Learning Symposium

The North Cluster 4 Learning Symposium was organised by a group of school principals and vice-principals from the North Zone 4 Cluster schools which the school belongs to. It is a 1-day event for teachers, who were engaged in inquiry projects including Teachers Network Learning Circles, to share their experiences and findings to other teachers and educators in general within the same school cluster. Fieldnotes were mainly written based on participant observation. I came as a guest invited by the school principal and the Learning Circle participants who were present to present their findings and experiences. Besides observations, artifact analysis was made on cultural artifacts such as contents found in the participant's complimentary bag.

### 3) The North Zone Action Research Educational Symposium

The North Zone Action Research Educational Symposium was held as 1-day event to provide the platform for teachers, who were involved in action research projects or other forms of inquiry projects such as Teachers Network Learning Circle, to present and share their findings and experiences. This is a school zone effort consisting of all school clusters within the North Zone, and was initiated by the deputy-director for schools in the north zone. The symposium was organised by a committee made up of principals, vice-principals and ministry officials. With regard to data collection, fieldnotes were made based on participant observation. I was a member of a group of teachers from another school who were presenting an action research project. Artifact analysis was done on the contents contained in the participants' file.

### 4) Teachers Network Learning Circle Facilitators' Training

The Teachers Network Learning Circle Facilitators' Training was conducted over two days for facilitators of Learning Circles from across the nation. The training for facilitators is usually at least twice a year. It is organised by Teachers Network and conducted by Teachers Network Professional Development Officers. Fieldnotes were made based on participant observation upon invitation by Teachers Network. The main

form of analysis that I had employed was mediational discourse analysis proposed by Scollon (2001). Mediational Discourse Analysis (MDA) strategises to reformulate the object of study from a focus on the discourses of social issues to a focus on the social actions through which social actors produce the histories and habitus of their daily lives that is ground in which society is produced and reproduced. MDA takes discourse as one of its central tasks to explicate, and understand how the broad discourses or our social life are engaged (or not) in the moment-by-moment social actions in real time activity. MDA shares the goals of Critical Discourse Analysis (CDA) which include the following characteristics (Fairclough and Wodak, 1997):

1. CDA addresses social problems.
2. Power relations are discursive.
3. Discourse constitutes society and culture.
4. Discourse does ideological work.
5. Discourse is historical.
6. The link between text and society is mediated.
7. Discourse analysis is interpretative and explanatory.
8. Discourse is a form of a social action.

MDA takes the analysis, interpretation and explanation of social problems as its central concern – hence the focus on social action. This is one partial departure from CDA. However, MDA takes it that power relations in society are not only discursive or just discursive but are grounded, instead, in practice. Discursive practice is one form of social practice, not the foundational or constitutive form of practice out of which the rest of society and the resulting power relations arise. Although MDA takes it that discourse is among the means by which society and culture are constituted, it argues that society and culture are constituted in the material products of that society as well as in its non-discursive practices. MDA is organised about six central concepts –

1. Mediated action.
2. Site of engagement.
3. Mediational means.
4. Practice and mediational means.
5. Nexus of practice.
6. Community of practice.

**5) Teachers Network**

Teachers Network is a unit within the Training and Development Division of the Ministry of Education. Established in 1998, its essential goal is to provide a different approach and paradigm to teacher professional development and professionalism. Its unique existence lies in the fact that it is a unit which has significant autonomy in terms of its operations to meet the very need for innovation in the emerging discourses initiated by the Ministry of Education. Its initial core programmes include Teachers Network Learning Circles, teacher led workshop, the annual Teachers' Conference and iCare (counseling). Since then, its roles have expanded to include projects such as Induction Programme for Beginning Teachers, Teacher Renewal programme, and Teacher Work attachment programme. Its first deputy-director was Nicholas Tang Ning followed by the present Ng Peng Yen. Fieldnotes were made during my three visits to Teachers Network based on non-participant observations and artifact analysis of cultural products such as contents of the Teachers Network workshop file, staff office, staff work spaces, and Reflection Journal.

**6) The Enhanced Performance Management System (EPMS) Kit**

The EPMS Kit was officially launched in 2001 by the Ministry of Education in the midst of a comprehensive gamut of initiatives which were progressively introduced during Teo Chee Hean's era when he was given the responsibility as the education minister from 1997 to 2003. The conception of the EPMS was undertaken in consultation with the HayGroup in 2000 which took in the views of more than 3000 teachers through focus group discussions, surveys and committees. The EPMS falls under the ambit of the Personnel Division of the Ministry of Education whose main role is to recruit and retain sufficient numbers of good officers for the ministry and schools. It handles staff appraisal aspects of education officers at all levels in matters of performance, pay and promotion. The EPMS Kit contains the technical details that pertain to the performance and promotion of education officers which include a regime of competencies; justifications for competencies; suggestions for the development of competencies; and procedures for staff appraisal according to these competencies. The emphasis on competencies is also linked to staff professional development. The basic premise of the EPMS is the thinking that raising the competencies of teachers will raise the performance of teachers, and inadvertently will increase educational output which leads to economic sustainability and growth.

The primary data analysis that was used to analyse the EPMS Kit is Critical Discourse Analysis (CDA), which –

> "… may be defined as fundamentally concerned with analysing opaque as well as transparent structural relationships of dominance, discrimination, power and control as manifested in language." (Wodak, 2001, p. 2)

Besides taking a perspective on linguistic and discourse analysis, CDA also takes the perspective of semiotic analysis which includes *"all forms of meaning making – visual, images, body language and language"* (Fairclough, 2001, p. 122). CDA also attempts to avoid traditional sociolinguistics that posit a simple deterministic relation between texts and the social by claiming that discourse is historically produced and interpreted, and thus situated in time and space, and that dominant structures are legitimated by ideologies of power groups (Wodak, 2001). The EPMS Kit is, therefore, both a discourse that is potentially constituted or shaped by past events, and a discourse that potentially constitutes or shapes future events.

The stance that has been adopted is considered 'critical' for it seeks to make known the effects of power in the production of meaning which are usually obscured or 'naturalised' – or in Bourdieu's term, 'arbitrary' (Bourdieu, 1977). Social realities become 'arbitrary' when people view them as being natural, without interventions of power. In making known the effects of unequal power relations in social realities, it is hoped that the consciousness of both practitioners and policymakers is raised.

**7) The MOE Work Plan Seminar 2005 Policy Document**

The MOE Work Plan Seminars are held once a year where the Minister of Education gives his or her speech to outline the future intents and plans of the Ministry of Education. The activities of the 1-day event are usually planned by a committee of ministry officials. The main participants for this event include education officers in positions of principals and above, and other invited guests such as academics and educators from various education institutes. The event will usually be closed by the Permanent Secretary for Education. The primary data analysis that was used to analyse the MOE Work Plan Seminar 2005 policy document is critical discourse analysis which has been described above.

With regard to data analysis, I have employed various methods of analysis in Stage 4. The following table seeks to summarise the various methods of analysis I have used:

| Sites | Fieldnotes | | | Critical Discourse Analysis |
|---|---|---|---|---|
| | Participant/Non-Participant Observation | Naturalistic Interviews | Artifact Analysis | |
| **1)** The School | ✓ | ✓ | ✓ | |
| **2)** The North Cluster 4 Learning Symposium | ✓ | ✓ | ✓ | |
| **3)** The North Zone Action Research Educational Symposium | ✓ | ✓ | ✓ | |
| **4)** Teachers Network Learning Circle Facilitators' Training | ✓ | ✓ | ✓ | ✓ |
| **5)** Teachers Network | ✓ | ✓ | ✓ | |
| **6)** The Enhanced Performance Management System (EPMS) Kit | | | | ✓ |
| **7)** The MOE Work Plan Seminar 2005 Policy Document | | | | ✓ |

***Table 2: Summary of Data Analyses at Stage 4***

**STAGE 5: USING SYSTEM RELATIONS TO EXPLAIN FINDINGS (JAN 07–MAY 07)**

As mentioned earlier, the critical ethnography that I have used did not follow strictly with Carspecken's (1996) model. In stage 5, I made high level inferences using the research findings in Stages 1 to 4 with reference to the theoretical framework which was described in the literature review and additional theories that pertain to the analysis, and the research questions. In my view, Carspecken's (1996) original methodology for Stage 5 where high level inferences are made based on the findings in Stages 1 to 4 by reference to broader system features does not meet my research agenda. Firstly and primarily, while Carspecken's model (1996) only brings in relevant literature at the end, I had developed my literature review prior to Stage 5. Second, while Carspecken's model (1996) proposes the researcher to link findings with macro social theories such as capitalism, patriarchy, race, gender, class, political structures of society, the role played by information technology and the media in postindustrial society, or a synthesis of these, I have linked my findings with theories that integrate theories on professional development with social and philosophical theories such as Habermas' theory of communicative action and discourse ethics. The discussion on Stage 5 constitutes the discussion chapter.

**RESEARCH ETHICS**

The sketches that have been drawn with regard to the critical social inquiry have significant bearing on the whole range of activities my research study. A highly salient point is the relationship between the researcher and the research subjects especially in relation to power dynamics. Research activities in my opinion are not value-free and not power-neutral activities. All research acts therefore have potential to dominate research subjects especially when local research discourse favours the researcher as an authoritative figure in terms of research expertise, along with the connotations attached to the researcher as having greater intelligence, knowledge or knowledgeability and socio-economic standing. This perception effectively gives greater propensity and potential for researchers to assert their will and for research subjects to submit their will to researchers in research activities creating power difference in the relationship between the researcher and research subjects.

This power difference is maintained and reproduced by both the researcher and research subjects in conscious and unconscious manner with intentional and unintentional

consequences. In the eyes of critical social researchers, this power difference is to be avoided or significantly minimised as it creates conditions that guarantee distorted communication, and thus masks the search of truth in social inquiry. The central goal in the relationship between the researcher and research subjects is thus to create and maintain symmetrical power relations as far as possible with the intention of creating conditions for the search for not only truth in social inquiry, but also human emancipation. As much as research activities have potential to dominate research subjects, it too has potential to emancipate research subjects.

In the research study I strived towards an enabling relationship, as opposed to constraining relationship, that promotes openness, trust and decision by consensus as opposed to opacity, mistrust or distrust and conformity. These aspects to an enabling relationship are consistent with matters of research ethics. The three main issues frequently raised, at least in the Western ethical research discourse, are codes and consent or informed consent, confidentiality and trust (Ryen, 2004) – but not without problems. Ryen (2004) proposed that the interconnections between methodological and ethical issues meaningfully "call for methodological reflexivity on the part of the researcher" (p. 236) confirming Punch's (1994) claimed that ethical codes work best as guidelines as ethical dilemmas have to be resolved situationally and often spontaneously.

The notion of an enabling relationship to create and maintain symmetrical power relationships is also consistent with research ethics proposed by Hollway and Jefferson (2000) who argue for a revision of our assumptions, and thus our research practices, about the nature of the person – the research subject, who are considered to be 'psychosocial' in nature.

> "… one (the research subject) whose inner world is not simply a reflection of the outer world, nor a cognitively driven rational accommodation of it … whose inner worlds cannot be understood without knowledge of their experiences in the world, and who experiences of the world cannot be understood without knowledge of the way in which their inner worlds allow them to experience the outer world … This research subject cannot be known except through another subject; in this case, the researcher." (Hollway and Jefferson, 2000, p. 4)

What is brought to the fore is the centrality of relationship between the researcher and research subjects who ought to be treated as centrally human as opposed to a research object. Hollway and Jefferson (2000, p. 100) proposed three appropriate principles for researching psychosocial subjects –

1. *Honesty*. This entailed approaching the data openly and even-handedly, in a spirit of enquiry not advocacy, deploying a theoretical framework which was laid out and justified, making only such judgements as could be supported by the evidence, not ignoring evidence when it suited us, and interrogating our responses to the data.
2. *Sympathy*. This is the fact or capacity of entering into or sharing the feelings of another or others, or fellow-feeling. (Shorter Oxford English Dictionary)
3. *Respect*. This is to treat or regard with deference, esteem, or honour and as everyone is entitled to respect in the sense of to pay attention to; to observe carefully. (Shorter Oxford English Dictionary)

My aim was for an enabling relationship that values openness, trust and decision-by-consensus, which is in fact underpinned by the value for symmetrical power relations based on 'intersubjectivity' and an 'ideal speech situation'. This principle was integrated into the research study purposefully throughout the research phases. This is also congruent with the notion of reflexivity – a continuous critical reflection on the research processes used to produce knowledge (Maynard, 2004). The following undertakings were made in to ensure the maximisation of this principle or value:

1. As already discussed in detail with respect to access, I had made attempts not to succumb to direct or indirect influence by individuals who have the advantage of power over others in deciding my entry as a researcher. Furthermore, time and effort had been made to ensure that all individuals concerned agree to my presence as a researcher. I find this practice meaningful as it not only is consistent with general ethical research guidelines, but also allows individuals to voice their agreement or disagreement in a democratic setting which in itself is empowering and emancipating.

2. Participants of the Learning Circle and the school principal were assured in matters of confidentiality of their identities in the findings of the study. Firstly, they were informed that the findings would be published primarily as a thesis publication followed by other forms of publications such as books and journals. Secondly, fictitious names will replace original names. Likewise, the name of school is either fictitious or anonymous. The only information that was made available is the School Cluster (North Cluster 4) that the school belongs to. This is inevitable as discourse analysis was made on the North Cluster 4 Learning Symposium. The principle of confidentiality was also conveyed to the staff of Teachers Network. Third, the agreement is that if direct quotes were to be made based on data collected from interviews, they will be informed to check for accuracy and sensitivity of how these direct quotes will appear.

3. Participants of the Learning Circle, school principal and staff members Teachers Network understood that I will try my best not to disclose information that will bring harm to them especially with regard to comments made in the interviews. This is done in two ways. First, sensitive comments made are made anonymous. Second, interviewees would tell me which comments to censor by the end of the interview. Third, interviewees could request for my interpretation of the conversations that had taken place during interviewees. For most of the time, participants chose the first and second options. The only person that requested my interpretation of an interview conversation was the school principal so as to ensure accuracy and sensitivity of information. In general, participants of the Learning Circle did not request the transcripts of the data collected from interviews or their dialogues during Learning Circles because of their busy schedules.

The above undertakings are generally consistent with the BERA (British Educational Research Association) ethical guidelines in carrying out research activities. The only guideline which I did not make prominent is to do with the right of participants to withdraw from the study at any time. In my view, insofar as the research study is a naturalistic study, the Learning Circle will continue with its endeavours regardless of me being there or not. The research study could only be stopped if I were to dismember myself from the Learning Circle community. The agreement at the start of the Learning Circle to welcome me as a non-participant or participant is an implicit commitment that

would need to last throughout the Learning Circle project. Furthermore, since the Learning Circle highly values group agreement through democratic processes, to dismember me at any time during the course of study would also need the consent of others. The right of participants to exclude his or her comments in the course of the study is, however, possible. Also, the agreement that the confidentiality, trust and well-being of participants are maintained throughout the course of the Learning Circle project implicitly meant that infractions to these principles would be the discontinuation of my presence and thus the research element of the Learning Circle project. On hindsight, I could have made it more explicit especially in the name of empowerment and emancipation of teachers.

## CRITICAL REFLEXIVITY

In this research study, I have placed reflexivity as an important component of my research study. The importance of reflexivity cannot be overstated because qualitative research including critical ethnography is deemed to be less rigid and flexible than quantitative research. However, the more important reason is that research work in general is like any other social activity that involves power. For Bourdieu, science is a symbolic system among others that embody power relations, and its intellectual practices like any other practice are interested (Bourdieu, 1990a; Bourdieu and Wacquant, 1992). In this regard, I am in support of Bourdieu's reflexive practice of sociology to a large extent in view of minimising research findings being reduced to power relations, which includes the following guidelines:

1. The researcher is critically aware of the *habitus* that he or she brings from his or her social background to the object of inquiry. Greater objectivity can be gained in research findings in as much as personal dispositions and interests are considered and controlled so as not to infiltrate the researchers' concepts, research topics and methods.

2. The researcher is critically aware of the *field location* that researcher resides in, which can be a source for bias. The struggle for scholarly recognition and intellectual or theoretical ideals may result in the researcher's projecting a position of intellectual struggle unto objects of inquiry, and therefore undermining the objectivity of research findings.

3. The outsider and scholastic point of view requires both a social and epistemological break with the realm of practice. He stated that "there is a sort of incompatibility between our scholarly mode of thinking and this strange thing that practice is" (Bourdieu, 1990b, p. 382). The separation from social practices of research participants and imposition of the researcher's epistemological framework upon the object of inquiry has power to undermine the objectivity of research findings. These are acts of epistemological sovereignty and *symbolic violence*. Although Bourdieu (1990a) claimed that a fully reflexive view can never be achieved, he espoused that researchers become conscious and critique the natural tendencies of separation from and imposition of epistemological framework upon the object of inquiry.

In relation to the research study, I found the third guideline most wanting especially in the findings phase. The lack is in my conscious effort at using participants' language to describe their indigenous realities. This is consistent with a potential weakness in the discourse analysis that I had used as it lacked extensive interviews with participants that reside within each social site to validate my analysis. However, some may argue that this is rightfully so as the task of researchers is in the creation of new knowledge and understanding based on epistemological competence, and inadvertently the creation of new language. Yet, some may argue that the power of social inquiry is to make the obvious known and the complex simple to lay people. However, some may argue that new language is required for new ways of thinking and living. This is a dilemma that I have yet to resolve.

# CHAPTER 4

# FINDINGS

In this chapter I will first present my findings based on the Hierarchical Scheme of Codes that was constructed based on the developmental constructions of low level, middle level and high level codes from Stages 1 to 3 (Appendix B). This involved the compilation of the primary record which mainly involves participant observations along with fieldnotes during Learning Circle discussions (Sample: Appendix C), fieldnotes during schools visits (Sample: Appendix D), and artifact analysis; preliminary reconstructive analysis of the primary record; and dialogical data generation. While low level coding started at the ending phase of Stage 1 and middle level coding started when the selection of units of initial meaning reconstruction were made, high level coding was based on pragmatic horizon analysis on these selected units. I will take selected texts which had undergone initial meaning reconstruction and pragmatic horizon analysis to support the key findings. The developmental construction of the hierarchical scheme was also concurrent with the research questions which were initially set and refined as the study progressed from stage to stage (Diagram 7).
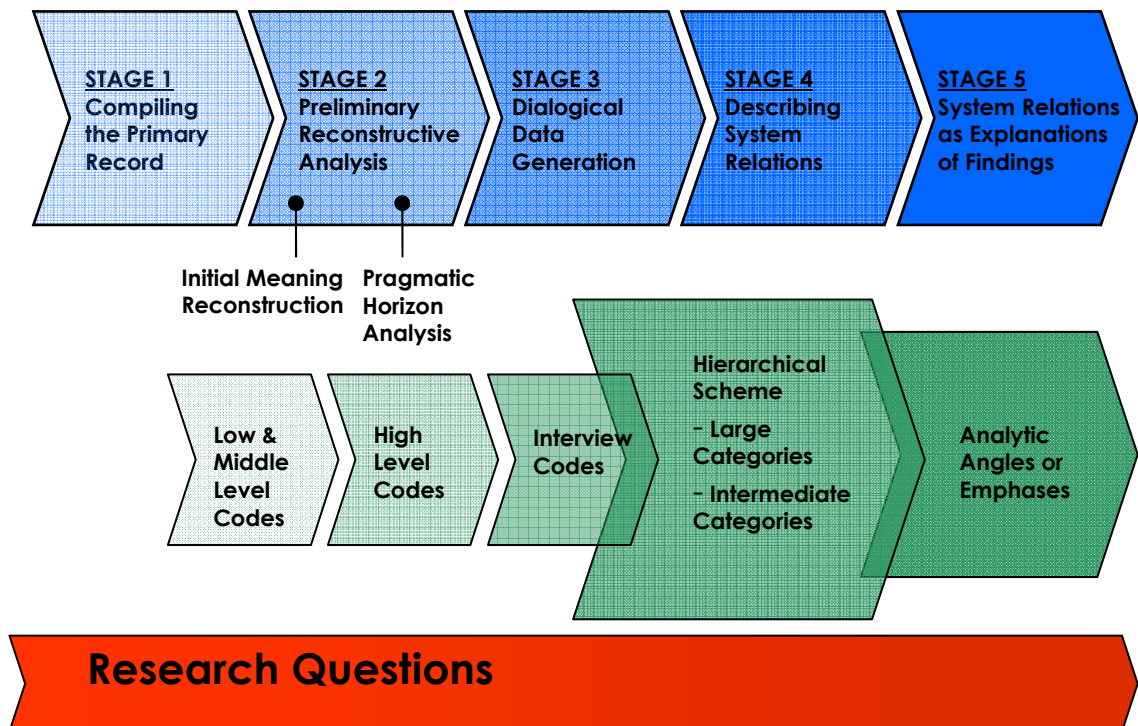


*Diagram 7: Developmental Stages of the Research Method*

In the second part of this chapter, I will present key findings of Stage 4 – that is, discovering system relations. However, I decided not to follow strictly to Carspecken's Stage 5 as it does not fit with my research agenda. I modified his Stage 5 to mean as making inferences using Stage 1 to 4 by reference to the literature review which was done prior to the data collection and analysis, and additional new literature in view of the research findings. My Stage 5 will be covered in the discussion chapter. The key findings derived at Stage 4 are primarily based on the analysis of data gathered from fieldnotes which utilised research tools comprising participant and non-participant observations, naturalistic interviews, and artifact analyses. The artifact analyses from fieldnotes essentially employ semiotics as a form of data analysis. In addition to this, critical discourse analysis was primarily used to analyse data collected from three sites as indicated in Table 2. I will take selected texts from the fieldnotes and discourse analyses to support the key findings which will be presented.

**FINDINGS (STAGE 1 TO 3)**

Based on the Hierarchical Scheme of Codes the findings for Stage 1 to 3 will be presented according to the following structure of knowledge claims:

1. Consensual / Symmetrical Power Relations.
   a. Consensus decision-making.
   b. Equal treatment of participants.

2. Relationship.
   a. Collegiality.
   b. Collaboration.
   c. Individuality within collectivity.
   d. Collectivity within individuality.

3. Work.
   a. Informality within formality.
   b. Enabling structures of Learning Circle.
   c. Learning Circle facilitator.
   d. Shared leadership.
   e. Moral purpose of teaching.

4. Learn.

    a. Intellectual discussion.

    b. Communicative consensus making.

    c. Semiotics in learning.

## 1. Consensual / Symmetrical Power Relations

The predominant power relationship in the discussions at the Learning Circle site is consensual or symmetrical as opposed to asymmetrical power relationship. In other words, the privileged power dynamics is power sharing – that is, 'power with' instead of 'power over'. Symmetrical power relationships are evident in both the structure and agency of social practices. Participants generally drew upon social rules that value consensus decision-making to participate in the social practices of the Learning Circle which include how participants relate to and work with each other, and learn in a group setting. A cultural value that stems from consensual power relations is consensus decision-making. In this regard, the following social rules were observed to be of value to the Learning Circle group:

- Everyone's voice is to be heard before decisions are made. This applies for discussions for every stage of the Learning Circle action research cycle.
- No one is to be left out in the decision-making process.
- No assertion should be left without a response or responses by others.
- No one should feel that they have been imposed to agree on decisions.
- Disagreements are not seen as something negative.
- Disagreements are welcomed as long as they do not impose on others.
- Disagreements are all right as long the person asserting them is opened to corrections and disagreements by others.
- Disagreements that are externalised and projected in an inappropriate manner are very rare, and if they do take place, they are handled politely and the onus is on the person to realise his or her mistake. At times, disagreements are postponed in order to give more breathing space for thoughts and feelings to be more settled.
- Lack of understanding to assertions made should not be left unclarified but within the constraints of time.
- It is all right to raise assertions that are uncertain and doubtful.

- Suspending one's judgement in the context of assertion or validating assertion is valued.

- The strength of agreements or disagreements lies in the supporting reasons.

- Although the force of influence is influenced by expertise, experience, intellectual competence and social charisma, the final decision is made on the better reasoned argument.

- The group believes in synergy - two heads are better than one.

- The value or principle of consensus decision-making takes precedence over efficiency needs. In other words, the extent of the Learning Circle project is contingent on the effectiveness of consensus decision-making.

Below is a sample transcript after it had gone through initial meaning reconstruction and pragmatic horizon analysis to illustrate the above social rules and the cultural value of consensus decision-making for the Learning Circle.

---

*Transcript 2 (8.55)*

K: For me I wouldn't say it's the tests that we did, lah, because Maths I'm teaching, er, angles and perpendicular lines. The children have problems visualising. They can see two lines but when you put it in a shape, right, then they have problems seeing it in the shape form, which are the perpendicular and which are the parallel lines. So I have to constantly show it to them like really draw out on the board and then show them how to do it. Then they "Oh! That's a parallel line," you know. **[MF: Karna expresses concern of an issue that she had experienced with her students]**

K: So visualising, visualisation, ya.
L: You want me to write Sis. Sis, do you want me to do the writing.
L: Bev, you can? **[MF: Lulu wants to offer her help to Surhana but feels that others could be given a chance to do the writing (OR) feels that a man should do the volunteering first]**
B: Eh, I'm a – I have very poor hand-writing.
S: That's okay, you can do it.
E: If it's better than this. *(Some laughs)*
B: I will try to make it better. *(Laughs)* **[MF: Surhana wishes to tease Bob]**
M: So visualising –
K: Visualising angles and the lines.
M: - angles and lines.
K: And I think we will be teaching Geometry which will be worse than angles and lines, right. So they'll have a bigger problem then. **[MF: Karna offers a justification to increase the force of her proposition]**

S: Okay, that's a small concern. Any other – even for the trainees you know. Because you do take them for the last, erm, seven weeks. So maybe you have seen some concerns that you know we -.
B: Maths, English, Science.
S: - could share with us. Ya, for English or Maths or even Science. **[MF: Surhana thinks that the idea is too simple for an action research project (AND/OR) wants to encourage other members to contribute other ideas]**

---

### Possible subjective claims
*Foregrounded*
- K: I'm really concerned about my students' learning
- L: I'm all right with Bob.
- B: I feel quite shy about displaying my handwriting.

*Slightly Backgrounded*
- E: I like to tease Bob.
- S: I like to tease Bob.

### Possible objective claims
*Foregrounded*
- Karna raises the concern that her students have problems with visualising angles and lines – that is, geometry. She believes that this ability is fundamental in Mathematics learning.
- Maimuna agrees with Karna's concern.
- Surhana, however, thinks that the concern raised by Karna is too small.

*Backgrounded*
- Surhana wants to generate more ideas into the discussion.

### Possible normative-evaluative Claims
*Foregrounded*
- It's all right for the facilitator to make evaluative comments on members' proposals.
- It's only right to volunteer help to each other.

*Backgrounded*
- It's good to agree with one another.
- It's good to tease each other.
- It's good to have all members' contribution in group discussions.

*Highly Backgrounded*
- We should not make negative evaluative comments on each others' proposals.

M: I, I have an observation on my pupils. They have a problem, especially for Maths – they have a problem, em, processing the question itself, reading the entire question. They, they do a glance, they'll read it very fast and then they try to attempt it - to do it. So, that is the problem with them. I need to teach them how to take each question and really focus on it, and put more effort in it. Rather than try to complete it as much as you can. For example, for the Maths test – there are four options and they didn't bother going through every single option. They just looked at it and the first one that looks to them and then they will pick. So, I don't know how other than – doing that to them, I don't know how else to get them to focus to look at the question.
S: So are you trying to say that they are not actually reading *(stressed)* the question -
M: They are not reading it. They are not –
S: - just scanning it.
M: - they are not putting in the effort. Ya, scanning it and then trying it out. Hoping that they would hit the target.
L: Is it about their gut feeling.
M: Ah. *(Affirmation)*
L: I feel that this is the correct one, just write it down.
M: Even for drawing of angles. When asked to draw a particular angle –
V: Accuracy is not there yet.
M: - the accuracy is not there yet. They will not hit seventy-five. They will hit seventy-eight, seventy, seventy-two -
L: Slipshod -
M: It's annoying, yes, very slip shot –
L: Slip shot work.
M: - work, ah. *(Affirmation)* I see no pride in their work at the moment for Maths, lah. **[MF: Maimuna expresses her negative experience with her students. Lulu and Val (guests) shares the same experience as Maimuna]**

E: But it sounds more like – there's not, er, motivation ah -
M: Maybe -
E: - no interest.
M: - maybe motivation and interest.
V: Like can't be bothered lah.
M: That's right. That's right. I don't know if it is – if there is anything we can do about it. **[MF: Edward wants to add on to the issue which has to do with lack of motivation. Val, Lulu and Maimuna shares the same experience as Edward]**

### Possible subjective claims
*Foregrounded*
- M: I'm upset that my students are not detailed in their work, and unmotivated.
- L: I'm really excited with Maimuna's idea.

*Slightly Backgrounded*
- S: I'm not surprised that students are not detailed and unmotivated in their work.

### Possible objective claims
*Foregrounded*
- Maimuna is really upset with her students' inability and lack of motivation to be careful and detailed in their response to test questions. Maimuna observed that this lack of detailedness is also the cause to students' inability to be precise in their visualisation in geometry which was mentioned by Karna.
- Surhana agrees with Maimuna.
- Lulu agrees with Maimuna.

*Background*
- Lulu thinks that the issue raised by Maimuna is quite spot on by virtue of it being fundamental and universal.

### Possible normative-evaluative Claims
*Foregrounded*
- It's good to be rational in our action research project.

*Background*
- We should be concerned with our students' grades.
- It's good to build on each others' ideas.

*Highly Background*
- We should take on an action research project that everyone can empathise and agree with.

*(A member from another Learning Circle, Jerome, passed by to comment on handwriting)*

J: Woh, your handwriting is rather small.
E: - Jerome, can we have font 36. *(All laughs)*
S: - Jerome, it's okay.
B: Can you, demo?
S: You want Arial, Times New Roman or do you want Comic Sans.
K: Arial – Comic Sans. *(Laughs)*
S: Wingding, Wingding. **[MF: Surhana, Bob, Karna and Edward joins in the humour started by Jerome]**

M: Hold on, hold on. Sis, we haven't found out the topic that we are going to work on.
B: Ya, ya, we are trying to brainstorm.
S: Ya, because what we xxx this was at the end of, erm, Term 1 -
M: But we need –
S: - when we have not actually you know really know the class very well and their weaknesses. So we did it in Term 2. We have more ideas. So, I'm hoping to get more before we actually decide on one area of concern that we want to target as our area of concern.

S: Edward, any, anything new with regards to your class. **[MF: Surhana wants to encourage further discussion (AND/OR) thinks that the participants have not exhausted all possible ideas (AND/OR) feels that the proposals so far are not satisfactory enough to be considered as an action research project]**

E: For me, what Maimuna mentioned ah. I, I think it's not just Maths alone. It stretches through all the subjects like Comprehension the card, the last class test, English Test 1. I think for comprehension they also demonstrate the, the carelessness in doing the question. Not answering – like there was one question asking about er sharks and other fishes, right. They would simply just – you know, without, without like –

B: What are 'they' referring to, right.

E: - em, filtering some of the un – information that is unnecessary, they just throw and – it's quite sloppy, lah. I find that it's not that they do not know the answer. It's just that they are not taking, they are putting in extra effort to ensure that they are answering to the question. So, losing marks, just, just because of their carelessness. Even answering things like which sentence, they can make mistake in the sentence. Copying the sentences.

M: Copying the sentence.

E: Yah.

E: Very badly done, lah. **[MF: Edward feels very strongly with the issue of students' inability to be accurate with their understanding of test questions]**


H: Is it to do with accuracy? They lack accuracy in their answer.

M: Yah, and double checking.

B: xxx they lack ah.


B: Erm … I think I also have experiencing the same thing in English. Because I, I'm quite appalled by my English failures ah. The number of percentage. Though better than him (Edward) , lah. *(All laughs)* Ya, but that is to be, that is expected. **[MF: Bob shares Edward's sentiments (AND/OR) wishes to share his negative class experiences]**

M: It better be.

B: Ya, better be.

E: Ya.

B: But the thing is, really loh, I bombed *(scolded)* them and they really look in some sense guilty yet also you know, you know –

M: Can't be bothered.

K: - They never learnt.

B: - heck care. Can't be bothered. I bombed them about how come the sentence is open and close apostrophe. I thought I've trained you all so well, you know, focused comprehension. Yet, tch, they don't bother you see.

M: Em. *(Affirmation)*

B: And they just lost all the marks because of all this you know. I mark each like that grammar mistakes. So, they felt guilty lah when I bombed them but then they also a bit heck care. So, I think we still, same problem. Lack of effort, lack of accuracy. **[MF: Bob felt morally responsible for his class lack luster performance (AND/OR) wants to justify why his class is not performing well in contrast to others]**


M: Maybe it's motivation ah.

L: Yah, there's no intrinsic motivation.

M: Em *(Affirmation)*. Just fill in the answer, that's it, hand it in. Can we look at motivation?

S: Any problems? Still no problem.

K: For them. I have problems for Maths already.

S: Oh. Oh. I've not seen any problems.

M: Your class is the best class.

H: Who's the best class?

M: Her class *(Some laughs)*

S: I mean, there are, there are few who's not motivated, but then a handful is easier to cope with you see rather than half the class – so I don't view it as a problem. It can be done between me, parents and the child himself, so.
M: Maybe your problem is at a higher level.
S: Challenging them *(Stressed)* is the problem. I'm running out of idea what to challenge them any further, because – **[MF: Surhana wishes to express to others that she too shares the common stress of helping her students to improve in academic performance]**

### Possible subjective claims
*Foregrounded*
- S: I like Edward.
- B: I'm so frustrated with my students' lack of motivation and effort in their work.

*Slightly Backgrounded*
- M: Let's get to our Area of Concern quickly.
- S: Let's take things slow.

*Highly Backgrounded*
- S: I look up to Edward.

### Possible objective claims
*Foregrounded*
- Edward agrees with Maimuna's idea that their Area of Concern should be general and applicable to all teachers, and that students' general lack of accuracy in their answers to test questions.
- Bob agrees with the rest that students lack accuracy and motivation in being accurate in their test answers. Bob is frustrated his students' lack of accuracy and motivation to be good in their studies.
- Lulu thinks that students lack intrinsic motivation.
- Surhana also thinks that even high ability students lack motivation to do better.

*Background*
- Our students' results are a reflection of our effort.
- Students are generally contented with where they are at in terms of academic ability.

### Possible normative-evaluative Claims
*Foregrounded*
- We should tease each other.
- Students should not be lazy and sloppy in their work.

*Background*
- It's good to come to consensus.
- It's good to generate as many ideas as possible befor coming to consensus.
- We should not be lazy and sloppy in our work.
- We should be concerned with our students' work.

*Highly Backgrounded*
- It is not good to neglect our students' studies.
- It's only right to respect people with experience.

E: I was thinking if is it possible we do something general. Something that is not just restricted to – the kids ah, it's not a matter of time constraint. They finish their test way before the time *(several affirmations)*, then they'll play with pencils. And in the end, the sentence that they copied from the passage is full of mistakes. That's despite you telling them, "Please check carefully, please check carefully." So, maybe we do something to –
M: Ya, they will have to take more time in their work.
K: Probably the attitude towards their work.

E: Inspired xxx.

S: Motivation can, motivation can be mistaken as inadequate.

E: But it's quite difficult lah to form the research question, right. **[MF: Edward finds that the moment he thought of an idea that encompasses all subjects he thinks that the idea is too general and lacking specificity]**

S: Any other concerns?

M: - you mean, we still need to make it subject base, Edward. We still have to make it subject base.

E: No, er, usually we want the subject – we want to base on subject. First, we need to measure in a – we need to have a measurable outcome.

S: Your, em, your area of concern must be SMART. Specific, measurable, achievable –

M: The targets are SMART.

S: - Ya, your targets are SMART. And it must be achievable and feasible you see, because – and it must be observable and the outcome must be measurable. So that's why most of the time we try to stick to academics subjects rather than discipline and things like that. Because if it's xxx. **[MF: Surhana feels that she need to educate participants on the meaning of the word SMART (AND/OR) feels responsible to educate participants on the meaning of the word SMART]**

M: Why not we just think out of the box and do motivation instead? **[OC: Maimuna looks frustrated and impatient]**

**[MF: Maimuna is in a hurry to close the discussion and move in order to move on in the action research project]**

S: That would mean –

M: Be specific, because motivation is specific what. I mean, by survey, measurable. Achievable. Can what. Because everybody all the other levels are going to do by subjects. Year after year we do by subjects. And we know that this is a persistent problem that is going to carry on to primary five and six.

M: Can we xxx.

*(Participants seemed to be stuck at this point)*

**[MF: Others sense that Maimuna is getting impatient and wish not to aggravate it further by keeping quiet and not explore any ideas]**

S: Okay, let's look at this. All these. And then – *(Handles the flip chart paper)*. **[MF: Surhana feels responsible that she should be resolving the issue of exploring ideas but yet coming to a consensual agreement quickly]**

H: What's your group's name? **[MF: Hairon tries to lessen the tension by starting a different question altogether]**

M: We don't have a group name. Not yet. Have we decided on the group's name?

S: We, we will normally decide on the group name when we are done with the xxx.

S: All these. Now let's now look at all these, and then let's rank it, okay. Re-write all these problems according to what is important our real area of concern for our classes because there might be overlapping you see. Five minutes, let's just look at it, think about it, what is the most important.

*(Participants either thought on their own or with another person)*

**Possible subjective claims**

*Foregrounded*

- M: My students must put in more effort.
- M: I can't wait to get the discussion moving.

*Slightly Backgrounded*

- S: I think Maimuna is frustrated.

*Highly Backgrounded*

- M: I have to go home soon.
- S: Let's not offend anyone.

**Possible objective claims**

*Foregrounded*

- Edward wants to do something that is general but at the same time recognises the need to be subject-specific.
- Maimuna thinks that her students should be more hard-working.
- Karna think that students should be more self-motivated.

*Background*

- Edward is obligated to fulfill the expectation by those who think of him as having experience.
- Surhana feels the responsibility of educating participants of the need to make the research questions SMART.
- Maimuna thinks that the group is taking too long to come up with the Area of Concern.
- Participants feel uncomfortable with Maimuna's lack of sensitivity to the value of exploring and generating ideas before coming to consensus.

*Highly Backgrounded*

- Maimuna senses that she is pushing the boundaries too much.

**Possible normative-evaluative Claims**

*Foregrounded*

- Facilitators should encourage optimal exploration of ideas.
- It's not right to correct participants' behaviours that are contradictory to the value of exploring and generating optimal ideas.

*Background*

- We should be hardworking.
- It is only right for more experienced participants to contribute more in the group discussion.
- It is only right for participants to agree with each

*Highly Backgrounded*

- It is not good to have frictions in group relations.
- It is only right to resolve tensions.
- It is only right for the participants who exhibit unacceptable behaviours to make amends to their own unacceptable behaviours.
- We should respect each other.

M: Okay, lah. So what do you want us to do now? **[MF: Maimuna wants to help the problem that she herself has created (AND/OR) feels guilty for not valuing the importance of exploring ideas and coming to consensus on the Area of Concern (AND/OR) tries to flow with the rest of the participants' spirit of discussion]**

S: Okay, em, according to yourself lah. See which one is the most – your area of concern, which is the most – **[OC: Looks more relaxed now]**
E: I find the most er feasible and beneficial to the whole level –
M: We are talking about – are we talking feasibility or are we talking about what is important now. **[MF: Maimuna feels strongly of the need to be pragmatic and realistic in the scope of the work]**

E: Ya, ya. I mean, all –

S: It must be feasible as well.

E: - All, all, you have to put all the factors together. Because I find that we are going to focus on Maths ah. It's going to be difficult because ah, the different classes would have different areas of problems. So, it is quite difficult for us to come together with a project that will benefit the whole level. So – and since last year we have done writing right. So I thought, for me lah, I would rank compre and em answering Science questions – **[MF: Edward wants to stress the importance of embarking on a project that all students will benefit across the grade level]**

S: But, compre –

E: - as a top priority.

S: - we already have focused to actually help them. And it's pretty focused – **[MF: Surhana disagreed because they already have a project to address the problem]**

M: It's insufficient.

S: - ya, it's sufficient.

M: It's insufficient. I find it –

E: Actually, actually not true, not true.

S: Sufficient? Okay, okay. **[MF: Surhana is confused with Maimuna's and Edward's points]**

E: There are a lot of aspects of comprehension not covered -

M: - It's not comprehensive.

E: - Ya, ya it's not. **[MF: Maimuna and Edward share the common concern that students are weak in comprehending Science questions]**

E: Like for example, how to answer – a lot of them have this habit of er telling grandmother story. Er, John was late because, and because they write John was late ah, they –

M: They incur error there.

E: - make mistakes here and there. They get half a mark, half a mark.

S: So which is – this, which is the other one?

E: Science.

S: So which should come first.

E: I think this is the problem that throughout the level more or less we experience ah.

S: So this and this ah.

S: Bob. **[MF: Surhana wishes to hear the views of others (AND/OR) wants to encourage inclusive participation]**

B: For me and for Edward – Because for example English, right, grammar, em, competencies and things like that is, like what you said just now throughout the level, but I think xxx. *(Laughs)*

S: Karna. **[MF: Surhana wishes to hear the views of others (AND/OR) wants to encourage inclusive participation]**

K: I'm more concerned with the unable to explain scientific concepts and the thinking skills. So, ah *(Affirmation)*, that one in the bottom. But I was wondering whether if their thinking skills were to improve, will they be able to answer the scientific, I mean, explain with the scientific concepts ah.

S: Thinking skills can be in many ways you know. Can be in English, Maths, Science part. Scientific concepts is being able to apply –

K: Applying, ya.

S: - facts that they have learnt.

K: So if their thinking skill increases maybe they can apply the concepts – application wise, that's why?

**Possible subjective claims**
*Foregrounded*
- M: I should not push myself too much.
- M: I feel slightly embarrassed for my impatience.

*Highly Backgrounded*
- S: I understand that Maimuna wants to go home early.

In the above sample transcript, Surhana attempts to make sure that every participant be given the opportunity to contribute to the construction of the Area of Concern (AOC) by giving open invitations for suggestions even if they contain uncertainties or doubts, allowing the participant who makes the suggestion to elaborate on the suggestion in order to help other participants understand and be clear about the suggestion, expecting or requiring participants to support their suggestions with reason, allowing other participants to give comments on the suggestion, and not encouraging quick decisions to be made. When Maimuna tries to hasten the discussion and hence encourages closure by placing great emphasis on her arguments, Surhana does not reject her argument outright neither encourages others to feel imposed to agree to her arguments.

In the brief silence that ensued Surhana is caught in a dilemma. On the one hand, she is committed to encourage assertions to be made during discussions in forms of propositions, agreements and disagreements. Furthermore, Surhana is constrained to take into consideration Maimuna's need to have closure on the discussions that pertain to the AOC. She breaks the brief silence by asking participants to rank the suggestions that they have raised. On the other hand, she feels that assertions made during discussions should not make participants feel that they are imposed to agree to these assertions. Furthermore, she is committed to the cultural value of consensus decision-making and especially the cultural value of hearing the views of all participants before coming to consensus on decisions. Maimuna's assertion of disagreement is unlike the usual case of disagreement such as when Edward disagrees with some participants' argument that students' are sloppy and lazy with their response to Science questions and argued that the culprit is students' lack of motivation. In this sense, Maimuna can be said to have contravened on the cultural value of not imposing one's views on others.

The brief silence is also a moment of reflection for Maimuna to read the situation and appreciate the cultural value of not imposing her arguments on others. In this instance, the situation has become a learning experience for Maimuna to understand an important aspect of the cultural value of the Learning Circle. This is understandable as Maimuna is new to the social practices of Teachers Network Learning Circles. Following Surhana's suggestions to consolidate the suggestions that have been generated prioritising them, Maimuna expresses her regret at imposing others to initiate closure to the exploration of suggestions and ideas by stating, "Okay, lah. So what do you want us to do now?" The group then continued with their exploration of ideas in the attempt to construct the AOC.

The sample transcript above also surfaced another value – that is, equal treatment, which is closely related to the value of consensus decision-making. Each participant ought to be given equal opportunity to make assertions during Learning Circle's discussions. The value for equal treatment in fact precedes the value of consensus decision-making. And in this regard, the following social rules were observed to be closely related to the value of equal treatment:

- Everyone is a human being worthy to be treated with respect.
- Everyone should be treated as equals in terms of having human worth regardless of age, experience, personality or status insofar as they have the right to make assertions in discussions.
- Everyone should be given the right to make an assertion – to make a stand, clarify a stand, elaborate on a stand, defend a stand, critique a stand, reject a stand and accept a stand.
- Everyone should be accepted as they are in terms of personality and idiosyncrasy [Transcript 3 (20.20)]. In this Learning Circle group, one participant was perceived as having a personality and idiosyncrasies that are rather unique in contrast to others. However, in my interviews at Stage 3, some participants told me that they still accepted this participant by virtue of the respect given to human beings. The Learning Circle social practices and rules had only played the role of confirming and promoting this value.

The value of respecting each participant as having human worth was confirmed by participants during Stage 3 interviews. In my interview with Maimuna to explore what are important factors to the success of the Learning Circle, she quoted: *"There was mutual respect, number one. We could work together. Number two, erm, ...."* She also commented that the Learning Circle had allowed for and promoted the practice of the cultural value of respect for one another.

Although it is right to give due respect to everyone equally, the nature of it varies based on a person's role, experience in teaching and involvement in Learning Circle, and age. Besides respecting each other as human beings, participants also respect each others' role, experience and age. In the Learning Circle, Surhana was respected for her role as the facilitator and her experience in facilitation of Learning Circles; Edward was respected for his experience in Learning Circles; and Maimuna was respected for being the most senior in terms of age. Respect is also given to participants who fulfill their formal or informal roles such as facilitation in discussions, preparation of PowerPoint slides, worksheets writing and video editing and cutting. Respect given to each other in terms of role, experience and age, however, does not override the respect given to each other on the basis of human beings to make assertions during discussions and in contribution to decisions in group setting. On the contrary, the latter supersedes the former.

In the above sample transcript, even though Maimuna displayed behaviours that contradict the value of optimising the generation of ideas before coming to consensus, others accepted her proposition on the basis of the value of respect for human beings and that everyone ought to be given the right to make assertions. The onus is on Maimuna to accept and practice in a non-coerced manner the value of optimising the generation of ideas before coming to consensus. This in my view also illustrates a form of socialisation where participants learn to become a member of the Learning Circle. And although the facilitator has the normative power to influence material and symbolic realities during Learning Circle discussions, the fact that he or she has to embody (internalise) and project (externalise) the value and principle of consensus decision-making, results in everyone being treated as equal without being imposed or coerced by virtue of hierarchical position. The value of equal treatment regardless of role, experience, age or personality had also contributed to every participant to freely assert claims and reach consensual decisions to be made based on the better reasoned argument. This will be discussed later in this chapter.

Equal treatment is also evident in workload distribution. It is based on what the group considers to be fair, and is decided through consensual reasoned discussions. Reasons for workload distribution are based on skills, talents and willingness to contribute. Furthermore, attempts are made to make workload distribution equal but discriminatory taking into consideration the strengths and weaknesses of individual participants. The sample transcript below illustrates the value of equal treatment in terms of workload distribution.

---

*Transcript 3 (32.40)*

S: Erm, one of you will have to take one xxx another xxx because okay, this, is, this is big because it respi – er, this is digestive –
**[MF: Surhana is concerned with the amount of workload and fair distribution of workload]**
K: Ya Maimuna and Teresa.
S: Em.
B: The digestive system is big.
**[MF: Bob agrees with Surhana that digestive system is big]**
S: Digestive and er –
B: xxx
S: - What's the other one ah, digestive and muscular, P3.
B: Skele, skeletal.
S: Skeletal, ya, it's big.
E: Skeletal should be, quite easy because it's just about what's the purpose of having skeleton.
S: I only remember everytime they they, they test about rib cage. *(laughs)* Pathetic and gory cage *(laughs)*.

---

E: It's skull lah.

B: Skull *(simultaneously)*.

E: Rib cage, skull.

B: Ah.

E: To protect xxx –

S: Ah.

E: - something like that.

K: xxx

C: xxx

K: I think it's the big one right, our boys tend to xxx –

S: Topic.

M: Alamak, that's not fair. **[OC: Maimuna is shocked to see her work allocation]**

**[MF: Maimuna is concerned about work or workload distribution (AND) Maimuna wants to seek attention]**

E: What's not fair?

M: xxx

E: You want all is it, okay, we give all ah *(jesting)*.

**[MF: Edward knows Maimuna quite well and wants to tease her]**

S: Which one you prefer?

B: Sometimes ah –

K: This one we did.

B: - you can handle *(comforting Maimuna)*.

K: This one we did.

**[MF: Karna, Edward, Surhana and Bob think that the work allocation is fair]**

S: We did for the test –

E: We let you choose ah. Don't say that we bully you.

**[MF: Edward wants to tease Maimuna]**

K: - test.

M: Oh is it?

E: Want matter ah, we give you matter.

K: xxx things.

B: We give you matter ah.

M: Arr, give me easy easy one ah. **[OC: Maimuna pleads to others]**

**[MF: Maimuna does not like to have additional burden on her shoulders]**

E: Are you interested in plants and animals or not?

K: xxx

M: I can't do plants and animals.

K: Take another one.

**[MF: Karna tries to be objective]**

E: Can do plants and animals ah? Can do plants and animals?

M: We give matter.

S: We give Edward to do matter, because Edward *(laughs)* have to come up with the, example, there's example worksheets which he xxx.

E: Auh *(affirmed)*.

S: Because, since you have it, then you might as well can come up *(laughs)*.

M: Okay lah –

B: Eh, serious you all xxx

S: If no then we'll have another -

M: - I take lah, anything lah, bo pien *(Chinese - no choice)* lah.

**[MF: Maimuna is all right with the work allocation after the explanation given by others (OR/AND) Maimuna is jesting with others that she is unhappy with the workload allocation]**

**Possible subjective claims**

*Slightly Foregrounded*
- S: I really find the skeleton man quite gory.

*Slightly Backgrounded*
- M: I'm already tight for time.
- B: I want to tease Maimuna.

*Background*
- M: I don't want to displease others.


**Possible objective claims**

*Foregrounded*
- Surhana wants to help coordinate work allocation with regard the topics to be taken by participants to do the worksheet intervention activities. Surhana thinks that both digestive and muscular systems are big topics and therefore require heavy workload. Surhana agrees with Bob that the skeletal system has a lot to cover and is heavy on workload.
- Bob agrees with Surhana that the digestive system has a lot to cover and thus is heavy on workload. In addition, Bob thinks that skeletal system also has a lot to cover and thus is heavy on workload. Bob agrees with Edward that Maimuna can take the topic on matter.
- Edward however thinks that the skeletal system is easy and therefore not so demanding as proposed by Bob and Surhana. Edward wants Maimuna to make a her own decisions to the topics that she prefers. Edward proposes that Maimuna do the topic of matter as he finds it easier than the rest. Edward also proposes to Maimuna to do the topics of plants and animals.
- Karna thinks that students may find difficulties with the skeletal system and many students that she knows are not competent at the topic. Karna encourages Maimuna to choose topics that she is comfortable to do.
- Maimuna does not consider the work allocation fair. Maimuna is surprised to hear from Surhana and Karna that several of the topics were covered before. Maimuna pleads with the rest that she should take the easier topics. Later on, Maimuna thinks that she cannot do plants and animals. Maimuna eventually decides to take what has been given to her and claims that she does not have any choice for topics.

*Slightly Foregrounded*
- Surhana thinks that the skeletal man is cute and frightening. Surhana wants to know what are Maimuna's preferences in view of her assertion that the workload is not fair. Surhana wants Edward instead of Maimuna to do the topic on matter because he is the on who will set the template for future interventions.
- Edward thinks that it is the skull and ribcage that make it gory.
- Bob thinks that it is the skull and ribcage that make it gory.

*Slightly Backgrounded*
- Karna thinks that the skeletal system covers a lot of concepts because it has a lot to cover.
- Bob wants to pacify Maimuna by stating that she can handle the workload.
- Karna wants to pacify Maimuna by stating that they had done several of the topics before.
- Surhana want to help Maimuna cope with workload better by saying that they had done several of the topics before.
- Maimuna is all right with taking the topics that had allocated to her.

*Quite Backgrounded*
- Maimuna finds the work allocation quite all right.
- Edward does not believe in coercion in matters of work allocation and distribution. Edward sympathises with Maimuna.

*Highly Backgrounded*
- Surhana is concerned about workload allocation. Surhana does not want to add unnecessary work on teachers.
- Maimuna takes into consideration home responsibilities in determine the degree of perceived workload. Maimuna does not like to take too many responsibilities.
- Karna pays close attention to the discussion at hand and analyses the arguments raised.

In the above sample transcript, participants are given equal treatment in terms of freely voicing out their opinions on matters of workload distribution. Each participant are given equal treatment to either volunteer to take on certain work that they prefer or suggest others who are suitable to carry out certain work. Conversely, each participant is given equal treatment to either agree or disagree with the suggestions of others. The final decision for workload decision is, however, based on agreement to the better reason argument.

### Summary:

The predominant power relation that was exercised among Learning Circle's participants as they relate, work and learn with each other is symmetrical or consensual in nature as opposed to asymmetrical or conflictual. The cultural values that underlie the symmetrical or consensual power relation among Learning Circle's participants as they relate, work and learn with each are (a) respect for human beings and equal treatment of human beings regardless of differences; and (b) respect for individual and collective freedom through consensual decision-making.

## 2. Relationship

The key themes that had consistently surfaced in the social practices of the Learning Circle in terms of relationship are collegiality, collaboration, individuality within collectivity and collectivity among individuality.

### a) Collegiality

The sub-themes that could be identified within the theme of collegiality comprise the following:

- Humouring.
- Teasing.
- Caring in the form of empathy and sympathy.
- Camaraderie and solidarity.

Expressions of care in the form of empathy and sympathy are also associated with consensual power relations. In this regard, participants shared personal or work problems and difficulties, and shared individual and collective experiences. In other words, participants empathise and sympathise with one anothers' experiences whether they be bad such as problems and difficulties or good such as successful or meaningful experiences. In the previous sample transcript [Transcript 2 (32.40)] participants expressed their empathy and sympathy towards one another in terms of workload and work demands specific to their students' ability.

Humouring and teasing were acted out as expressions of shared experiences in the form of current thoughts and feelings at the moment of interactions, or in the form of past thoughts and feelings relating to past interactions. These expressions of experiences are associated with a sense of ease – that is, "I'm okay, you're okay," or "We are among equals," and are indicative of consensual power relations.

Another sub-theme that has surfaced prominently is camaraderie. Participants exhibited a high degree of camaraderie. During discussions, participants shared their work demands and stress with one another. They also actively listened to each other and affirmed each others' assertions and intellectual positions. Tensions are usually resolved through collegial negotiations through the use of reason, fraternising, and humouring. Collegial negotiation through the use of reason, fraternising and humouring were also

used to reach consensus in decisions. The positive emotions that accompany camaraderie include feelings of being:

- accepted by others.
- accepted even though each of us are uniquely different.
- understood by others.
- empathised by others.
- heard by others.
- supported by others.
- able to share similar experiences with each other.
- free to share personal weaknesses to each other.
- able to contribute to claims of others.
- able to receive contributions from others.
- able to agree with others and to be agreed by others.
- united.
- liked by others.
- affirmed by others and to affirm others.
- respected by others and to respect others.
- at ease with each other.
- encouraged and to encourage others.
- able to synergise.
- able to help others and be helped by others.
- critical of others' views and to be critiqued of one's views.
- equal with each other in decision-making processes.

Below is a sample transcript after it had gone through initial meaning reconstruction and pragmatic horizon analysis to illustrate the sub-themes that relate to collegiality especially with respect to humouring and teasing:

*Transcript 4 (48.20a)*

S: And what's our introduction this year? Tell me. **[OC: Surhana and others are eating the food that Maimuna has brought]**
**[MF: Surhana needs to know the introduction activity that was discussed earlier in her absence]**
E: We let them …
M: … ah.
T: Now that's you can. Sellavision.
K: A sellavision.
M: A sellavision.
S: Just that ah?
T: Ah *(surprised)*. What else do you want?
**[MF: Teresa feels that the idea is quite good already]**

M: Major already what.
H: Quite good *(laughs)*.
K: I think it's quite a good idea.
**[MF: All others think that the sellavision idea is brilliant]**
S: Because last year I thought it was very funny.
**[MF: Surhana believes in the idea that an Learning Circle presentation must be very good in terms of being engaging and humorous]**
M: Hah *(remembered)*.
T: Hah *(simultaneously)*.
B: Oh, okay okay.
T: Mr Chong. The accident one right.
**[MF: Bob and Teresa shares the same sentiments regarding the shared experience that they had last year (OR/AND) Bob and Teresa feel a sense of camaraderie in relating to the shared experienced that they had last year]**
S: Em.
M: What did we do?
S: We did …
B: Bleed a lot a lot ah.
**[MF: Others except Bob are gearing up for the joke that is going to be shared by Surhana]**
S: So, erm, erm, correct usage of word lah. So, Mr Chong is the not very, not very good –
T: Not – in English.
S: - in English. And Madam, er Madam Lim is the person who is very good with English. So they stumbled upon, er, at at an accident scene. So Mr Chong, Wah Blood got a lot a lot. No -
B: *(laughs)*.
T: *(laughs)*.
S: That's wrong, he's bleeding profusely.
*(some laughs)*
**[MF: Those who share the same experience feel a sense of solidarity and goodness in relating the story that had taken place during last year's presentation]**
S: It was, funny, you know –
T: Very funny.
S: - … to say, No! That's wrong!
T: *(laughs)*.
S: But, but they really caught the attention.
S: Mdm Lim is funny. Yes.
**[MF: Surhana admires people who are funny (OR/AND) Surhana appreciates humour (OR/AND) Surhana believes that presentation ought to be funny]**
T: …
S: That caught the attention of the audience ah. So, the video clip, if we are using the video clip, it must also be able to catch that kind of attention.
M: It will *(stressed)* with Edward's expertise *(laughs)*.
*(all laughs)* **[OC: Maimuna copies the tone of voice that Surhana uses for the previous illustration (OR/AND) Maimuna looks up to Surhana (AND) Maimuna loves fraternising with Surhana]**

E: No promises ah.

T: Hey, can you show us the confidence or not.

*(some laughs)*

T: Because if you don't show us the confidence – **[OC: Teresa teases Edward]**

**[MF: Participants enter into role positions where the one receiving the teasing could adopt a role that is either teasing back or play acting to be serious]**

S: … people talking about this, then it's going to be a bit, erm –

M: Of course.

B: Of course *(simultaneously)*.

M: There's voice over what. Do you feel like this?

E: I must – No. I must check with Sabas is it – easy with our equipments to, to, input the, the sound into it, that means when you pre-record the file. That would be better – **[OC: Edward sounds quite serious with the implication of video-recording]**

H: Em.

B: Em *(simultaneously)*.

E: - rather than try to capture everything together. It would be muffled.

**[MF: Edward takes his work seriously]**

S: *(laughs)* Do you feel like this – science paper. **[OC: Surhana acts out]**

M: Hah, like that ah. That's what he said ah.

B: …

S: So, who's the actor?

E: I will go and recruit. **[OC: Edward responds with a jest]**

M: *(laughs)*.

E: I must … the actor -

M: After that you must put in his –

E: - it may not be the P4 …

M: - He wins the video clip for the young director's award *(laughs)*. **[OC: Maimuna continues to tease Edward]**

B: Old already ah. Young. **[OC: Bob adds on to the teasing]**

E: Anyway I'm –

T: The P5 have got a few quite funny character.

E: - leading a team for the school's video award. So, due to give them. No problem.

M: …

T: Ah? What did he say? *(surprised) (laughs)*

B: Wo chiao hen hao? *(Chinese: I teach very well)*

T: *(laughs)*.

M: Wo chiao hen hao *(Chinese: I teach very well)*. Okay.

**[MF: Maimuna copies the Chinese phrase in order to fraternise with Bob (AND/OR) Maimuna wants to show off to Bob that she knows a bit or two of Chinese language]**

E: Anymore?

### Possible subjective claims
*Foregrounded*
- S: I want to know what the discussions were all about in my absence; I really feel good about last year's introductory presentation; Can we have that again?

### Possible objective claims
*Foregrounded*
- All participants except Surhana are happy with the idea of sellavision as an introduction to the group presentation. This is because Surhana has missed the earlier discussion that the group had in Surhana's absence.
- When Surhana brings up an incident that took place last year, quite a number of the participants express much empathy to it. Participants then converse with other to relive the past incident again.
- Maimuna teases Edward that the group is depending on his skills to do a good introduction. Maimuna also teases Bob by speaking in Chinese.
- Edward expresses that he will try his best to make introduction work well.
- Teresa teases Edward that the group is relying on him to make the introduction a success.
- Bob too teases Edward in this matter.

<div style="border:1px solid black; padding:10px;">

*Backgrounded*
- The Learning Circle facilitator needs to be in the know to what is happening in the project.
- Surhana hopes that this year's fun will be good as last year's.
- Edward is good in ICT related work.

*Quite Backgrounded*
- The shared practical experiences that participants have strong contribution to the formation of collective identities which outsiders may find difficult to understang and share. Such experiences are milestones to participants' development of shared identity along with their growing sense of solidarity and camaraderie.
- Edward is a modest and humble person.

*Highly Backgrounded*
- Humouring each other is a sign of power symmetry.
- Participants' individual and collective experiences are important.

**Possible normative-evaluative Claims**
*Backgrounded*
- Work should be fun.
- It is all right to be teased and to tease others.

*Highly Backgrounded*
- We should encourage each other.
- We should listen to each other.
- We should respect each other.
- Our personal and collective experiences should be respected.

</div>

In the above sample transcript, participants are discussing how to present their Learning Circle findings in an entertaining and impacting manner. This idea came as a result of the previous year's presentation of their Learning Circle project. In the midst of their discussions, they recalled and re-played their past experiences in the midst of much humouring and teasing. These experiences were accompanied by positive emotions which relate to the above social interactions such as being accepted by others, empathised by others and supported by others.

### b. Collaboration

Besides collegiality, another theme that had emerged within the dimension of relationship of the Learning Circle's participants is collaboration and collaborative social practices. And in this respect, the division of work among participants was done consensually – that is, decisions for work distribution were only concluded when everyone had agreed to these decisions. What was evident in the social practices of work distribution is the importance placed on reasons to determine the equity of workload and work distribution. Reasons are surfaced, critiqued, negotiated and agreed upon by all members of the group whether verbally or non-verbally (ie. body language) in an open and transparent manner.

Discussion and debates in matters of workload and work distribution took into consideration the participants' role specialisations, talents, skills, personalities and commitment, and the value of equal spreading of work. In addition, the personalities and willingness of participants to volunteer or offer help beyond his or her expected lot had also influenced workload and work distribution. The willingness of participants to volunteer or offer help beyond his or her expected lot is closely related to the unhindered projection and expression of individual identities. Also, the division of workload and work distribution did not remain static instead changes according to the situated need.

In the earlier sample transcript [Transcript 3 (32.40)] Surhana, being the facilitator, expresses her concern over the potential work demand needed to complete the intervention worksheets and the need to distribute the workload as equitably as possible. When Surhana, Bob and Karna assert that the skeletal system is a big topic to be completed by one participant Edward reasons with other participants hoping to persuade them that the skeletal system is a simple topic. He also tries to allay Maimuna's anxiety over the possibility of too much work needed to construct the intervention worksheets. The rest of the participants also try to empathise and sympathise with Maimuna's concerns. Edward eventually asserts that Maimuna be given the choice to choose any topic that she prefers in view of her concerns over workload issues and her inexperience in the Learning Circle. Others seem to be agreeable to this as they too sympathise with Maimuna's concern. Surhana finally suggests that Edward construct the intervention worksheet for the first topic – that is, on matter, because he was the one who gave the suggestion for the intervention worksheets. Edward is agreeable to Surhana's suggestion.

The cultural value of working collaborative and sharing each others' workload is depicted in the image of geese flying in V-shape formation which can be found in the Teachers Network Reflection Journal which every participant owns once he or she participates in Learning Circles (Photograph 1). Just like geese flying together, participants in Learning Circles share the same goal and workload needed to accomplish the goal. It is expected that participants care for each other and help others who are in need of help. Furthermore, the picture of the lead goose being replaced by another when

it is tired signifies shared leadership in the work needed to be accomplished. The eventual outcomes are self-mastery, excellent practice and fulfillment.

**Learning from Geese**

(revisited by TN)

There is much we can learn from geese as they fly south for the winter.

Geese fly in V-formation because as each goose flaps its wings, it creates an "uplift" for the birds that follow - which adds 72% greater flying range than if each bird flew alone. This means that when a goose falls out of formation, it suddenly feels the drag and resistance of flying alone so it quickly moves back into formation. To encourage those up front to keep up their speed, the geese give encouraging honks to those up front. And should the lead goose tire, it rotates back into the formation and another goose flies to the point position.

Learning Circle provides the uplift, encouragement and leadership opportunities for teachers to achieve self-mastery, excellent practice and fulfillment.

*Photograph 1: Back front cover page of*
*Teachers Network Reflection Journal*

### c. Individuality within collectivity

The third theme that had emerged from the findings has to do with the idea of 'individuality within collectivity'. The cultural value that is evident from the analysis has to do with the freedom for self-expression. Self-expressions during Learning Circle discussions were usually spontaneous but constrained within the rule of turn-taking. Furthermore, self-expressions were influenced by the personality of participants. For example, some participants are more spontaneous and vocal than others. The rule of turn-taking, however, has the greatest influence on how participants could express their individual selves. In other words, by virtue of the cultural value of turn-taking, each participant has the opportunity to express themselves. The concept of turn-taking does not mean each participant formally take turns one at a time. Instead, self-expressions are spontaneous, but participants are sensitive that no individual is left out in the opportunity to express themselves. The personal historical experiences of participants also have influence on self-expressions especially with regard to the content of self-expressions. It is common for participants to express themselves in the form of stories

which they bring along to the discussions. The example on how participants recall the story of a teacher correcting a grammatical error as an introduction to a Learning Circle project presentation is an appropriate example [Transcript 4 (48.20a)]. Below is a sample transcript after it had gone through initial meaning reconstruction and pragmatic horizon analysis to illustrate how participants made spontaneous but turn-taking self-expressions within a collective setting:

---

*Transcript 2 (34.25b)*

E: So, your pupils can say that because solid cannot compress, and then –
M: No, they said that it has a definite shape and a definite volume. **[OC: Maimuna slowly and calmly responded and defended her stand and experience]**
**[MF: Maimuna is defensive of her students and class teaching (AND) Maimuna doubts if her students are truly skillful in answering Science questions]**
B: At least they are willing to write that. Mine is just not enough space. No more space left. **[OC: Bob sounds serious in relation to his students' learning]**
**[MF: Bob wants to share his own share of frustration of his students' weak ability]**
M: Oh, is it? They add one every other – everything else that – **[OC: Maimuna sounds surprised]**
**[MF: Maimuna finally is convinced of general students' lack of competence in the task of answering the particular Science question]**
K: They don't know –
**[MF: Karna shares the common problem of students' poor skill in answering Science questions]**
M: - the definition –
K: - They are not focused.
**[MF: Karna thinks that one of the problems is lack of focus]**
M: - xxx they squeezed everything in, so no more space. Everything is in one.
S: Em, but not scientific.
**[MF: Surhana wants to stress on the importance of using scientific terms in answering Science questions]**
M: Ah, it's not scientific.
B: Ah, it's not scientific.
M: It's just pick out –
K: And whatever they learn about solid, they just throw in. They don't sieve it out.
**[MF: Karna thinks that one of the problems is indiscriminate use of terms]**
B: Hey, at least you all throw in you know. Mine just say –
E: They download lah. They downloaded everything.
**[MF: Edward wants to joke about the problem at hand]**
B: - Hey, mine just say not enough space you know. Very logical and straight to the point, and they don't add anything more extra, mine, my class ah.
**[MF: Bob expresses his frustration that his students are least able to handle the Science question relative to others]**

*(with laughs along the way)*
**[MF: Participants gain a sense of empathy, harmony, solidarity and camaraderie after participants share his or her experiences which resonate with others]**

    <u>**Possible subjective claims**</u>
*Foregrounded*
- M: I'm very surprised that Bob's students are so weak.
*Slightly Backgrounded*
- B: It's unfortunate that I have a weak class.
- K: It's so sad that our students are not so focused in their work.
*Highly Backgrounded*
- B: It's so embarrassing to know that my class is weaker than the rest.

---

**Possible objective claims**

*Foregrounded*

- Surhana thinks that students are not scientific in their explanations.
- Maimuna and Bob agree with Surhana that students are not able to use scientific terms in their explanations.
- Karna and Edward elaborated and contributed to Surhana's, Maimuna's and Bob's proposition by stating that students are also not discriminative in their use of scientific terms.

*Slight Foregrounded*

- Bob thinks that his students do not have a repertoire of scientific concepts.

*Backgrounded*

- Participants empathised with each other shared personal experiences that pertain to the difficulties in helping their students understand Science concepts.

*Quite Foregrounded*

- Participants developed a common identity through the act of shared experiences that pertain to the difficulties in helping their students understand Science concepts.

**Possible normative-evaluative Claims**

*Foregrounded*

- It is good to share our difficulties.
- It is good to have shared experiences.

*Backgrounded*

- It s only right to claim that our students' learning reflects on our teaching.
- It is good to have feelings of solidarity.

*Quite Backgrounded*

- It's our responsibility to help our students learn.
- It is good to share to empathise with each other our personal experiences.
- We should develop collective identity through the acquisition of shared experiences.

Self-expressions are also related to projections or externalisations of self-identities. In the above sample transcript, when participants externalise their past personal experiences with their students, they are in actuality externalising the meanings that they had constructed in regard to these experiences – that is, their identities as teachers. The students as a class can thus be said to be an extension of the teachers' identities. These experiences are uniquely different to the experiences of other participants. Within a context where both spontaneity and turn-taking are culturally valued, the projections or externalisations of self-expressions and self-identities are generally encouraged and maximised. Moreover, individual self-expression and identity are accepted and respected by virtue of the cultural value for equal treatment of participants to express their views openly in group settings. The freedom to project and externalise one's identity helps individuals' ideals to be openly expressed, and the free expression of creative and aesthetic ideas.

At a higher degree of inference, the freedom to externalise one's identity also brings about the internalisation of one's identity, and thus bringing about the affirmation and

consolidation of one's identity within a group. For example, when Bob expresses his disappointment that his students are worse off than other students from other classes, he is externalising the meanings that he makes with regard to his students in relation and contrast to other teachers. By doing so, he is externalising his identity of a teacher with students who are generally weaker than students from other classes. At the same time, he is also internalising the identity which he has externalised.

The accomplishment of the externalisation and internalisation of one's identity brings about a sense of worth as a person – that is, to be accepted by peers for being who he or she is. Although the accomplishment of the externalisation and internalisation of one's identity may bring about acceptance by peers, it may also bring about rejection. However, in a group setting where the cultural values of respect for human beings and consensual power relations predominate, efforts for acceptance were more prevalent than rejection. For example, when Bob expresses his disappointment towards his students he is at the same time subjecting himself to be critiqued by others who may reject or accept his assertions. Maimuna and Edward, however, either empathise and sympathise with him, and thus can be said to accept the externalisation and internalisation of his identity. At a higher degree of inference, the accomplishment of the externalisation and internalisation of one's identity may also bring about a sense of self-constitution as a person – that is, being accepted as a member of the group.

### d. *Collectivity among individuality.*
The fourth theme under the category of relationship, which is closely related to the third theme, is collective identity. Past and current shared experiences do contribute to the collective identity of the group. Each participant brings into the group his or her individual identities based on his or her past experiences and current roles. In the above transcript [Transcript 2 (34.25b)], the participants brought into the discussion the meanings that were derived from their classroom interactions. These identities relate to the identity of a moral teacher who is concerned with students' academic achievements. At other instances, Maimuna expressed her identity a mother and home-maker when she attempted to complete the discussions quickly so that she could go home to fulfill the responsibilities of a mother and home-maker [Transcript 2 (8.55)]. However, Surhana, having the identity of a facilitator based on her current role and her previous experiences of facilitation, challenged Maimuna's value to cut short the discussion. Bob and Karna brought along their identities as beginning teachers by hearing and listening

more rather than talking more. However, Maimuna was able to make strong assertions even though she was new to Learning Circle discussions because she brought along her identity as the most experienced teacher. The structure of encouraging individual expression in Learning Circles allows for the externalisation of individual identities. These externalisations could be shared or empathised by other participants. These experiences provide opportunities for solidarity and a collective identity. In this way, the structure of Learning Circles provides opportunities for participants to create common experiences, feelings, knowledges, and therefore the formation of common identities.

The externalisations of individual identities were usually in the form of stories. In the discussions in the Learning Circle, it was common for participants to tell their personal life stories. As stories were told, participants empathise or sympathise with these stories, and this way, accepting, sharing and respecting each others' life stories. The act of sharing stories, or what I termed as 'current experiences', also creates group identities. In the above sample transcript [Transcript 2 (34.25b)], although participants bring into the discussion their individual past experiences, and thus individual identities, they are at the same time constructing collective identities through the empathising and sympathising of past experiences which have common themes such as the difficulties in helping their students grasp required concepts. At the same time, the very act of sharing and agreeing to these difficult experiences provided shared meaning and thus shared identity, which can be used as another shared story to be told and recalled in the future.

Furthermore, the formation of common and collective identities through story telling brings about a sense of self-worth as an individual and as collective group who shares common experiences. The feelings attached to this are those of a sense of acceptance, agreement, solidarity and unity. Part of being human is to be able to communicate one's own experiences of the world with another human, and for the other to accept and affirm those experiences. In the above sample transcript, participants feel a sense of solidarity knowing that they not only could they express past individual experience which have commonality with others, but also are accepted by their fellow peers regardless of their difficulties in teaching their students.

Although collective identities were developed through the shared stories, they could also be developed through the sharing of material constructions such as mind maps,

concept maps, video productions and creation of booths or poster presentations to present their action research project. These externalisations of collective identities enabled the internalisation of collective identities. It is a common practice for the Learning Circle to use symbolic or psychological tools such as mind maps and concept maps to conceptualise their thinking and discussions. These psychological constructions are collectively constructed through debate and consensus decision-making. The video productions and creation of booths for the presentation of findings of the Learning Circle project involved the contributions of each participant. The creation of these materials had contributed to the feelings of camaraderie and solidarity of the group. They also created shared experiences and meanings which are important to the development of the group identity.

Before moving on to the next category of findings, it is worth noting that the cultural values and practices of the Teachers Network Learning Circles do not on their own affect participants to be collegial and collaborative, and to form solidarity. Rather, the cultural values and practices of Teachers Network Learning Circles are in synchrony with their own beliefs, values, aspirations and needs for democratic living. These include respect for human beings, individual differences, care, love, consensual decision-making. However, participation in the Learning Circle does play not only a confirmatory role to participants' existing values, but also an educative role. Participants may commence with a partial or fallacious knowledge of the values and practices of democratic life, and participation in the Learning Circle allows for the exposure, questioning, experimenting and embracing of democratic values.

*Summary:*

The cultural values that underlie the symmetrical or consensual power relation among Learning Circle's participants as they relate with each other had brought about positive influence on collegial relationships through social practices of humouring, teasing, caring through empathy and sympathy, and building camaraderie, along with positive emotions that are related to these practices. These cultural values had also brought about positive influence on collaborative relationships through transparent, consensual and equitable distribution of work that took into consideration participants' role specialisations, talents, skills, personalities, commitment, and willingness to volunteer help beyond one's expected lot. Collaborative relationships had also contributed to the development of individual and collective identities through social practices of turn-

taking during discussions where participants were encouraged to express their individual identities. Self-expressions of individual identities were not only affirmed but shared and empathised by all other participants. Such social practices where common experiences, feelings and knowledge are affirmed and shared contributed to the development of a collective identity. Positive feelings of camaraderie and solidarity were also attached to these social practices.

In terms of how participants' relationship with each other had influenced teacher change these cultural values had brought about positive influence on collegial relationships through social practices of humouring, teasing, caring through empathy and sympathy, and building camaraderie, along with positive emotions that are related to these practices. These cultural values had also brought about positive influence on collaborative relationships through transparent, consensual and equitable distribution of work that took into consideration participants' role specialisations, talents, skills, personalities, commitment, and willingness to volunteer help beyond one's expected lot. Collaborative relationships had also contributed to the development of individual and collective identities through social practices of turn-taking during discussions where participants were encouraged to express their individual identities. Self-expressions of individual identities were not only affirmed but shared and empathised by all other participants. Such social practices where common experiences, feelings and knowledge are affirmed and shared contributed to the development of a collective identity. Positive feelings of camaraderie and solidarity were also attached to these social practices.

## 3. Work

The key themes that had consistently surfaced in the social practices of the Learning Circle in terms of work are informality within formality, enabling structures of Learning Circles, leadership of the Learning Circle facilitator, shared leadership and moral purpose of teaching.

### a. *Informality within formality*

Although Teachers Network Learning Circles adopts formal structured framework and procedures such as the action research cycle along with appropriate documentations such reflection log, action plan and group reflective journal, the application of these procedures at the Learning Circle site did not follow the formal framework rigidly in response to the contextual needs of the Learning Circle group. Examples of how participants exercised flexibility within the formal structures of Learning Circles include the following:

- Collectively choosing not to use the reflection log.
- Collectively foregoing drawing up the action plan for the Learning Circle project.
- Collectively deciding to meet only about five times within the year as opposed to the range given of eight to ten Learning Circle meetings.
- Collectively deciding not to use some of the technical terms such as Stop Tape or Sounding Board as part and parcel of their communication devices.

The first decisions were made by virtue of time constraints. As participants are primarily teachers with busy schedules, foregoing these requirements would mean more time to focus on the core aspects of the Learning Circle project. The last decision was made by virtue of group preference to not use technical terms that are unnatural and foreign to them. Instead of using the term Stop Tape, participants would naturally allow time for thinking moments. And instead of using the term Sounding Board, participants they would spontaneously provide feedback to each others' assertions, and hence, foregoing using the term altogether.

Flexibility in applying the procedures of Learning Circles was seen as appropriate and something to be encouraged. In my naturalistic interview with one of the Professional Development Officers at Teachers Network, I was told that they do not encourage the

rigid obedient use of the technical terms introduced by Teachers Network. This is encouraged because it promotes participant's ownership to the Learning Circle project. In this sense, the substance of the Learning Circle has priority over the form of Learning Circle. The substance of the Learning Circle consists of the core tenets of Learning Circles such as voluntary participation, reflection, change and trust, and other principles such as emotional support, critical thinking and self-awareness. For example, the hidden principles of the discussion technique 'Stop Tape' such as critical thinking, self-awareness and awareness of others, clarification and suspending judgement are essentially more important than using the term per se.

The division of labour is also not rigidly structured. Participants could initiate changes within the division of labour but only when these changes were agreed upon collectively. What was rigidly followed is the principle that workload ought to be distributed as equally as possible in a consensual manner. This is consistent with the earlier knowledge claim that pertains to collaborative work that is based on consensus decision-making. The flexibility in the division of labour and workload distribution stemmed from the cultural value of taking into consideration participants' role specialisations, talents, skills, personalisties and commitment. This advertently had allowed for negotiations and changes to be made in terms of workload distribution and allocation. However, participants also understood and appreciated the need for work efficiency due to resource constraints. In this sense, there is flexibility and diversity within efficiency.

### b. Enabling Structures of the Learning Circle

The second key theme under the category of work is the enabling structures of the Learning Circle. They are enabling as they provide the tools to enable thought and action. Based on the cultural artifacts, the following symbolic or psychological tools are examples which are stated in the discourse of the materials produced by Teachers Network that pertain to Learning Circles:

- *Critical Friend* – the value of questioning and accepting each others' propositions and presuppositions, and at the same time maintaining collegial relations. Value is placed on being a human being, and to be a friend to immediate colleagues. However, a friend is someone who has the moral obligation to question or challenge each other propositions and presuppositions.

- *RTR (Respect, Trust, Rapport)* – the values of mutual respect and trust to participants, and building close working relationship with colleagues.
- *Check-in* – the values of inclusion, camaraderie and personal worth of individuals.
- *Sounding Board* – the value for open and honest feedback.
- *5 Why* – the value of questioning our assumptions and inquiry.
- *Double Loop Learning* – the value of questioning assumptions that determine teaching strategies.
- *Stop Tape* – the values of suspending judgement, questioning assumptions, listening, accepting and respecting colleagues' views and opinions, and self-awareness and awareness of others.
- *RER (Responding, Expanding, Reflecting Critically)* – the values of engagement with colleagues, contribution to colleagues' views and comments, and being critical of colleagues' views and comments.
- *Dialogue* – the value of collegial discussion with colleagues.
- *Suspending Judgement* – the values of not being judgemental of colleagues' views and assumptions, and being critical of one's views and assumptions.
- *RPAOR (Reflection, Planning, Acting, Observing, Critical Reflection)* – the values of reflection, action and inquiry.

These symbolic or psychological tools lend support to the cultural values of consensus decision-making and equal treatment which are closely associated to consensual power relations described earlier. In effect, these symbolic tools provided the linguistic material for group discussion. For example, participants use the term Critical Friend to mean privileging the value of maintaining collegiality in the midst of critiquing each others' assertions during discussions. Hence, once a participant uses the term Critical Friend, he or she is making the moral claim that participants ought to critique assertions without jeopardising collegial relations. Likewise, when a participant uses the term Suspending Judgement or Suspend Judgement, he or she is making the moral claim that participants ought not to judge assertions made by others too quickly but give more attention to understand the assertion in depth without allowing personal biases to colour one's perception and understanding.

A core practice that the Learning Circle had adopted is getting all participants to inclusively contribute to both the discussions and decisions that take place. The cultural

value for inclusion residing within the tasks of RPAOR along with their respective questions had enabled participants to enter into discussions that follow the routine flow from divergent to convergent discussions. The rule of consensus making is drawn upon in moments of exploring ideas – divergent discussions, and coming to decisions – convergent discussions. For example, the task of coming up with the AOC requires participants to articulate or externalise individual ideas, needs and concerns, and eventually narrow down to what is considered reasonable to all by consensus. This form of divergence and convergence, though formal in its structure, provided opportunities for diversity, flexibility and fluidity to flourish, but within resource constrains.

Besides structured tasks, participants were also guided and enabled by graphic signs that accompany the linguistic signs to affect their Learning Circle practices (Photograph 2). For example, the graphic sign of 'RPAOR' accompanied by another graphic sign of a cyclical process of upward moving cycle has the meaning of systematic inquiry, growth in the skills of inquiry and growth in personal and professional development. These signs provide the resource for participants to draw upon to guide their practices in the Learning Circle.
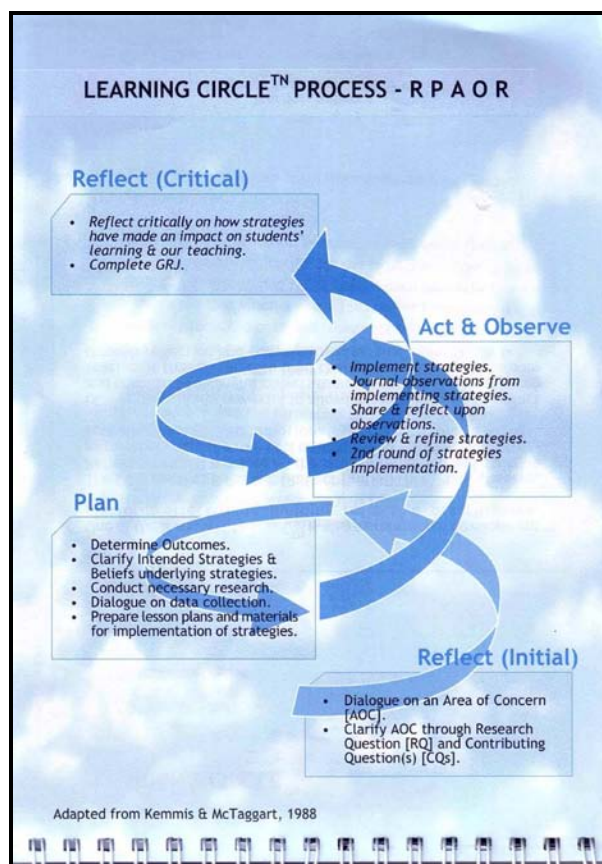


*Photograph 2: The Learning Circle process found in the*
*Teachers Network Reflection Journal*

*c. **Key Role of the Learning Circle Facilitator***

The third key theme under the category of work is the key role of the Learning Circle facilitator. The Learning Circle facilitator played the role of the administrator, bricoleur of knowledge and arbiter of human interactions and relations. With regard to administration, the facilitator managed the workings of the Learning Circle. She manages the formal framework of the Learning Circle such as dates of meetings, number of meetings, duration of meetings, description of action plan and the write up of the group reflective journal. She essentially played a significant role in coordinating the action research cycle.

At the formal level, the facilitator is administratively responsible and accountable to the school principal in matters of the Learning Circle at the grade level. Her primary role centred on one task – that is, to manage discussions. In other words, she played the role of facilitating discussions among participants in the Learning Circle. She initiated, maintained and closed discussions, which were then translated to plans for future practical activities – all of which were done consensually.

In facilitating and managing discussions, the facilitator provided the social milieu where knowledge can be articulated, constructed and reproduced. In this way, she can be said to be producing and reproducing the culture of learning where exploration, contestation and agreement of knowledge are done in an inclusive manner. She can thus be considered as a bricoleur of knowledge. She helped participants to surface assumptions, question assumptions and reconstruct assumptions in a collective fashion. In this way, the shared knowledge that is produced after surfacing, questioning and reconstructing knowledge becomes a collective knowledge which all participants identify with.

The facilitator also has the important role in maintaining and promoting collegial and collaborative relationships for the Learning Circle within the context of democratic participation. She achieves this by the following:

- Models the values and practices of Learning Circles.
- Mediates interactions in the Learning Circle's discussions.
- Moderates interactions in the Learning Circle's discussions.

- Manages consensual decision-making interactions during Learning Circle's discussions.
- Models learning, working and relating to each other according to the beliefs, values and principles of Learning Circles.

The facilitator can be said to embody and exemplify the values of Teachers Network Learning Circles. The embodiment and exemplification of these values have given her the power to assert greater influence in relation to others. However, the value of inclusive and consensual decision-making enables every member of the group to influence assertions and decisions in the Learning Circle. As the facilitator has to embody this value in its truest sense, she is bound to remain equal in terms of power relations. The notion of leadership is therefore more shared than hierarchical.

Below is a sample transcript after it had gone through initial meaning reconstruction and pragmatic horizon analysis to illustrate the key role of the facilitator in the discussions during the Learning Circle.

---

*Transcript 2 (29.50)*

M: Because they are used to us planning the experiment and then they observe and answer the question. But when it comes in the test that they have to plan this particular experiment, they cannot, they cannot do it.
**[MF: Maimuna is suggesting that teachers are partly to be blamed for not providing opportunities for students to conduct their own experiments]**
E: I, I think, ya, if we have this activity, there's a lot of things we can teach. We can even teach how to control the factors that will affect the result you see.
**[MF: Edward empathises with Maimuna (AND) Edward thinks that when students are given opportunities to conduct their own experiments, they will be able to grasp concept of 'control factors to determine causal relationships']**
M: Ya.
E: Just through project lah. Of course time wise we really have to work on devising it. I guess at least it's something that they might be interested.
**[MF: Edward expresses his concern about time resource (AND) the importance of planning for activities that students find interesting and meaningful (AND) Edward believes that a middle ground can be forged to the issue of time constraint]**

S: I think, how – em, we are actually moving forward. We're already, we're already thinking of how to get it done. More the change. So, before we do that, we must, we must agree *(stressed)* on one area of concern. Okay.
**[MF: Surhana plays the role of the facilitator (AND) Surhana attempts to follow the procedures of Learning Circle (AND) Surhana feels that group members have shared sufficiently and its time for narrowing down their area research project]**

---

<div style="border: 1px solid black; padding: 10px;">

**Possible subjective claims**

*Foregrounded*

- E: I'm excited with the possibility that students could grasp the concept of causal relationship using experiments.

*Slightly Backgrounded*

- M: I feel bad that we are partially responsible in causing students to not being able to do experiment on their own. We have never provide the opportunity for them to do experiments on their own.

**Possible objective claims**

*Foregrounded*

- Edward thinks that it is possible to construct an intervention programme that will not take too much time.
- Surhana acknowledges the contribution by Edward and Maimuna but is concerned about not missing the procedures of Learning Circle.
- Surhana wants the group to follow the steps of Learning Circle discussion.

**Possible normative-evaluative Claims**

*Highly Foregrounded*

- Everyone must agree on the intervention programme.

*Slightly Foregrounded*

- It is worthy to come up with intervention programmes that will benefit students.

*Quite Backgrounded*

- It is only right for teachers to sacrifice time to help students' learn.
- It is only right to follow the procedures of Learning Circle.

*Highly Backgrounded*

- It is only right for the facilitator to decide on the direction and pace of the Learning Circle discussion.

</div>

In the above sample transcript, Surhana effectively displayed the following roles during the discussion on coming up with an AOC:

- Ensures that participants are following the stages of the RPAOR.
- Encourages the divergent exploration of ideas through giving participants equal opportunity to contribute to group discussion.
- Encourages the convergence of ideas through the process of collective decision-making.
- Models the cultural value of respect for individual participants to make assertions and be involved in consensus decision-making.

### d. Shared leadership

What has also consistently emerged in the analysis is the theme on shared leadership with respect to the Learning Circle's discussions. Even though the facilitator has the primary responsibility to take the lead in discussions during the Learning Circle, all participants had equal power to assert influence over discussions by taking the lead in

engaging participants on the matter, topic or concern at hand. Although Surhana was the facilitator, she did not feel threatened when others take the lead in pursuing a discussion. In fact, the cultural value of the Learning Circle facilitator is that he or she should encourage participants to take the initiative and take the lead in pursuing a discussion. For example, it was not uncommon for Edward to take the lead in discussions that pertain to the conceptualisation of the intervention worksheet [Transcript 3 (23.20)]. Likewise, Maimuna took the lead in the discussion on matters of crafting the research question [Transcript 2 (52.55)]. Understandably, the right to take a lead in discussions is based less on positional authority than rational authority – that is, being able to convince others by virtue of strong reasoned argument. Below is a sample transcript after it had gone through initial meaning reconstruction and pragmatic horizon analysis to illustrate how Edward took the lead in conceptualising the intervention programme for the Learning Circle project.

---

*Transcript 3 (23.20)*

E: Then we must discuss on, how we are going to, errr, design the worksheets to be to achieve our – our goal.
**[MF: Edward wants to share his idea for intervention (OR/AND) Edward has thought about the idea for intervention prior to the meeting]**
S: Correct.

*(Momentary pause)*

S: So we are going straight into application, we are not doing comprehension *(confirming)*.
E: Actually I have an idea ah, but I don't know you all –
S: Okay.
E: - will.
S: Er you have to let us know –
E: Ya ya ya.
S: - before we can decide whether we like your idea or not *(teasing) (laughs). (some laughs)*
**[MF: Surhana wants to assert her position as the Learning Circle facilitator]**
E: Okay it's something like this, not, okay, it's not necessary – *(some laughs)*
E: Not not necessary to be like that but I I am thinking since we are linking concepts right. So maybe under matter we could do something like, first we show an experiment ah. For example, the beam balance and two balloons. So we could start with prompting questions. Might, it might be just on the teachers erm notes like for example, what's inside the, what's inside the, balloons. Then they will link, oh, it's air. Air is tested.
**[MF: Edward conceptualises through a material example]**
M: Heavily guided ah.
**[MF: Maimuna wants to know if Edward is suggesting a step-by-step guide]**
E: Not heavily guided, just for the starting.
**[MF: Edward does not want to presume that his idea should be followed as a whole]**
M: Aha.

---

E: You want them to link concepts first so air. So, what is so, then it will link, oh, air is a matter. So if air is a matter what does that mean? Oh, it means that air would have mass and volume. And then, after this basic gui guiding question right, then they would go into the answering the question like, what if I burst the particular balloon? What do you think will happen, then they oh because air has mass so the heavier one will move downwards ah. Something like that ah. Maybe because I teach the end class, so I have this step-by-step thingy in my mind but maybe for your pupils it becomes a bore, I don't know.

S: I, I think –

E: xxx.

S: - I can always, I can always do something like what happens if I pop the balloon.

B: Ya.

S: I dare to skip the rest of the part. I just go to answering the question?

**[MF: Surhana thinks that for her class, she could skip the step-by-step approach]**

M: So where, where does it not let the child identify that this is the, the question –

E: Because you help them –

M: - that is related to matter. **[OC: Maimuna wants to clarify]**

E: - You help through the thinking you see.

S: Yah.

E: They must look at it and then ask themselves. What does this picture show me. So you're, you're teaching them the steps to think through it when they are doing questions. Because sometimes it's just scary ah, hoping that the questions will tell them what is it about. Instead of thinking and trying to make a link to that question.

**[MF: Edward believes that the teacher is the central mediator to help students grasp concept through posing of questions to students so that students may link material experience to concepts]**

S: Em.

E: But no lah, that's how – I I, I might be wrong. That's how I see it.

**[MF: Edward does not want others to see that his approach is final or the best (OR/AND) Edward does not like the idea being arrogant (AND) Edward is making an individual assertion for collective consideration and agreement]**

S: Em.

E: Just a suggestion.

**[MF: Edward does want to be seen as arrogant (OR/AND) Edward wants to be inclusive]**

S: Actually, for end class that's a good suggestion. Because actually –

K: Oh, my xxx –

S: - you guide them into thinking, to, towards the correct answer you see.

**[MF: Surhana believes that end classes need guiding in their thinking]**

M: Em.

S: But that does mean that every question will be, will be, we start with an experiment –

E: I think we will all die xxx *(laughs)*.

S: - then I think we will need er 6 periods *(laughs)* more for Science. *(momentary pause)*

E: Pro, probably we will have to find a refined way of doing it. Can't we like, xxx for the time being.

S: Em.

### Possible subjective claims

*Foregrounded*

- E: My proposals are just ideas. They need to be refined. Don't decide on anything yet.

*Slightly Foregrounded*

- E: I'm excited with an idea which I have been thinking about recently.

*Slightly Backgrounded*

- S: Em, I think Edward has good point about helping students gain a set of step-by-step thinking skills in order to make connections between a real life activity and Science concepts.

*Highly Backgrounded*

- S: I admire Edward's ingenuity.
- M: Em, Edward has a good point.
- B: I can see where all these are leading to.
- : Edward has a good point.

**Possible objective claims**

*Foregrounded*
- Surhana want to clarify the assumption that the intervention programme will focus on application and in so doing deal with identification. Surhana thinks that her students do not require a step-by-step approach to the intervention. Although Surhana agrees with Edward's proposals, she does not think that all task will start off with an experiment.
- Edward is proposing that the activity of the intervention starts off with presenting students with an experiment followed by asking students to make connections between the experiment and Science concepts. Once students are able to make these linkages, they will be asked to respond to a set of step-by-step questions that require them to answer using the Science concepts that are raised in context. Edward believes that the step-by-step approach will be good for low ability students. Edward also thinks that the step-by-step approach will help students in their thinking – that is, to make connections between the experiment and Science concepts. Edward believes that the teacher plays an important part in helping students make the connections between the experiment and Science concepts by giving helping students develop a systematic way of thinking.
- Maimuna questions the activity that will have students make connections between the experiment and Science concepts.

*Slightly Backgrounded*
- Surhana wants to tease Edward.
- Maimuna anticipates that Edward's proposal will be heavily guided.
- Edward thinks that his proposal does not have to be one that is heavily guided as Maimuna has proposed. Edward is serious about his idea for the intervention. Edward does not want to impose his idea on others by claiming that his idea ought to be accepted.

*Background*
- Edward wants to clarify that his idea is still in the midst of construction.

*Quite Backgrounded*
- Edward explores his idea as he is talking along the way.
- Surhana's critique of Edward's proposal is based on her own past experiences. Although Surhana thinks that every task does not have to start off according to Edward's proposal, the essence of helping students acquire a set of step-by-step or systematic thinking which will help them make connections between a real life activity and Science concepts is a very good, relevant and reasonable – especially for low ability students.

*Highly Backgrounded*
- Talking helps to clarify one's thoughts and ideas.
- Edward's proposals are based on his own past experiences. Edward is aware that others may not have similar experiences and may have different level of abilities, and thus the need to expand or refine his ideas.
- Teachers play an important role in mediating students' ability in making connections between real life activities and Science concepts by the use of scaffolding such as a set of step-by-step questions.

**Possible normative-evaluative Claims**

*Slightly Backgrounded*
- It's not good to impose one's view.
- It is not right to make decision based on one person's view.

*Quite Backgrounded*
- It is not good to be arrogant with one's view.

Besides taking the lead on initiating, defending and developing assertions, the theme on shared leadership also means that leadership roles are multifarious. Each participant can take lead on a myriad of tasks such as writing down discussion notes and coordinating ICT productions and teaching materials. For example, it is not uncommon for

participants to take turns in being the note-taker for a segment of the discussion. These notes were usually written on white butcher paper in the form of mind maps, concept maps or bullet points. Hence while some participants were conceptual leaders who initiate, defend and develop assertions, some were operational leaders who initiate and take the lead in taking notes, coordinating ICT productions, creating a template using Excel and creating teaching materials such as the intervention worksheets.

In addition, leadership roles are not rigid. Taking turns in leadership roles were quite common. A certain leadership task could be handled by one participant for one meeting, but another participant might take over the role in the following meeting. For example, Edward's role of ICT production could be taken over by Bob in situations when Edward is unable to do the task [Transcript 4 (8.23c)]. Even the task of facilitation can be rotated. In Surhana's absence, a participant from the Learning Circle group volunteered to take the lead as the facilitator for the initial part of the meeting [Transcript 4 (3.47c)]. This idea of shared leadership is allegorised in the graphic sign of the flight of geese as described above, which privileges the cultural value of care and empathy.

### e. *Moral Purpose of Teaching*

The fifth and final theme under the category of work is the moral purpose of teaching. The analysis shows that the commitment towards students' learning and academic achievement is a significant underlying motivational force in participants' engagement in the Learning Circle's discussions. Besides deriving meaning from group solidarity, participants also derived meaning in their effort at directly or indirectly contributing to students' learning and academic achievement. Based on the sample transcript mentioned earlier [Transcript 2 (8.55)], although participants' suggestions, arguments and discussions that pertain to constructing the AOC, they were all related to participants' experience with their students. Underlying these experiences is their commitment to students' learning and academic achievement.

The cultural value for students' learning and academic achievement, however, has a tacit and taken-for-granted nature. The entire Learning Circle project, which focused on the effectiveness of an intervention programme using worksheets aiming to help students make successful links between Science topics and Science test questions, is already an indication of participants' primary concern over students' learning for academic achievement. This cultural value underlies participants' discussions during the

construction of not only the AOC, but also throughout all the stages of the RPAOR cycle.

*Summary:*

The cultural values that underlie the symmetrical or consensual power relation among Learning Circle's participants as they work with each other had helped participants to make use of enabling structures provided by Teachers Network. First, participants made use of the symbolic or psychological tools and graphic signs (egs. 'Critical Friend', 'RTR', 'Check-in', '5 Whys', 'RPAOR' and 'Suspending Judgement') provided by Teachers Network which supported the cultural values of consensus decision-making and equal treatment. Second, participants exercised autonomy in the usage of enabling work structures with flexibility taking into consideration work context and resource constraints. Flexibility was also applied in the social practice of dividing workload. In addition, shared leadership was exercised by participants. Third, the participants were being socialised into Learning Circles' values and practices with the help of the facilitator who embodied the exemplified the values of Teachers Network Learning Circles and the cultural values that underlie symmetrical or consensual power relations.

## 4. Learning

The two key themes that had consistently surfaced in the social practices of the Learning Circle in terms of learning are intellectual discussion and semiotics in learning.

### a. Intellectual discussion

The sub-themes that could be identified within the theme of individual discussion comprise the following:

- Discursive dialogue – the nexus between talk and thought.
- The nexus of propositions and presuppositions.
- The demand for inquiry.

Most of the conversations that had taken place during the Learning Circle contained a discursive element – that is, there is an integration of talk and thought. In this regard, most of the conversations that had taken place during the Learning Circle were intellectually engaging. Although there were moments when participants engaged in conversations for social purpose such as humouring with each other and teasing each other, the prevalent conversations involved thinking. Furthermore, the interspersed social conversations were imbedded within the broader predominant conversations which integrate talking and thinking. It has been observed that in an intellectual conversation, the participant who took the lead in proposing, elaborating, justifying and defending his or her propositions had to express his or her thinking through talking.

The rest of the participants, in a reciprocal manner, did the listening and understanding of the thinking of the participant who proposed based on his or her talking. In response, they could then assert questions to clarify, develop, agree or disagree with the propositions. In doing so, they could be said to be thinking upon the thinking of the participant who proposed. Momentary or long pauses during conversations were indications of intellectual dilemma where participants were unable to agree on a proposition or a set of proposition, unable to develop their arguments, or found no new ideas to develop on their previous idea. These pauses were not, however, devoid of thinking. The existence of the cultural values of consensus decision-making and equal treatment for participants to make assertions in group discussion had constrained participants to think either out loud or in silence.

Below is a sample transcript after it had gone through initial meaning reconstruction and pragmatic horizon analysis to illustrate the how participants were engaged in intellectual conversations.

---

***Transcript 3 (35.27)***

S: Okay. Edward, you want to come over and show us what – *(started the discourse on the characteristics of the worksheets)*
**[MF: Surhana thinks that Edward's previous suggestion is worthwhile venturing into]**
E: Ah *(surprised)*.
**[MF: Edward does not like the idea of being seen as the key person (OR/AND) Edward does not like to be arrogant (OR) Edward does not believe in being arrogant]**
S: - what kind of idea you have.
E: What kind, okay, can can we sit down and and put some thoughts to it? Then see whether we can –
**[MF: Edward believes in consensus decision-making and group think]**
B: Standardise our questions.
**[MF: Bob believes in coming to an agreement to the finished product]**
S: Yah, we have to standardise the question erm xxx –
E: Okay, maybe –
M: But as long as it's *(simultaneously)*, progressive right, from easy to hard right?
**[MF: Maimuna believes in setting tasks for students that are developmental in nature]**
S: Do we want to put a column where they gonna write what concepts used for that topic or do we not.
M: We copy – from Edward lah and let him do the first one. **[OC: Maimuna's voice to the phrase 'We copy' contains a slight tone of embarrassment]**
**[MF: Maimuna believes in getting work done in an efficient manner (OR/AND) Maimuna does not believe in deliberating too much into the planning of the task to be done]**
S: That's that's why, ask ask ask him whether he.
M: If its'.
E: How about, it might be something like this, might be something like this. *(Edward started to draw out his idea)*. Okay, maybe, er, the very first page I show them two page, and then, let's say I have a ball here lah, but xxx label A, then I have a maybe er, a radio towards here, radio and – xxx and probably a plant, a pot of plant and label C. Then maybe I ask them A, B, C, what are these, okay, then erm, try to link them try to get them to say, oh, all these things are matter, something like that. Then –
**[MF: Edward believes in helping others (AND) Edward is a hands-on person]**
M: First one ah –
E: - probably you have.
M: - the second one ah?
B: Oh, I see you xxx.
E: Yah, probably you'll have a lamp here, then – and point to the light label 1, something like that. Then a shadow. Near the shadow left label 2. Then 1, 2, 3, what's common? These are non-matter, something like that. So, the new concept of matter will be, something like that lah. I don't know whether it's too, simply – this, maybe this is too simplified. This is just an idea of, getting them to come up with the –
M: Concept lah. **[OC: Maimuna tries to help Edward in his thoughts]**
**[MF: Maimuna tries to understand Edward's ideas by adding words that are meaningful to him]**
E: - Or it will be. If you want –
M: Fact.
**[MF: Maimuna continues to engage in the meaning making process that Edward tries to construct – fusion of horizon]**

E: - to be detailed it will be a very, thorough type of worksheet ah.

K: But I think that – like what she, Su ah, she said ah. Every question right like maybe provide a box and ask them what concept it is is it, definite volume of solid or –

**[MF: Karna wants to provide more guide for students to make linkages between a real world to scientific concepts]**

S: Because if you don't, if you want them –

K: - then compressing it, ya –

S: - to identify –

K: - they have to identify.

S: - right. If they are able to write. Concept is correct -

B: xxx topical right.

S: - The concept is correct but if they they cannot answer the question it it means that, it's more of the phrasing more than the concept.

**[MF: Surhana is concerned about students' inability or lack of ability in phrasing what they have identified as a concept in writing (AND) Surhana is using her students' learning as a reference point of further development of the worksheet]**

B: Sorry, are we doing it topically or –

**[MF: Bob wants to clarify if the worksheets are developed according to topics]**

K: Topically.

S: Topical *(simultaneously)*.

B: Then it will be difficult.

**[MF: Bob sees possible difficulties in having worksheets that are restricted to one topic]**

*(momentary pause)*

### Possible subjective claims
*Slightly Foregrounded*
- S: On hindsight, I think I like Edward's idea.

*Slightly Backgrounded*
- E: I'm pleasantly surprised that you want to take my suggestion.

*Highly Backgrounded*
- B: I'm still trying to catch up with the content discussion that has taken place.

### Possible objective claims
*Foregrounded*
- Surhana wants to seriously consider Edward's previous proposition. Surhana believes in standardising the questions for the worksheet activities. Surhana wants to know if providing boxes to help in the learning activity would be good or not. Surhana hypothesises that it is still possible that students may answer Science questions inaccurately even though they may have a good grasp of Science concepts as a result of their weak ability in phrasing Science concepts in respond to Science questions.
- Edward wants others to build on his previous proposition. Edward proposes that the worksheet presents a real life scenario whereby teachers mediate students' thinking skills in identifying Science concepts. He also proposes the notion of what is and what is not in terms identification of Science concepts. Edward also believe that the worksheet can be compressed to cover all the necessary Science concepts.
- Bob believes that the worksheet activities must be standardised across the Primary 4 level. Bob asserts that constructing the worksheets according to topics may have problems.
- Maimuna wants to assert that although the worksheet questions are standardised across the level, the degree of difficulty of questions should be graduating from easy to difficult. With regard to Surhana's suggestion on providing boxes in the worksheets, Maimuna thinks that it is more efficient to take from Edward's template. After Edward has presented an illustration on the first worksheet's template, Maimuna asks about the second worksheet's template.
- Karna likes the idea of having boxes beside worksheet questions for students to fill in order to help them make easier linkages between Science concepts and Science question.

*Slightly Backgrounded*
- Edward believes in consensus decision-making.
- Surhana wants to engage in the construction of worksheet.
- Maimuna attempts to understand Edward's suggestion by anticipating and completing the word or phrase of his assertion.
- Bob wants to know if the worksheet activities are topical in nature or not.

*Quite Backgrounded*
- Maimuna's assertion that worksheet questions must be graduating from easy to difficult is a non-issue to other participants. Maimuna believes that work should not be replicative.
- Bob is generally agreeable to Edward's idea. Bob is trying to catch up with the content discussion. Bob's slow flow of talk does not encourage others to engage with him.
- Surhana has the ability to think ahead and see potential implementation problems.

*Highly Backgrounded*
- Maimuna treasure time at home.
- Edward is a hands-on person.
- Karna cares about students learning.
- Participants make use of their respective past experiences to assert suggestions, arguments and assertions.
- Hypothesisation is the result of predicting future actions based on past experiences.
- Surhana is a pragmatic person.
- The structure of Learning Circle provides opportunities for participants to develop both theoretical and practical aspects in the professional lives of participants.

**Possible normative-evaluative Claims**
*Backgrounded*
- It is only good to have everyone contributing to each others' views and suggestions.

*Quite Backgrounded*
- Standards must be maintained across the level.
- It is good to build upon each others' ideas and contribution.
- No assertion spoken must be left unanswered.

*Highly Backgrounded*
- Students' learning is important.

K: But it's a bit mix then -
E: Do, do you all remember the *(simultaneously)*, question of the crow want to drink from the bottle –
S: Aha.
E: - then cannot reach, a big stone something like that, can use question like that? So, but –
S: Yah.
B: Yah.
E: - But don't know what it is like. Just, just, -
S: Hey, you you can because it it, it does make sense right. If they are able to apply the concept, that will be one of the most difficult question lah.
E: That will be -.
M: Ah.
S: At the end lah, there's one last question. It's a gift for those can, who actually has erm, learnt to apply it, the concept.
**[MF: Surhana explores the possibility of having difficult questions in the worksheets as one of the several questions]**

S: But. It will be good for them to identify concepts that's it, you know. That they will be able to okay, this is a, okay – you know that this is a water question –

B: xxx

S: - or air question. But what concept **[OC: Surhana stresses on the identifying concepts]** in all that you have learnt is linked to this question.

B: Too high, too high level.

**[MF: Bob thinks that this type of question may not fit well in the worksheets (AND) Bob is using his own students as a reference point for his assumption]**

K: So that it will become focused to them –

S: Ya, they are focused.

K: - you're talking about volume, so they would just.

S: Because you talk about, water only ah, there're so *(stressed)* –

K: Yes.

**[MF: Karna empathises with Surhana' argument]**

S: - many concepts of water you know, then you throw them one question they would be like, erm, which concept is this.

**[MF: Surhana is concerned that students may not be able to cope with identifying and differentiating multiple sub-concepts within one main concept]**

**Possible subjective claims**
*Foregrounded*
- E: Hey, I have a good idea.

*Slightly Backgrounded*
- B: I don't think my students can do this.
- K: I think some of our students may not be able to cope with difficult questions.
- S: I'm glad that we are refining on our intervention programme.

*Highly Backgrounded*
- M: Em, this discussion is really interesting.
- E: It feels good to have brought up that idea.
- It's a good feeling to have talked about this novel idea.

**Possible objective claims**
*Foregrounded*
- Edward likes the idea of presenting a real life scenario that is more elaborate such as a crow trying increase the water level of the jar by adding pebbles in it rather than a simple one such presenting drawings of a ball, radio and plat. However, Edward is not sure of its feasibility.
- Surhana likes Edward's idea of presenting a real life scenario that is more elaborate and therefore harder for students. This is so because it will provide a good challenge to high ability students and thus fitting the notion of graduation of difficulty level. The questions generated from such a scenario could be good at assessing identification and application of Science concepts, and therefore a holistic understanding of the core Science concepts for the topic concerned. Having said this, Surhana still thinks that separating the worksheet activities between identification and applying Science concepts is necessary – that is, being able to identify first before applying. Surhana believes and postulates that posing difficult questions from an elaborate real life scenario can be too much a challenge for students in view of the sheer vast spread of Science concepts within a topic.
- Bob however thinks that this might be too high level for students.
- Karna agrees to Surhana latter proposition of separating the worksheet activities between identification and then application of Science concepts because it will be more focused for students.

*Slightly Backgrounded*
- Bob likes Bob's idea of presenting a more elaborate real life scenario.
- Surhana sees the benefit of have an elaborate real life scenario along with challenging questions because it fits well with the action research project in as much as it can validate the success of the intervention programme.

*Quite Backgrounded*
- Surhana is thinking with the help of talking. Surhana thinking is affected by her past experience.
- Edward's hypothesising is influenced by his previous experience especially in relation to the ability of students he is teaching now.
- Bob is hypothesising and predicting the results of Edward's elaborate real life scenarios as something too difficult based on his past experience especially in relation to the ability of students he is teaching currently.
- Karna is concerned for students learning especially in relation to the ability level of her students.

*Highly Backgrounded*
- All forms of thinking – and semiotic or abstract thinking – requires a material context such as one's own past experience especially in relation to the ability of students of one's currently owned.
- The allowance for exploration can lead to novel and highly valuable ideas for others to tap on.

**Possible normative-evaluative Claims**
*Backgrounded*
- It is good to explore ideas together.

*Quite Backgrounded*
- It is meaningful to have discussed on something that we have never thought of before.
- It is not good to impose one's idea or assertion on others.
- It is only right to allow others to critique an idea or assertion.

*Highly Backgrounded*
- It is good to listen to one another.
- It is good to build on each other's idea.
- It is improper to not respond to an idea, suggestion or assertion.
- Everyone must feel comfortable with the engagement of ideas.
- Participants feel good to have talked about the novel idea that has been raised by Edward.

M: Okay. Then the second level question is like what?
**[MF: Maimuna is concerned with completing the intervention worksheet]**
E: Not, I think not necessarily like that, might be to, might be too complicated. *(momentary pause)*
**[MF: Edward is thinking about how to develop the intervention worksheet further]**
E: What else ah? Maybe we skip the identification, maybe go straight to – to the concept ah. *(momentary pause)*
**[MF: Edward is in deep thought]**
S: We all are doing the process skills worksheets right? In the process worksheets we do a lot of identification.
**[MF: Surhana attempts to develop the intervention worksheet further]**
M: Em.
S: If you notice. The –
B: Correct, correct –
S: Not much of application –
B: - That's correct.
S: - question ah. So we're trying to, you know, come up with me to sup – to to, to help –
M: But –
S: - supplement what we have.

M: - one, we we ,we spoke last, the last meeting about, our pupils not only not being able to identify the concepts. They can't read classification table, -

B: Em.

M: - they cannot read, –

B: Then to underline diagram.

M: - diagrams.

**[MF: Maimuna raises the issue of the priority of students' inability to read question over applying concepts. If students are unable to read questions accurately, the issue of applying Science concepts is redundant]**

M: Flow chart.

B: xxx

M: That skill. Are we gonna keep on that skill?

S: Okay.

E: Sorry, again.

S: Actually if you, if you want to you can actually –

K: They can't, they can't er-

**[MF: Karna thinks that students are unable to read the materials given to them such as flow charts and diagrams]**

S: - hang on that –

K: - xxx

S: - you can just look to the skills to get xxx

M: Flowcharts.

**[MF: Maimuna agrees with Karna that students are unable to read the materials given to them such as flow charts and diagrams]**

E: But that one is a separate type of skill already –

M: It's a skill -

E: - right.

**[MF: Edward thinks that asking students to apply Science concepts is not a priority]**

M: - Ya, that's why I say are we going to include that in –

B: xxx

M: - in this AR.

**[MF: Maimuna, Karna, Edward and Bob disagree with Surhana's suggestion to require students to apply Science concepts in the intervention worksheet]**

E: Then maybe something like that ah. Like boxes ah. *(momentary pause)*

**[MF: Edward thinks of an idea to resolve the dilemma]**

E: Then have a man xxx. Maybe you tell them, erm, okay, this Mr Lee cannot carry all the three boxes to point B. He has to carry one box at a time. So, maybe, tell them, ask them, what, erm, you know, to let them to think, oh, this is because three boxes, heavy then because box – maybe from there we can, what concept can you - because you know it's matter what, so what concept can you think of from this question, then probably oh, mass, because of all these boxes has to do with mass. *(momentary pause)* Something like this. This could be the, very basic one.

**[MF: Edward continues to modify and develop his initial idea]**

**Possible subjective claims**

*Foregrounded*
- M: I am frustrated that this discussion is getting too long for me.
- E: I've got an idea.

*Backgrounded*
- E: I'm a bit lost here.
- S: I don't like the silence.

*Quite Backgrounded*
- E: I'm happy that we could get things going.
- S: I'm happy that we are progressing in our discussion.

In the above sample transcript, Edward takes the lead in discussing how to develop the content and form of the intervention worksheet specifically in terms of how to develop the skill of identifying Science concepts from the information given to or questions posed to students in a test paper. He verbally elaborates his ideas and allows others to develop, question, agree or disagree to his ideas. And in doing so, he is thinking whilst he is elaborating on his ideas. When other participants are responding to his ideas, he is thinking along with them either in the form of a comment or question. As much as others have the right to comment and question his ideas, he too has the right to comment and question to the response of others. Edward makes three examples as an introduction in the intervention worksheets for students to identify Science concepts in day-to-day life examples. While it is obvious that Edward is doing most of the thinking by virtue of

him taking the lead in the discussion at the moment, the rest of the participants are also involved in thinking evidenced by their attentiveness, questions, affirmations and comments to develop further his ideas.

Besides the observation that most of the conversations during the Learning Circle contained a discursive element, it was also observed that talking about one's thinking has helped speakers to reconstruct their own knowledge. In the attempt to help other participants understand the proposed ideas, speakers are constrained to organise the ideas and the thinking accompanying the ideas in such a way that helped other participants understand their knowledge with clarity and persuasion. And in talking about one's thinking to help others understand, the speakers' tacit knowledge becomes explicit knowledge, and undifferentiated knowledge becomes differentiated knowledge.

From the above sample transcript, Edward was constrained to present his ideas in a logical and coherent way so that other participants could understand them by listening, questioning, developing, challenging, disagreeing or agreeing on his spoken ideas. In his second example, where he suggested that the introduction of the intervention worksheet could require students to identify Science concepts from pictures of lived objects, he commented,

> "So, the new concept of matter will be, something like that lah. I don't
> know whether it's too, simply – this, maybe this is too simplified."

What I could infer from this statement is that Edward's ideas are still abstract and undifferentiated, and therefore tentative. They are abstract as they have not been articulated before and thus have not been concretised in words. They are undifferentiated because they are unrefined or lack coherence. Furthermore, at the end of his idea, he became critical and skeptical of his own idea.

In his third example, Edward suggested that the introduction of the intervention worksheet could require students to identify Science concepts from a story with the teacher guiding students thinking through appropriate questions. He commented,

> "… Maybe you tell them, erm, okay, this Mr Lee cannot carry all the three boxes to point B. So, maybe, tell them, ask them, what, erm, you know, to let them to think, oh, this is because …"

In the above quotes, Edward is thinking on the spot about the content of his ideas – developing his ideas as he speaks. The existence of 'erm's, breaks, usage of the words 'maybe' and 'you know', and change of terms such as "tell them, ask them" in his sentences suggest that he is constructing and reconstructing his ideas instantaneously. In this sense, his abstract knowledge becomes explicit knowledge, and undifferentiated knowledge becomes differentiated. In my member check with Edward, I was told that the ideas that had raised during the Learning Circle's discussions were created in the midst of the discussion. The structure of the Learning Circle which requires group members to come up with a pragmatic solution to their problems such as the intervention worksheet had enabled or constrained him to think creatively. Furthermore, the speaking out loud had allowed him to gain feedback of his own ideas in the midst of presenting his ideas, and thus had helped him to make changes to these ideas along the way.

The member checks that I had carried out with other participants had also corroborated this phenomenon too. I was told that the opportunity to talk about their ideas and the thinking relating to their ideas had allowed them to hear for themselves their own taken-for-granted knowledge. In doing so, they were also able to critique these ideas and the thinking of these ideas while verbally speaking out their thoughts to others. Some of them commented that there were moments during the discussions of the Learning Circle that they were struck by surprise by the incoherence after they had articulated their ideas in the open. Hence, talking about one's thinking had provided the means for the speaker to critique or evaluate the coherence of his or her ideas and the thinking relating to these ideas. Furthermore, although participants commented that they could still think in silence, the need to talk about their ideas and the thinking relating to their ideas in the open had contributed to the critique of these ideas and the thinking involved in these ideas by other participants. The questions that other participants posed to speakers would constrain speakers to think further, and in doing so, either consolidate or reconstruct their knowledge.

A social practice that enabled the nexus between talk and thought is the routine interplay between divergent and convergent discourses as described above. While divergent discourses contained cultural values of spontaneity, exploration, creativity, aestheticism, divergent thinking, out-of-the-box thinking, active listening and critical thinking, convergent discourses contained cultural values of consensus decision-making. Also, while divergent discourses enable spontaneous propositions, convergent discourses constrain propositions to be critiqued in light of pragmatic goals. Underlying both the routine interplay between divergent and convergent discourses is the cultural values of equal treatment for all participants to contribute ideas and consensus decision-making as described earlier.

Another condition that enabled the nexus between talk and thought is the inadvertent need for participants to generate new knowledge. For example, the participants of the Learning Circle had to explore, construct and agree to the AOC, Research Question (RQ), intervention design, research design, research tools, data analysis and presentation of findings. The ideas that relate to these tasks, and the thinking involved in these tasks, were unique and different to what they had already done in previous Learning Circle projects. Although some of the isolated ideas were not new to some participants such as the idea of using an intervention worksheet, lived stories or guided questions to guide students' thinking, and developmental tasks ranging from easy to difficult levels, the need to coherently link these ideas together is a creative act that requires much discursive discussions.

The discussions that took place within the Learning Circle were also generative – that is, being able to produce more and more ideas. As an idea is articulated by a participant, another participant develops on that idea, which is then developed by another participant, and so on and so forth. At the end of the discussion, the original idea takes on a different form as it goes through the morphological process of reconstruction upon reconstruction. In simple terms, ideas by participants are built on from one to another within the conversations that took place within the Learning Circle. The value for supporting each others' ideas or assertions or intellectual positions over time becomes a privileged cultural value. Below is a sample transcript after it had gone through initial meaning reconstruction and pragmatic horizon analysis to illustrate how participants build on each others' propositions, ideas and knowledge:

*Transcript 3 (27.45)*

S: I like that idea but, hmm *(thinking)*. Is it time consuming or not? Because if you're talking about, matter alone there's a lot of concepts that you have to actually introduce.
**[MF: Surhana wants to consider the feasibility of the approach]**
E: Like, but, like – maybe your –
M: How does that help identify ah?
**[MF: Maimuna tries to understand how Edward's approach could help students to identify concepts]**
E: Yah for each topic –
M: The –
E: - first of all in our worksheets ah, for each topic we, we lead in, we give them blanks to get them identify what is the main concepts in this topic first. Matter very simple, matter is, mass, volume, fixed shape – er definite shape, definite volume.
**[MF: Edward wants to suggest]**
M: No I thought maybe, when we give them a question right. Like he said, we put a, a, a blank on a box, and for them just to write from which topic does this one come from. Water. This identify oh this is a water question. Then you write all all the things that have to do with water. Freezing boiling point freezing point, er melting, condensation, and then look what – you know when, when they are doing the question they will know which ones to actually use. Just as they are writing down they are also, re, you know trying to recall what they learned about water. *(momentary pause)* First they identify oh this is a, a a water a water question, oh this is a question for heat they put heat there first. So they will xxx –
**[MF: Maimuna believes that the activities of the lesson should help students identify concepts (AND) Maimuna wants to build on Edward's idea]**
S: But if xxx by topical then –
M: - they will delete everything else.
S: Ya but we are doing by topical then, it wouldn't be.
E: Ya, yours will be, unless we are doing general.
S: Ya.
M: Revision ah.
E: Ya but if we are setting the worksheets in a topical sense ah, ya, that means you'll be –
S: They will know that all this is matter question. All this is air –
M: Because it's inexhaustive. There are many many many questions on heat. Many many many questions.
**[MF: Maimuna questions the feasibility of the approach]**
S: Unless of course erm all you ask them is describe the concept involved lah.
B: Ya ya.
S: Let's say matter. They have to write all the concepts that involved in matter. Then, eventually decide on which concept is this. This particular - to answer the question.
E: That's why, that's why the first step will be, the main concept in the topic auh. Like for example heat, then you'll be talking about, source of heat, then ah –

    **Possible subjective claims**
    *Foregrounded*
-   S: I like Edward's idea.
-   S: I feel good that we have come to an agreement on this aspect of the intervention worksheet.

    *Slightly Backgrounded*
-   E: I am happy that I could contribute to the discussion.
-   M: I'm glad we are making progress.

    *Quite Backgrounded*
-   S: I respect Edward.
-   M: I feel accepted in this group.
-   E: I feel accepted in this group.

**Possible objective claims**

*Foregrounded*
- Surhana is concerned if Edward's proposal will place a high demand on time based on the assumption that each topic has many concepts. With regard to Maimuna's topical worksheet activities, Surhana questions the feasibility of it if the intervention needs to flow together with the rest of the curriculum progression which is topical in nature. In addition, if the worksheet activities are going to be by topic students do not need to discriminate topics. Eventually, Surhana takes note of Maimuna's proposal that questions within a topic may be many and suggested that the worksheet activities could require students to only describe as opposed to answer Science questions. Surhana suggests that worksheet activities require students to write down all the concepts within the topic and eventually decide which ones to use to answer Science questions.
- Maimuna wants to interrogate further the assumption that Edward's proposal will help students identify Science concepts. Maimuna proposes the structure of worksheet activities to be one that is not limited to one topic so that students will be able to identify the topic, and therefore the corresponding Science concepts, that is related to the Science question. In addition, students will acquire the skill of distinguishing between topics and the corresponding Science concepts. Eventually, although Maimuna sees the need for the setting worksheet activities according to topics, she believes that this will require students to answer a lot of Science questions within the topic which students themselves may not be able to cope.
- Edward suggests that for each topic, the worksheets will contain activities whereby students will be led to explore and identify Science concepts that are related to the topic. With regard to Maimuna's suggestion, Edward agrees with Surhana's point of view. With respect to the diversity of Science questions and concepts within each topic, Edward proposes that primary Science concepts are to have priority in the worksheet activities.
- Bob agrees with Surhana's idea that the worksheet activities could require students to only describe Science concepts rather than respond to Science questions.

*Slightly Backgrounded*
- Maimuna is still not clear how Edward's proposal will help students identify Science concepts.
- Although Edward agrees with Surhana that the worksheet activities have to be done in topical order, he thinks that this will demand students to grasp a lot of Science concepts.
- Surhana thinks that since worksheet activities cannot prepare students to tackle all Science questions pertaining to the topic, worksheet activities could provide opportunities for students to identify appropriate Science concepts to answer Science questions.

*Quite Backgrounded*
- Edward thinks that the task at helping students explore and identify Science topics within the given topic is manageable.

*Highly Backgrounded*
- Surhana plays the role of making the intervention feasibly workable in view of available resources.
- Karna is carefully paying attention to the discussion at hand.

**Possible normative-evaluative Claims**

*Slightly Backgrounded*
- It is only right for participants to try to come to consensus on matters relating to the intervention programme.

*Quite Backgrounded*
- It is good to come to agreement on the same ideas.
- We should have shared understanding and ideas.

*Highly Backgrounded*
- It is only right for participants to build on each others' suggestions and proposals.
- It is good to accept one another's ideas and propositions.
- We should respect one another.
- We should like each other.

In the above sample transcript Surhana likes Edward's suggestion which is about presenting students with an experiment [Transcript 3 (23.20)]. For example, present students with a beam balance with two balloons on it, followed by prompting questions such as "What is inside the balloons?" in order to help students link the experiment to the Science concepts of air. However, Surhana is concerned about the impossibility of coping with the sheer multitude of concepts that ought to be covered within one worksheet. Edward defended his idea by stating that each worksheet would cover only one Science topic and alludes to prioritising only key concepts within the topic. However, Maimuna expresses her preference for the earlier version of the intervention worksheet where students are required to identify the Science topic from the question which is then followed by requiring students to list down the concepts that relate to the topic. This would also help students in the skill of recall of concepts from topics. However, when Edward is about to critique Maimuna's suggestion, Maimuna grasps the enormity of the concepts that could be generated from the topic. That is, many concepts could be implied from a topic. Surhana suggests then that the intervention worksheet focused on presenting students with an experiment which require them to identify one key concept first before requiring them to identify sub-concepts from the key concept. The group's idea or knowledge has therefore gone through several reconstructions.

The practice of building on each others' ideas is also closely associated and linked to building partnerships, alliance, solidarity and positive emotional bonding. When participants eventually come to an agreement on an idea they experienced positive emotions towards each other. Positive emotions were derived not only when participants agree and affirm each others' ideas, but also when participants challenge or disagree on each others' ideas but in a respectful manner. For example, Maimuna could interrupt with the flow of discussions which Edward took the lead in without being frowned upon, instead her assertions were properly heard and responded to. The positive emotions that are associated with the experience of partnerships, alliance, solidarity or bonding essentially are essentially about liking others or being liked by others. These emotions are also associated with feelings of acceptance and respect. Hence, to like others and be liked by others are indications of acceptance and respect.

The value and practice of building up each others' propositions are also important in contributing to the individual-collective identity nexus as described earlier. The propositions made by individual participants are essentially externalisations of

individual meanings and identities based on past experiences that are uniquely different from one participant to another. As a participant externalises his or her individual identities within the social milieu of acceptance and respect, he or she internalises and constitutes his or her own individual identity at the same instance. When a participant externalises his or her ideas in the open, the ideas take on a concrete audible form. He or she then identifies with the ideas which he or she has spoken. As other participants clarify, challenge, affirm and build upon his or her propositions, the original propositions to come up with shared propositions within the social milieu of acceptance, respect and solidarity, the group as a whole internalises and constitutes their collective identity. In this way, participants identify with the spoken ideas that are agreed upon by all.

Collective identities were formed not only when participants created a collective knowledge through discussions, but also when participants created a collective material artifact as described earlier. When the presentation of the Learning Circle was made using a booth setting for teachers within the school and outside the school to view, participants experienced a sense of solidarity from the shared experiences in constructing the booth. Likewise, when participants drew up their ideas in the form of mindmaps or concept maps, they become collective artifacts. These shared experiences provide the basis for shared knowledge, practice and emotions to be embodied by participants, and thus contribute to the formation of collective identities. The shared construction of the booth can be said to be the extension of the collective identity of the group.

A consistent sub-theme that had surfaced through the analysis is the intimate linkage between propositions and presuppositions within the pragmatic field of actions where participants have to complete tasks set within the stages of the Learning Circle. When a proposition is made, it is supported by a presupposition or a set of presuppositions. This is synonymous with the claim that conclusions are supported by premises. This can be termed as 'reasoned argument'. When a proposition is made, it is made within a backgrounded presupposition or set of presuppositions which the speaker may explicitly or implicitly know. However, in a social milieu where explorations (divergent thinking) and decisions (convergent thinking) need to be made in light of pragmatic field of actions, participants are enabled or constrained to make the implicit backgrounded presuppositions known to others.

Below is a sample transcript after it had gone through initial meaning reconstruction and pragmatic horizon analysis to illustrate how propositions are supported by presuppositions:

---

*Transcript 2 (22.45a)*

M: I still feel that we have to tackle the problem right on the top, the one that covers everything. Because if you're going to pick a, a project base on, on – that's easy to do, it may not actually benefit the children. But if tackle the root problem of them not motivated, not taking pride in their work, then it would – the rest would all follow you see. But that's my opinion lah. So I would take, er, lack of effort, Bob's and Edward's xxx or lack of pride.

**[MF: Maimuna feels strongly about her belief in getting to the root of the problem (AND) Maimuna is beginning to consciously or unconsciously realise that it is all right to make assertions but not to impose one's own view on others (AND) Maimuna believes imposing on others is not right (OR/AND) Maimuna does not want to offend others]**

S: Yours ah.

**[MF: Surhana unconsciously challenge the basis of Maimuna's insistence – that is, personal (OR/AND) Surhana does not fully agree to the idea that decisions based on personal assertions]**

M: I still feel we should do something like, you know xxx

V: These three are pretty similar.

**[MF: Valerie believes in the spirit of consensus]**

M: Ya, because you see once you tackle attitude ah, then the rest will follow through. Because then they will take more pride – they will take more effort when they do their work, they will have more accuracy. Like one give crap like drawing with a thick rule, pencil. Drawing angles with thick pencils and all that.

**[MF: Maimuna strongly believes that motivation is at the underlying problem that impinges all others (AND) Maimuna is frustrated with her students' lackluster performance in tests and day-to-day work (AND) Maimuna believes in not wasting time and resource on strategies that do not work for all]**

S: That's more towards their what do you call that – their pride in work and motivation xxx they are going into. Okay, sorry, okay, Maimuna was saying that she's more for lack of pride and motivation. Because that's the root to all evil. Okay. If you are able – if you are able to you know change it otherwise, then many of these problems – because the attitude is already there, corrected. So, teaching them the others is not difficult. This is pretty em straight forward, but unable to explain scientific concepts, em, what are we?

**[MF: Surhana wants to surface and clarify Maimuna's assumption in the open (AND) Surhana thinks that the motivation is but one of the problem – another is to do with students' skills in explaining scientific concepts (AND) Surhana thinks that solving motivation problem is not sufficient to solve students' skills in answering Science questions]**

**Possible subjective claims**
*Foregrounded*
- M: I feel strongly for focusing on students' motivation.
*Quite Background*
- S: I think it is only your opinion and not the rest.

**Possible objective claims**
*Foregrounded*
- Maimuna thinks that the group focuses on motivation because it is the root of the problem.
- Surhana acknowledges and gives due recognition to Maimuna's insistence; Surhana thinks or hypothesises that solving motivation will not be significant or substantial enough to help students' explain scientific concepts.

---

In the above sample transcript, Maimuna takes the lead in the group discussion. She proposes that the group do a Learning Circle project that tackles students' lack of motivation. This is based on several presuppositions. First, the issue is universal across all subjects, and involves classes in the same grade level and all student ability groups. Second, the lack of students' motivation is the real source of students' disengagement with learning and hindering academic achievements. Third, when students are motivated, they will have more pride and in more effort in doing their studies, and this will result in greater degree of accuracy in students' academic work. Hence, when participants attempt to make coherent links between propositions and presuppositions, they are said to be reasoning based on existing knowledge.

The analysis also shows that the externalisation of propositions and presuppositions are historical – that is, they are influenced by the person's past experiences in view of the current situation as it is perceived in the future. When Maimuna raises her proposition along with presuppositions, she is bringing into existence her past experiences that relate to the issue at hand, which is the search for a key problem that hinders students' learning and academic achievement. These past experiences are also closely associated with emotions that relate to these experiences. In the above sample transcript, Maimuna feels strongly about her proposition because she believed that resolving the issue of students' lack of motivation will enhance students' learning and academic achievements. Her strong feelings were also a result of her belief that the moral task of the teacher is to help students learn and improve academically. Hence, participants' externalisation of propositions and presuppositions are closely associated with emotions, beliefs and values of being a teacher.

Another sub-theme that had surfaced in the analysis is intellectual discussion that relates to inquiry. Participants were exposed to the practices of inquiry. In this regard, the participants in the Learning Circle discussed concepts and concerns that pertain to the following:

- AOC (Area of Concern) – the theoretical base of research.
- RQ (Research Question).
- Research design.
- Empirical verification.
- Research tools.
- Measurability issues.
- Quantitative versus qualitative issues.
- Limitations due to resource constraints.
- Presentation of results.

Below is a sample transcript after it had gone through initial meaning reconstruction and pragmatic horizon analysis to illustrate how discussions, and therefore learning, took place that relate to inquiry:

---

*Transcript 4 (16.15)*

M: Who's going to come up with the survey ah? Pupils' and teachers' survey? **[OC: Maimuna is into the swing of the workload distribution]**
M: But those can also be statistics. Because have how many pupils tick very confident, confident, not so confident.
**[MF: Maimuna believes in doing a survey (AND) Maimuna believes that questionnaires are more scientific (OR/AND) Maimuna feels strongly for questionnaires because she is the originator of this idea (OR/AND) Maimuna has done questionnaire (OR) is more familiar with questionnaire]**
K: Em *(agrees)*.
M: I think it bounces back to you.
**[MF: Maimuna believes that results from questionnaires will give good feedback about the intervention programme]**
T: I thought of getting them to verbalise would be better than, just ticking.
**[MF: Teresa thinks that interviewing pupils would be a more meaningful (AND/OR) get more in-depth information from students (OR/AND) Teresa is more comfortable with qualitative research tools]**
B: She's afraid of her class.
**[MF: Bob feels for Teresa's students who are of low ability (OR/AND) Bob thinks that Teresa is thinking of her students as the reference point (AND/OR) Bob likewise thinks with reference to his students (OR/AND) Bob is concerned about his class interest, interest and performance]**

---

M: What about doing a case study ah? One child now –

**[MF: Maimuna is not concerned with Bob's response (OR/AND) Maimuna is too engrossed with getting a consensual agreement with regard to success indicators (AND) Maimuna is open to both quantitative and qualitative tools for observation]**

B: Wow.

M: - Then his results after it.

**[MF: Maimuna believes in the idea of pre- and post-testing]**

T: We're supposed to identify students' right. You're not going to, do – you know, we are not going to just, pass the survey to everybody you know. That means you do it on selective, selective pupils – selected pupils only right? *(momentary pause)* Can or not? Ah?

**[MF: Teresa is open to the idea of questionnaire but to selected pupils (OR/AND) Teresa believes in the value of inclusion and consensus (AND) Teresa takes into consideration resource constraints]**

M: I don't know.

T: Yah. Because I thought it was, er –

M: It's it's not – what is the consensus?

**[MF: Maimuna believes in the value of consensus]**

T: I thought it was -

K: I thought it was the whole class.

**[MF: Karna wants to make clarification (OR/AND) Karna wants to clear the perceived confusion]**

M: Me too.

**[MF: Maimuna feels good that Karna understands her point of view]**

E: It sounds like multi-level marketing than a case study.

M: But you want to do it right what. Then later, er -

K: I thought the whole class would be –

M: Ya.

**[MF: Maimuna feels pacified that Karna understands her point of view]**

K: - better than selected few. **[OC: Karna asserts with a calm and intellectual tone]**

M: And then, and then even during the presentation we can say "Okay, this is Chan She Min and you take the picture of Chan She Min, and before she was answering this sort of questions. This is how she has answered it. Then after *(stressed)* the programme this is how she has been answering it. Then you have, maybe a little footnote, a, a you know, something that –

T: But you can't do that for every single child right?

**[MF: Teresa adopts the facilitator's role where she needs to consider resource issues]**

M: Of course not *(pacifying)*.

E: No no. Of course not.

M: Case study.

H: Just one.

M: Ha *(agrees)*.

K: But the survey is for everybody.

M: Ha, the survey is for everybody. But then this particular child, we write down what the average marks, the pre-test marks, and how she has been answering and then after teaching her –

**[MF: Maimuna believes in qualitative sense making however it needs to be quantifiable in order to make comparisons]**

E: So whole level one or two or every class take out one?

T: Every class one mark.

**[MF: Teresa believes that time resource is an important constraining factor]**

M: Every class one ah. Then we have six good enough.

**[MF: Maimuna is concerned about workload and resource issues (OR/AND) Maimuna is into the swing of generating ideas and getting involved in decisions (AND) Maimuna thinks and believes that one child is not enough to generalise]**

T: No, then we have from the top range to the bottom range then we can have a –

**[MF: Teresa thinks that comparing results between high and low ability would be meaningful]**

M: Yah -

T: - progression.

M: - From the best class to the worst class better in application. And also, when we do statistics hah, we can actually breakdown from Faith, Hope (class names) … we see which is most effective. Usually programmes like this right, AR – **[OC: Maimuna sounds excited]**

**[MF: Maimuna believes that action research should adopt a deterministic form of inquiry (AND) Maimuna wants to build on Teresa's idea]**

T: Yes. It might not serve -

M: - It will be more effective with Faith, Hope and Kindness. Joy –

**[MF: Maimuna is predicting the results of the intervention programme (AND) Maimuna's assertion is based on her previous experiences]**

T: It depends. Sometimes towards the -

M: Joy, it's … Joy. Patience – What patience.

T: It depends you know. No, last year our, our AR right. For the, for the AIP right -

M: Ah *(acknowledges)*.

T: - it doesn't serve the first class that much you know, but it's helping the –

**[MF: Teresa shares of her past experience (OR/AND) Teresa's beliefs have been shaped by previous experiences]**

K: End.

**[MF: Karna shares similar experiences and beliefs]**

M: End.

**[MF: Maimuna shares the same sentiments]**

T: - end classes.

M: That's why it's a, it's a statistics presentation to show. And then, that's most is effective maybe even in the mid range. The, the, the the up, the Faith class may not be so effective.

**[MF: Maimuna feels good that she is contributing something important (OR/AND) Maimuna has experienced the unintended of planned intervention programme or strategies (AND) Maimuna is predicting that the greatest value adding will come from the middle ability students]**

### Possible subjective claims
*Foregrounded*

- M: I'm really getting interested with the topic of finding out how our students experience the intervention programme.

### Possible objective claims
*Foregrounded*

- Maimuna expresses her liking for teachers' and pupils' survey because information from questionnaires will give a range of valuable responses back to teachers. After hearing from Teresa's idea for doing interviews, Maimuna suggests doing a case study of one child – before and after.
- With regard to Maimuna's proposition for doing survey, Teresa thinks that doing interviews will be more meaningful. In response to Teresa's query on sample population for the survey, Maimuna and Karna assume that it is for the whole class. When Maimuna suggests once again having a case study, Teresa critiques by stating that this is not possible in terms of resource.
- Bob thinks that Teresa prefers interview because Teresa's students may not be able to respond accurately to the questionnaire.
- With regard to the discussion about a case study and survey, the group decides that they will do survey for every child but a case study on a student for every class.
- Maimuna and Teresa share the belief that they will be able to make comparisons between low, middle and high ability classes. They predict that the intervention may be more effective in one class than another.
- In the end, the group has consensus on the predicted results – that is, middle ability students.

<div style="border:1px solid">

*Slight Backgrounded*
- Bob has tendency to think with reference to his own class.
- In response to Maimuna's suggestion for a case study, Teresa thinks but with doubts that the survey will not be given to all but a few selected students because of resource constraints.

*Backgrounded*
- Maimuna is into the swing of things as she wants to hasten to pace of the discussion and is enjoying the discussion relating to research methods.

*Quiet Backgrounded*
- Teresa is in a dilemma between a survey requiring all students and resource constraints (OR/AND) Teresa assumes that a survey usually involves a sample population.
- Maimuna at times diverts from the main line of discussion.
- The group came to consensus on the decision of survey involving every student based on the degree of certainty expressed by participants.

*Highly Backgrounded*
- Maimuna has understanding of both qualitative and quantitative perspectives of inquiry – and case study and pre- and post-testing.
- Participants' prediction of the effects of the intervention is influenced by their previous experience of their students' learning.
- It feels good to have other people who share similar opinions and perspectives.
- It is meaningful to be discussing matters relating to making or introducing changes that will make a difference to students' learning.
- The Learning Circle facilitator is the arbitrator of meanings and goals.

**Possible normative-evaluative Claims**

*Backgrounded*
- It's good to build on each others' suggestions and propositions.

*Quite Backgrounded*
- The Learning Circle facilitator must be able to do a good job at clarifying doubts and establishing consensus among participants.

</div>

In the above sample transcript, Maimuna proposes that the group uses a questionnaire with Likert Scales with the presupposition that students' perceptions of their experiences pertaining to the intervention programme will be made known. Teresa, however, thinks that interviews with students will give rich a richer sense of students' experiences about the intervention programme. Maimuna accepts and builds on Teresa's proposition and presupposition by proposing that the group could do a case study of certain students from which a pre- and post-tests could be done. In this regard, Maimuna's presupposition is that the pre- and post-tests could indicate if the intervention has impacted on students' ability to respond Science questions. Teresa, on the other hand, accepts Maimuna's proposition for pre- and post-testing supporting the presupposition for the need to know the impact of intervention programme on students' academic performance. However, she thinks that the enormity of the workload required in getting all students to respond to the questionnaire and analysing the results thereafter is too great. Bob shares the same concern too.

Based on the presupposition that the workload needed to collect and analyse data from all students is too much for participants to handle, Teresa proposes that the group do some sort of sampling. However, she expresses uncertainty and lack of knowledge on matters of sampling. Maimuna too expresses uncertainty in this matter, and asks for other participants' views. However, when Karna proposes that all students should be involved in the data collection and analysis, Maimuna reasserts her proposition that all students should be involved. Karna's presupposition is that it is better to involve all students rather than only a selected few. When Hairon proposed that the group could take one student as a case study instead of doing many students, Maimuna expresses the realisation that the group could employ both a questionnaire and a case study. Eventually, participants agree to get all students to respond to a questionnaire, and get one student from each class as case studies.

The above sample transcript suggests that participants were exposed to issues of epistemology especially questions that pertain to ways of knowing. However, their knowledge on epistemological issues lacked depth and rigour. In the above sample transcript, participants are not clear in the distinction between quantitative and qualitative epistemological demands. They are also not clear about the purpose of sampling and the distinction between descriptive sampling and inferential sampling techniques. One possible reason to the lack of depth and rigour in epistemological matters could be derived from the shortage of time to discuss epistemological issues. Another possibility is that they did not have symbolic or linguistic tools to aid in the discussions that relate to epistemology.

On the whole, the diagram below (Diagram 8) attempts to conceptualise the consolidated findings which pertains to how an individual participant participates in learning:
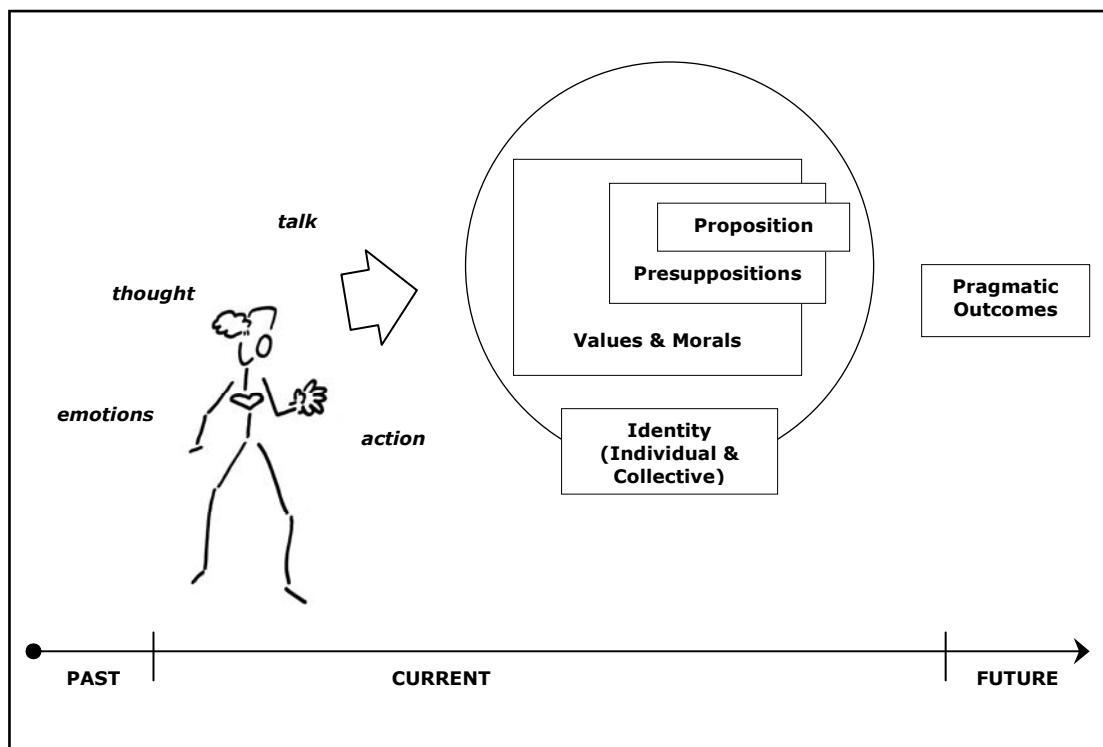
*Diagram 8: How a Participant Participates in Learning*

### b. Semiotics in Learning

The second theme that had finally surfaced in the analysis of learning has to do with the close linkage between semiotics and learning. The findings relating to this linkage are, however, discovered at a higher level of abstraction.

**Semiotics and communication**

The cultural values of consensual decision-making and equal treatment for participants to contribute to the discussions in the Learning Circle, along with the pragmatic need to complete an action research project within resource constraints, had enabled or constrained participants to give a 'name' to experiences in the past and possible future experiences in the present moment of discussion. In the sample Transcript 2 (8.55) when the group was exploring the AOC, Karna, Maimuna and Edward had to name their past experiences in order to help in the discussion in constructing the AOC. When Karna proposed a focus on students' ability to visualise geometrical figures accurately, she made the following explanation for her proposition:

"For me I wouldn't say it's the tests that we did, lah, because Maths I'm teaching, er, angles and perpendicular lines. The children have problems visualising. They can see two lines but when you put it in a shape, right, then they have problems seeing it in the shape form, which are the perpendicular and which are the parallel lines. So I have to constantly show it to them like really draw out on the board and then show them how to do it. Then they "Oh! That's a parallel line," you know … So visualising, visualisation, ya."

The articulation of her past experiences is synonymous to 'naming' past experiences. Hence, her past experiences became materialised in a linguistic form. In the same way, Karna's proposition to focus on visualisation as the AOC became the articulation of future possible experiences. This is synonymous to naming future possible experiences. The notion of naming future possible experiences can be further evidenced by Edward's propositions that pertain to the content of the intervention programme in Transcript 3 (23.20) where he made the following proposition:

"… So maybe under matter we could do something like, first we show an experiment ah. For example, the beam balance and two balloons. So we could start with prompting questions. Might, it might be just on the teachers' erm notes like for example, what's inside the, what's inside the, balloons. Then they will link, oh, it's air. Air is tested."

In this instance, Edward is naming future possible experiences which have not been materialised. He is creating meanings of future possible experiences that are related to the intervention worksheet.

The naming of both past and possible future experiences are considered as semiotic experiences (SE). While the naming of past experiences requires meaning making of past material experiences (ME), the naming of future possible experiences require imagined experiences which are essentially semiotic in nature. Material experiences are essentially embodied experiences gained through bodily senses such as sight, sound or kinesthesia. When Karna spoke of her students not being able to picture perpendicular lines, she is giving a meaning or name to her past material experiences. The naming of past experiences result in a material existence in a linguistic form such as a spoken

word or phrase, which I term as 'material signs'. They are material signs because they have a material existence which can be heard by others.

However, the naming of possible future experiences is meaning making without future material experiences. It is purely a semiotic engagement, where participants engage in the manipulation of linguistic forms or material signs. These material signs are, however, linked to material experiences. For example, when Edward commented, "For example, the beam balance and two balloons," he is proposing a possible future experience where the intervention worksheet could contain a diagram depicting a beam balance and a balloon at each end of the beam balance. These materials signs have reference to the material experiences such as an actual beam balance, balloons or a diagram of a beam balance supporting two balloons. Material experience and semiotic experience are therefore intimately tied to each other.

Understood in this way, participants in the Learning Circle hold within them past experiences that are both material and semiotic in nature. While material experiences are embodied experiences that are sensed by the body, semiotic experiences are the meanings or names, which are predominantly linguistic in content and form, that are given to material experiences. When participants bring into the discussion past material experiences, they inadvertently give material signs to these experiences, which I recognise as externalisations of semiotic experience. In doing so, these material signs contribute to the stock of semiotic experiences, which I recognise as internalisations of semiotic experience. The externalisation of both the material and semiotic experiences is at the same time the internalisation of those experiences.

The diagram below (Diagram 9) seeks to capture what has been described thus far in diagrammatic form:
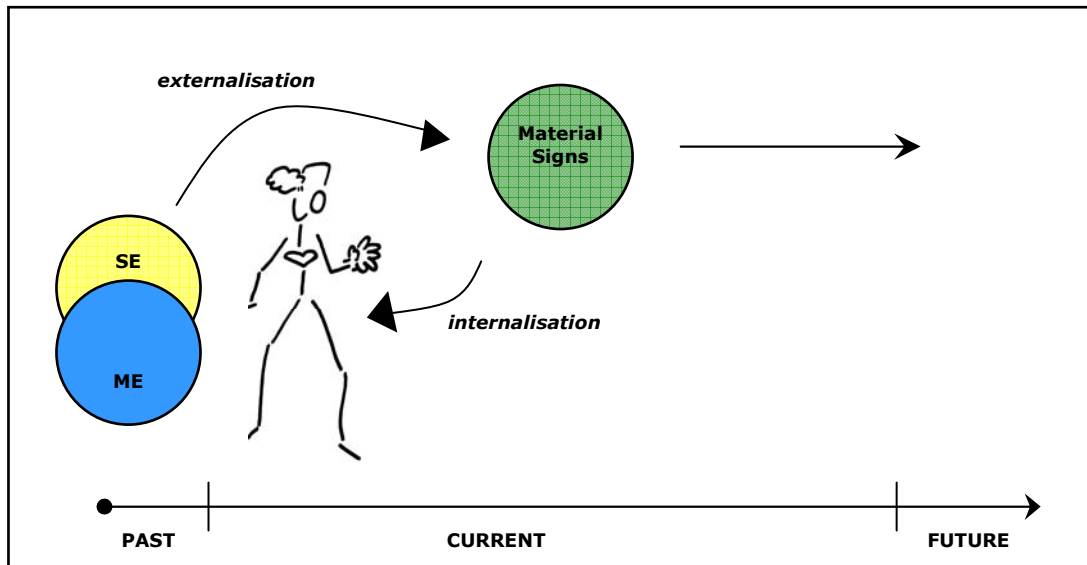
*__Diagram 9: The Integration of Material and Semiotic Experiences (Individual)__*

The cultural values of consensual decision-making and equal treatment for participants to contribute to the discussions in the Learning Circle, along with the pragmatic need to complete an action research project within resource constraints, had also enabled or constrained participants to 'co-name' past material experiences and possible future experiences in the present moment of discussion. The act of co-naming of past material experiences took place when participants had to share a common understanding of the material experiences of individual participants during divergent discussions. For example, when participants were exploring and discussing on the AOC [Transcript 2 (8.55)], participants had to share a common understanding of the material signs that each participant had externalised. This is done through affirmation, questioning and clarification.

There were times when the sharing of common understanding of participants' material experiences was done without much questioning and clarification because participants had gone through the same material experience in the past. For example, when Surhana told the story of how last year's presentation of the Learning Circle took the form of a television advertisement, most of the participants could identify with it easily without question [Transcript 4 (48.20a)] because they were involved in the event that took place.

The act of co-naming of possible future experiences took place when participants had to come to consensus during convergent discussions. For example, when participants had

to come to an agreement on the research tools to be used to collect data, they had to share common understanding on possible future experiences [Transcript 4 (16.15)]. This is also true when participants had to come to a shared understanding of the research question [Transcript 2 (52.55)]. In this case, participants were enabled or constrained to converge their discussions in matters of co-naming possible future experiences.

Regardless whether participants were co-naming past material experiences or possible future experiences, they were engaged in semiotic engagement in the present state of discussion by virtue of the requirement to make known their knowledge in the form of material signs, which were predominantly linguistic in content and form, to one another so that they could be clarified, critiqued, affirmed and shared.

The diagram below (Diagram 10) seeks to capture the notion of co-naming within the Learning Circle's discussions in diagrammatic form:
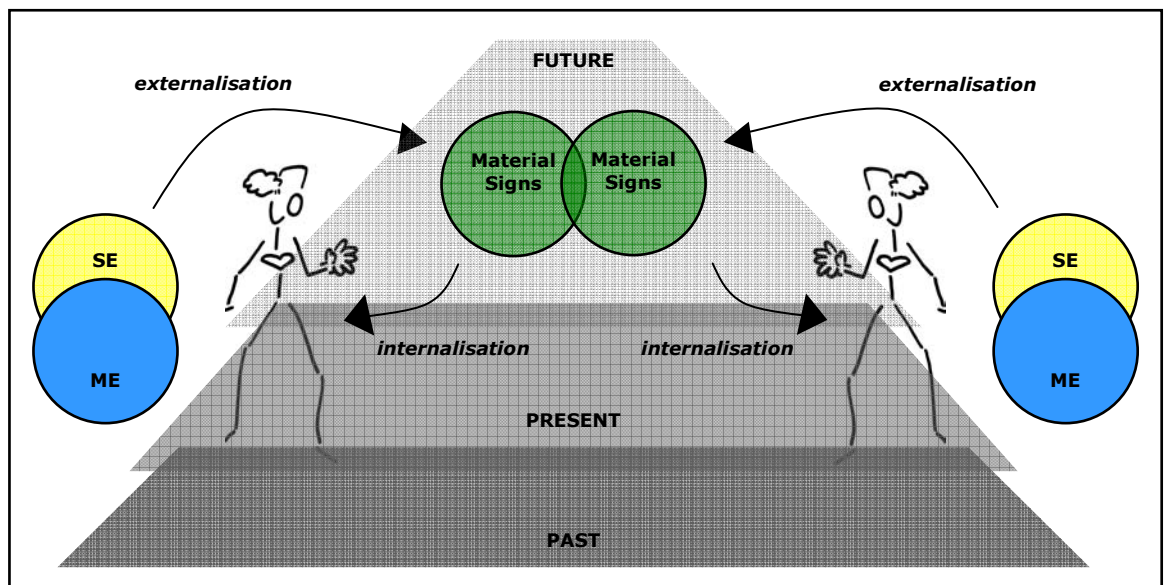


***Diagram 10: The Integration of Material and Semiotic Experiences (Collective)***

In the above diagram, semiotic engagement takes place when participants construct and reconstruct the material signs which each participant has externalised. The semiotic engagement involves affirmation, clarification and agreement of material signs. The externalisation of material signs by individual participants are based on the semiotic and material experiences which each participant embodies. The externalisation of semiotic experiences in the form of material signs is at the same time the internalisation of semiotic experiences.

**Semiotics and cognition**

The act of naming also involved the act of cognition – that is, to cognise, understand or bring into existence, the knowledge of the material world which may exist as past experiences or current experiences. Experience becomes knowledge when experience is being cognised and recognised in the act of naming. In this sense, humans are 'with the world' rather than being 'in the world' (Freire, 1972, 2005). In Learning Circle discussions, when participants were enabled or constrained to name their past or future possible experiences in the present state of discussion, they were made to stand outside their experiences to critique them, and in this way, to be 'with the world' rather than 'in the world'. In other words, the ability to stand outside their experiences allowed them to reflect and think about the world – specifically their pedagogical practices of the teaching world.

The act of naming also allowed participants to make their existing material signs coherent as likened to the notion of knowledge reconstruction mentioned earlier in relation to the nexus between language and thought. When a participant gave reasons or presuppositions to support propositions during the discussions in the Learning Circle, he or she is considered to make coherent linkage between one semiotic sign and another – in this case, a presupposition to a proposition. In the example taken from Transcript 3 (23.20a), Edward was making a proposition to start the lesson with an experiment followed with prompting questions pertaining to concepts that relate to the experiment. The reason or presupposition that Edward gave is that students first need to be able to link exam or test questions to appropriate science concepts. Both the proposition and presupposition are semiotic signs that Edward connected together coherently in the attempt to resolve a pragmatic need – that is, constructing an intervention worksheet. And in doing so, it can be inferred that Edward experienced a transformation of his pedagogical knowledge base as the result of being able to make coherent links between two knowledge – an experiment followed by prompting questions, and students' need to make appropriate links between science concepts and assessment/test questions.

In the same way, the act of co-naming is at once an act of collective cognition. Knowledge residing within individuals is laid bare for others to be cognised or recognised through discussions. The participants' past and present knowledge is put in the open, clarified, elaborated, critiqued and transformed, and therefore co-constructed

through semiotic engagement. The phases of Learning Circle, which require exploration (divergent discourse) and agreement (convergent discourse) to knowledge construction, had enabled or constrained participants to co-construct material signs and therefore co-construct knowledge. Co-construction of semiotic signs is at once a co-construction of knowledge of past and present experiences. In this way, the co-construction of signs guarantees the construction and transformation of human cognition.

Using the same example from Transcript 3 (23.20a), Maimuna critiqued Edward's idea for an experiment followed by prompting questions by stating that the strategy would lead to heavy guidance by the teacher. Edward, however, responded that the crux of the strategy is to encourage students to think about the links between science concepts and the test questions, and that he agreed that the prompting of questions should not be too heavily guided by the teacher. Surhana followed this up by proposing that this strategy depends on students' cognitive ability. The proposition-presupposition nexus was transformed –

### *From*

| | |
|---|---|
| Proposition: | An experiment followed by prompting questions. |
| Presupposition: | To help students link science concepts to assessment tasks. |

### *To*

| | |
|---|---|
| Proposition: | An experiment followed by prompting questions that are appropriate to students' ability. |
| Presuppositions: | To help students link science concepts to assessment tasks. Different students require different level of help to make these linkages. |

The above example indicates the presence of semiotic construction, clarification and reconstruction. Also, the cognitive development of each participant was heightened as a result of discussions with other members with different experiences, knowledge and levels of competence. The professional knowledge of each participant was also heightened because each participant brought into discussion professional knowledge that others did not have. On the whole, the professional knowledge of the whole group was enhanced. This is synonymous to Vygotsky's concept of ZPD (Zone of Proximal

Development). The diagram below illustrates the above development of participants'
semiotic constructions.
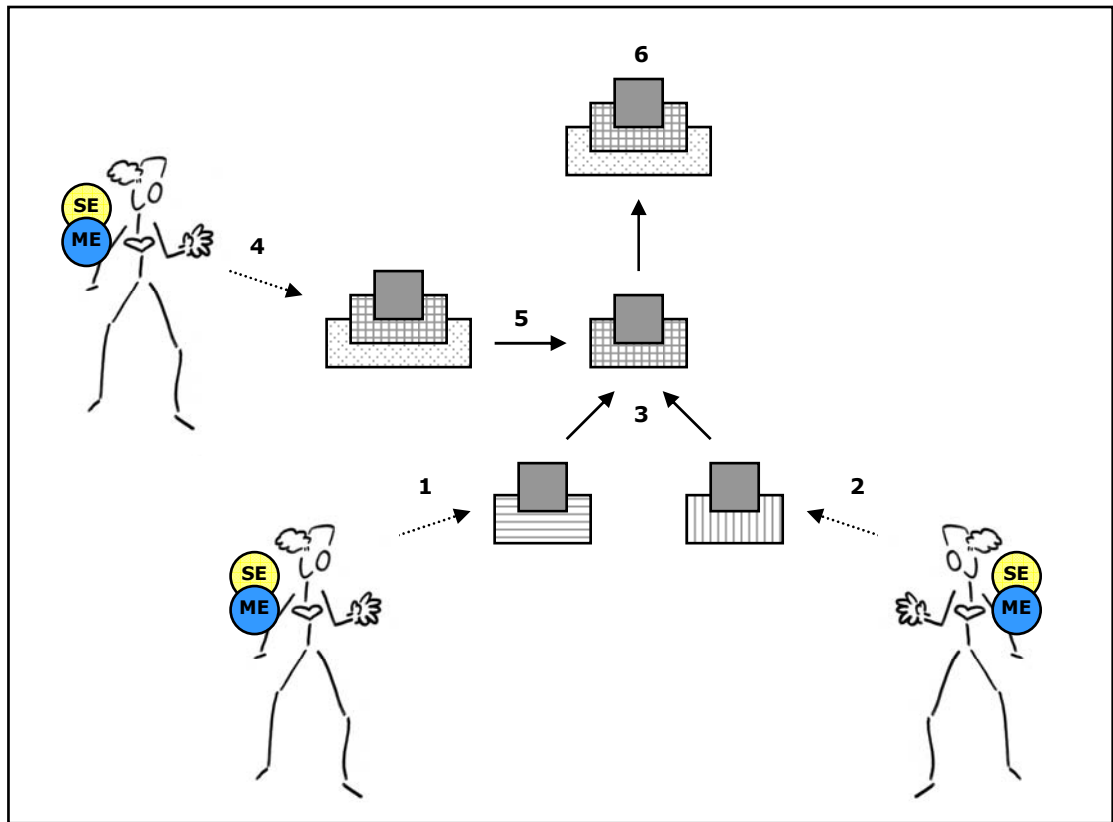


*Diagram 11: Semiotic Co-constructions*

From the analysis of the Learning Circle, five types of semiotic engagement were
identified.

1. Agreement.
2. Synthesis.
3. Analysis.
4. Disagreement.
5. Creation.

*1. Agreement (or confirmatory)*
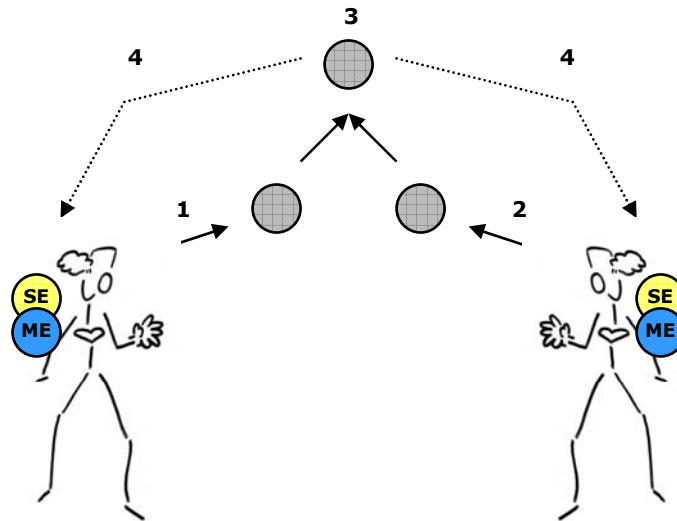


In the semiotic engagement of agreement, participants have an inter-subjectively shared understanding to the material signs during discussions. These material signs are externalised and internalised by the participants. For example, when Surhana shared the story that relates to how their two colleagues acted in a skit for a television advertisement, most of the participants had the same understanding to the material signs used by Surhana [Transcript 4 (48.20a)].

*2. Synthesis*
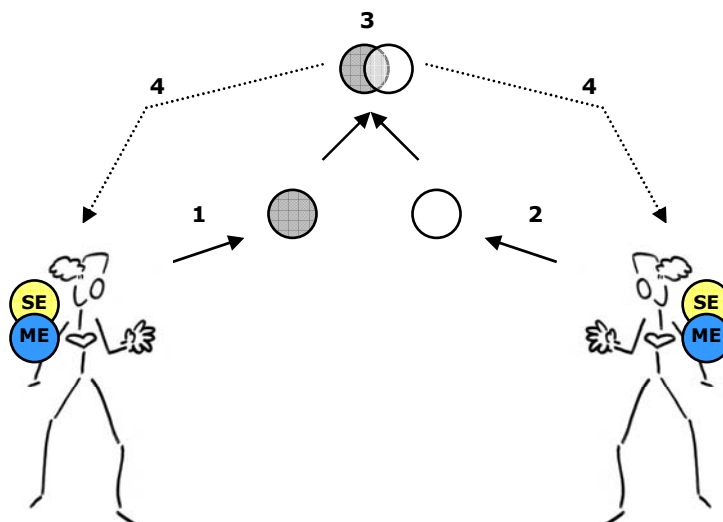


In the semiotic engagement of synthesis, participants are able to synthesis, combine or integrate the material signs during discussions. These synthesised material signs are externalised and internalised by the participants. For example, when Edward proposed that the intervention worksheet start with an experiment followed by the teacher asking

prompting questions to students, Maimuna challenged his proposition and proposed that these questions be less guided. Surhana then proposed that these questions need to be appropriate to the ability of students [Transcript 3 (23.20a)]. Hence, the material signs externalised by the three participants had now synthesised to become one.

3. *Analysis*

　　a) *Refinement (or accuracy)*
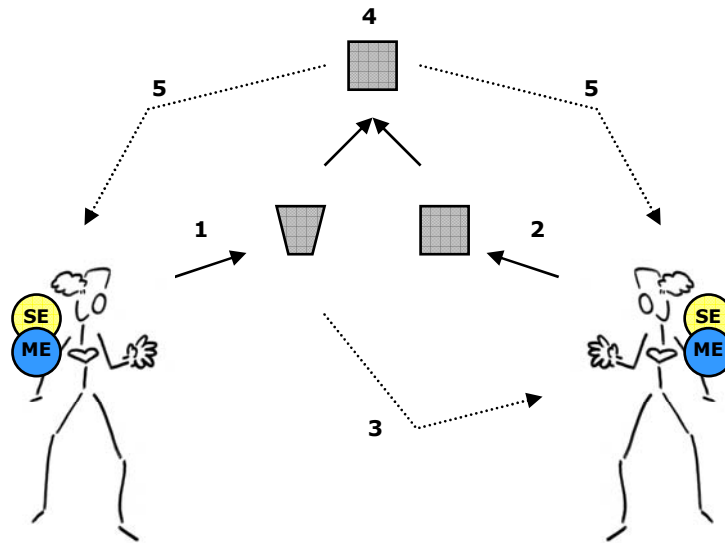


In the semiotic engagement of analytic refinement, participants clarify the accuracy of the material signs during discussions. The accuracy and inaccuracy of the material signs are externalised and internalised by the participants. For example, when Maimuna was not clear with the distinction between a survey and case study, the discussions that ensured had helped to clarify that a survey could involve a questionnaire that all students could respond to, and a case study could involve an interview of selected students [Transcript 4 (16.15)].
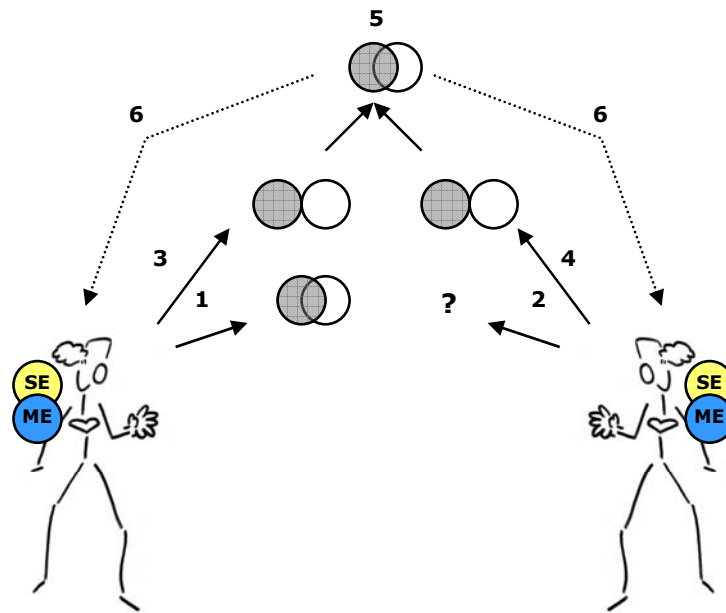
In the semiotic engagement of paradigmatic analysis, participants may disentangle compound material signs in order to gain inter-subjectively shared understanding during discussions. The disentangled material signs are externalised and internalised by the participants. For example, when Surhana informed the participants that the AOC has to be specific and asked Maimuna to take the lead in the discussion on this matter, Maimuna made a few suggestions. Along the way, Surhana gave affirmations and corrections in order to tease out the sub-concepts of 'specificity' [Transcript 2 (3.20)].
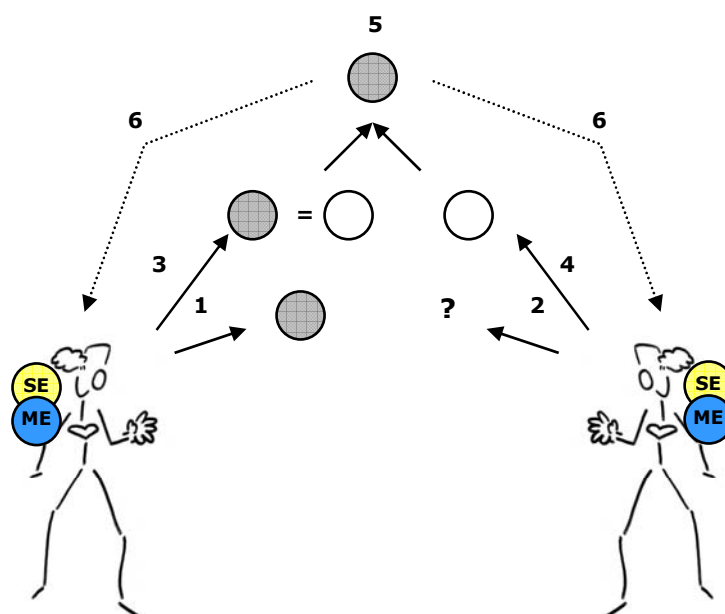
In the semiotic engagement of paradigmatic analysis, participants may also equate material signs to other material signs to gain inter-subjectively shared understanding. The similar material signs are externalised and internalised by the participants. For example, when Surhana mentioned that the Research Question must be SMART and thus requiring it to be measurable, she gave another word to describe the concept measurability – that is, the word 'observable' [Transcript 2 (8.55d)].

*c) Syntagmatic analysis*
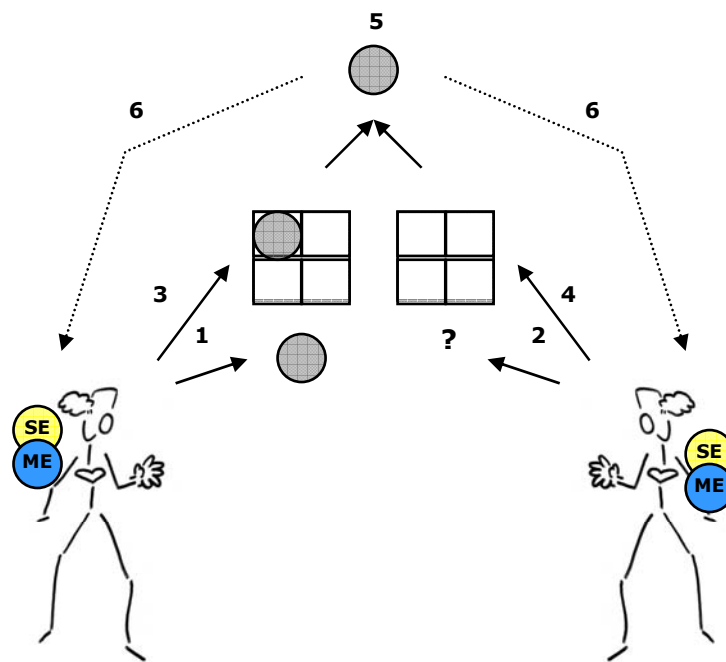


In the semiotic engagement of syntagmatic analysis, participant may locate material signs within a bigger framework of material signs in order to gain inter-subjectively shared understanding. The new material signs are externalised and internalised by the participants. For example, when Maimuna asked, "What is the research question supposed to be?" to Surhana, the discussions that ensured enabled or constrained participants to understand that the sub-question fits into the research question, and the research question fits into the AOC [Transcript 2 (52.55)]. In this way, participants' understanding to these material signs became clearer.

*4. Disagreement*
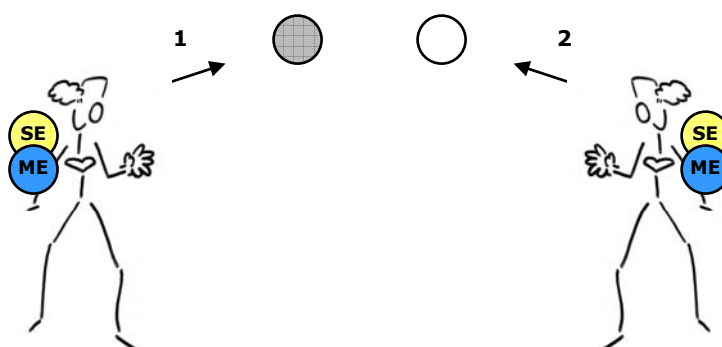


In the semiotic engagement of disagreement, participants do not share a common understanding to the material signs and intersubjectively shared understanding is not pursued. For example, when Bob used the term 'thesis statement' to contribute to the discussion on the AOC, Surhana disagreed with the use of the term commenting, "No, area of concern." [Transcript 2 (40.10)] The following dialogue gives an illustration to this:

E:  Pupils are having difficulties … using, ah – applying -
K:  Applying scientific terms.
E:  - I think applying –
S:  They, they have problems using key words –
E:  - Science, ah.
S:  - But are we looking at key words here or are we looking at concepts?
E:  No, using of key words is a form of applying what. **[OC: Edward tries to convince Surhana]**
 K: Understanding key words –
B:  Difficulties can be over, er –
K:  - Where the pupils get confuse and all those also. Understanding and using also -
V:  - The concepts they cannot recall, ah?
B:  - er, what do you call it.
K:  - Both.
B:  No, the thesis can be very overarching you know. I mean as in cover a lot of areas. Then after that the whatever reports then be more detailed. This is the thesis statement.
S:  No, area of concern – **[OC: Surhana challenges Bob's assertion]**
M:  Okay, can we say the P4 pupils, ah, ah – **[OC: Maimuna attempts to push through her  proposal]**
S:  - We can only have one problem in the –

In the above dialogue No further attempt or discussion was made to clarify the meaning of 'thesis statement' and its distinction with the AOC, and participants continued in their discussion in the exploration of the AOC. Another form of disagreement is when Surhana commented that Karna's proposition for visualisation of geometrical lines as an AOC: "Okay, that's a small concern. Any other …" Here, although Karna may have

disagreed with Surhana, she kept quiet about it [Transcript 2 (9.35)]. Disagreements of material signs were, however, very rare.

*5. Creation*

If inter-subjectively shared understanding of material signs fails because participants lack sufficient material signs, another possible way of attaining inter-subjectively shared understanding is by providing actual material experiences. When these material experiences are associated with the material signs their inter-relatedness is established.
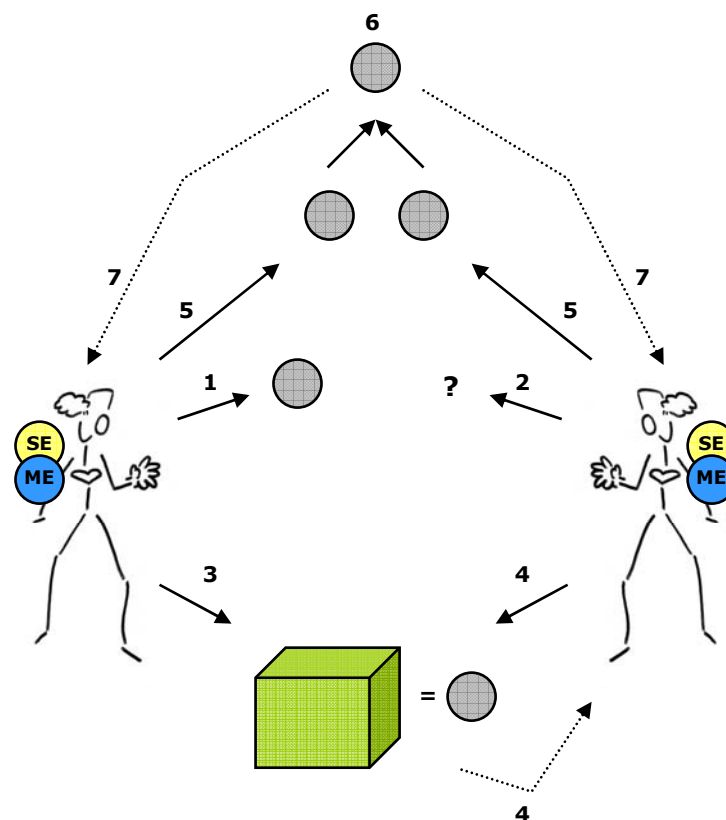


For example, when Surhana required participants to do a 'check-in', she provided the demonstration to what it means to do a check-in. This demonstration was helpful to participants who are either totally new or quite new to the whole concept of Teachers Network Learning Circles [Transcript 2 (1.45)]. Another form of linking material sign with material experience is when Edward constructed the first intervention worksheet so that others could understand how the worksheet should eventually look like in the material world. The completion of the booth to present the findings of the Learning Circle during the Learning Circle Symposium was also another form of linking the material sign of the word 'booth' to a material experience. Although these two cases

took place outside of the Learning Circle's discussions, they provided the common understanding of the material sign during the discussions.

**Semiotics and identity**

The act of naming and co-naming is also an act of identity formation. Being able to name one's past material experiences and possible future experiences in contrast to others is at the same time establishing one's identity or one's meanings. Likewise, the co-naming of past material experiences and possible future experiences bring about collective identities. The notion of identity formation through the externalisations and internalisations of material signs is synonymous to the externalisations and internalisations of self-expressions as mentioned earlier. Below is a sample transcript after it had gone through initial meaning reconstruction and pragmatic horizon analysis to illustrate how semiotics is related to identity.

*Transcript 2 (1.45)*

S: Hm, actually I wanted to choose this because you know it's a time capsule. Is it a time capsule?
**[OC: Surhana initiated a routine that is commonly encouraged by staff members from TN Learning Circles]**
**[MF: Surhana is a cheery person (AND) Surhana wants to set the tone for others to emulate (OR/AND) Surhana wants to model the check-in routine]**
M: It's an hour glass. *(The rest echo the same reply and laughs)*
S: Okay, I've been feeling stifled with you know trying to catch time, all time. But anyway, I choose this because it's pretty cute. Hm, beetle, it's my favourite. Hm, ya. That's all.
M: Wah, you feel cute is it? *(Teasing)*
S: Ya, I'm really cute. *(Reciprocates the teasing) (The group laughs)*
M: That's how you feel today. **[OC: Affirmation]**
S: Yah, I feel cute actually. *(The group laughs)*
**[MF: Surhana likes the idea of engaging in counter-teasing with Maimuna]**
S: Thank you. I'm in.
S: Bob. **[OC: Surhana initiated the momentum of the routine]**
**[MF: Surhana formally adopts an approach that can be considered informal and which has potential to encourage participants to be true about their thoughts and feelings]**

    **Possible subjective claims**
    *Foregrounded*
- S: I'm feeling slightly stressed with work recently; I like cute things.
- M: I feel comfortable with Siwati.

    *Less Foregrounded*
- I like cute things; I am cute.

    *Backgrounded*
- Surhana feels that all have been busy recently.

    **Possible objective claims**
    *Foregrounded*
- Surhana wants to do the check-in.

**Possible normative-evaluative Claims**
*Foregrounded*
- Check-ins are the proper way to start discussion.
*Backgrounded*
- Teasing each other is good.

B: Bob, oh. Originally this thing was quite twisted ah. So, I'm also quite twisted ah. For the past one week quite twisted. So, twisted as in my lifestyle everything ah. So, okaylah try to find ways to untwist it.
**[MF: Bob feels frustrated over the demands of being a beginning teacher (OR/AND) Bob is facing a set of problems that is difficult to resolve and which he may not want to share to others]**

**Possible subjective claims**
*Foregrounded*
- I'm trying to resolve or solve the problems that I have.
*Less Backgrounded*
- I'm having some difficulties both my work and personal lives.

**Possible objective claims**
*Foregrounded*
- I've been having some difficulties for one week.

**Possible normative-evaluative Claims**
*Foregrounded*
- It is only right to share personal matters during check-ins.

E: Okay, I choose the hour glass it symbolises time. And for the, I mean for this past week, I, er, come back from reservist and then straight away during the weekend I moved to another place. And once I come back I find a lot of backlog and especially today is one of my worst days. To me no breaks for the whole day. So, er, ya, it has been a very busy week for me. So if not for Valerie ah I would have been run down because she's taking my Maths classes. Usually Wednesday by now I'll be yawning away so tired. So, tch, this is how I feel ah. Very busy … I'm in. *(Stressed on the word 'in' as in 'innn')* **[OC: Edward expresses his difficulties with greater details than Bob.]**
**[MF: Edward wants to share to others about his stressful condition (OR/AND) Edward wishes that others would sympathise him]**

**Possible subjective claims**
*Foregrounded*
- I've been busy with much work demands. I'm very happy to have Valerie to help me.

**Possible objective claims**
*Less Foregrounded*
- The reservist has contributed to Edward's workload.
*Highly Foregrounded*
- Time is an important resource.

**Possible normative-evaluative Claims**
*Quite Backgrounded*
- It is only right to serve the country through National Service. It is good to be able to commit to the responsibilities of a teacher.

Besides the inter-links between semiotics and communication, cognition and identity, the acts of naming and co-naming during Learning Circle's discussions were not devoid of participants' emotions and morals. This is synonymous to the inter-linkages of intellectual discussions and collegial collaborative relations with emotions and morals which had been described above.

**Semiotics, agency and power**

The act of naming and co-naming of past material experiences and possible future experiences means that participants were able to stand outside their experiences and become conscious of the existence of a subject-object reality. In Freire's term, participants were able to 'be with the world' or 'emerge from the world' (Freire, 1972, 2005). In this way, participants were made to be conscious of the inter-linkages between intentions, actions and consequences – that is, cause-and-effect relations of past, current and future actions, through semiotic engagement in the present state of discussions. Participants were able to understand how and why past actions took place, and how and why future actions might take place. In doing so, participants were able to clarify, critique, change and control their semiotic understanding of not only past material experiences, but also possible future experiences. The act of naming and co-naming is therefore an act of power.

Based on the Transcript 2 (8.55), when participants named their past material experiences in view of constructing the AOC, they were first made conscious of their students' learning needs. When they later had to come to consensus on the collective AOC, they were involved in semiotic engagement to not only agree on a collective AOC, but also gain a deeper appreciation of their students' learning needs. Karna's initial observation that her students lacked visualisation skills was challenged by the alternative that students lacked the general motivation in their studies. Maimuna's initial observation that her students lacked motivation was challenged by the alternative that students lacked accuracy in linking Science concepts, topics and questions together. At the collective level, participants' understanding of their past material experiences were critiqued and clarified. This is an act of power as it enabled participants to change their meanings and thus understanding of their past material experiences in a different and deeper way.

When participants named possible future experiences with respect to coming up with an intervention programme [Transcript 3 (32.40)], participants initially were involved in semiotic engagement to explore and propose the content of the intervention worksheet. Subsequently, when participants had to agree on the collective intervention worksheet, they were involved in semiotic engagement to co-name the specific details of the intervention worksheet. The act of naming and co-naming of possible future experiences is an act of power as it provided participants with the material signs to be used to control and change actions that would take place in the future. The creation of material signs for the intervention worksheet became the means for its materialisation which is the actual material production of the intervention worksheets. The creation of the material signs for the questionnaire and case study became the means for the materialisation of the research tools. The creation of material signs for the booth became the means for the materialisation of the booth. This is an act of power as it provided participants with the material signs that enabled them to control and change their material experiences.

***Summary:***

The cultural values that underlie the symmetrical or consensual power relation among Learning Circle's participants as they learn with each other were had contributed to the participants' intellectual and knowledge development. First, the social practice of discursive dialoguing where participants had to speak out their thoughts in the presence of others had helped them to make implicit knowledge becomes explicit, and undifferentiated knowledge becomes differentiated. It had also contributed to the development of reasoning skills where participants had to propose, elaborate, justify and defend one's propositions with valid presuppositions in the presence of others. Second, the social practice of participants' integrating divergent and convergent discourses by exploring maximum contributions by each member followed by coming to consensus by all participants had contributed to the generative character of knowledge development at the individual and collective levels. In other words, participants' thought and knowledge underwent developmental reconstructions build on each others' knowledge. This is also closely linked to the development of partnerships, alliance, solidarity and positive emotional bonding, and the development of the collective identity as participants agreed on each others' knowledge. At another level of analysis, the social practice of discursive dialogue participants had to speak out their thoughts in the presence of others and come to agreement on matters of the action research project had also enabled the participants

to engage in semiotic experiences where one has to give a 'name' or a sign to experiences in the past and possible future experiences during the Learning Circle's discussions. In addition, participants were also engaged in co-naming past experiences and possible future experiences during the Learning Circle's discussions. The social practice of naming and co-naming had contributed to development of knowledge and identity at the individual and collective levels.

**FINDINGS (STAGE 4)**

In Stage 4, I examined system relations between the Learning Circle social site and other specific social sites which had relations to it. These included the school, North Cluster 4 Learning Symposium, Teachers Network Learning Circle Facilitators' Training, Teachers Network and North Zone Action Research Educational Symposium. Other sites included that which produce cultural artifacts such as the Enhanced Performance Management System (EPMS) Kit and policy documents pertaining to teacher professional development and professionalism.

**MOE Work Plan**
**Seminar 2005 Policy Document**

**Teachers Network**

**TN LC Facilitators' Training**

**Learning Circle**

**The School**

**N4 Learning Symposium**

**NZ AR Edn Symposium**

**EPMS Kit**
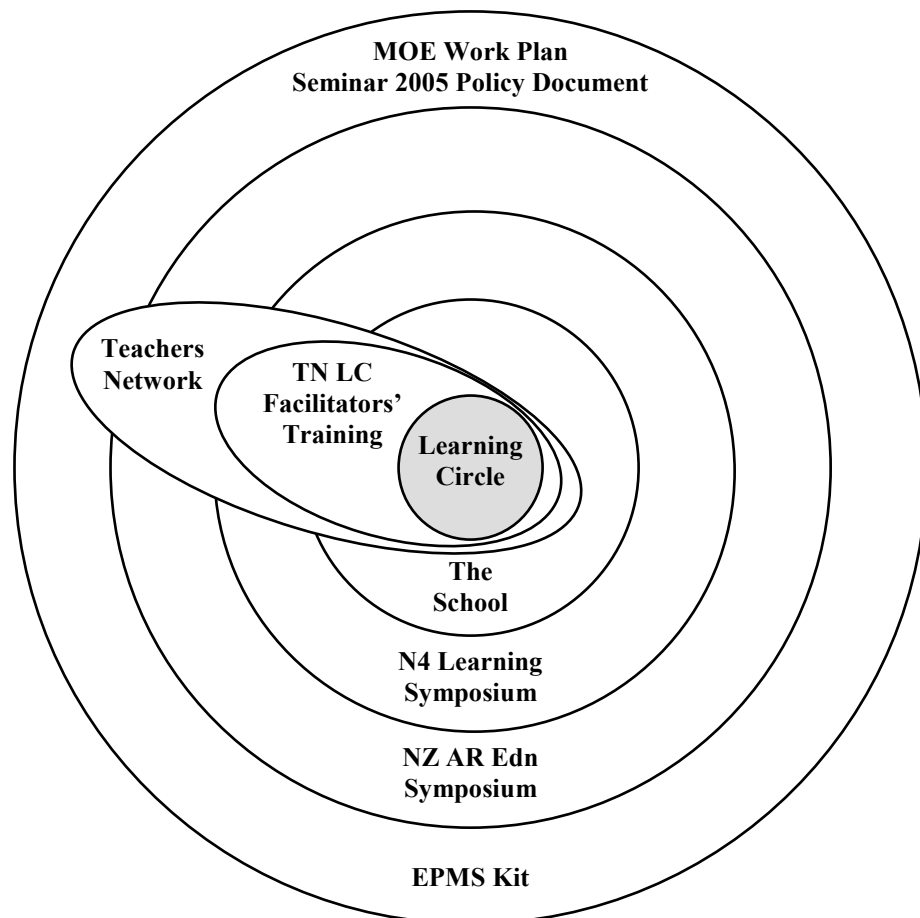
*Diagram 12: Discovering System Relations (Stage 4)*

I will first present my findings for each of these social sites. I will then consolidate these findings to surface relations between the Learning Circle site and other sites that pertain to it. It is also useful to state that I have borrowed Habermas' concepts of the system and lifeworld to help me in the interpretation and understanding of the phenomena that I studied throughout the Stage 4 analysis. Although I have built on these two concepts in the Stage 4 analysis, I have maintained the essence of Habermas' concepts of the system and lifeworld (1987a) which had been described in the literature review. It is also worth

noting that some artifact analyses are not accompanied by pictures in order to maintain confidentiality of the school and the participants of the school of study.

## 1. The School

In total, 13 school visits and 13 school visit fieldnotes were made (Appendix D). Observations of school routines were made including classroom teaching and learning, morning assembly, school executive committee meeting and special events. Artifact analyses were also made on items such as school facilities, and noticeboard displays and school magazine. Interactions with different members of the school community were also integrated in the school visits. The analysis of data from the school site surfaced three key themes. They consist of the following:

1. School leadership that balances system and lifeworld values.
2. Building of group identities and solidarity.
3. Teacher professionalism.

### 1. *School leadership that balances system and lifeworld values.*

Although the education system requires effectiveness and efficiency in the use of resources such as the need for hierarchical organisational structure, internal and external appraisal, and publication of examination results, lifeworld values such as the values of human interactions, building relationships (work and home), face-to-face learning and development of human beings were not neglected in the school. System values were, on the contrary, used to meet the objectives of promoting lifeworld values. The school leader and school management invested efforts to efficiently use the school resources to promote lifeworld experiences.

An example is providing structures of time and facilities for Learning Circles' discussions. These structures were, in a sense, protected because they were planned one year in advance and integrated into the school organisational routines. Moreover, the resources provided for the Learning Circle privileged face-to-face interactions and informal learning such as using small round tables, a diverse range of writing materials and access to refreshments. Such setting encouraged informal ways of learning. In addition, Learning Circles were adopted as a whole school strategy for teacher professional development, and integrated in the school's curriculum.

The school leader believed in balancing both human sensitivities and work obligations. She believed that teachers' well-being goes hand-in-hand with teachers' commitment to their work, which eventually is about the well-being of pupils. As an illustration, the

school management adopted a formal form of accountability practice where teachers were required to account for their students' academic performance. This accountability practice is, however, done with a human touch which required teachers to have a private face-to-face meeting with the senior management team. This allowed teachers to reflect on the reasons for and give an account for his or her class performance without being embarrassed in the presence of others.

The school leader also showed the ability to balance between meeting bureaucratic needs of the system that reproduces the cultural value of hierarchical power relations, and lifeworld needs. Even though there was need for 'showmanship' within the system culture, the school leader made attempts to not invest too much resource into it. This applied to small or large scale events. For example, the school leader attempted to make a prize-giving ceremony as informal as possible. In another example, the school leader attempted to help the school staff gain an award by emphasising what the school was already doing, instead of aiming for an award first followed by managing the school to attain the award. This also exemplifies how the school leader attempted to cleverly respond to the system's tendency to control schools through a slew of awards.

Based on my artifact analysis of the general office noticeboard that displayed the schools' organisational structure, it did not have the typical hierarchical structure where the school principal is at the top, followed down by the vice-principal, followed down by all the heads of department, and then the teachers under each head of department. Photographs of form teachers were displayed in their respective grade levels. The photographs within each grade cluster were all arranged haphazardly and without any hierarchical structure. Likewise, photographs of the heads of departments were located in their respective grade levels among the rest of the teachers teaching the same grade. The photograph of the school principal was located in the administrative cluster together with other administrative staff members. Furthermore, the photographs were also arranged haphazardly and without any hierarchical structure. This, in my interpretation, is one way whereby the school leader attempted to balance the values of the system and lifeworld.

Although there was evidence of hierarchical relationship amongst the school leader, senior management, and teachers, consensus is still the ideal to be pursued. The hierarchical relationship served more to demarcate specialisation of roles and

responsibilities than hierarchy. In other words, power symmetry is a cultural value that the school leader attempted to pursue within specialisation roles and responsibilities.

## *2. Building of group identities and solidarity.*

Part of the school culture was also the encouragement to promote the formation of group identities in the day-to-day activities of learning and working. Although diversity was welcomed, unity was the ideal to be pursued. The choice to encourage teachers to take up Teachers Network Learning Circles is an example of the value placed on building group identities and solidarity. Furthermore, the school framework for Learning Circles is one that required the grouping of Learning Circles according to grade level as opposed to academic subject. This meant that value was placed on teachers gelling together according to grade level which cut across subjects. In this way, too, heads of departments did not get isolated from each other as they were to provide the curriculum leadership and support to teachers across subjects. The school also practised another form of organisational leadership – that is, consortium leadership. A consortium head provided the overall administrative leadership for the grade level. This again was established to encourage solidarity within grade levels.

The school leader also encouraged the notion of 'buzzing' where ideas generated from and among teachers were put on trial, institutionalised and supported by school management. In this sense, the formation of group identities entailed the naturalistic formation of identities from the ground up and took account for human interaction and relationship which value individual freedom within collective good. This too provided the social milieu for teachers to develop group identities where individuals freely contribute ideas for other teachers to affirm and develop them further. The practice of buzzing could be understood as complimenting the conventional way of school policy-making where the senior management conceptualised school policies. An idea which the school leader was encouraging in the course of my fieldnotes is the notion of a consortium head for Primary 1 and 2 who has much reduced teaching workload in order to provide time and energy for teachers in matters of professional and curriculum development. This idea was generated in the course of conversation between the school leader and consortium head for Primary 1.

The notion of group identities is also related to democratic forms of living where individual staff member was to be treated as having worth and respect. However,

individual freedom did not only serve the individual interest, but also the interest of the collective group. In my interview with the school leader, I found that although the school leader valued respecting her staff members as having worth and respect at the individual level, she also expected them to fulfill their work obligations as teachers who contribute to the development of students when perceived at the organisational level. In this respect, I found that the school leader was conscious in her attempts to balance the pursuit of respecting individual teachers and that of meeting the collective and organisational needs.

### 3. *Teacher professionalism.*

The school leader believed that the motivation to learn and develop professionally ought to come from within teachers and not be externally imposed upon them. Furthermore, she believed that teachers ought to encourage each other to learn and develop professionally. This value is consistent with the value for developing group identity and solidarity. The decision made by teachers to do Learning Circles as opposed to WITs (Work Improvement Teams) is also congruent with the notion of teacher professionalism. During the time of my fieldnotes, WITs were perceived to be top-down in orientation whereby teachers were imposed to be involved in WITs.

In my interview with the school leader, I observed that she believed that a professional teacher ought to be self-motivated and self-directed in his or her learning endeavours. The learner is actively involved in the planning of his or her own learning – arriving at their area of needs and choice of solutions. Learning should not be forced on adults, and personal commitment and accountability is derived from his or her sense of ownership to the learning process. Consistent with this value, the decision to pursue Learning Circles as the primary platform for teacher professional development was based on the following considerations which were raised during the interview, and which are directly or indirectly related to teacher professionalism:

- Teachers Network Learning Circles use adult learning theories which primarily favour self-directed learning.
- Teachers Network Learning Circles help teachers to be reflective practitioners, and privilege the value for self-initiation and autonomy of teachers as evidenced in their motto 'For Teachers, By Teachers'.

- The belief that the primary source of ideas and creativity comes from the community. This is because members of the community are the ones who experience and understand the problem first hand, and can therefore come up with context-sensitive solutions. In this sense, teacher professionalism is to do with teachers' autonomy at not only the individual teachers' level, but also at the collective teachers' level.

- There was a match between teachers' and the principal's aspirations when she first took the helm. The principal wanted to encourage teachers to embark on Teachers Network Learning Circles. Teachers wanted to do something different instead of WITs. Consensus was hence reached between the school leader and teachers.

- The year end review in 2003 indicated that teachers preferred to continue to do Teachers Network Learning Circles as opposed to WITs. This is in tandem with the school leader's belief that teachers ought to want to want to do Teachers Network Learning Circles.

- The focus of Teachers Network Learning Circles is on pedagogy which is at the heart of teachers' core work, and which is in accord to teachers' moral purpose of teaching.

On the whole, the key themes and its discourses are generally congruent with the themes and discourses of the Learning Circle site.

## 2. The N4 Learning Symposium

The North Zone 4 Cluster Learning Symposium was a one-day event held at a secondary school within the same cluster of schools that belonged to the school of study, and which it actively participated in. Fieldnotes which were made for the day were taken from observations, naturalistic interviews and artifact analysis. Observations of activities included the opening ceremony, speeches made from the invited speaker and guest-of-honour, constructed booths and teachers' presentations in the classrooms. Artifact analysis was made mainly on the participants' bag and its contents. Naturalistic interviews that had taken place were more unplanned than planned. The analysis of data of the North Zone Cluster 4 Learning Symposium surfaced key themes that relate to both system and lifeworld discourses. Correspondingly, while the latter is congruent with the cultural values of the Learning Circle site, the former is not.

The incongruent cultural values which come under system discourse contained the cultural values for efficiency, hierarchy and bureaucracy. With regard to efficiency, several items of analysis pointed to the cultural value for efficiency. The first is the presence of the day's programme which stated the time slots, activities and venues for these activities. Second, the presentation made by the guest-of-honour, who was also the Cluster Superintendent, were highly efficient insofar as it has the characteristics as being step-by-step, systematic and systemic, without detractions and stories, logical, and technical such as the use of system thinking diagrams and reductionistic bullet points. The use of acronyms by the Cluster Superintendent also indicated the primacy given to efficiency. Examples include KP (Key Personnel), TLLM (Teach Less, Learn More), TDSBUI (Top-down Support, Bottom-up Initiative), LCE (Learning Centred Excellence) and the 3 Rs (Rigour, Relevance and Relationship).

With regard to hierarchical relations, the first item of analysis that indicated the cultural value for hierarchy was the practice of honouring people at the start of the programme in order of rank starting from the guest-of-honour, invited speaker, invited cluster superintendents and teachers. The second is the segregation of educators between leaders and teachers. The chairs were arranged in such a way where the front part of the hall was designated for the guest-of-honour, invited speaker, and school leaders. The back part of the hall was for teachers. Third, during my interactions with people during the tea and lunch break, I observed that people generally sat together according these

two main classifications – school leaders and teachers. Invited academics, however, had greater liberty to sit with any social group.

With regard to bureaucracy, the item of analysis that indicated the cultural value for bureaucracy is the practices of honouring and showcasing at the start of the programme whereby the Cluster Superintendent was introduced. He then gave a speech which was followed by a video presentation of how the schools in the Cluster had promoted the idea of CoP (Communities of Practice) under the leadership of the Cluster Superintendent. This too is evidence of the cultural value of honouring in the discourse of bureaucracy. Within the bureaucratic discourse I also observed the presence of corporate discourse. First, the Cluster Superintendent was dressed formally in a white shirt and a tie which are common attire for business people in Singapore. Second, his speech made use of meanings that relate to being performance-driven, futuristic and productive. However, what came out strongest was the cultural value of honouring.

The congruent cultural value which comes under lifeworld discourse is the cultural value for learning. The cultural value for learning was predominant in the social site. This applies also to the system discourses mentioned above. For example, the value for learning surfaced as one important aspect along with efficiency in the speech given by the Cluster Superintendent. The speech given by the invited speaker also surfaced the value for learning but situated within the discourse of academic thinking. The cultural value for learning underpinned many of the activities for the day such as the speeches made by the Cluster Superintendent and invited speaker, video presentation on the practices of CoP, presentation of findings using booths, and the oral presentation of research findings by teachers in the afternoon.

The contents contained in the participant bags also carried meanings related to learning. These included a summary of Learning Circle's Group Reflection Journals where Learning Circles' learning experiences were summarised, a notebook for writing down learning notes and a stick-on pad to write down notes. The notebook has a front cover of three human figures in three different colours of red, blue and yellow depicting the value of learning at all stages of educational level along with the attitude of strong foundations, purity and passion in learning. In addition, a dimension of learning that was privileged is the notion of group learning. This was evidenced by the way the presentation of findings were done using booths (Photograph 3), and the focus on CoP.

The lunch time activities were also geared towards the idea of learning. There were ten concurrent activities during the lunch break. Examples included Teachers Network booth, learning support materials, learning about the beauty of butterflies, performance by students from a secondary student and story books sale.



***Photograph 3: Presentation of findings using booths***

The close relationship between the cultural value for learning and lifeworld discourse is by virtue of the characteristics of learning that are consistent with lifeworld discourse which essentially privileges inter-subjectively shared communication and understanding. Based on observations, artifacts analyses and naturalistic interviews, the characteristics of learning at the symposium include the following:

- *Reflective learning.*
  The presentation of findings through the Learning Circle's Group Reflection Journals along with the notebook and stick-on pads privileged the values of self-reflection. The oral presentation by teacher-presenters also signified the importance of reflection on participants' pedagogical knowledge.

- *Pragmatic learning.*
  The black participants' bag signified the meanings of practicality and utility. The bag could be used not only during but also after the conference. The items in the bag such as water bottle, notebook, stick-on pads and programme sheet also

have meanings of practicality and utility. The lunch time activities also carried the meaning of integrating learning with practical resources for teaching.

- *Practitioner friendly.*

   The idea of having booths to present Learning Circle's findings signified learning that is practitioner friendly in contrast to the usual oral presentations that mimic the academic form of learning. The presentation of findings through booths was also consistent with teachers' practical needs of learning through face-to-face conversations. When participants visit the booths, they could interact with the presenters who had set up the booths. This also provided opportunities for participants to strike conversations and build networks. The black participant's bag and its contents also signified meanings that are close to the teaching profession which meet the practical needs of teachers – programme sheet, writing materials and water bottle. The contents in the Group Reflection Journals that accompanied these booths also signified meanings related to being practitioner friendly (Photograph 4)
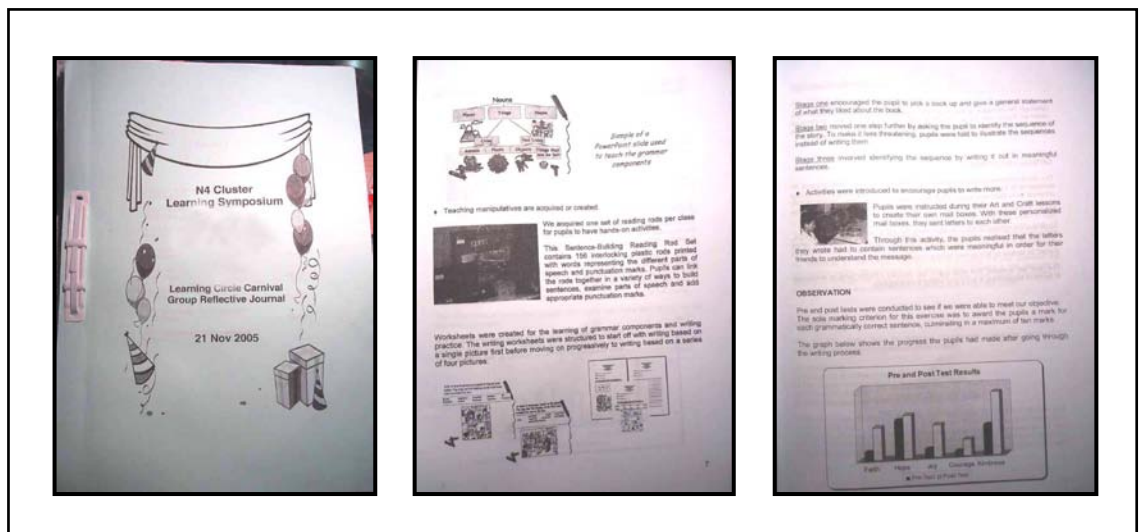


*Photograph 4: Sampled pages from a Group Reflection Journal*

The cover page, which is covered with pictures such as balloons, gifts and party hats, and relates to celebration in a party setting signified meanings of being relaxed and happy. It also signified that the symposium is a celebration for and of teachers. The language used in the writing uses the first person pronoun such as "We acquire one set of reading …" Pictures pertaining to the lesson materials signified that importance of helping the reader easily capture the reality of the

intervention instead of using purely words. Furthermore, the use of a simple chart to explain the pre- and post-test without much statistical technical jargon signified the importance of encouraging practitioners understand the findings of the Learning Circle project.

- *Diversity in learning.*

  Another value that had surfaced in my fieldnotes is the value for diversity in learning. This value could be derived from the analysis of items such as the notebook and presenter's name cards. As described earlier, the front cover of the notebook depicted three human figures of varying size and colours. Although the stated meaning is that of the three levels of education – primary, secondary and pre-university, the varying sizes and colours signified diversity in learning. The colourful spectrum and dispersion of white circles of varying sizes overlapping each other depicted in the presenter's name card also signified the value for diversity in learning (Photograph 5).



*Photograph 5: A presenter's name card*

The mixing of colours and overlapping white circles of varying sizes also signified the interactions of educators with different backgrounds and opinions. The white circles could also mean the characteristics of learning that is inclusive as synonymous to Teachers Network Learning Circles or CoP.

- *Human dimension in learning.*

  The values for reflection, pragmatism, practitioner friendly and diversity in learning also point to the value for human worth in learning experiences. The slogan 'Celebrating Learning' written in cursive form used for the symposium contained the meaning of including emotion in learning experiences. The symbols which were given by the organisers pertaining to the three human figures included purity and passion which are meanings that have close association with morals and emotions.

The data analyses gathered from the fieldnotes also revealed matters of power relations. Power relations within the lifeworld discourse are essentially more consistent with consensual power relationships in contrast to system discourse. Lifeworld discourses posed as a challenge, buffer and balance to system discourses. Besides the cultural values that are consistent with lifeworld discourses described earlier, other forms of how the lifeworld discourses materialised side-by-side with system discourses include being receptive to the idea of not strictly following to the programme sheet and not allowing academic discourse to colonise practitioner discourse by emphasising on oral sharing rather than publication.

The data analysis also showed that the lifeworld discourses were defended and protected by the school leader and staff members of the school in study who were present at the symposium. The school leader, who was one of the organising members, promoted the idea of having booths to present findings from Learning Circles. However, the extent of how lifeworld discourses could be protected from system discourses was limited to her staff. For example, I was informed that there were teachers who were present at the symposium not by personal choice. In one of my conversations with a beginning teacher whom I had taught before, I was told that he was made to come for the symposium. The conversation that I had with him revealed that he was disheartened with how the hierarchical nature of the system denies the voice and autonomy of teachers.

### 3. The North Zone Action Research Educational Symposium

The North Zone Action Research Educational Symposium was a one-day event held at a secondary school within the same cluster of schools that belonged to the school of study. However, the school of study did not participate in this symposium. Data analysis was made based on observations, artifact analyses and naturalistic interviews with participants. The data analysis of the North Zone Action Research Educational Symposium site revealed primarily what I termed as 'showcasing' discourse. Within this showcasing discourse, three themes were identified:

1. Manifestation of honour.
2. Hierarchy of honour.
3. Validity of honour.

### 1.  *Manisfestation of honour.*

The practice of honouring in order to show honour and recognition to individuals was evident in several ways. First, the conferment and passing on of symbolic value from the guest-of-honour who is the Director of Schools (DOS) to DDSN (Deputy Director Schools North) and presenters. The symbolic value was in the form of praises such as "I am excited at the very intent of the North Zone Action Research Educational Symposium", "I am pleased and very encouraged to note that" and "I would like to congratulate". The commendations made by the guest-of-honour in his speech about the achievements of the symposium such as the initiative and innovative efforts, magnitude of participants, presenters and involvement and the 400-paged publication, are manifestation of honour. The giving away of certificates and tokens of appreciation and recognition was another form of honouring. Another was the sharing or associating of honour made between the guest-of-honour and recipients by being able to stand on the same high platform and shake hands with the guest-of-honour, and take pictures together with the guest-of-honour and retain that honour via photographic images and certificates or tokens of appreciation and recognition.

Second, the conferment and passing on of symbolic value from the Keynote Speakers to DDSN and presenters. While the first Keynote Speaker concluded his speech by congratulating participants involved in the action research efforts, the second congratulated participants who were involved in organising the symposium. Third, the self-conferment made by the DDSN through her written speech "I am heartened to note

that the CLEAR symposium has drawn more than 60 papers for presentation, covering a representation from some 45 schools in the North Zone." Self-conferment was also evident by the claim that recognition is given by the presence of the guest-of-honour and the two keynote speakers from the National Institute of Education. Fourth, the conferment and passing on of symbolic value from DDSN to the guest-of-honour, Organising Committee and presenters through the DDSN's speech. Honour was also given to the two keynote speakers in the description of their CVs as part of the initial pages of the symposium. Fifth, the declaration of symbolic value by the Master of Ceremony placed on the DDSN, schools and individual presenters (in order of priority). Last, the conferment of symbolic value by the guest-of-honour to schools that participated in the symposium through paper presentation, and followed by conferment of presenters by attendees by virtue of being present in the presentations in the classrooms allocated for presentations.

The manifestation of honouring followed a consistent pattern. In this regard, the following strategies were identified:

- Declaring or proclaiming the honour.
  - *PowerPoint presentations, participants' file, processional procedures, and announcements made by the Master of Ceremony.*
- Describing the honour.
  - *Participants' file, speech made by DOS in written and verbal form, speech done by the Cluster Superintendent for N4 for DDSN, and speech by DDSN in writing.*
- Showcasing the honour.
  - *Participants' file, planned activities, and video presentation which showed the success stories of the action research endeavours.*
- Receiving the honour.
  - *Presence of DOS, presence of VIPS – cluster superintendents, speech by DOS in written and oral form, and receiving tokens of certificates from DOS for school members who have participated in action research projects.*

*2. **Hierarchical honouring.***

Honouring was understood as mainly given from people in high or higher hierarchical position to people in lower hierarchical positions. The task of the people receiving the honour was to acknowledge the high status of people in higher hierarchical position and the justification of the receiving honour. There was evidence, however, of peer honouring which took place during the presentations made in the classrooms in the afternoon. However, this honouring paled in comparison to the honour manifested in the presence of the guest-of-honour which took place in the morning. The immense difference was evidenced in the following ways –

- A large and spacious stage as opposed to small classrooms.
- Visual effects of lights, sounds, formal dress-codes and applause in contrast to basic classroom facilities.
- Large attendees at the hall as opposed to small attendees in the classrooms.
- Attendees are obligated to sit in the hall while attendees can come and go during classroom presentations, or choose not to attend the classroom presentations.
- High intellectual discourse in the morning as opposed to low to middle level intellectual discourse in the afternoon.
- The honouring that took place in the morning came first as opposed to honouring by peers in the afternoon. The morning activities were essentially spent on the speech given by the guest-of-honour, speech made by the DDSN through a Cluster Superintendent, video presentations, and awards given to teachers and schools who participated in the action research endeavours at the zonal level.

In summary, the hierarchical character of honouring had placed honour in the following order of degree of importance:

- Guest-of-Honour.
- DDSN.
- The symposium's Organising Committee.
- Cluster Superintendents who led and gave support to Cluster AR Champions.
- School principals who led and gave support to School AR Champions.
- School principals who gave support to their teachers in the project.

- Teacher presenters who were involved in the project.

### *3. Validity of the honour.*

The validity of the honour given to people was based on three main circumstances. First, the degree of magnitude of the outcomes such as the number of action research projects submitted, number of teachers involved, number of participants present in the symposium, number of pages in the publication of action research projects, and the quality of the publication of the 600-paged action research book. Second, the quality of recognition and comments given by people in higher positions such as the guest-of-honour and invited speakers. Third, the validity of the honour was also dependent of the hierarchical positions of the persons giving the honour. Hence, the honour given by the guest-of-honour is more valid than if it was given by a school principal.

Besides the predominance of the showcasing discourse, the data analysis also revealed the predominant cultural values that are in tandem to the system discourse, and hence the incongruence to the cultural values promoted at the Learning Circle site. The four cultural values that prominently surfaced are the value for efficiency, hierarchy, bureaucracy and technical-academic discourse. Since the values for hierarchy and bureaucracy, which are associated to the showing discourse, had been described above, I will elaborate on the value for efficiency and technical-academic discourse.

With respect to the value for efficiency, the symposium took place without any glitch in terms of timing and in accordance with the programme for the day, which was already quite detailed and well defined.

**Programme for the Day**

| 0800 to 0830 | Arrival of Participants and Guests (Registration & Breakfast) |
| 0830 to 0845 | Welcome Party to gather |
| 0855 to 0900 | Arrival of Guest-of-Honour – DOS |
| 0900 to 0905 | Guest-of-Honour and Welcome Party to be seated |
| 0905 to 0910 | Welcome Address (by DDSN) |
| 0910 to 0925 | G-O-H Address (by DOS) |
| 0925 to 0945 | Presentations of Tokens of Appreciation |
| 0945 to 1030 | Keynote Address 1 (by Assoc Prof Tan Oon Seng) |
| 1030 to 1100 | Tea Break |
| 1100 to 1145 | Keynote Address 2 (by AP Dr Ng Pak Tee) |
| 1145 to 1230 | Breakout Session 1 |
| 1230 to 1400 | Lunch @ the Canteen |
| 1400 to 1440 | Breakout Session 2 |
| 1445 to 1525 | Breakout Session 3 |
| 1530 | Thank You & Have a Nice Day |

*Photograph 6: Programme of the day*

The value for efficiency was also evident from the acronyms that could be found in words either spoken or written. Examples include DOS, G-O-H, CLEAR, TLLM, DDSN, NZ AR, N4 and VIPs. In addition, the value for efficiency was evident from the organised and succinct quality of the action research publication (CLEAR). It also contained an evaluation page which participants could respond to and tear off to give to the Organising Committee.

The value for technical-academic discourse was evident mainly from the artifact analysis on the CLEAR publication which was contained in the participants' plastic file. Other items included the programme booklet, presenters' name card and a blue pen. Based on the written texts and logo, action research was the privileged form of learning. The image of three male beginning teachers seated together with the backs facing book shelves engaged in a discussion with papers and written materials on a table signified a type of action research that involves much reading, serious intellectual discussion and in collaboration with other colleagues (Photograph 7). The green four-sided shapes overlapping each other signified learning that involves contributions from different people. The background of shades of green ranging from very light green to dark green from left to right signified growth of teachers. It also signified the technical and serious aspect of carrying out action research. The logo, located at the top front cover, depicting four human personnel connecting together in equal distance through the use of two

colours (green and purple) signified technical and systematic collaboration in action research endeavours.
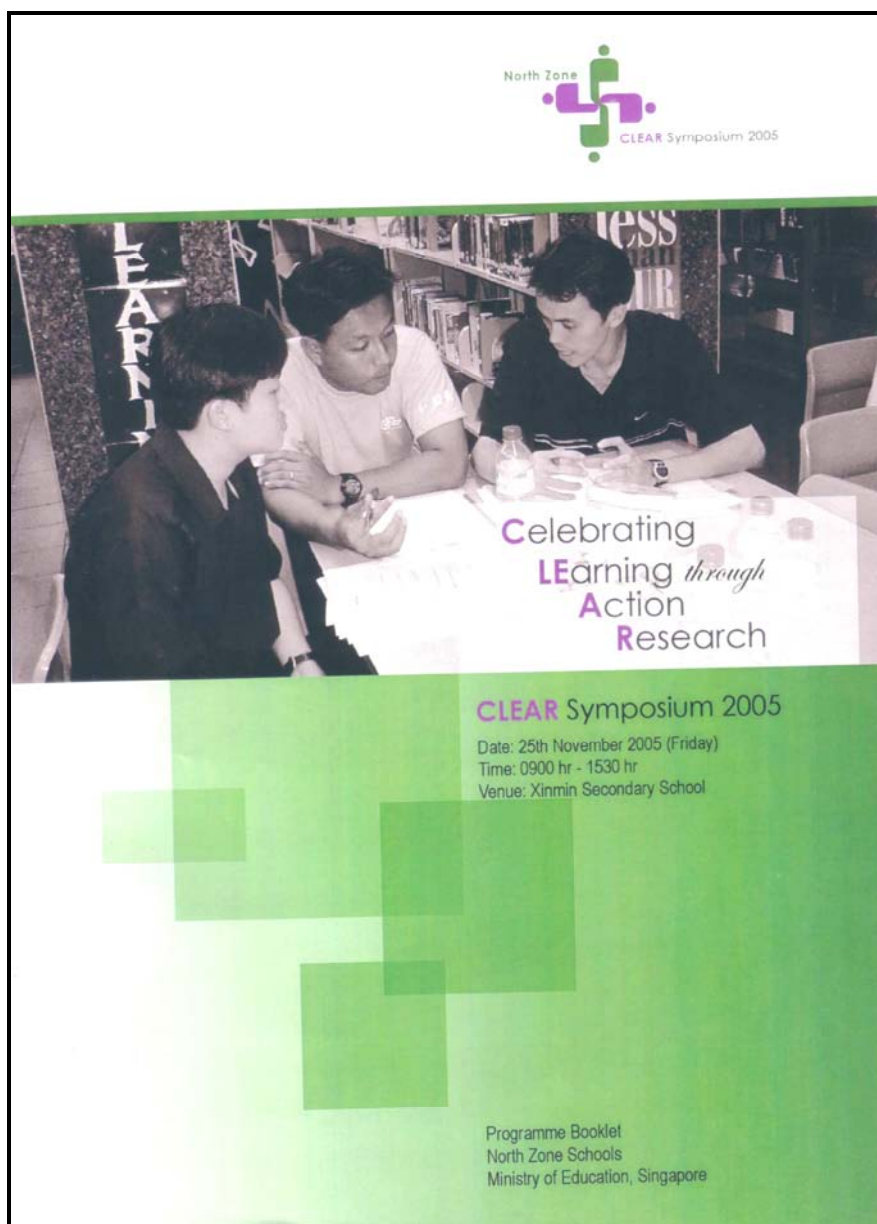


**_Photograph 7: Cover page of the CLEAR publication_**

The value for technical-academic discourse was also evident in the action research reports published in the CLEAR publication. The sample pages taken from the publication are quite representative of the other action research reports (Photographs 6 & 7). First, the language adopted by the writer is without the use of personal pronouns. Second, the writer also used language that belongs to quantitative research methodology such as 'Pre-test', 'Post-test', 'Experimental group', 'Control Group', 'Standard Deviation' and 'P Value'. Third, the action reports contained elements such as Title,

Abstract, Authors and References which are characteristics of publications common in academic discourse.

## A. Design

| Randomized groups pre-and-post-test design | | | |
|---|---|---|---|
| | Pre-test | Action | Post-test |
| R1 | O1 | X | O3 |
| R2 | O2 | -- | O4 |

R1 was the Experimental group subjected to the recommended strategies. The study was conducted over a period of six to eight months. A survey to find out about the confidence of the pupils in Reading Comprehension was conducted before the treatment and another was done upon the completion of the study.

## C. Measure

Both the Experimental and Control groups used the same comprehension passage for the pre and post-test. Ten questions related to the text were given to the pupils to answer. The list of comprehension questions was separated from the comprehension passage during the small group discussion. This was to deter pupils from copying answers from their friends or memorizing their answers. The post-test was carried out upon the completion of all group discussions and oral presentations. The Control Group would attempt the post-test after the teacher's explicit explanation of the text.

## D. Procedure

The design of the research involved three parts:
(1) Induction Phase Through Project Work
(2) Implementation Phase
(3) Evaluation Phase (Exploring With Different Text Types)

### Part (1): Induction Phase Through Project Work

This phase was essential to help pupils get accustomed to group dynamics so that they would be familiar with the recommended strategy. The Experimental Group was divided into small heterogeneous groups of threes or fours. Different newspaper articles on "Tsunami" were distributed to every group. Pupils in each group were assigned to read short paragraphs in the texts. They were given twenty minutes to read through their texts and use the questioning technique (5W, 1H) as a guiding framework to formulate their questions, and provide the answers. Teacher would model questioning techniques using the "DRTA" method on one of the texts, paragraph by paragraph, so that pupils learned to decode contextual cues and go beyond factual answers. During that time, no pupil was allowed to ask questions or answer the teacher's questions. Pupils were expected to take the inward journey (intrapersonal skill) to reflect on their questions and texts. Pupils were given time to rephrase the questions that they had written down earlier during their oral presentations and think critically about their answers. Next, members in the group took turns to present their questions and answers in a round-robin fashion. Finally, group members had to ask questions and clarify for complete understanding of their text before presenting it to another group that had no prior knowledge of their text. The latter had the liberty to ask questions during the presentation

NZ CLEAR Symposium 2005    3

*Photograph 8: A page from an action research report (p. 3)*

References

1http://www.funderstanding.com/brain_based_learning.cfm (Brain-basedlearning), 2http://www.funderstanding.com/learning_styles.cfm (Learning Styles)

3http://www.co-operation.org/pages/overviewpaper.html (AN OVERVIEW OF COOPERATIVE LEARNING)

Appendix A (Results)

Table 1: SA1 Exam Results (based on 7 questions)

| Percentage Passes of Experimental Group | 10% | 70% |
|---|---|---|
| Mean | 3.78 | 8.05 |
| Sd | 2.43 | 1.96 |
| Mode | 4 | 10.5 |
| Median | 3.5 | 8 |
| Q3 | 4.5 | 10 |
| Q1 | 2 | 6.25 |
| Q | 2.5 | 3.37 |
| MEAN DIFF | 4.27 | |
| P VALUE | 3.0142E-08 | |

| Percentage Passes of Control Group | 25% | 65% |
|---|---|---|
| Mean | 5.55 | 7.78 |
| sd | 2.67 | 2.27 |
| mode | 5 | 5.5 |
| median | 5 | 7.5 |
| Q3 | 6.38 | 9.5 |
| Q1 | 3.88 | 5.88 |
| Q | 2.5 | 3.62 |
| MEAN DIFF | 2.23 | |
| P VALUE | 3.4141E-05 | |

Table 2: Comparison of post-tests of Experimental and Control Group

| | Experimental Grp Post test | Control Grp Post test |
|---|---|---|
| Mean | 8.05 | 7.78 |
| Sd | 1.96 | 2.27 |
| Mode | 10.5 | 5.5 |
| Median | 8 | 7 |
| Q3 | 9.75 | 9.5 |
| Q1 | 6.38 | 5.88 |
| Q | 3.37 | 3.62 |
| MEAN DIFF | 0.27 | |
| P VALUE | 0.34 | |
| Effect Size | 0.12 | |

Table 3: Exploring with Different Text Types

NARRATIVE TEXT

| | Exp Grp Post test | Control Grp Post test |
|---|---|---|
| Mean | 9.46 | 9.89 |
| Sd | 4.34 | 4.13 |
| Mode | 9 | 14.5 |
| Median | 9 | 10.25 |
| Q3 | 11.88 | 13.5 |
| Q1 | 6 | 7.5 |
| Q | 5.88 | 6 |
| MEAN DIFF | 0.43 | |
| P VALUE | 0.40 | |
| Effect Size | 0.1 | |
| Coorelation | 0.005 | |

EXPOSITORY TEXT

| | Exp Grp Post test | Control Gp Post test |
|---|---|---|
| Mean | 7 | 6.11 |
| sd | 3.49 | 3.18 |
| mode | 6 | 5 |
| median | 6.75 | 5.5 |
| Q3 | 9.38 | 7.88 |
| Q1 | 5 | 4.5 |
| Q | 4.34 | 3.38 |
| MEAN DIFF | 0.89 | |
| P VALUE | 0.24 | |
| Effect Size | 0.28 | |
| coorelation | 0.026 | |

From the results of the correlation coefficient and effect size, the integrated language and cooperative learning has very little effect on the Reading Comprehension of the pupils.

NZ CLEAR Symposium 2005    7

*Photograph 9: A page from an action research report (p. 7)*

Finally, the data analysis indicated that the cultural value for efficiency, bureaucracy and technical-academic discourse all contributed to the showcasing discourse which is centrally about the value and practice of honouring along with its production and reproduction of hierarchical power relations.

## 4. The Teachers Network Learning Circle Facilitators' Training

The mediational discourse analysis of the Teachers Network Learning Circle Facilitators' Training site involved the interpretation of the discourses at this site using six concepts: mediated action; site of engagement; mediational means; practice and mediational means; nexus of practice; and community of practice. At the end of the mediational discourse analysis, seven key developmental features of social practices had emerged. The PDOs (Professional Development Officers) from Teachers Network who had planned and taken the lead in these social practices might or might not be conscious of the organisation or intent of these practices as defined by the analysis. These social practices include:

1. Eliciting 'buy in' and negotiation.
2. Building camaraderie.
3. Instructing, practising and learning concepts, principles, strategies and values of democratic learning and living.
4. Modeling concepts, principles and values of democratic learning and living.

### 1. Eliciting 'buy in' and negotiation.

The first task of the PDOs at Teachers Network was to put in place the practices that sought to elicit 'buy-in' from participants who were enrolled for the training session. The participants were mainly school teachers who were already facilitators or facilitators-to-be of Learning Circles in their respective schools. It could also be said that the practices of 'buy-in' involved negotiations between the PDOs and participants. The four practices of 'buy-in' included identification with participants; building of positive emotions; creating a safe and unthreatening environment; and building of group or collective spirit.

With respect to identification with participants, PDOs attempted to align themselves to teachers. Their dressing was not elaborate or formal. They encouraged participants to design their own name tags. This provided opportunities for participants to express their unique individual identities to others. In their talks, PDOs often used stories to help participants understand the concepts which they were trying to convey, but in doing so, they also identified with participants and helped participants to identify with them. Giving examples is another practice that PDOs had adopted in order to identify with participants and help participants identify with them. Both the telling of stories and

giving of examples helped in creating authentic human relations. In the telling of stories and giving of examples, the PDOs used words and phrases that were familiar to participants. Finally, although participants were seated in groups of about ten per table, a PDO was present as a member of the group. This too provided the opportunity for participants to feel that the PDOs were part of them, and they were a part of the PDOs. In terms of power relations, the practices of identifying with participants served to minimise hierarchical power relations and equalise power relations.

With respect to building positive emotions, PDOs exuded a positive, dynamic and collegial tone in their speech and body posture especially when they were taking the lead in addressing and instructing the whole cohort of participants. The atmosphere of the occasion was one of a mixture of celebration, excitement and relaxation. The room was occupied by round tables, a screen at the front and an area for participants to view teaching materials. Each table had several playing items such as rubber balls, marbles, a variety of colourful writing materials and straws. Sweets were also served on each table. Another practice that PDOs adopted to build positive emotions was using humour and teasing in their presentations. This too had contributed to help PDOs identify with participants, and participants identifying with the PDOs. In some occasions, PDOs made use of games to get participants engaged.

PDOs made attempts to create a safe and unthreatening environment for participants by not being judgemental to participants' verbal contributions instead accepting them enthusiastically. The presence of playing items, and food and drinks in the midst of discussions had also contributed in helping participants feel safe and secure. Another practice adopted was to allow participants to make clarifications of what they were presented with in small group discussion within their table setting. Here, participants could make queries or comments in the presence of a small number of people so that a PDO could respond and clarify them.

The final practice of helping participants to 'buy-in' to the concepts of Teachers Network Learning Circles was building group or collective spirit. Whilst the earlier practices helped to affirm participants' individual uniqueness and identities, the final practice was to help participants negotiate and make decisions at the collective or community level. For example, it was a common practice to provide individual participants to write down their opinions on small stick-on pads and later on to stick

them onto a flip chart for others to view (Photograph 10). In addition, this practice provided opportunities for participants to build onto each others' ideas and opinions. Assertions written on the stick-on pads were therefore amenable to contestation, development, change and agreement through consensus decision.
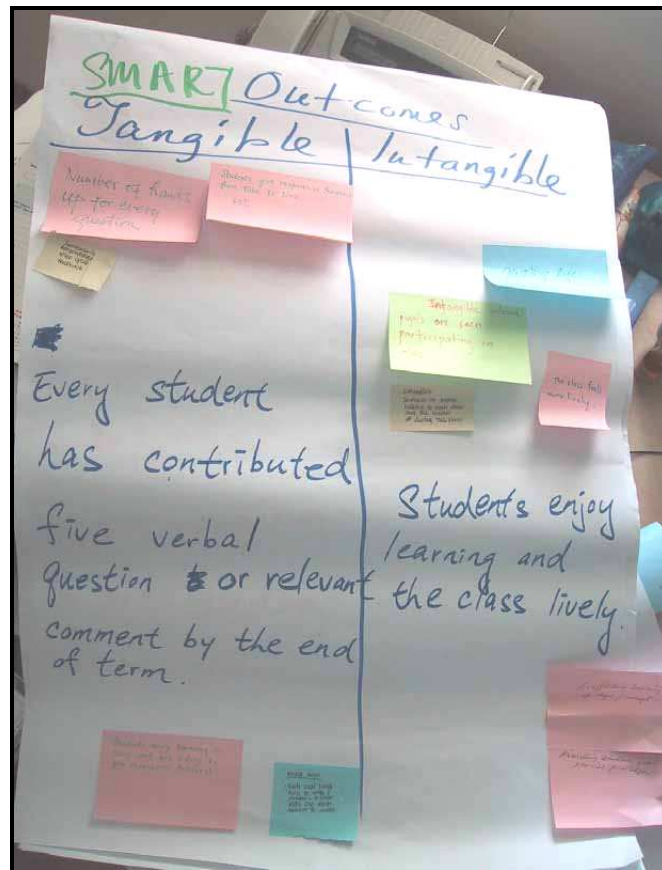


*__Photograph 10: Participants' contributions to the__*
*__notions of SMART Outcomes__*

Not insisting on how groups should engage in discussion in terms of physical posture was also another practice that had encouraged participants to build group identities and spirit. While some groups preferred to sit at their tables while one member wrote down their discussion, other groups preferred to stand around the flip chart to engage in discussions and allowing any participant to freely write down the group's discussion. Yet, there were other groups who preferred to sit down on the floor to do their discussions. What each PDO in each group had suggested is the idea of getting the agreement of all group members with regard to the decisions to be made.

The practices that had been described above all had helped participants to engage in collective decision-making not based on hierarchical relations, but rather on the notions of trust building and equalising power relations.

## 2. *Building camaraderie.*

The second task of the PDOs was to put in place the practices that sought to build camaraderie among participants. In this regard, the following social practices were identified at the site of engagement:

- Affirming self-identities in the presence of others in a safe and unthreatening social milieu.
- Building trust with each other and establishing equal power relations.
- Building shared experiences.
- Encouraging individual and collective initiative and active participation.
- Developing democratic participation.
- Affirming collective identities.

The affirmation of self-identities was accomplished in several ways. First, participants were encouraged to design their own name tags using colourful writing materials in the presence of others. Second, each participant was given equal opportunity to make assertions. In this regard, the use of stick-on pads to write down individual opinions had given participants the confidence to make assertions without feeling that others were watching and thus judging their assertions. In addition to this, participants were also given equal opportunity to give their comments during small group discussions. The PDOs in each table adopted a practice whereby all participants in the small group were asked to give comments whether one-by-one in a clockwise manner or random opportunity but making sure all participants were given a chance to give comments. The PDOs also adopted a relaxed and non-judgemental attitude evident from their body posture, facial expressions and tone of voice. These practices had created a safe and unthreatening social environment so as to increase the possibility for participants to affirm their self-identities.

Trust was built among participants in several ways. First, PDOs shared personal real life stories in the midst of their presentations and facilitation in small groups. The authenticity of this story had not only helped participants to develop trust towards the

PDOs, but also sent a message to participants that it is fine to share personal life stories in the training session even if these experiences are not success stories. The PDOs also expressed empathy when stories were told by participants. Second, PDOs provided opportunities for participants to make assertions that related directly to their teaching experiences. For example, the construction of AOC and RQ were primarily matters, concerns, issues and problems that affect their teaching. In this regard, real and authentic sharing of experiences was encouraged. The authenticity of these experiences shared in small group discussions had contributed to trust building among participants. Third, the use of humour and teasing by the PDOs had also contributed to the relaxed atmosphere. This was also an indication to participants that it is culturally acceptable to humour, jest and tease each other. Fourth, the PDOs treated participants as friends and colleagues as opposed to an expert and novice. In my conversations with some of the PDOs prior to the training session, I was told that PDOs should not see themselves as the expert simply because the participants that come for the facilitators' training are the genuine experts in their subject area. They only see themselves as expert in doing the facilitation. During the training session, the PDOs also demonstrated a collegial and collaborative posture in their interactions with each other. They not only called each other 'friends', but also the participants as friends. Fifth, the use of games had also contributed to the development of trust. Play activities had the effect of bringing down people's social defences. On the whole, the social practices that had contributed to building trust are related to equalising power relations where the attitude is one of "I'm okay, you're okay", "We are colleagues" or "We are Friends".

The above activities that built trust among participants had also contributed to shared experiences. When personal stories were shared by a PDO or participant, another participant would either affirm it by agreeing to it or share a personal life story that is similar. The activities that participants went through such as constructing the AOC and RQ provided opportunities for participants to share experiences. Constructing the AOC and RQ did not only involve making assertions, but also defending those assertions. The articulation of these assertions was sometimes affirmed and at times critiqued. The clarification of these assertions did bring about a sense of shared experience beyond the superficial level. Small group discussions that sought to clarify key concepts such as SMART had also contributed to developing shared experiences whereby participants clarified each others' understanding to these concepts. PDOs also used appropriate linguistic symbols to encourage shared experience. Examples include 'we', 'us', 'work

with you', 'partner with you', 'friends' and 'colleagues'. These linguistic symbols also privileged the value of agreement. Some of the common words were used by the PDOs included 'acknowledge' and 'affirm' in an attempt to demonstrate agreement of opinions. Lastly, playing games also had great potential in contributing to building shared experiences as participants could be themselves in such activities and yet still be accepted.

With respect to encouraging individual and collective initiative and active participation, PDOs demonstrated a high level of dynamism in the task that they did throughout the two-day training session. They embodied a positive spirit and excitement. This not only provided a model of dynamism for participants to emulate, but also established the privileged cultural value for active participation. The small group tasks that they were expected to accomplished further demanded a substantial degree of activism by virtue of time constraints in addition to being pragmatically relevant to participants' work lives.

In terms of democratic participation, the practice of generating maximum input of ideas from all participants in small group discussions had promoted the value for democratic participation. For example, the writing down of individual ideas on stick-on pads, followed by sticking them onto flip chart papers promoted the value that in democratic participation, all participants ought to be given the opportunity to contribute to the assertions of ideas. The practice of coming to consensus on a common idea or a set of common ideas also promoted the idea that among a diverse range of assertions, participants still have to come to an agreement to what constitute the collective assertions. This was done through questioning the assumptions that underlie them. This practice was prevalent because the concept of double-loop learning as espoused by Schön is a central aspect of reflection in Teachers Network Learning Circles. Taking into consideration the individual assertions that were written down on stick-on pads, the group had to pen down the group's eventual collective decision. The practice of taking-turns in terms of writing down notes of groups' assertions and leading in the facilitation of discussions had also contributed to the value for democratic participation. The practice of democratic participation is, however, not technically structured whereby a step-by-step set of actions lead to consensus. Instead, how group participants reached consensus varied from one group to another, and from one situation to another within the same group. In other words, there was no fixed way of entering into consensus.

What was most important is providing opportunities for group participants to freely make assertions and to freely come to consensus.

The affirmation of collective identities was attained in several ways. First, participants' collective ideas were affirmed, respected and celebrated. For example, ideas which were explored and decided on the flipchart were shared to all participants in the room. PDOs would then give positive comments that pertain to the relevance and uniqueness of the groups' ideas, and encourage all participants to give a round of applause to share in their successful discussion. Second, participants were encouraged to take group photographs in their respective small groups at the end of the training session. I observed that some participants requested that they could take back their artifacts that the group participants' had created. Another practice that was encouraged at the end of the facilitators' training is drinking fizzy drinks contained in wine bottles and taking down of participants' contact emails and numbers. The conception of building camaraderie within the site of engagement meant the constitution of two identities – individual identity in the midst of group identity.

A consistent practice that was observed at the site of engagement is the flow of conversations that involves divergent and convergent discussions (Diagram 13).



**DIVERGENT DISCUSSION**
- Brainstorm ideas.
- Non-judgmental.
- Accepts comments from everyone.
- Inclusive.

**CONVERGENT DISCUSSION**
- Select ideas.
- Decisions based on consensus to what is considered right with regard to what has been defined.
- All must agree.
- Inclusive.
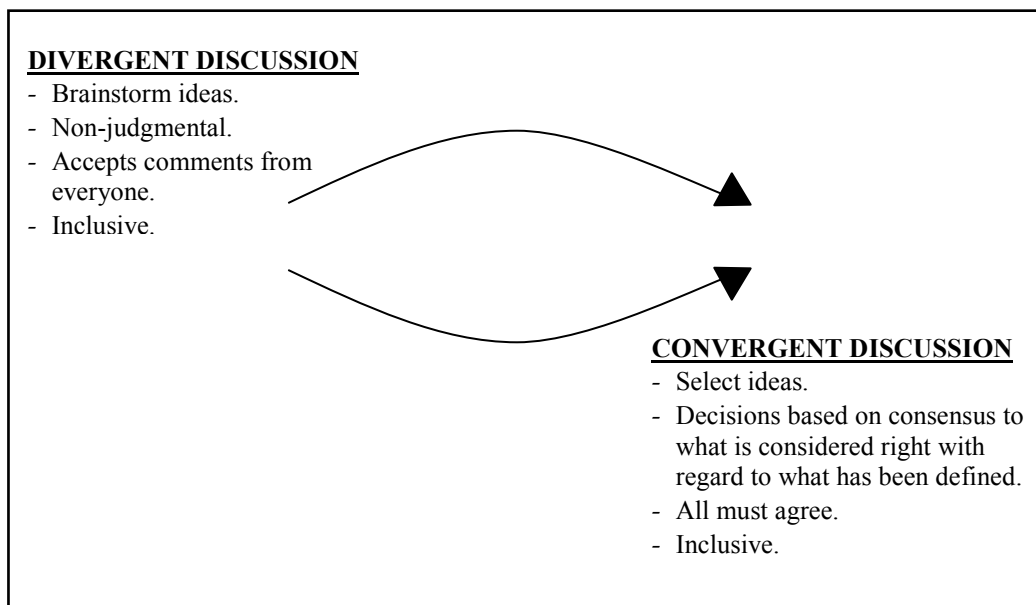
***Diagram 13: Divergent and convergent discussion in LC Facilitators' Training***

***3.   Instructing, practising and learning the concepts, principles, strategies and values of democratic learning and living.***

A third task that the PDOs had set in place during the training session was to specifically instruct participants on key concepts, principles, strategies and values of democratic learning and living. These key concepts, principles, strategies and values included technical terms such as critical friendship, 5 why, stop tape, AOC, RQ and RPAOR. The instructions given were direct as they were presented using PowerPoint slides and presented by the PDOs. These key concepts, principles, strategies and values are also not negotiable as they are the symbolic tools for participants to use to guide their actions and practices in the discussions during Learning Circles.

Although direct instructions were given using PowerPoint presentation, these key concepts, principles, strategies and values were revisited a few times in the course of the training sessions in order to clarify, affirm and elaborate on the terms of these key concepts. The re-visitations were, however, not predetermined by the PDOs. They were surfaced in the course of participants attempting to understand them at both the conceptual and practical levels. The following actions were common in the course of apprehending the key concepts, principles, strategies and value of Teachers Network Learning Circles:

- Direct instruction of a key concept such as AOC given by a PDO to all participants. Examples may be given by the PDO to help participants in their understanding of the AOC.
- In small group discussions, participants were tasked to come up with an AOC through exploring ideas and converging on ideas through consensual decision-making. In the course of constructing the AOC, questions could be raised by participants to clarify the concepts and related concepts of the AOC. The PDO present in the group would take the opportunity to respond to questions and thus clarify the concept of AOC further. The PDOs present in the small groups could also resort to demonstration if they deemed necessary. However, the key task was to provide opportunities for participants to put these concepts, principles, strategies and values into practice.
- After the time for small group discussions on the AOC had ended, a PDO would ask various groups to present their AOC to the rest of the participants. The PDO

would affirm or pose questions to make further clarifications. At this point of time, the concept of AOC would be revisited, clarified and elaborated.

The above practice of direct instruction, followed by small group discussion and whole group discussions was used for all other key concepts that pertain to Learning Circles.

It is also worth noting that these small group discussions had also provided participants time to explore, try out and question the concepts, principles, strategies and values of democratic learning and living. Opportunities were therefore provided for:

- participants to facilitate with support and without the judgmental attitude of others.
- the promotion of democratic concepts, principles, strategies and values.
- support to grasp the concepts, principles, strategies and values of democratic living and learning through demonstration, collaboration, feedback and encouragement.
- groups to articulate, question and share their experiences.
- reinforcements and moderation of shared experiences.

However, some key strategies and values such as 'brainstorming', 'suspending judgement', 'sounding board', 'RTR – Respect, Trust and Rapport' were introduced but did not have to go through the above practice. They were, however, reiterated or revisited by the PDOs when situations called for reminders or clarification. All in all, the social practices described so far served to systematically provide participants with both the symbolic and material tools to help participants become competent Learning Circle facilitators.

### 4. *Modeling concepts, principles and values of democratic learning and living.*
In the midst of providing the learning opportunities for participants to internalise democratic learning and living, PDOs modeled democratic practices in the midst of their facilitation of activities. They did this by the following:

- Giving support to fellow PDO colleagues.
- Giving honour to PDO colleagues and participants.
- Using the words 'we' and 'us' in their communication with each other.

- Acting as standby for fellow colleagues.

- Not being intimidating to fellow colleagues.

- Accepting and celebrating that each of their colleagues is important by virtue of having his or her unique strengths and personality.

- Modeling democratic living.

- Putting into practice the spirit of camaraderie such as taking turns during facilitation.

- Celebrating the successes of their colleagues.

With respect to celebrating the successes, the PDOs had also encouraged opportunities for celebration when groups were able to complete group tasks. These could take the form of the following:

- Applauding when the group has completed tasks together.

- Emphasising group success and not so much on individual success.

- Having fun in the celebration.

- Playing music and making noise.

- Opening up of champagne (grape juice) bottles.

- Taking group photos.

All the above had helped participants to see the match between the language and action of democratic concepts, principles and values and actions and practices of democratic learning and living.

Based on the analysis, the cultural values at the Learning Circle Facilitators' Training site are totally congruent with the cultural values of the Learning Circle site. The PDOs were successful at using mediational tools comprising symbolic and material tools to convey the values of Teachers Network Learning Circles. While the material tools include PowerPoint slides, stick-on pads, flip charts, experiential practices and videos, the semiotic tools include:

- Language.
- Facial expressions.
- Hand signs.

- Body posture.
- Pictures and words.
- Acronyms.
- Conceptual maps.
- Dress.
- Normative rules.

The type of teacher identity that the PDOs had presented was that include the following (not in order of priority):

- Collegial.
- Critical friends.
- Reflective practitioners.
- Lifelong learners.
- Inquirers.
- Change agents.

In view of the analysis that was carried out at the Learning Circle site, the community of practice at the Learning Circle Facilitators' Training site has attained technologisation of nexus of practice. While nexus of practice means the intersection or linkages of multiple practices, the technologisation of nexus of practice means that the nexus of practice becomes regular enough that they can in themselves be recognised and used as mediational mean in taking other actions within fixed and bounded social groups. Surhana, who had undergone the same training session, would have experienced and internalised the key concepts, principles, strategies and values of Teachers Network Learning Circle. She would have internalised the nexus of practice which were used at the Learning Circle site. The practices at the Learning Circle Facilitators' Training site thus had influenced the practices of the Learning Circle site at the school of the research study.

**5. Teachers Network**

In total, only two visits, and thus two fieldnotes, were made at Teachers Network (Sample: Appendix E). For the first visit, I joined in the activities of Learning Circle's facilitators who were at Teachers Network to attend LC Facilitators Booster Workshops. Following this, I visited the main office space where the PDOs worked. For the first visit, observations were made on how PDOs conducted the workshops, conversations with PDOs took place, and artifact analysis was done on several items such as the Teachers Network participant file and its contents, office physical set up, noticeboards and office decorations. For the second visit, artifact analysis was the primary research tool to gather data as I visited the Teachers Network library. Due to time constraints I was not able to immerse myself to understand the social practices of PDOs. This task was made more difficult as most PDOs were out in schools at the time of my visits.

The analysis of the Teachers Network site revealed primarily the discourse of human learning. All the data collected and analysed contained an element of learning. Within this discourse, people are perceived and treated as the end to all learning endeavours. In other words, to be a human being is the primary objective of learning. Learning is considered as an aspect of and a means to becoming a human being. As becoming a human being is a lifelong endeavour, learning too ought to adopt a continuous and lifelong character. Within the discourse of human learning, four themes were identified. These discourse strands signified the values that the staff members at Teachers Network cherish.

*1. The pursuit of the human worth through learning*

What is prominent in the analysis of Teachers Network site is the pursuit of the human worth and human development in all aspects of being human. This being the objective, learning then is a means to an end, which is the development of the human being. Learning is perceived as an integral aspect of being a human being. In other words, learning is contemporaneous with being a human being. The goal of work is thus also the development of human beings. The privileged discourse is that both learning and working are considered inseparable human activities. People therefore are placed not only at the centre of learning, but also at the centre of working.

The reading of the vision and mission statements of Teachers Network which could be found on the back page of the front cover of the Teachers Network participant file

indicated that the primary focus of Teachers Network is essentially about teachers, and teachers who take their own initiative to learn together in order to do excellent and fulfilling professional practice.

### Our Vision

*To build a fraternity of reflective teachers dedicated to excellent practice through a network of support, professional exchange and learning.*

### Our Mission

*To serve as a catalyst and support for teacher-initiated development through sharing, collaboration and reflection leading to self-mastery, excellent practice and fulfillment.*

The final outcome is essentially about the development of the human beings. The back of the front cover of the Teachers Network participant file contained information on the core values of Teachers Network written in an acrostic VOICE: Valuing people, Open to learning, Integrity, Commitment and Excellence. What is signified here is that the first step in attaining excellence at work is to value the worth of the person. The second is to value learning. The value for learning is evident from the slogan 'Growing Together' that is located under the text 'TEACHERS NETWORK' on the front cover of the participant file. Both learning and human are therefore closely associated. A quote from Socrates, "An unreflected life is not worth living" which is found at the bottom of the feedback form also signified the close association between living and learning. The feedback form is one of the items of the participant file.

Another content item found in the file is the Teachers Network brochure. The first meaning that I had interpreted from it is that Teachers Network has multiple and diverse activities for teachers. In total ten activities were mentioned covering areas of new work experiences, reading materials, counseling, group learning, life improvements, learning through workshops, publication, conferences and programmes that meet the needs of teachers at different career phases. In addition, all these activities have one common purpose – that is, the development of teachers. The photographs that were printed on the brochure also suggest the value of human lives, and teachers are highly valued people (Photograph 11).
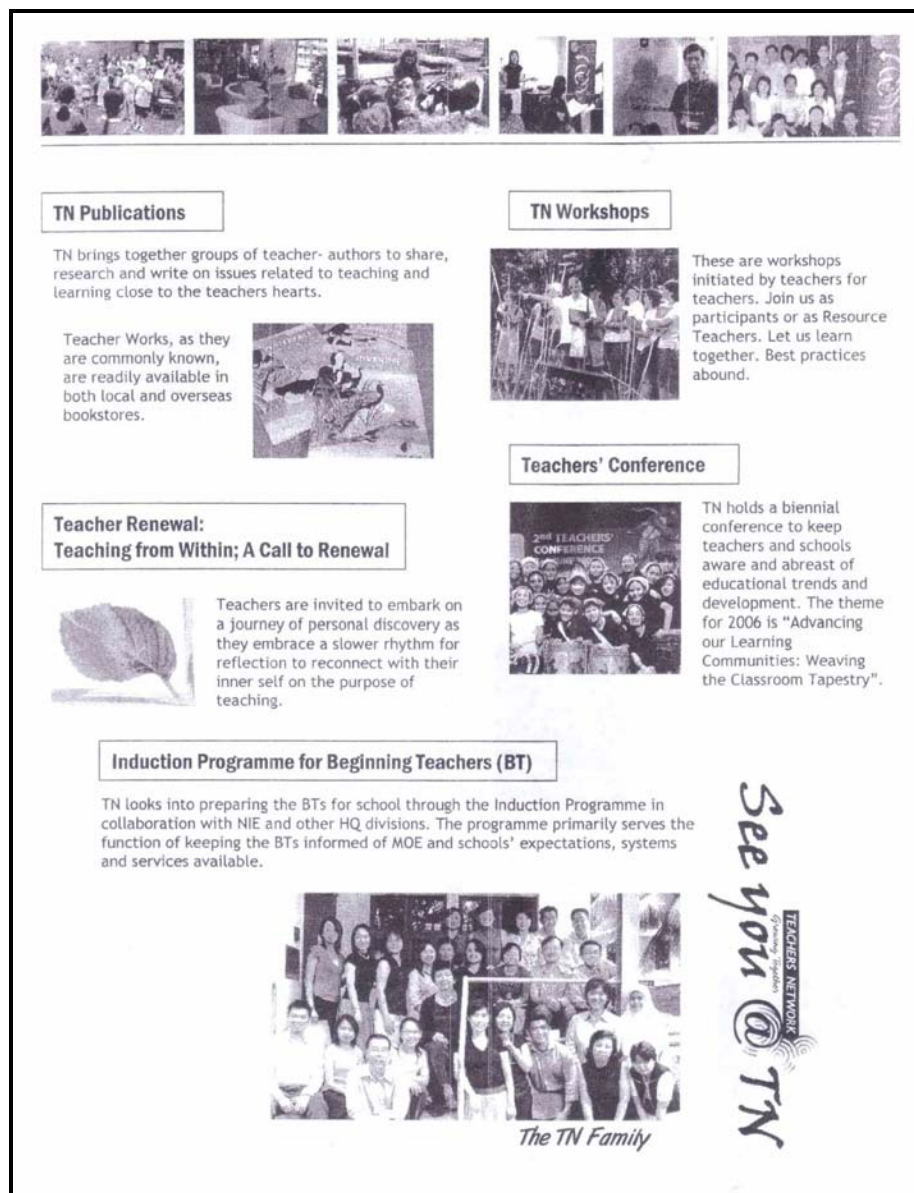
*__Photograph 11: The back page of the Teachers Network brochure__*

The items in the office space of Teachers Network also contained meanings that value the human worth through learning. The photographs that were framed on the walls all speak of the importance of human values. For example, the photograph of a lighthouse with the title 'VISION' and the quote "The only way to discover the limits of one's life is to go beyond them into the impossible" signifies the value of having vision in one's life. The photograph of a man on a hang-glider with the title "IMAGINATION" and the quote "The man who has imagination has wings" signifies the value of having imagination. The photograph of a mountain climber with the title "Excellence" and the quote "Climb as high as you can dream" signifies the value of having a dream (Photograph 12). All these meanings are all related to being a human being and importance of the human worth.
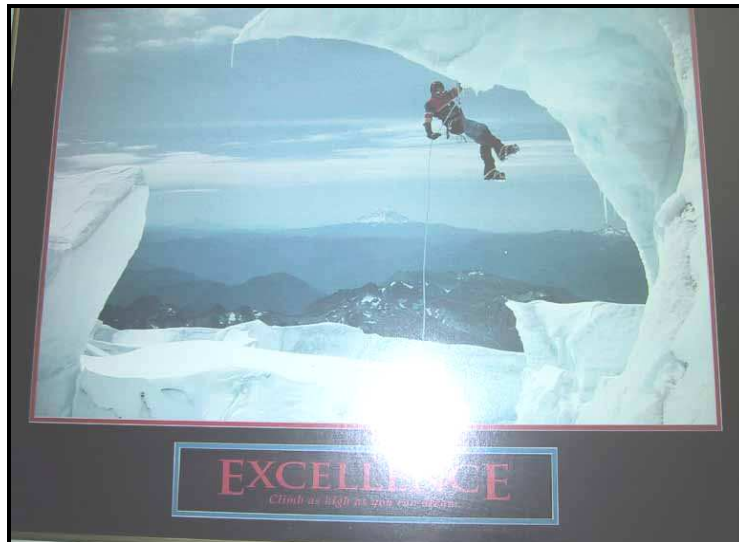
***Photograph 12: A photograph on the office wall of Teachers Network (Excellence)***

What is also signified is that humans are essentially with values. The photograph that depicts this best is the one that says "It's more important to DO THE **RIGHT** THINGS than to do things right." (Photograph 13)
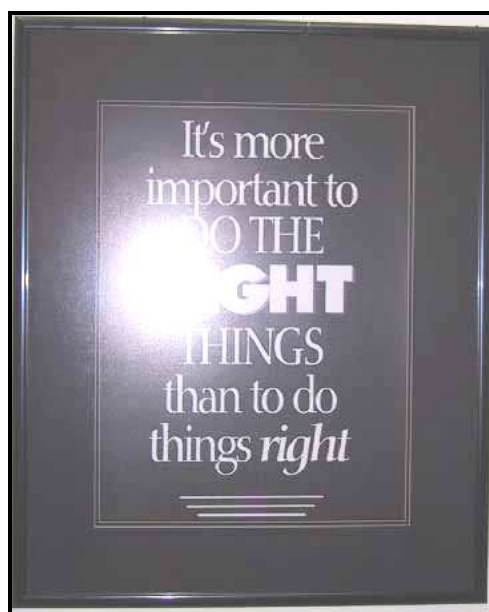


***Photograph 13: A photograph on the office wall***
***of Teachers Network (The Right Thing)***

What is signified in this artifact is the importance of both human values and productivity, but the former is of greater importance than the latter. In combination with the artifact analysis of the photographs mentioned earlier, human values are perceived

as influencing and determining human behaviour. For example, the value of imagination contributes to the ability to fly. The value of excellence contributes to the ability to climb greater heights.

## 2. *Learning as a social activity.*

Another prominent theme that had emerged in the analysis is conceptualising learning as a social activity insofar as it involves collective human interdependent and collective interactions. An element of social activity in learning is the notion of sharing. In my participation with facilitators at one of the workshops, I observed that the seating arrangement for participants was semi-circular where participants could face each other. The importance of being able to see each other face-to-face is also present in Learning Circles. This importance is also held by the school principal of the school of study. In my attendance at a senior management meeting, the school principal made sure that all members of the senior management were seated in a manner that allowed all to see each other face-to-face. She also explicitly told me that she believes in this practice.

The way participants were seated not only privileged the value of sharing each others' thoughts and feelings, but also provided the material means to which participants could share with each other their thoughts and feelings that pertain to the topic of the day. The face-to-face character of the seating arrangement had also provided participants with the opportunities to have eye contact with each other and encouraged genuine listening from each other. When one participant makes an assertion he or she is in a better position to know if his or her assertion is heard and understood, or not simply by watching the facial and body expressions of others.

The value of sharing each others' thoughts and feelings was also encouraged by the two PDOs who were conducting the workshop. They too adopted the posture of listening to participants' assertions, and responded to these assertions appropriately. The two PDOs were role models of sharing each others' thoughts and feelings to each other in the midst of their facilitation. They had in fact role models of all characteristics and values that relate to the learning that Teachers Network espouses.

Another social element of learning that had surfaced in the analysis is the importance of building individual and group identity. When participants arrived at the venue for the workshop, they received a blank sticky name card and were encouraged to write down

their own name on it. At the start of the workshop, the PDOs gave brief background information about themselves to participants. Each participant was then encouraged to introduce themselves to each other just as modeled by the PDOs. This practice had in effect brought about an affirmation of their individual identities in the presence of others. They were then encouraged to consider their intentions for attending the workshop, and to write these down on stick-on pads which were collected and stuck to a flipchart. This practice too had contributed to the affirmation of individual identities in the presence of others. The objectives of the workshop were then flashed on the screen. In my interpretation, this action spoke of the value for the formation of collective identities. Another practice that was adopted by the PDOs that had encouraged the development of individual and collective identities is encouraging as many responses by individual participants in the discussions and coming to a collective agreement on the concepts which were discussed. Another way of building collective identities was to show that ideas generated from one participant could be built upon by other another, and yet another. In this way also, participants learnt to bond one with another.

The development of individual and collective identities, however, required participants to feel safe and secure. At the very start of the workshop, the PDOs explicitly made clear to participants that they were not the expert in terms of the teaching of the subjects. They rather considered themselves only to be expert in terms of facilitation. In this way, PDOs showed their respect to the participants as fellow professionals in education. In my interpretation, this was a practice that contributed to power equalisation – in other words, to reduce the tendency to perceive hierarchical relations. Moreover, the PDOs put into the practice of equal power relations among themselves as they take-turns to lead in the facilitation of the workshop. Also, they had also encouraged participants to give a try at facilitating a small group discussion instead of providing a demonstration first. The trust that PDOs showed to participants also meant that they were really treated as equals.

The artifact analysis of PDOs meeting room also indicated the value of learning integrating with social activities. With regard to learning, the items that signified the value for learning include the presence of the following items: LCD screen, desktop, triangle movable tables, flip chart stand and whiteboard. The items that signified the value for social interactions of people include a colourful sofa with soft toys, bottles of snacks and mineral water bottles on the table, a coffee corner and toys such rubber balls

at the corner of the room. The value of learning that is integrated with social activities was also evident in the artifact analysis of Teachers Network library. The common seating arrangements was circular with chairs and tables that looked more like home furniture that are commonly found in the living or dining room (Photograph 14)



*Photograph 14: Seating arrangements at Teachers Network Library*

In addition, visitors could have access to the coffee corner, writing materials, musical corner and a mini-fountain. Within the libraries there are small special rooms such as the Icreate Corner which contained items that encourage visitors to learn and socialise with each other. These items include round tables, movable round stools, games, charts, teaching resource materials and flip chart stand (Photograph 15).



*Photograph 15: An Icreate Corner at Teachers Network Library*

### 3. Learning as a semiotic activity.

A prominent theme that had surfaced in the analysis is the idea that learning is a semiotic activity whereby learners are enabled or constrained to 'name' their experiences in the form of linguistic representations. For instance, when participants during the booster facilitators' workshop were encouraged to reflect on their expectations of their learning experiences during the workshop in written form on stick-on pads, they were essentially 'naming' their past experiences of issues and problems that they had faced prior to the workshop that pertain to facilitation. At the same time, they were also naming possible future experiences that would take place during the workshop.

Learning as a semiotic activity would also suggest that learners are engaged in communicative discussion with other learners. For instance, as PDOs attempted to help participants understand the concepts of asking good questions during the facilitation of Learning Circle's discussions, they made use of linguistic signs to convey these concepts. In the attempt to understand these linguistic signs, participants raised questions in order to clarify these concepts. The value of building on each others' ideas or concepts is also synonymous with a semiotic activity. Ideas communicated between participants of the workshop are essentially conveyed through linguistic signs. The building of ideas is therefore synonymous to the co-construction of linguistic signs.

### 4. Learning as a pragmatic activity.

Another theme that had emerged in the analysis is the notion of learning as being integrated with the practical needs of participants. For example, during the booster facilitators' workshop, the two PDOs made use of demonstration and practical exercise to help participants observe and experience how to ask good questions during Learning Circle's facilitation. This was followed by feedback by participants and opportunities for queries from participants that pertain to the demonstration or practical exercise. This practice of demonstration followed by clarification is common in the two-day Learning Circles' Facilitators' training session described earlier.

The value for integration of learning with the practical needs of participants was also evident at the start of the workshop when the PDOs encouraged participants to write down their expectations for the booster workshop. This signified the priority given to meeting the practical needs of the participants. The value for integration of learning

with the practical needs of participants could further be evident from the vision and mission statements of Teachers Network. In my analysis of these statements, the following diagram (Diagram 14) could be used to illustrate my interpretation of these statements:

```
              ┌──────────────┐
              │    SELF-     │
              │  FULFILMENT  │
              └──────────────┘
                     ⬆
              ┌──────────────┐
              │  EXCELLENT   │
              │   PRACTICE   │
              └──────────────┘
                     ⬆
              ┌──────────────┐
              │    SELF-     │
              │   MASTERY    │
              └──────────────┘
            ⬈        ⬆        ⬉
  ┌──────────┬──────────────┬────────────┐
  │ Sharing  │ Collaboration │ Reflection │
  ├──────────┴──────────────┴────────────┤
  │    TEACHER-INITIATED DEVELOPMENT      │
  └───────────────────────────────────────┘
                     ⬆
  ┌──────────┬──────────────┬────────────┐
  │ Network  │ Professional │  Learning  │
  │ Support  │   Exchange   │            │
  ├──────────┴──────────────┴────────────┤
  │      TN AS CATALYST AND SUPPORT       │
  └───────────────────────────────────────┘
```
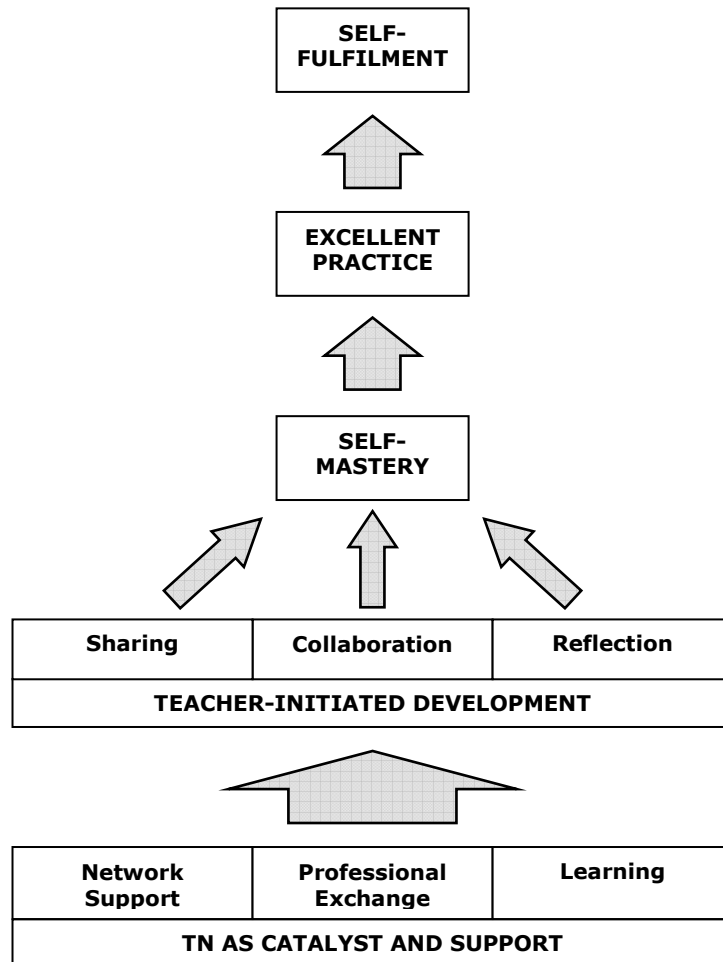
***Diagram 14: A concept map of Teachers Network***
***vision and mission statements***

The learning that takes place within the purview of Teachers Network seeks to promote a type of learning involving reflection, sharing and collaboration of teachers so as to develop each teacher to gain a sense of fulfillment through self-mastery and excellent professional practice. In other words, learning in the form of reflection, sharing and collaboration essentially seeks to eventually serve the practical needs of teachers to experience fulfillment through excellent professional teaching practices. Finally, a slightly hidden practical need of teachers had also surfaced in the analysis – that is, the need for teacher emancipation. The phrase "for teacher-initiated development" in the

mission statement signified the meaning of teacher autonomy but within the scope of learning or professional development.

Besides the discourse of human learning, the analysis of the Teachers Network site also revealed a tension between system and lifeworld discourses. Teachers Network is not an autonomous organisation as it belongs to a unit within the Training and Development Division, which is one of 12 divisions in the civil service of the Ministry of Education. In my interviews with previous staff members of Teachers Network, I was told that the first deputy-director of Teachers Network intentionally wanted the organisational structure to be flat – that is, the deputy-director followed by the PDOs, in contrast to that which is common in schools. The common hierarchical structure in schools would take on the following structure: the principal, vice-principal, heads of department, level heads or subject heads, and teachers. In my conversation with the first deputy-director of Teachers Network, the notion of flat organisation structure is more related to how staff members work than the organisational positions. At Teachers Network, the value for symmetrical power relations is pursued just as mirrored in Learning Circles where shared leadership is pursued and practised. Hence, the work relations at Teachers Network had greater tendency to promote symmetrical power relations in contrast to the overall culture of TDD where roles and responsibilities are more fixed.

Although PDOs at Teachers Network had equal power status, they did practise the notion of co-ordinator or team in-charge for certain programmes or projects. But these positions are not meant for command and control purpose. Rather, these positions are more facilitative roles. Furthermore, these positions are rotated among PDOs from time to time in the spirit of turn-taking. Project-based facilitative roles are also transitory in nature. Hence, the concept of leadership is not fixed. The staff members of Teachers Network could therefore be said to share the common value of shared leadership in the broad sense of the term. In terms of power relations, Teachers Network can thus be said to privilege the value for power symmetry. All these characteristics are atypical of bureaucratic organisations.

In my artifact analysis of office space items at the PDOs' work spaces, I stumbled upon a long whiteboard that gives an overall strategy for the Training & Development Division (TDD). The TDD's mission and vision statements are as follow (Photographs 16 & 17):

*Mission*

To enhance the capacity and capability of the education service.

*Vision*

A well-qualified, competent and committed teaching force dedicated to continuous learning and excellent practice.
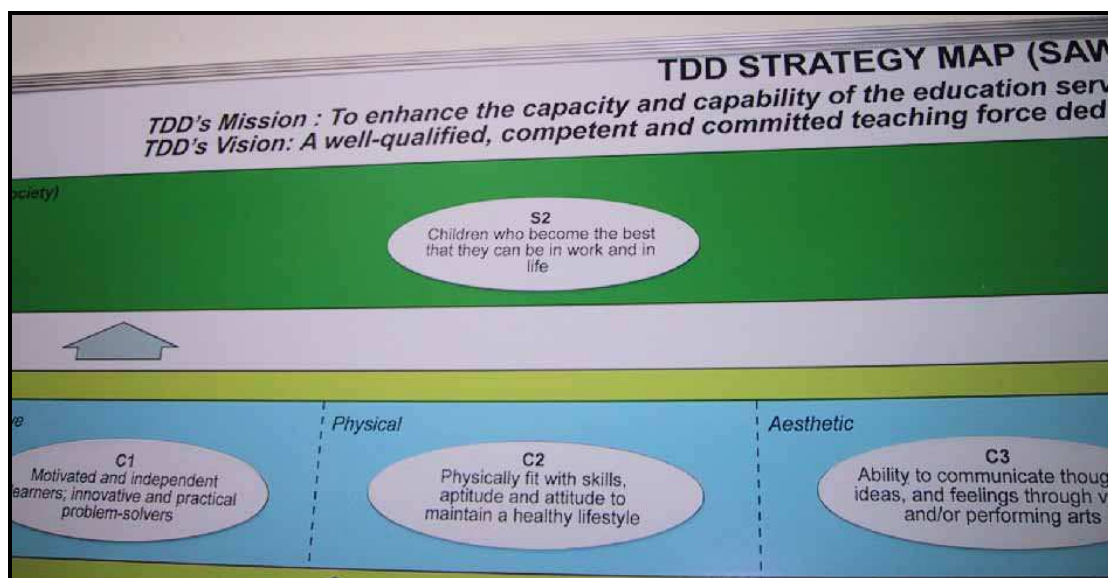


*Photograph 16: A TDD strategy map (A)*

The meanings that can be interpreted from the TDD mission and vision statements contrast that of the Teachers Network. First, the language that is used in these statements is technical and strategic such as the use of the words 'enhance', 'capacity' and 'capability'. The language used is also bureaucratic. For example, the phrase "A well-qualified, competent and committed teaching force" signified a more detached relationship with teachers. Although the vision statement does contain the element of learning, what is missing is the exact nature of learning. This and the way the strategy map is structured illustrates a systematic approach to managing teacher professional development signify the value for control in how the technical processes of the organisation ought to be done. Moreover, the way different aspects of professional development could be compartmentalised signifies not only the need for control, but also how teachers' professional development is a technical process that can be broken down instead of perceiving them as fluidly coherent. The use of numbers to designate these aspects further indicates the value for technical control.
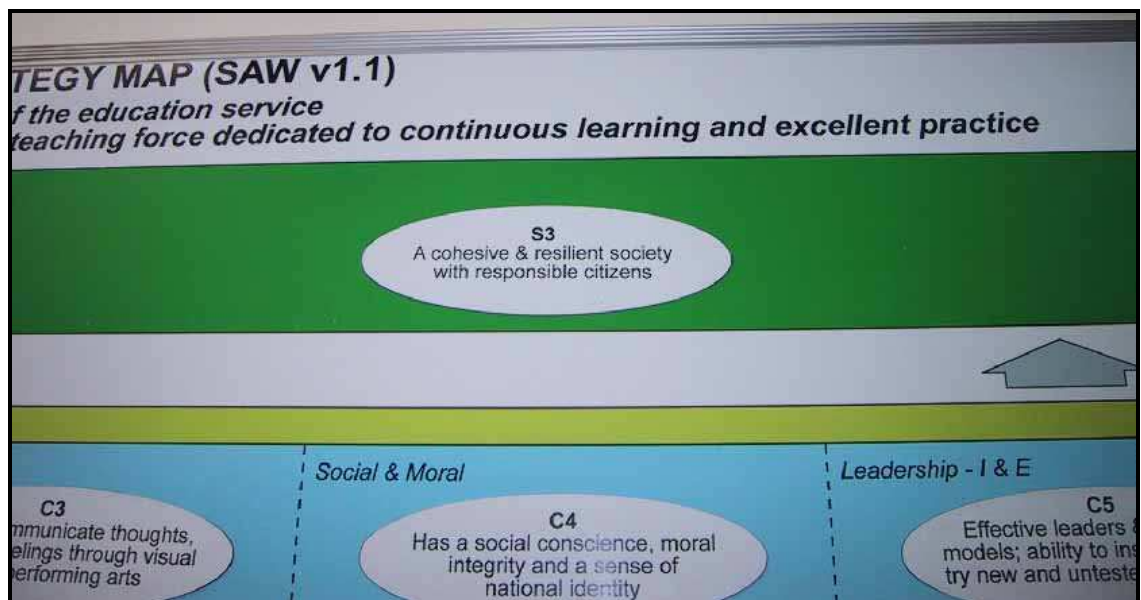
*__Photograph 17: A TDD strategy map (B)__*

In terms of organisational structure, the TDD had tendency to adopt a more hierarchical structure than Teachers Network by virtue of its bigger number of staff members than Teachers Network. While Teachers Network had about 22 staff members, TDD had about 100 staff members. The need to adopt a greater number of layers to the structure was therefore understandable. In this regard, Teachers Network had the advantage of being small which had helped it to adopt a flatter organisation structure. The nature of facilitating Learning Circles is also one that requires a flat organisation structure.

The existence of the TDD's Strategy Map in the office space of PDOs and the fact the Teachers Network is a unit that belongs to TDD, however, does suggest that Teachers Network must meet the needs of the TDD's mission and vision statements. This perhaps explained why the mission statement of Teachers Network included the use of phrases such as 'excellent practice'.

In my interviews with two pioneers of Teachers Network, although the Teachers Network is located within the Training and Development Division of the Ministry of Education, it had a degree of autonomy. First, the historical establishment of Teachers Network was supported by the then Permanent Secretary of Education who has the highest power next to the minister of education. Second, it was able to craft its own vision and mission, and set up its own administrative framework quite independently from the Training and Development Division. Third, its autonomy is also validated by the existence of an autonomous logo which is not seen in other units within other

divisions of the ministry. Its autonomy and activist nature of its vision and mission are said to be institutionalised. Fifth, the discourse of Teachers Network fits well with emerging discourses that the Ministry of Education has been promoting since the latter half of the 1990s especially the 'Thinking Schools, Learning Nation' national slogan.

In my interviews of the second generation of staff members of Teachers Network especially the two co-ordinators for Learning Circles, I was told that in order to remain sustainable Teachers Network has to meet the needs of the system – that is, the professional development of teachers in order to change pedagogy, and thus student learning – but as perceived by school principals. The activist discourse of Teachers Network had over the years been challenged especially with regard to voluntary participation. The Teachers Network Learning Circle booklet has now left out the principle of voluntary participation in its pages because it may contradict with schools' need for efficiency. The system requires schools to embark on professional development efforts without much deliberation and debate.

In my interviews with some of the first and second generation staff members of Teachers Network, the need to downplay the principle of voluntary participation is a necessity in order to help the discourses of Teachers Network Learning Circles to be introduced and used by teachers and school leaders. The justification is that when teachers give a try at Learning Circles, even in situations where the principle of voluntary participation cannot materialise in full, they will taste the benefit of Learning Circles. This will translate to future disposition towards embarking on Learning Circles without being told by superiors. This strategy benefits both the system and lifeworld needs. The former requires change to be initiated and implemented in an efficient manner. The latter requires change to be initiated and implemented taking into account of human needs of autonomy and collectivity through inter-subjective communicative action. The PDOs' role is thus central in fulfilling and balancing the needs of school teachers and principals. The achievement of this balance and democratic deal is the sixth reason why Teachers Network is able to stay relevant to the needs of both teachers and principals, and thus achieving sustainability.

The table below seeks to summarise the contrasting discourses between the Teachers Network and TDD sites.

| Teachers Network | Training and Development Division |
|---|---|
| • Spirit of flat organisational structure.<br>• Shared fluid roles.<br>• Shared leadership roles.<br>• Project oriented.<br>• Informal collegial roles.<br>• Discourses: collective initiation/work, critical friends, shared knowledge, commitment, collegiality, collaboration, reflective practice and fulfillment.<br>• Learning focus.<br>• Activist orientation.<br>• Privileging symmetrical power relations. | • Hierarchical organisational structure.<br>• Specialised fixed roles.<br>• Fixed leadership roles.<br>• Bureaucratic oriented.<br>• Formal official managerial roles.<br>• Discourses: technical, efficiency, systemic, accountability, measurability and control.<br><br><br>• Administrative focus.<br>• Conformist orientation.<br>• Privileging asymmetrical power relations. |

*Table 3:  Discourses of Teachers Network & Training and Development Division*

On the whole, the discourses at the Teachers Network site are congruent with the discourses of the Learning Circle site.

## 6. The Enhanced Performance Management System (EPMS) Kit

The Enhanced Performance Management System, which is short-versioned as the EPMS, is an initiative by the Singapore Ministry of Education (MOE) officially launched in 2001 in the midst of a comprehensive gamut of initiatives which were progressively introduced during Teo Chee Hean's era when he was given the responsibility as the education minister from 1997 to 2003. The EPMS falls under the ambit of MOE's Personnel Division whose main role is to recruit and retain sufficient numbers of good officers for the ministry and schools.

The conceptualisation of the EPMS is a result of several merging discourses that relate to economic survival, performance management (performance, potential and promotion), staff appraisal, staff development and future teachers' aspirations. The PAP (People Action Party) government's push for the state's vision of 'Thinking Schools, Learning Nation' (TSLN) which was first announced in 1997 is indicative of its commitment not only to develop into a knowledge-based economy in response to increasing global competition, but also to invest in the education system which has consistently played a functionalist role in the state's economic and employment matters. The PAP governments' commitment to the latter was evidenced when the then prime minister announced in 2000 for an increase in the budget for education from 3.6% to 4.5% of GDP over the next few years (Goh, 2000).

Besides the realisation to increase the budget for education, there was the realisation to invest in teachers. In his initial term as the then education minister made the assertion that "teachers are key to everything that we do in the education system" (MOE, 1998). The heart of this assertion was once again expressed when he officially announced the introduction of Edu-Pac (**Edu**cation Service **P**rofessional Development **a**nd **C**areer Plan) along with the EPMS (MOE, 2001). The bottom line is to recruit and retain good teachers in order to bring about a strong education system that is essential to – "assure Singapore's continued economic success" (MOE, 1998; MOE, 2000). In view of raising the quality of teachers, a slew of initiatives were made in relation to the teaching profession. One significant change is focused on monetary rewards such as annual Performance Bonus (PB) which commensurates with the performance ranking (A to E), new intermediate grades to give teachers additional promotional opportunities and a faster first promotion, revision in teachers' general pay packages, the CONNECT plan which seeks to reward and recognise teachers who stay in the profession (MOE, 2001),

and Outstanding Contribution Award (individual and team) for each school to reward significant value-added contribution by teachers.

Besides the focus on monetary rewards, the then minister of education also recognised the need for professional development. Attempts at fulfilling this need include the emphasis on teachers to make use of the 100-training hours which was an annual entitlement, the creation of a centralised IT platform – TRAISI (*Tr*aining *A*dm*i*nistration *S*ystem on *I*ntranet) – for teachers to enroll into professional development courses, and the emphasis on school-based professional development such as coaching, mentoring, induction programmes for beginning teachers, WITs (Work Improvement Teams) and Learning Circles (Teachers Network).

Although the EPMS was officially launched in 2001, its crystalisation took months prior to it being made known to the public, and although it is under the purview of Personnel Division, its ideas and principles are carved out by different people – albeit with varying degree of effects. As the main stakeholder of the EPMS, MOE hired consultants from the HayGroup in 2000 to review and restructure the pay and career systems (MOE, 2001). For over seven months, the Steering Committee chaired by the then Permanent Secretary of Education, Chiang Chie Foo, worked with the HayGroup to receive views from more than 3000 teachers through focus group discussions, surveys and committees. The draft model of the EPMS was piloted, and refinements made thereafter.

The central feature of the EPMS is the creation of 'Competencies', and is in essence closely related to the concept of 'Performance'. Furthermore, the EPMS articulates 'Competencies' differently from 'Knowledge' and 'Skills'.

> *"Competencies are underlying characteristics that are proven to drive outstanding performance in a specific job. Competencies establish a link between certain behaviours and the achievement of success. They describe what makes people highly effective in a given role. While skills and knowledge are necessary for good performers, competencies are the personal attributes and behaviours that leads to longer-term achievement and success."*

Competencies therefore form the based for knowledge and skills as allegorised by the iceberg diagram (Diagram 15).
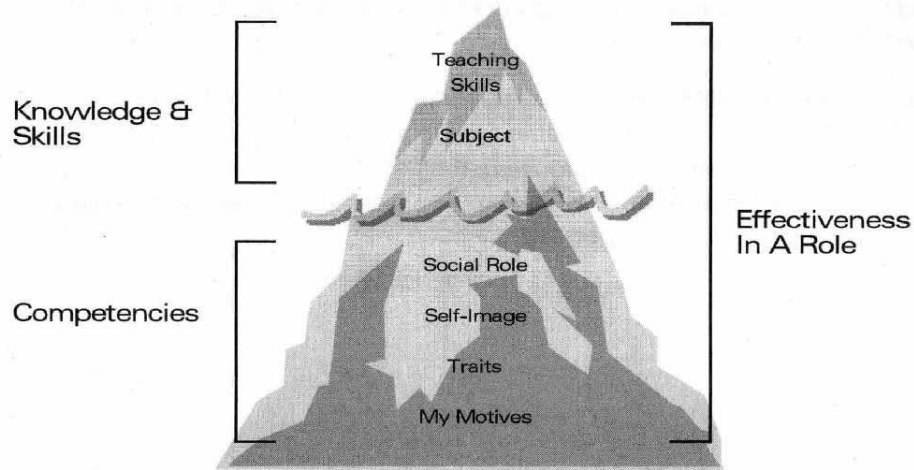


***Diagram 15: Teaching Competency Model***

These competencies relate well with another key feature of the EPMS, which is the creation of 'Career Tracks' or also known as 'Fields of Excellence' – Teaching, Leadership and Senior Specialist. Therefore, each career track has its own predetermined competencies. These competencies were derived from in-depth interviews, focus groups discussions and questionnaires on a representative sample of schools across different levels – Primary, Secondary and Junior College. Competencies within each career track are further categorised into clusters forming a 'Competency Model'. For example, there are five clusters of competencies for the Teaching Competency Model – Nurturing the Whole Child (a core competency), Cultivating Knowledge, Winning Hearts & Minds, Working With Others, and Knowing Self & Others. Moreover, for each cluster, competencies are further categorised into sub-competencies, except for the core competency. For example, the competency cluster 'Cultivating Knowledge' for the Teaching Track contains four sub-competencies – Subject Mastery, Analytical Thinking, Initiative and Teaching Creatively. The Teaching Competency Model has in total 13 competencies *(See Diagram 16 for an example of the Teaching Track)*. However, only 9 performance-related competencies will be assessed as competencies under Knowing Self & Others are excluded from assessment.

## Teaching Competency Model

**Core Competency**
- Nurturing the Whole Child

**Cultivating Knowledge**
- Subject Mastery
- Analytical Thinking
- Initiative
- Teaching Creatively

**Winning Hearts & Minds**
- Understanding the Environment
- Developing Others

**Working With Others**
- Partnering Parents
- Working in Teams

**Knowing Self & Others**
- Tuning into Self
- Personal Integrity
- Understanding Others
- Respecting Others
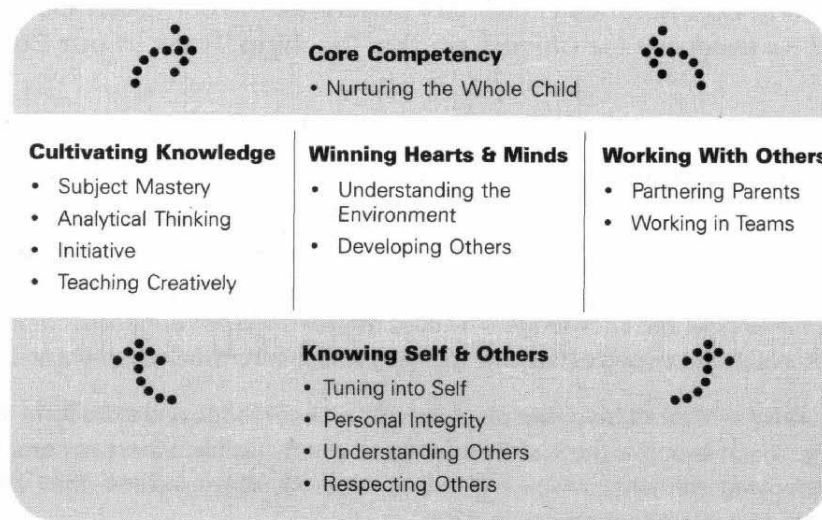
*Diagram 16: Teaching Competency Model (Clusters)*

Besides being categorised into clusters and career tracks, competencies within each cluster are also categorised according to degrees of competence termed as 'Levels' – Level 1, 2, 3, 4 and 5. For example, while Level 1 of Subject Mastery of the Teaching Track expects that an officer 'Has knowledge in subject area and awareness of education issues', Level 3 expects that an officer 'Applies knowledge of trends and developments into lessons'. These levels are also closely related to teachers' job grade or 'Substantive Grades'. Using the example of Subject Mastery, while Level 1 is tied to the job grades of GEO 1 or GEO 2 officers, Level 2 is tied to GEO 1A1/2A1 or GEO 1A2/2A2.

The creation of the Clusters of Competencies has also influenced concepts and practices of previous staff appraisal, specifically in carrying out Work Reviews which are to be done twice a year with the main purpose of targeting, monitoring and assessing work, and involve supervising officer and an officer who is being appraised. The new Work Review form is deliberately aligned to the Competencies corresponding to the three career tracks. For example, the Teaching Track describes specific outcomes for officers with regard to their Role Profile – another new term for the EPMS, which consists of Accountabilities (Key Result Areas), Knowledge and Skills (Table 4).

| Accountabilities: Key Result Areas | Knowledge & Skills | Skills |
|---|---|---|
| 1. Holistic Development of Students through – <br> a. Quality Learning of Students <br> b. Pastoral Care & Well-Being of Students <br> c. Co-Curricular Activities <br> 2. Contribution to School <br> 3. Collaboration with Parents <br> 4. Professional Development | 1. Teaching Area <br> 2. Psychology <br> 3. Development in Field of Education <br> 4. Education Policies | 1. Teaching Pedagogy |

*Table 4: Role Profile 1 (Teaching Track)*

Furthermore, each category and sub-category of the Role Profile is categorised according to Levels. For example, the Teaching Track has six levels – Beginning Teacher, GEO 1 or 2, GEO 1A1 or 2A1, GEO 1A2 or 2A2, Senior Teacher, Master Teacher. Table 5 gives an example of contrasting expected behaviours between a Beginning Teacher and a Senior Teacher with respect to the KRA on Quality Learning of Students.

| KRA: Quality Learning of Students | |
|---|---|
| **Beginning Teacher** | **Senior Teacher** |
| ❑ Draw up lesson plans with appropriate class activities and materials. <br> ❑ Deliver valid and effective lessons. <br> ❑ Maintain discipline and order in class. <br> ❑ Design appropriate assessments. <br> ❑ Monitor the performance of students and provide feedback to students of their performance. | ❑ Establish a positive learning climate in the school where students can take intellectual risks and work collaboratively and independently. <br> ❑ Deliver valid, effective and interesting lessons by managing time skillfully and creating a conducive environment to maximise quality learning of students across different levels and abilities within the school. <br> ❑ Lead in the design of appropriate, varied and challenging pupil-centred assessment for student improvement. <br> ❑ Lead in delivery and assessment of integrated lessons across subjects. |

*Table 5: Role Profile 2 (Teaching Track)*

Work Reviews in effect appraise an education officer's Role Profile and Competencies according to his or her track and level. This 'track-cluster-level' competency matrix plays a central role in appraising not only the Role Profile, but also the Competencies of education officers. This matrix is also central in appraising education officers' Role Profile and Competencies, in short 'Performance', and in guiding professional development of education officers.

The critical discourse analysis of the EPMS Kit essentially understands the kit as both a discourse that is potentially constituted or shaped by past events, and a discourse that potentially constitutes or shapes future events. The critical discourse analysis of the EPMS Kit exposed three inter-discursive discourses – 'buy-in', 'compliance' and 'consumption'. Although these discourses were introduced in this order, the transition is not discrete, rather transitory and merging (Diagram 17). The 'buy-in' discourse introduces itself and subtly merges with the 'compliance' discourse, which eventually merges and culminates with the 'consumption' discourse. Furthermore, where two discourses merge with each other, an emerging discourse is created, which is a form of hybridity.
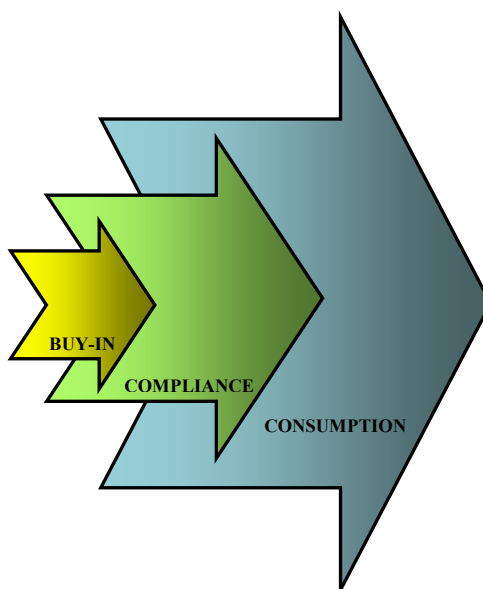


_**Diagram 17: Merging and emerging discourses in the EPMS Kit**_

The transitory character of the merging and emerging discourses could be broadly located across the different sections of the EPMS KIT – Overall EPMS Kit, Teaching Field of Excellence, and Tools (Table 6).

# Overall EPMS KIT

## Overall Presentation of the EPMS Kit

### Front Cover of the EPMS Kit

#### Content Page

#### Preface

# Teaching Field of Excellence

## Front Cover of the TFE

### Summary Page of the TFE

#### Accountabilities: KRAs, Knowledge and Skills

#### Competency Dictionary (TFE) – Introduction

#### Structure of the Competency Dictionary

##### Competency Dictionary

## Development Advisor (TFE) – Introduction

##### Working out your Training & Development Plan

### Developmental Suggestions & Resources

##### Teaching Competency Model

##### Development Advisor

# Tools

## Cover Page for the Tools

| Tools Title Page | | |
|---|---|---|
| | Introduction | |
| | Table of Contents | |
| | | Phase 1 |
| | | Phase 2 |
| | | Phase 3A |
| | | Phase 3B |
| | | Supporting Information |
| | | Work Review Forms |
| | | Development Form |
| **BUY-IN** | **COMPLIANCE** | **CONSUMPTION** |

*Table 6: Identification of Discourses along the EPMS Components*

Table 7 captures the analysis of semiotic features for each discourse. On the whole, it can be said that the EPMS Kit has the sole purpose of getting the complicity of its users to first buy-in to its concepts, then comply with its frameworks, and eventually consume its material and symbolic products, and therefore the implementation of the EPMS in the domains of subjective meanings and future social practices of its users.

| Linguistic Features | Buy-in Discourse | Compliance Discourse | Consumption Discourse |
|---|---|---|---|
| **GENRES** | • Marketing <br> • Advertisement Package <br> • Political Speech <br> • Personal Persuasion | • Political Speech <br> • Personal Persuasion <br> • Job Description <br> • Roles Description <br> • Concept Description | • Job Description <br> • Roles Description <br> • Concept Description <br> • Instruction Manual |

| | | • Instruction Manual | |
|---|---|---|---|
| **TEXT TYPES** | • Official Explanation<br>• Concept Explanation<br>• Personal Persuasion<br>• Personal Talk | • Technical Explanation<br>• Instructive Description<br>• Developmental Categorisation | • Technical Explanation<br>• Instructive Description<br>• Developmental Categorisation |
| **TOPICS** | • Self-determination<br>• Personal Responsibility<br>• Personal Commitment<br>• Intrapersonal and Interpersonal Relationship<br>• Efficiency<br>• Moral obligation | • Self-determination<br>• Personal Responsibility<br>• Personal Commitment<br>• Intrapersonal and Interpersonal Relationship<br>• Personal Change<br>• Personal Discipline<br>• Economics<br>• Efficiency<br>• Moral Obligation | • Reflective Practice<br>• Coaching<br>• Intrapersonal and Interpersonal Relationship<br>• Efficiency<br>• Moral Obligation |
| **MEANINGS / SYMBOLS** | • Friendliness<br>• Futuristic<br>• Diversity<br>• Individuality<br>• Inclusion<br>• Fairness<br>• Trendy<br>• Fulfilling<br>• Technicism<br>• Efficiency | • Trendy<br>• Technicism<br>• Efficiency | • Labour (Blue Collar - Technicist)<br>• Technicism<br>• Efficiency |

*Table 7: Analysis of semiotic features of the EPMS Kit*

*1.* *'Buy-in' Discourse.*

Based on Table 7, the producers of the 'Buy-in' discourse intelligently employ merging and emerging linguistic and semiotic strategies – from a combination of 'marketing'– 'advertisement' to 'political'–'personal persuasion' genres; from 'official explanation' to 'personal persuasion' text types; covering a combination of topics on 'personal responsibility' and 'personal commitment', 'intra- and inter-personal relationships', 'moral obligation' and 'efficiency'; and touching on a gamut of humanistic meanings and symbols (friendliness, futuristic, diversity, individuality, inclusion, fairness, trendy and fulfillment) and mechanistic meanings and symbols ('tecnicism' and 'efficiency').

The first strategy the producers of the 'Buy-in' discourse use is to tune in to its interpreters' or users' emotive domain which is the passion to teach and nurture pupils. This analysis is mainly derived from the front and back Cover File of the EPMS Kit.
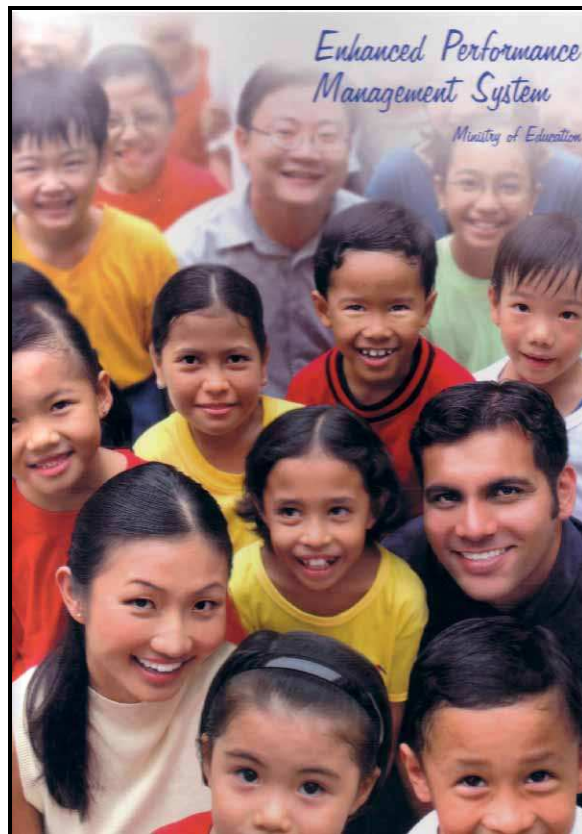


*Photograph 18: Cover Page of the EPMS Kit*

The object of this strategy is to persuade users to 'buy-in' to the symbolic product of the EPMS using more of the emotive domain than the intellectual (reason) domain of its users – the former is often immediate in terms of consumption than the latter. The

second strategy, which resides in the Preface, has the objective of persuading users to buy-in to the EPMS using a scheme of reasons – that is, the intellectual domain, which can be catergorised to two aspects evidenced from the text type – 'official explanation' and 'personal persuasion'. Lexical and syntactic analyses of the Preface focusing on the 'official explanation' text type reveal the following logical framework, which has 'efficiency' and 'moral obligation' as central features.

- People are resource contributing to the overall quality of education.
  - *Moral obligation to the state.*

- Quality of education is dependent on quality of the teaching force.
  - *Moral obligation to professional development.*

- People resource can be divided according to specialisation which requires integration in order to contribute to the overall quality of education.
  - *Moral obligation to specialisation.*

- Key features of the EPMS include the integration of specialist works, clarity of roles and behaviours, coaching and feedback, and personal commitment by Jobholders.
  - *Moral obligation to the EPMS.*

- The EPMS Kit is comprehensive and therefore sufficient.
  - *Moral obligation to not waste resources.*

- The EPMS is an initiative and directive from the Permanent Secretary and MOE, which is a ministry of the government.
  - *Moral obligation to authority and pay masters.*

The step-by-step logic seeks to amplify the legitimacy for the introduction of the EPMS, and to increase the moral obligation and the degree of complicity of its users. At the same time, analyses focusing on the 'personal persuasion' text type reveal that the producers of the EPMS are aware of the need for Jobholders' personal commitment and therefore complicity, and compliance, in order to make the EPMS successful. What is hoped is essentially the successful implementation of the EPMS. The Preface therefore

has merging discourses from 'buy-in' to 'compliance' – the former being a primary discourse.

Both the first strategy which focuses on semiotics and the second strategy that focuses on linguistics primarily aim at getting the users of the EPMS Kit to 'buy-in' to the material and symbolic products of the EPMS Kit through emotive and intellectual domains. This same strategy is used at the initial stages of the Teaching Field of Excellence section.

## PREFACE

People are our most important resource. The quality of education our young receive depends critically on the quality of our teachers. We need good Teachers, capable Leaders and competent Senior Specialists to work together to deliver a high quality of education to our children.

With the introduction of the 3 Fields of Excellence, namely the Teaching Track, the Leadership Track and the Senior Specialist Track, there is a need to enhance the current performance management system to meet the specific needs of the Education Service. The current system, albeit rigorous, emphasises the capability for management. The Enhanced Performance Management System (EPMS), on the other hand, is a competency-based model that encapsulates the knowledge, skills and professional characteristics appropriate for each of the 3 Fields of Excellence. This enhanced system provides greater clarity in terms of the roles and behaviours expected for effective performance in each field. It also better aligns learning and development opportunities.

One of the key elements in the EPMS is the need for regular coaching and feedback. Reporting officers play an important role in helping their teachers know how they are progressing, and in encouraging them to do better.

Personal commitment is a critical aspect in the development of each officer's competencies. We should work closely with our supervisors to identify the areas that we need development or training in. We must be proactive and take responsibility for charting our own career and improving work effectiveness.

This info-kit puts together the various tools and components needed to effectively utilise the EPMS. The *Role Profiles* sets out the key results areas for the different roles in each Field of Excellence and describes the *Competencies* that are essential for effective performance. It also provides useful guidelines on how to prepare for a meaningful appraisal interview. *The Development Advisor* helps Reporting Officers and Jobholders with a list of suggested activities, readings and courses for further development.

I hope you will find this kit valuable in your learning and development.

Chiang Chie Foo
Permanent Secretary
Ministry of Education

*Photograph 19: Preface of the EPMS Kit*

## 2. 'Compliance' Discourse.

Although the Teaching Field of Excellence commences using 'buy-in' discourse, it uses a merging strategy moving from 'buy-in' to 'compliance'. This is evident in the Role Profile summary page.



**Role Profile**

Teaching Field of Excellence

**Job Purpose:**

Teachers nurture the whole child – cognitively, physically, morally, socially and aesthetically; and every child according to his talents and abilities so that he becomes a good citizen, conscious of his responsibilities to family, society and country.

Teachers are mentors and role models to their students. They influence young minds and inculcate sound social and moral values through word and deed, within and outside the classroom.

They must impart to students learning skills, thinking skills and life skills to cope with the future; an attitude of continuous learning and improvement; and a sense of commitment and belonging to Singapore.

Teachers must keep up with professional developments in their fields, and judiciously apply new educational theories and practices to the classroom. They need drive and conviction to translate education policies into practical and effective programmes to meet the learning needs of their students.

***Photograph 20: Role Profile of the EPMS Kit (Teaching Track)***

It has a white background (formal-compliance) with the primary title 'Role Profile' in friendly light grey font (informal-buy-in). Beneath is a secondary title 'Teaching Field of Excellence' three times smaller than the Role Profile and written in black san serif font (formal-compliance). Beneath this is the sub-title 'Job Purpose:' written in black san serif font slightly smaller than the Teaching Field of Excellence' (formal-compliance). The text beneath Job Purpose is black san serif font (formal-compliance).

The same merging strategy is also evident in the Job Purpose, which consists mainly of 'buy-in' and 'compliance' discourse. The text type observed is more 'job description' than 'political speech' and 'personal persuasion'. Lexical and syntactic analyses reveal the following logical framework.

- Teachers are accountable to children's holistic development, attitudes and values towards learning, improvement and patriotism through modeling (word and deed) and acquiring new skills.

- Teachers have moral obligation towards pupils, and are therefore accountable for pupils' development.

- Teachers are indirectly accountable to families, the society and the country. Teachers have moral obligation towards them, and are thus accountable to them.

- Teachers therefore have moral obligation to continually learn, put that learning into practice and be committed to MOE and its initiative including the EPMS.

The step-by-step logical description amplifies legitimacy and moral obligation and thus the degree of complicity of its users, and in their roles, to effectively implement the EPMS.

The Job Purpose is immediately followed by information on Accountabilities (KRAs), Knowledge and Skills for the Role, which is primarily 'compliance' discourse as it employs a 'role description' genre; 'technical explanation', 'instructive description' and 'developmental categorisation' text types; a topic of 'efficiency'; and meanings and symbols of 'technicism' and 'efficiency'.

The merging discourse strategy is also evident in the Competency Dictionary. The Introduction focuses mainly on conceptual explanation with regard to the idea of 'Competencies', and seeks to gain legitimacy to the concept of competencies and how it is closely related to performance. Legitimacy is also strengthened by research carried out to validate the competencies. Once the Introduction has served the 'buy-in' purpose, the Structure of the Competency Dictionary plays its part as 'compliance' discourse evidenced from the text types of 'technical explanation', 'instructive description' and 'developmental categorisation'. The rest of the Competency Dictionary is completely a 'consumption' discourse which has similar text types as the 'compliance' discourse.

## ACCOUNTABILITIES | Key Result Areas

| Levels in the Teaching Field | Holistic Development of Students through: | | | Key Result Areas |
| --- | --- | --- | --- | --- |
| | Quality Learning of Students | Pastoral Care & Well-Being of Students | Co-Curricular Activities | |
| | Teachers create a classroom environment that is positive for the learning and involvement of students. Teachers employ innovative and creative teaching techniques/strategies and cater to students of different abilities. | Teachers provide a culture of care, trust and friendliness that *enhances the well being and character development of students*. Teachers use a variety of methods to determine current and future student needs and expectations, and provide necessary guidance and support. | Teachers inculcate in students desirable values and attitudes by *providing for intellectual, physical, emotional, moral and social development of students*. Teachers use CCA to provide opportunities for students to maximise their potential. | Teachers initiatives about sch developm |
| Beginnning Teacher | • Draw up lesson plans with appropriate class activities and materials.<br>• Deliver valid and effective lessons.<br>• Maintain discipline and order in class.<br>• Design appropriate assessment.<br>• Monitor the performance of students and provide feedback to students of their performance. | • Maintain discipline and organise class activities and materials appropriately.<br>• Provide guidance to students and intervene where necessary. | • Conduct CCA with guidance from supervisor. | • Show contri<br>• Contri super of sch duties schoo |
| GEO 1/2 | • Draw up lesson plans with appropriate learning activities and materials.<br>• Deliver valid, effective and interesting lessons with time management.<br>• Address differentiated learning needs of students during lessons.<br>• Maintain discipline and orderly learning environment.<br>• Design appropriate and varied modes of assessment.<br>• Monitor the performance of students and provide accurate feedback to students of their performance and take follow-up action. | • Establish rapport with students through showing concern, acknowledging and encouraging students.<br>• Provide guidance to students and intervene where necessary to take follow up action at class level. | • Conduct appropriate CCA which support the mental, physical and social development of students | • Contri impler and d schoo |
| GEO 1A1/2A1 | • Deliver valid, effective and interesting lessons with varied teaching techniques and time management.<br>• Design appropriate, varied and challenging assessment customised to different students' abilities.<br>• Motivate students through establishing orderly environment and reinforcing positive behaviour.<br>• Monitor the performance of students consistently, provide accurate feedback to the students of their performance, and take follow up action. | • Establish strong rapport with students through showing concern, acknowledging and encouraging students.<br>• Provide effective guidance to students and take necessary actions/make referrals for professional intervention at class level. | • Conduct appropriate and lively CCA that sustain the interest of students and support the mental, physical and social development of students. | • Help and d schoo devel |

*Photograph 21: KRAs of the EPMS Kit (Teaching Track)*

## Subject Mastery

**Definition** : The drive to find out more and stay abreast of developments in one's field of excellence.

**Core Question** : Does the teacher seek to expand content knowledge in own subject area?

**Why It Matters** : Effective teachers show great interest in their subject areas and are driven to broaden their knowledge in their subject areas by actively seeking new information through reading, attending seminars or talking to colleagues. They keep themselves up-to-date with the latest issues, tools, approaches and technologies associated with their subject areas.

By broadening their knowledge of the subject beyond the curriculum, teachers are able to teach the subject to the students more effectively as well as direct students to other additional sources of information if the students wish to learn more.
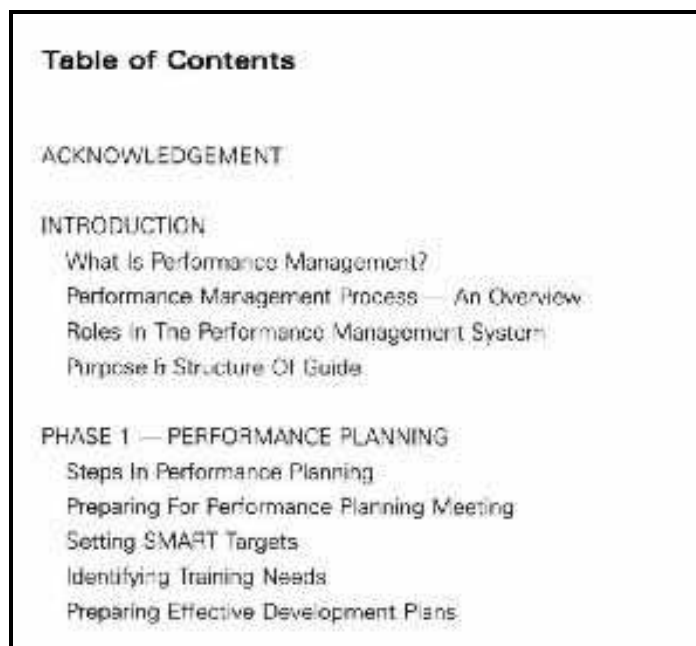
| Level Of Competency | Possible Behaviours | Target Level For... |
|---|---|---|
| **Level 1: Has knowledge in subject area and awareness of educational issues**<br><br>Shows keen interest in own subject area and related educational issues within subject area. | • Has good knowledge and understanding of core concepts of subject area and is able to impart the knowledge and skills pertaining to the subject area.<br><br>• Has knowledge of pedagogy and is able to demonstrate effective delivery of lesson. | • GEO 1/2 |
| **Level 2: Keeps abreast of trends and developments in own subject area**<br><br>Takes initiative to stay current and expand content knowledge in own subject area. | • Keeps himself updated on subject area through reading beyond curriculum requirements.<br><br>• Has broad-based knowledge of subject area.<br><br>• Actively seeks new information on subject area through attending training, seminars, courses, etc.<br><br>• Is pro-active in offering to share expertise and practices in subject area with colleagues. | • GEO 1A1/2A1<br>• GEO 1A2/2A2 |

*Photograph 22: Competency Dictionary of the EPMS Kit (Teaching Track)*

The Development Advisor generally uses the same merging strategy, except that it gives greater emphasis to 'buy-in' discourse. Merging discourses include Introduction ('buy-in'), Working out your Training & Development Plan ('consumption'), Developmental Suggestions & Resources ('buy-in' and 'compliance'), Teaching Competency Model ('consumption') and Development Advisor ('consumption'). Although the text types employed for the Developmental Suggestions & Resources include 'technical explanation', 'instructive description' and 'developmental categorisation', the topics generated include 'self-discipline', 'personal responsibility', 'personal commitment' and 'personal change'. These two text types in my view are indicative to the meanings of 'efficiency' and 'moral obligation'.

### 3. 'Consumption' Discourse.

The analysis indicates that 'consumption' discourse is the final outcome of the EPMS Kit. This is best illustrated for the Tools section. Although the Tools section employs the same merging strategy, the linguistic texture is more closely tied to 'consumption' discourse in contrast to the Teaching Field of Excellence section. For example, the Role Profile summary page of the Teaching Field of Excellence attempts to describe the Job Purpose of the teacher, but the Tools section basically presents a technical summary of contents.



*Photograph 23: Tables of Contents for Tools Section of the EPMS Kit (Teaching Track)*

The genre for the Introduction of the Competency Dictionary Introduction is more 'concept description' than 'instruction manual'. While 'concept description' has affinity to 'buy-in' and 'compliance' discourses, 'instruction manual' has affinity to 'compliance' and 'consumption' discourses. For example, in the Introduction of the Competency Dictionary, the producers attempt to convince interpreters using a fairly detailed narrative explanation to the meaning of competencies with the aid of a diagram.



**INTRODUCTION**

The Teaching Competency Dictionary describes the competencies that are identified as essential for officers on the Teaching Track in our Education Service.

**What are Competencies?**

Competencies are the underlying characteristics that are proven to drive outstanding performance in a specific job. Competencies establish a link between certain behaviours and the achievement of success. They describe what makes people highly effective in a given role. While skills and knowledge are necessary for good performance, competencies are the personal attributes and behaviours that lead to longer-term achievement and success.

Using the example of an iceberg (see diagram below), knowledge and skills form the top of the iceberg, which is above the water surface and clearly visible, whereas competencies are the underlying elements which are not as apparent. Nevertheless, they are critical determinants of one's effectiveness in a job.

***Photograph 24: Teaching Competency Dictionary of the EPMS Kit***

In the Introduction of the Tools, the term 'Performance Management', although is phrased as a question, dispenses with narrative explanation and efficiently list in bullet points the technical meaning to the term. In terms of syntactic strategy, the first word used for each bullet point is a verb-noun or gerund, generating an 'instruction manual' text type. Lexical analysis of these words indicates a slant towards the specifics of 'what to do'.
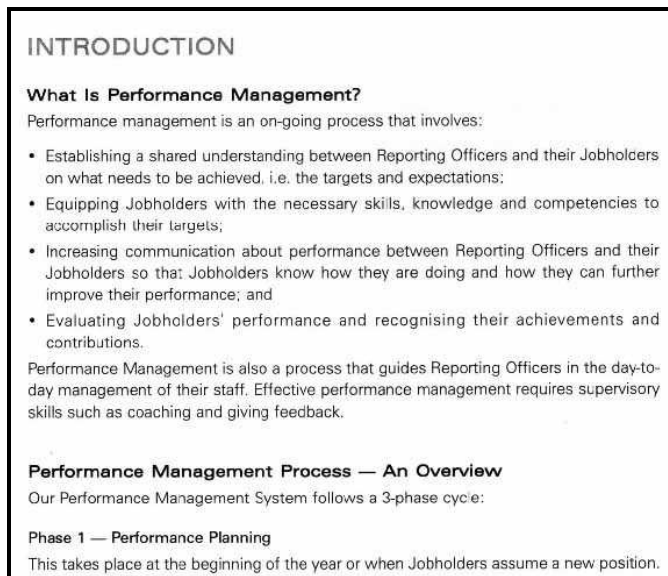
*__Photograph 25: Introduction to Tools of the EPMS Kit__*

Using the Development Advisor as another contrasting example, the Development Advisor is slanted towards 'buy-in' discourse. First, it starts off with a dialogue between Charlie Brown and Linus with the intention of surfacing the need to change even though it can be painful. In terms of genre, a 'concept description' (genre) is accomplished in combination with 'personal persuasion' (text type). The topics that were raised consist of 'personal commitment', 'personal responsibility', 'personal change' and 'reflective practice', and allude to the meaning of 'moral obligation'. On the whole, the linguistic strategy employed in the Introduction of the Development Advisor is in my view more humanistic than mechanistic, and personal as opposed to official. The slant towards 'buy-in' discourse is understandable when one takes into consideration the attempt at introducing coaching.

*Photograph 26: Development Advisor of the EPMS Kit*

After the Introduction of the Tools, the remainder of the sub-sections – Phase 1, 2, 3A, 3B –Supporting Information, Work Review Forms and Development Form are in essence 'consumption' discourse, consisting of the genre of 'instruction manual' and 'technical explanation'. They consist of genres of 'job description' and 'roles description'; text types of 'technical explanation', 'instructive description' and 'developmental categorisation'; and meanings of 'tecnicism' and 'efficiency'.



*Photograph 27: Phases of Performance Management (Phase 1)*

*of the EPMS Kit*

The analyses of 'buy-in', 'compliance' and 'consumption' discourses also revealed two other related sub-themes. First, the growing importance of professional development in contributing to significant pedagogical practices that fit the current knowledge based economy. This is evidenced in the attempt to make closer linkages between professional development and performance appraisal. Second, the growing realisation that newer generation of teachers is different in contrast to the older generation in terms of aspirations and expectations in career advancement and pay; and engagement with policy-making and -implementation. The term 'buy-in' means not only the recognition of people's need to be engaged at the emotive and intellectual levels, but also to be engaged politically. Third, although there is recognition for investing in professional development and greater ownership on the part of practitioners to initiate teacher learning, the system needs still have privileged discourse.

In this regard, the cultural values at the EPMS Kit site contained both congruent and incongruent cultural values in contrast to cultural values that are promoted in the Learning Circle site. The congruent cultural values comprise the following:

- Participation.

  *- Learning requires the participation of teachers.*
- Self-determination.

  *- Learning is a personal decision of the teacher.*
- Personal responsibility.

  *- Learning is the personal responsibility and duty of the teacher.*
- Personal commitment.

  *- Learning requires commitment.*
- Interpersonal relationship.

  *- Learning is a collective activity.*
- Moral obligation.

  *- Learning is a moral obligation on the part of the teacher who wishes to pursue effective teaching and learning.*
- Diversity, choice, individuality and inclusion.

  *- Learning includes many forms and is dependent on individual teachers' learning styles and preferences.*
- Personal fulfillment.

  *- Learning satisfies teachers' sense of professional commitment.*

The incongruent cultural values comprise the following:

- Instructive.

  *- Learning sits within a structured framework as opposed to being exploratory.*

- Technical.

  *- Learning is linear, framed, step-by-step and development.*

- Efficiency.

  *- Learning is an efficient activity – linear, devoid of experimentation and unproblematic.*

- Economics

  *- Learning is connected directly or indirectly to performance appraisal and pay.*

- Control and compliance.

  *- Learning requires teachers to comply with the framework that has been prescribed by the EPMS Kit.*

## 7. The MOE Work Plan Seminar 2005 Policy Document

The MOE Work Plan Seminar is an annual one-day event where leaders in education come together to talk about current educational issues. In general, educators who are school principals and above are invited for the seminar. The morning activities are usually allocated for the minister for education to give a speech that relate to the progress of previous policies and upcoming future policies or initiatives in education. This is usually followed by award presentation. It is also common to have students or staff performing on the topic for the day. After lunch, participants would sit in small groups to discuss how to implement current policy initiatives, and consider the challenges that accompany them and ways of overcoming them. All small group discussions would be compiled by the organising committee who would use the data from small group discussions to fine-tune policy-conceptualisation and implementation at the national level. The permanent secretary for education would then close the day's event.

The speech that was given by the education minister at the MOE Work Plan Seminar 2005 was entitled "Achieving Quality: Bottom Up Initiative, Top Down Support" (Appendix F). The structure of the speech is as follows:

- Focusing on quality and choice.
- Bottom-up initiative, Top-down support.
  - Greater support for teachers and leaders in school.
  - More flexibility and choice for all our learners.
- Greater support for teachers and leaders in school.
  - Creation of 'White Space' through content reduction.
  - Giving teachers more time and space.
  - Strengthen focus on professional development.
  - School leadership development.
- Greater emphasis and ownership in character development.
  - Making CME more relevant and engaging.
  - Social Emotional Learning.
- Flexibility and choice for all students.
- Schools offering new 'O' level subjects.
- Update on new Normal Technical curriculum.
- Greater flexibility in the Normal Academic course.

- Extending elective modules Normal Academic students.
- Allowing selected Normal Academic students to bypass 'N' levels.
- Study feasibility of niche programmes in schools that link up with Polytechnics.
  - More applied and practice-oriented subjects through Poly links.
  - Direct Polytechnic admission for selected students.
- Joint Polytechnic special admission exercise (JPSAE).
- Focusing on what we cannot measure.

Based on the discourse analysis of the speech by the education minister at the MOE Work Plan Seminar 2005, five types of discourse were identified. The discourse analysis focused on the values that undergird his speech. The discourses include the following:

1. Political discourse.
2. Change discourse.
3. Human discourse.

### 1. *Political Discourse.*

The minister's speech, which commences in the giving of official greetings to people along with their organisational positions, signify the value for hierarchical relations and differential honouring common in bureaucratic discourse in Singapore. The official greetings also signify the power hierarchy which gives priority to state ministers followed by civil servants such as the permanent secretary and school practitioners such as principals. The official greetings also signify the value for top-down policy conceptualisation and implementation in the education ministry. The common word which is used to describe this is to 'cascade' policy which was introduced at the turn of the century.

Although the word had replaced the phrase 'top-down' and signifies the need to be less 'top-down', the core of policy conceptualisation, implementation and change is essentially top-down. Hence, policy conceptualisation, implementation and change are generally hierarchical as opposed to consensual. The education minister's ideas also need to align with the political ideology of the ruling political party.

"As PM put it in his National Day Rally speech last month, we need a mountain range of different talents, each one of us being the best that we can be, not just one or two peaks."

The historical invention and establishment of a pyramidal structure of society commenced at the start of independence is still alive and kicking (Lee, 1966). The pyramidal structure of society consisting of the elites to conceptualise policies, middle managers to coordinate the implementation of policies, and mass digits to carry out policies is evident in the list of names and organisational positions found the greetings: the ministers of state (elites), civil servants (middle managers) and school principals (mass digits).

## 2. *Change Discourse.*

In the change discourse, the cultural values that are privileged include the following:

- Evolutionary change.
- Change from the ground.
- Change from the top.
- Efficient change.

Importance is placed on the value of evolutionary change where individuals in organisations, society and country take pride of past successes, and build on past successes. In this sense, it is evolutionary – moving from a system that efficiently promotes narrowed frame of success to diverse frames of successes. What is not valued is the one-size-fits-all approach to change, and the idea of a single educational formula to change. The signification of evolutionary change is evident from the following quote:

"We have embarked on a new phase **(change in stages)** in education in recent years. We are shifting focus from quantity to quality, and from efficiency to choice in learning. We have made many refinements in recent years, but they boil down to this basic shift **(change in stages)** in focus - from an efficiency-driven system to one focused on quality and choice in learning."

Importance is also placed on the value of change coming from the ground or bottom where teachers and schools initiate change to contextually meet the needs of their students. This is evident from the following quote:

> "But there is no large fix in education that will bring in the improvements that we want. No big system-wide solution, like the introduction of streaming in the 1980s to reduce the huge attrition of students from the system. The days for large fixes are over. The improvements in quality as we go forward will have to come from innovations on the ground - new teaching practices, new curricula responding to a school's unique needs, and new options and chances given to students. Quality will be driven by teachers and leaders in schools, with ideas bubbling up through the system rather than being pushed down from the top."

What is therefore valued is ownership by teachers and schools for current educational reforms. However, what is contradictorily valued is for change from the top and at the top. This is especially so in areas where standardisation is required and applied to all schools without unequal treatment. For example, policy changes to Normal Technical (NT) curriculum. Although the idea of change from the top and change from the bottom seems rather contradictory, what it possibly signifies is the demarcation for change at the school and system levels. Although the ministry values change from the bottom in view of meeting diverse learning needs of students and schools, it also values change from the top when standardisation is called for.

Value is given to changes that are planned, progressive, methodical, pragmatic, holistic, systematic, prudent and careful. In this sense, value is given to changes that are efficient. Value is placed on learning from best practices. For example, the idea of teachers engaging in professional dialogue in order to implement curriculum changes that are customised to their classes and schools need to be standardised and done for the duration of one hour – not less or more. In view of this, one hour of administrative work load needs to be taken away by the employment of one administrative personnel (Co-curricular Programme Executive) per school, but only to be accomplished in the next two years. On the whole, the value for systematic, prudent and holistic change subsumes within the value for efficient change.

## 3. Human Discourse

In the human discourse, it is observed that the education minister attempted to put into the system discourse more lifeworld discourse. The first is the need for more bottom-up changes in the system. This would imply the adoption of a value that favour ideas being conceptualised at the bottom. This is consistent to the notion of human discourse because it gives power in the hands of practitioners, who have been at the receiving end of policy-making within the top-down discourse. Second, character development in schools received given greater emphasis when the minister of education stated that it should adopt a whole school approach. This signifies the importance of valuing the more human aspect of education. Importance is also given to getting a diverse range of stakeholders such as teachers, school leaders, parents and other relevant parties, for character development endeavours.

Third, the emphasis placed on student-centred and holistic learning also signified the importance of including more human dimensions of learning such as character development in contrast of the usual technical efficient approach of drilling students for exams. The emphasis on building relationships with students in the course of teacher-student interactions is consistent with student-centred and holistic learning.

> "This is why TLLM really goes to the core of quality in education. It is about a richer interaction between teacher and student - about touching hearts and engaging minds, as today's seminar theme puts it."

Fourth, emphasis is also placed on students who are considered disadvantage in terms of socio-economic status which are represented by their corresponding streams – Normal Academic and Normal Technical. This signifies the importance of social equity or justice. Fifth, the call for broadening the concept of achievement signifies the notion of accepting everyone by virtue of their unique strengths and talents. This is in opposition to the prevalent value for academic achievements.

Although the analysis indicated an emerging discourse that gives more importance to then notion of human beings that are more holistic, and that include the value for moral, aesthetic and social development of people, the analysis also showed the need to

maintain the centrality or core of system discourse. This stands in contradiction to and creates a tension with the lifeworld discourse. This includes the following:

- Top-down change especially for the sake of standardisation of standards across the education system.
- Valuing the hierarchical relations of political and social structure of the Singapore society.
- Learning that will maintain Singapore's position in terms producing good academic results.

In terms of professional development, the tension is the value for efficient teaching contradicting with the value for reflection and collective dialogue amongst teachers. Although the minister of education had called for weekly structured time, the culture of efficiency, where productive work needed for academic achievements is more privileged than reflective work, may not encourage a disposition in teachers to reflect and engage in collective professional sharing. Reflective practice may end up as quick problem solving meetings as opposed to deep learning where pedagogical knowledge are surfaced, critiqued and refined.

In summary, the cultural values at the MOE Work Plan Seminar 2005 site does contained congruent cultural values that are promoted in the Learning Circle site. These comprise the following:

- Flexibility, diversity and choice.
- Change from the ground
- Holistic development of students.
- Reflection and professional development.
- Support for human development.
- Value of human beings – everyone has equal human worth.

However, the above lifeworld discourse constitutes a small emerging portion of the system discourse. And although it was introduced at the ministry level, the impact on the education system is still questionable bearing in mind the predominance of the system discourse.

**SUMMARY OF SYSTEM RELATIONS**

Based on the analysis done on the seven social sites, the following summarised conclusions that relate to system relations and integration were made:

1. The cultural values at the school site are congruent with the cultural values at the Learning Circle site.

2. The cultural values at N4 Learning Symposium are fairly congruent with the cultural values at the Learning Circle site.

3. The cultural values at North Zone Action Research Educational Symposium are incongruent with the cultural values at the Learning Circle site.

4. The cultural values at Teachers Network Learning Circle Facilitators' Training (2005/6) are congruent with the cultural values at the Learning Circle site.

5. The cultural values at Teachers Network are congruent with the cultural values at the Learning Circle site.

6. The cultural values at the EPMS Kit site are more than less incongruent with the cultural values at the Learning Circle site.

7. The cultural values at the MOE Work Plan Seminar 2005 Policy Document site are more than less congruent and incongruent with the cultural values at the Learning Circle site.

The integrative analysis of these social sites also revealed that the cultural values of the Learning Circle site which had been described earlier had their origin at the establishment of Teachers Network. The pioneers of Teachers Network carried these cultural values which then consolidated together in the midst of their conceptualisation of Learning Circles. They were the producers of these cultural values. The Learning Circles' cultural values were then reproduced through the Learning Circle facilitators' training sessions along with follow-up workshops. The reproduction of these cultural values also took place through the process of handholding when first time facilitators attempt to implement Learning Circles in the different school contexts. The translation of these cultural values to teachers was easy by virtue of teachers' inherent need for emancipation and professional development practices that are more emancipating. The role of the school leader was pivotal in the reproduction of these cultural values insofar as she was able to provide not only the material resource, but also cultural resource to support the reproduction of these cultural values. Her role was also crucial especially in protecting these cultural values from being colonised by the system's values. One

critical role that the school principal had played was to promote the lifeworld discourses without jeorpadising the core aspect of the system which is the need for efficiency. The only aspect of the system which was downplayed was the value and practice of honouring. Another condition that had helped the school principal in protecting and promoting the lifeworld discourses was the system's need for a type of learning that has characteristics of the lifeworld discourses. This, in essence, was the principal tension that existed in the attempt to promote the cultural values of Learning Circle at the school of study. On the one hand, the system needs new lifeworld discourses to grow, and thus its support for these discourses. On the other hand, the system has the tendency to colonise the lifeworld by virtue of its principle value for money as expressed in the value for efficiency, and power as manifested in the value for control.

## 1. *Evolution*

The cultural values of the Learning Circle site have their roots at the Teachers Network. These cultural values were produced at the Teachers Network site by people who believed in them, and people outside of Teachers Network who had the power to influence decisions in the Ministry of Education. They in turn had been encultured by these values in their previous life histories. In my interview with the first deputy-director of Teachers Network, he expressed how his university experience in one of the university in the UK had contributed to his leftist tendencies. In my interview with one of the creators of Teachers Network Learning Circle, she expressed her desire to materialise the notion of teacher emancipation. The first pioneers of Teachers Network also had autonomy in recruiting and selecting staff members who have similar cultural values to produce and reproduce the cultural values that are privileged in Teachers Network.

The sustainability of these cultural values was an ingenious act of pragmatism on the part of the pioneers of Teachers Network. They did so by combining both lifeworld and system discourses, and therefore the possibility of balancing cultural values which may have the tendency to be in tension. Below are examples:

- Informality-human with formality-technical discourse.
- Activist within conformist structures.
- Flat organisational structures within hierarchical structures – Teachers Network within Training and Development Division (Ministry of Education).

- Voluntarism with 'hijack-ism' – Teachers Network encourages voluntarism in Learning Circles but allowed Learning Circles and the value of voluntarism to be hijacked by people in higher hierarchical positions. However, in moments when participants were coerced to be involved in Learning Circles, TN PDOs attempted to turn initial negative experiences with subsequent positive experiences.

- Time for critical reflection with high level of labour which robs time for reflection – Teachers Network encourages critical reflection but allowed high level of labour productivity and efficiency.

- Flexibility with guidelines and framework – to meet the needs of technical efficiency.

- Power symmetry with power asymmetry – Teachers Network encourages power symmetry but allows for power asymmetry.

## *2.  Enculturation*

The cultural values of Teachers Network site were mainly reproduced through the Teachers Network Learning Circle Facilitators' Training, and were finally reproduced at the Learning Circle site. The Teachers Network Learning Circle Facilitators' Training site provides the time and space for participants to experience and embrace the values and practices of Teachers Network.

Participants at the Teachers Network Learning Circle Facilitators Training site generally welcomed and embraced the cultural values that were promoted by Teachers Network PDOs because of their close link with basic human values such as trust, loyalty, honesty, sharing, caring and camaraderie. In essence, the cultural values promote the development of the individual person and the collective body of persons – that is, individuality and solidarity. These cultural values were projected through signs such as words, symbols, actions and practices. In addition, these cultural values promote values of solving problems, truth seeking and enhancing students learning – a core value of the teaching profession. In this sense, the cultural values that were being promoted at this site are not new to participants – as a professional teacher, and a human being. The newness is only in light of the predominant discourse of the education system which promotes labour and learning as efficient – technical, cost-effective, controlling, linear and reductionistic. Labour and learning are in a word 'reified' because they are devoid of emotions, morals and thought (reasoning).

Another contributing factor to the easy embrace of Teachers Network cultural values is the power relations that Teachers Network privileges. Power relations within the Teachers Network Learning Circle Facilitators' Training site promoted consensual power relationships. Hence, participants were not coerced to accept the cultural values that were being promoted. On the contrary, PDOs believed that participants have the right to accept or reject the cultural values that were being promoted.

The enculturation of the cultural values of Teachers Network continued when PDOs handheld LC facilitators when they were facilitating their own LC groups at the school site. The handholding is part and parcel of Teachers Network practice of providing support and guidance to first time LC facilitators after their LC facilitators' training. During the handholding, an LC facilitator meets with his or her respective PDO to discuss and plan the LC meetings. After each LC meeting, the LC facilitator and PDO meet again to do evaluation and plan for the next LC meeting.

### 3. *Support*

The cultural values of the Learning Circle site, which are congruent with Teachers Network, were supported by the cultural values of the school. On the whole, the cultural values at the school site – especially pertaining to teacher professional development, are congruent with the cultural values of the Teachers Network, Teachers Network Learning Circle Facilitators Training, and Learning Circle sites. The school leader's work at Teachers Network during its pioneering years had influenced the promotion of cultural values that are congruent to Teachers Network and Teachers Network Learning Circles. Her personal life experiences such as her Christian beliefs and opportunities for involvement in activist work during schooling days had also shaped her beliefs and values pertaining to teacher professional development.

As a school leader, she had the greatest say in how material resource was used to support the practice of Learning Circles in the school, along with the promotion of its values. The position of a school principal gave her the symbolic power to affect the distribution of material resource. For example, she was able to affect the scheduling and venue of Learning Circles, and integrating Learning Circles with other school purpose and strategies. This had brought about a successful reproduction of the cultural values of Teachers Network and Teachers Network Learning Circles.

Another factor that brought about the successful cultural reproduction is the way staff members were allowed to embrace the cultural values of Teachers Network Learning Circles. The cultural values of Teachers Network Learning Circles were not forced on teachers. Although the school leader had the most influence in implementing Teachers Network Learning Circles model in the school, she adopted a negotiated approach in the conceptualisation and implementation phases as opposed to a sovereign or laissez-faire approach. The decision-making processes, although privileging senior management, were generally inclusive as it allowed for teachers' voices to be heard which had bearing on the evolution of Learning Circles at the school.

Another factor is the cultural values of Learning Circles that are sensitive to the values human development, as mentioned above – trust, loyalty, honesty, sharing, caring and camaraderie. These cultural values do not have to rely on cultural values of the system to maintain its reproduction. Participants are not so motivated to participate in Learning Circles in order to gain or avoid losing material resource. Likewise, school leaders are not so motivated to motivate teachers to engage in Learning Circles using material or symbolic resource.

Finally, the support given by Teachers Network PDOs in the initial implementation phase of Learning Circles at the school site had been congruent with the support given by the school leaders with regard to the cultural values of Learning Circles.

### 4. *Protection from the System*

The reproduction of cultural values of the Learning Circle site was successful because of not only the support given by the school leader and Teachers Network PDOs, but also the protection given by the school leader. The school leader made attempts to protect the cultural values of Learning Circles from countervailing cultural values at the cluster and ministry levels – the system cultural values.

For example, she negotiated with the organising committee responsible for the N4 Learning Symposium on matters of timing and presentation of the school's Learning Circles. The level of negotiation also meant that she did not actively protest with cultural values at the cluster and ministry levels. Rather, in her negotiation she attempted to satisfy cultural values at the cluster and ministry level but without harming

the cultural values of Learning Circles at the school level. And although she may not be able to protect the cultural values of Learning Circles in totality, her ideal is to minimise the encroachment of system cultural values on Learning Circles cultural values. For example, she made attempts to streamline the requirements of the ministry's expectation for contributions at the MOE Excel Day in 2006 with what Learning Circles have already done. Although, some teachers might see this as a contradiction to the spirit of voluntarism, she perceived this as maximising on what had already been done and thus requiring minimal labour involvement.

The factors that guarantee the reproduction of the system cultural values include the distribution of material and symbolic resources. With regard to material resource, one form of distribution of material and symbolic resources is the appraisal system, which could pose as constraints or enablement on actors' agency – their decisions and actions. The competition for material resource within hierarchical social relations translates well to competition for hierarchical organisational positions. And as promotions to hierarchical organisational positions are based on efficiency and achievement, actors are constrained to behave in ways that demonstrate efficiency and achievement in response to the need either to gain more future symbolic and material resource or to secure current symbolic and material resource. The cultural value for economic accumulation or security becomes the primary force constraining people's decisions and actions.

For example, when a person has shown efficiency and achievement he or she gains symbolic resource in the form of honour. This would increase his or her chance of promotion in terms of organisational position, which translates to higher material resource. Once this is achieved, he or she will gain not only higher material resource, but also higher symbolic resource by virtue of the new higher organisational position. Although actors could be constrained to act according to symbolic or moral values such as commitment to students' learning or the teaching profession, the appraisal system is so all encompassing and the mechanistic effects are so wide reaching that its constraining effect have greater effect of overshadowing personal or professional moral values. Of course, the extent of its pervasiveness is dependent the degree of its usage. However, in a work environment that demands high labour in the midst of stretched resources, resistance to increase workload may be more common. People in leadership positions are thus more constrained to use the appraisal mechanism rather than moral

obligation towards students' learning and teacher professionalism to motivate staff members to work at increasing capacities.

The following illustrates the pervasiveness and tenacity of the appraisal system:

- EPMS – delineating nine competencies – plus four non-appraised, which are set at five levels according to the substantive grade (organisational position) of the staff members (school teachers, school leaders and specialists).
- Three appraisal meetings within a year – start, middle and end year.
- Ranking exercise connected to Performance Bonus – A, B, C, D and E grading with a 5 per cent compulsory D for each school.
- Achievement awards – individual and group performance which commensurate with monetary benefits.

Another system mechanism that works in tandem with the appraisal system is the School Excellence Model (SEM). It is a framework that espouses systemic and holistic approach to organisational functioning of an organisation based on strengthening the linkages of results, approach, deployment, assessment and review – RADAR for short. Each school is required to do internal appraisal based on three main areas (Enablers, Results) 14 core criterion and 32 sub-criterion. Although the SEM could be perceived as an enabling tool, it is also a constraining tool – that is, used as a tool for control. The performance of school leaders could be based on the annual internal appraisal report which is validated by external validators from the School Appraisal Branch (SAB) once every five or six years.

The new performance appraisal – the EPMS, is one of the latest holistic and systemic approaches to appraisal which has brought professional development closer to appraisal. Inadvertently, this has also brought professional development closer to monetary implications.

The cultural values attached to competition for material resource is most influential in reproducing the cultural values of the system. Although there are cultural values that promote sharing of material and symbolic resource, the social mechanisms that are in place privilege the former than the latter. In my view, the primary object of system functioning in Singapore education system is efficiency of material resource – cost-

effective means; or maximum output with minimum cost input. This efficiency is also guaranteed by ensuring leaders who make efficient decisions to gain material and symbolic resources. Singapore's model of system efficiency has been historically based on hierarchical social functioning. In the early days of Singapore independence, the first Prime Minister of Singapore, Mr Lee Kuan Yee, established the concept and practice of the pyramidal structure of society making up of the elites, middle managers and broad mass. Material and symbolic resource is distributed more to people in leadership positions by virtue of them being able to make efficient decisions for others who are not in leadership positions but benefit materially from these decisions. In this way, the material and symbolic benefits that people in leadership positions gain are legitimated and reproduced. Hence, to gain material and symbolic resource one has to move up in the hierarchy of social positions. The value for material resource has become embedded in the Singaporean psyche as a result of geographical, historical, cultural, social and political interconnecting factors. Finally, the monopoly that the Ministry of Education has over the education market ensures not only the pervasiveness of the cultural values of the system, but also the lack of alternative for actors within education to opt out of the system. Actors within the education system thus have severely little choice but to participate in the cultural reproduction of the system, except to leave the teaching profession, and in doing so, leave the personal values that one has for the teaching profession.

All in all, the cultural values of the Learning Circle site are however protected by the cultural values of the system because of several reasons.

- They have evolved differently from the system. The cultural values espoused by Teachers Network are essentially different from the system. Actors are constrain to share instead of compete; build solidarity as opposed to individuality; and pursue lifeworld values such as trust, loyalty, honesty, sharing, caring and camaraderie as opposed to system values such as technical-bureaucratic rationality and monetary gains.
- They have been supported by Teachers Network and the school leader of the school, which are organisations that are legitimated by the system itself.

## 5. *Necessity of Lifeworld*

The reproduction of cultural values of Teachers Network Learning Circles is also guaranteed because of it affinity to the system's reliance on the lifeworld. Although the system's cultural values are essentially contrapuntal to the cultural values of the Teachers Network Learning Circles, the system require the lifeworld's experimentations and exploration for new ways of thinking and doing. Since the mid-1990s, the education system has been evolving to accept alternative world views that are may not sit well with its traditional core cultural values mainly as a result of globalisation and its impact on economic-labour models. This is evident taking into consideration its key initiatives over the years – TSLN (Thinking Schools, Learning Nation), ADE (Ability-Driven Education), I&E (Innovation and Enterprise) and TLLM (Teach Less, Learn More). Just as there are uncertainties, exploration and experimentation in the economic system, there are also uncertainties, exploration and experimentation in the education system. The economic and education systems are now more open to cultural values that are not the norm – that is, based on efficiency, hierarchy and bureaucratic. However, the main cultural values are still predominant to serve the functioning of the system. This, in essence, is the contradiction, and a leadership challenge.

Therefore, the cultural values of Teachers Network Learning Circle, though seen and treated as less important than the system's cultural values, could still survive in the system because of the necessity of system's reliance on the lifeworld. The lifeworld provide opportunities for the discovery of new cultural values and practices that would further refine the system – making it relevant to its own survival.

People in leadership positions who are used to the cultural values of the system cannot reject the cultural values of the lifeworld because they see the importance of lifeworld values in relation to how they could help the system to evolve to stay relevant to constant external changes.

Having said this, it is however possible to unwittingly colonise the lifeworld cultural values and replacing them with the cultural values of the system. For example, the linking of professional development with appraisal may replace the cultural value of learning for personal and professional development with the cultural value for material gains. It is also possible that the motivation to engage in Learning Circles is replaced with the motivation to gain awards, which is a symbolic value, in order to gain higher

positional benefits and therefore more material resource. In addition, people with higher material and symbolic resource may impose and dominate people with lower material and symbolic resource to practice Learning Circles to gain greater symbolic resource and subsequently material resource.

# CHAPTER 5

# DISCUSSION

In attempting to provide a cultural description and interpretation of power relations in the social interactions of Teachers Network Learning Circle's members as they related, work and learn with each other, the following are the summarised findings of the research study in relation to the research questions in order of sequence (Refer to page 74):

1. The predominant power relation that was exercised among Learning Circle's members as they relate, work and learn with each other is symmetrical or consensual as opposed to asymmetrical or conflictual.

2. The cultural values that underlie the symmetrical or consensual power relation among Learning Circle's members as they relate, work and learn with each are (a) respect for human beings and equal treatment of human beings regardless of differences; and (b) respect for individual and collective freedom through consensual decision-making.

3. The cultural values that underlie the symmetrical or consensual power relation among Learning Circle's members as they relate, work and learn with each other had influenced teacher change.

   a) In terms of how members' relationship with each other had influenced teacher change, these cultural values that underlie the symmetrical or consensual power relation had brought about positive influence on collegial relationships by providing a safe and unthreatening social milieu that nurtured social practices of humouring, teasing, caring through empathy and sympathy, and building camaraderie, along with positive emotions that are related to these practices. These cultural values had also brought about positive influence on collaborative relationships through transparent, consensual and equitable distribution of work that took into consideration members' role specialisations, talents, skills, personalities, commitment, and willingness to volunteer help beyond one's expected lot.

*284*

Collaborative relationships had also contributed to the development of individual and collective identities through social practices of turn-taking during discussions where members were encouraged to express their individual identities. Self-expressions of individual identities were not only affirmed but shared and empathised by all other members. Such social practices where common experiences, feelings and knowledge are affirmed and shared contributed to the development of a collective identity. Positive feelings of camaraderie and solidarity were also attached to these social practices.

b) In terms of how members' working with each other had influenced teacher change, these cultural values that underlie the symmetrical or consensual power relation were applied when members made use of the symbolic or psychological tools and graphic signs (egs. 'Critical Friend', 'RTR', 'Check-in', '5 Whys', 'RPAOR' and 'Suspending Judgement') provided by Teachers Network which gave support to the cultural values of consensus decision-making and equal treatment. Second, members exercised autonomy in the usage of enabling work structures with flexibility taking into consideration work context and resource constraints. Flexibility was also applied in the social practice of dividing workload. In addition, shared leadership was exercised by members. Third, the members were being socialised into Learning Circles' values and practices with the help of the facilitator who embodied the exemplified the values of Teachers Network Learning Circles and the cultural values that underlie symmetrical or consensual power relation.

c) In terms of how members' learning with each other had influenced teacher change, these cultural values that underlie the symmetrical or consensual power relation had brought about the members' intellectual and knowledge development. First, the social practice of discursive dialoguing where members had to speak out their thoughts in the presence of others had helped them to make implicit knowledge becomes explicit, and undifferentiated knowledge becomes differentiated. It had also contributed to the development of reasoning skills where members had to propose, elaborate, justify and defend one's propositions with valid presuppositions in the presence of others. Second, the social practice of members' integrating divergent and convergent discourses by exploring maximum contributions by each member followed by coming to consensus by all members had contributed to the generative character of knowledge development at the individual and collective

levels. In other words, members' thought and knowledge underwent developmental reconstructions build on each others' knowledge. This is also closely linked to the development of partnerships, alliance, solidarity and positive emotional bonding, and the development of the collective identity as members agreed on each others' knowledge. At another level of analysis, the social practice of discursive dialogue where members had to speak out their thoughts in the presence of others and come to agreement on matters of the action research project had also enabled the members to engage in semiotic experiences where one has to give a 'name' or a sign to experiences in the past and possible future experiences during the Learning Circle's discussions. In addition, members were also engaged in co-naming past experiences and possible future experiences during the Learning Circle's discussions. The social practice of naming and co-naming had contributed to development of knowledge and identity at the individual and collective levels.

4. The cultural values of the Learning Circle site had their origin at the establishment of Teachers Network by the pioneers of Teachers Network. These cultural values were reproduced through the Learning Circle facilitators' training sessions followed by hand-holding by PDOs when first time facilitators attempt to implement Learning Circles in the different school contexts. The key actors in the reproduction of these cultural values were the facilitator, PDOs and school principal. The role of the school principal was pivotal insofar she had the greatest power in providing not only the material resource, but also cultural resource to support the reproduction of these cultural values in the school. Her role was also crucial especially in protecting these cultural values (lifeworld discourses) from being colonised by the system's values or discourses which privileged efficiency and control. One critical role that the school principal had played was to promote the lifeworld discourses without jeorpadising the core aspect of the system which is the need for efficiency. Another condition that had helped the school principal in protecting and promoting the lifeworld discourses was the system's need for a type of learning that has characteristics of the lifeworld discourses. This, in essence, was the key tension that existed in the attempt to promote the cultural values of Learning Circle at the school of study. On the one hand, the system discourses indicated the need for lifeworld discourses to grow, and thus its support for these discourses. On the other hand, the system discourses had the tendency to colonise the lifeworld by virtue of its principle value for money as expressed in the value for efficiency, and power as

manifested in the value for control. The task of balancing this key tension by the school leader had protected and nurtured the cultural values and practices of the Learning Circle.

For the remainder of this chapter, I will discuss three aspects of significance that contribute to the knowledge about teachers learning in groups. The first aspect has to do with how the cultural values that underlie symmetrical or consensual power relation have potential to positively contribute towards the holistic development of teachers learning in group settings which encompasses communication, cognitive, emotion, moral and identity domains of a human being. The second has to do with the important role of the school principal and Teachers Network personnel in providing the structural and cultural support conducive in creating, protecting and nurturing the cultural values that underlie symmetrical or consensual power relation, or democratic practices, in teachers learning in groups. These people not only embody, but also champion these cultural values, and understand the necessity to continually balance both the system's and lifeworld's needs with moral courage and intelligence. The third aspect has to do with how teachers' learning in groups using the cultural values of symmetrical or consensual power relationship contributes to teacher empowerment, which has potential for emancipation.

# SYMMETRICAL/CONSENSUAL POWER RELATION
# IN TEACHERS LEARNING IN GROUPS

In taking an interactionist posture in understanding power – that is, the study of power in more direct, participant-informed manner within a community of "living, thinking, acting and interacting being" (Prus, 1999, p. xiv), the study showed that the predominant power relation at the Learning Circle site was symmetrical as opposed to asymmetrical. This is contemporaneous to consensual and conflictual power (Haugaard, 2002) respectively. However, the symmetrical power relationship was not a stable state of 'pure consensus' as defined by Haugaard (2002) where people share common goals and structures (meanings or rules), rather an ideal that the Learning Circle's members tacitly pursue.

In this regard, the Learning Circle's members valued social meanings and rules of sharing instead of competing for resources and decisions or goals. The predominant cultural value is the coming to consensus on matters of structure and agency. And in terms of the evolutionary development of "pure consensus", the Learning Circle's members were enabled or constrained to move from a situation of either consensual goals but conflictual structures or conflictual goals but consensual structures to a situation of "pure consensus" (Haugaard, 2002). On the whole, between the scalar opposition of conflict and consensus (Haugaard, 2002), the power relationship at the Learning Circle site was towards "pure consensus" (Diagram 18).
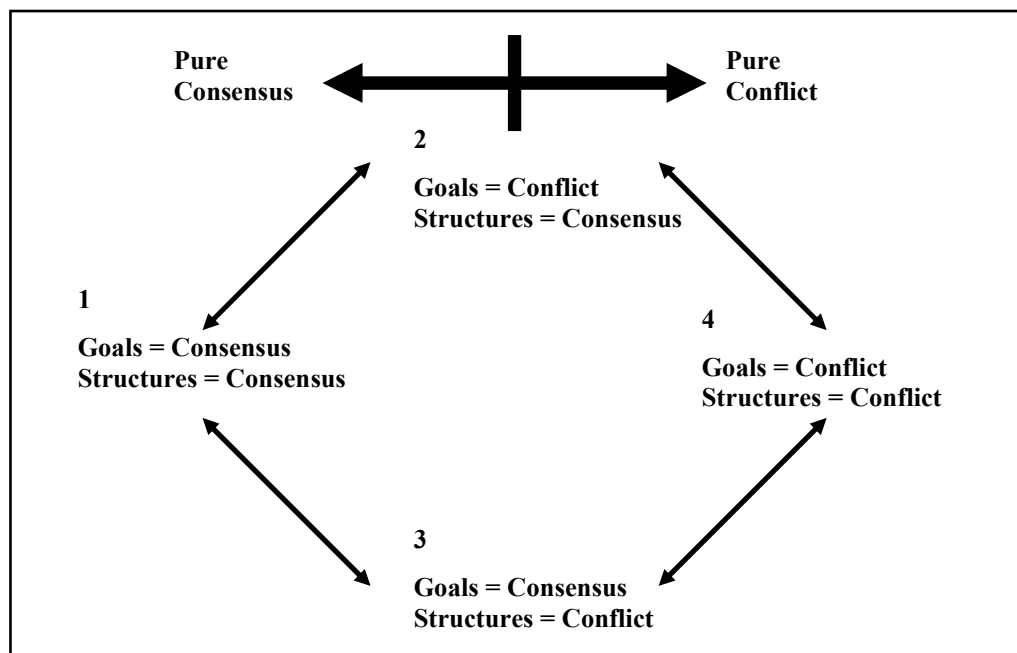


***Diagram 18: Scalar opposition of conflict and consensus (Haugaard, 2002, p. 313)***

The manifestation of symmetrical or consensual power relation was the result of the cultural values that Teachers Network had consciously or unconsciously produced and reproduced in the education system. A primary cultural value that had contributed to symmetrical or consensual power relation possible is the respect for each human being regardless of differences, which is considered basic and fundamental in human social interactions. And although due respect is given to age, experience, competence, roles, specialisation, this basic and fundamental cultural value has primacy especially in terms of making assertions and collective decisions. The fulfillment of this basic and fundamental cultural value would also necessitate the cultural value for equal treatment regardless of differences. However, the pursuit for equal treatment within a group setting would require the engagement of consensual decision-making, which is the second primary cultural value that Teachers Network had consciously or unconsciously produced and reproduced in the education system.

Although the cultural values of respect for each human being and equal treatment for each human being regardless of differences are unconsciously structured within Teachers Network Learning Circles, what makes these values attractive is their inherent universality, fundamentality of being human beings. This contributes to the successful cultural and social reproduction of these cultural values from the Teachers Network site to the Learning Circle site. The successful cultural and social reproduction of these cultural values also alludes to another perspective of power – that is, members of the Learning Circle were free to control or influence material and symbolic realities. However, this freedom or autonomy was not geared towards 'power over' as in to dominate another person, rather 'power with' as in to share with other persons in controlling or influencing material and symbolic realities. The cultural values that underlie symmetrical power relation are evident from the social norms or rules during the Learning Circle discussions (Refer to pages 117-118).

These social norms or rules during discussions are congruent to the universal principle U and discourse principle D which Habermas (1995) proposed in his discourse ethics, which are consistent to Habermas' notion of an 'ideal speech situation' and democratic participation where "all motives except that of the cooperative search for truth are excluded" (Habermas, 1975, p. 108), and that deliberations ought to be conducted

around "a common interest ascertained without deception … in the constraint-free consensus permits only what all can want" (Habermas, 1975, p. 108).

In a nutshell, the cultural values that underlie the Learning Circle's discussions – (a) respect for human beings and equal treatment of human beings regardless of differences, and (b) respect for individual and collective freedom through consensual decision-making – had brought about symmetrical or consensual power relation which eventually had made significant contribution to how members of the Learning Circle relate, work and learn, and thus had made significant contributions to members' individual and collective change. A common social practice that was evident in how the Learning Circle's members interact with each was the idea of turn-taking in making sure that everyone's voice and ideas are heard before coming to a consensus.

For the sake of brevity, I will refer these two cultural values to the 'cultural values that underlie symmetrical power relation'.

**SYMMETRICAL POWER RELATIONS AND TEACHER CHANGE**

The research study showed that symmetrical power relation which was underpinned by the cultural values of respect for human beings and equal treatment of human beings regardless of differences, and respect for individual and collective freedom through consensual decision-making had made positive contributions towards the holistic change and development of teachers who were engaged in learning in group settings. These cultural values had brought about changes in how teachers relate, work and learn with each other in the domains of communication, cognition, action, emotion, moral and identity.

<u>**Teacher Change in Teachers' Relationship**</u>

These cultural values that underlie symmetrical power relation had brought about a sense of ease among members and a feeling that they are among equals – thus creating a safe and unthreatening environment, evident from the humouring, teasing and fraternising that took place in the midst of serious and unconstrained discussions. This safe and unthreatening environment had also provided a social milieu that encouraged expressions of care in the forms of empathy and sympathy among members. This safe and unthreatening environment had thus contributed to collegial relationship between teachers during their group discussions.

These cultural values had also contributed to the social practice of turn-taking during the Learning Circle's discussions which had in turn made sure that everyone's voice and ideas being heard before coming to a consensus. This is consistent with the common social practice of diverging and converging conversations or discussions. While the former encouraged maximum contributions from individual input, the latter encouraged maximum agreement by all. The practice of turn-taking within divergent-convergent discourse had brought about the development of camaraderie among members evident in the practices of acceptance, understanding, empathy, being heard by others, sharing, making contributions to group ideas, liking for each other, affirmation, respect, encouragement, synergy and helping one another.

The materialisation of collegiality is also closely related to the materialisation of collaboration. The same cultural values that afford symmetrical power relation which had enabled or constrained collegiality had also enabled or constrained collaborative social practices. The social practices of collaboration were evident in the division of

work which was based on consensus – that is, decisions for work distribution were only concluded when everyone had agreed to these decisions via reasoned argumentation within time constraints. Reasons eventually determined the equity of workload and work distribution, which also took account of role specialisation, talents and skills of members.

The nature of collaboration was also evident in the blurring of lines between work responsibilities. The cultural value of respect for human beings and equal treatment of human beings regardless of differences had also enabled or constrained members to volunteer or offer help beyond their expected scope of work to other members who needed help and support. This is contemporaneous to the cultural value of shared work that Teachers Network has been promoting as signified by the flight of geese. The ability and disposition to volunteer or offer help to other members was also enabled or constrained by the cultural value for individual freedom. This is consistent with Smylie's (1995b) proposition that workplace learning ought to provide ongoing opportunities for individual members to work and learn together in an open, collegial and collaborative atmosphere, and where there is a certain degree of autonomy and choice for individual members balanced with participatory decision-making.

The cultural values that underlie symmetrical power relation had also enabled or constrained members to express themselves freely and spontaneously. This had effectively provided the time and space for each member to express their individualities in terms of personalities, roles, historical experiences or stories, ideas, emotions and decisions in the midst others. This is congruent with the proposition to include personal biographies in the formal discourse of professional development of teachers (Ball, 1996; Day and Sachs, 2004; Goodson, 2003; Leitch and Day, 2001; Rogers and Babinski, 2002; Woods, 2002).

The social practice of expressing oneself freely and spontaneously was also conducive for the creation of shared experiences based on past experiences in order to determine future experiences. This is synonymous to the construction of shared stories/narratives based on past stories/narratives to determine future stories/narratives. Although this is consistent with the propositions made by some writers that teachers' biographies or life histories/stories/narratives must be brought to bear in teacher learning (Ball, 1996; Goodson, 2003; Kelchtermans, 2004; Leitch and Day, 2001).

The materialisation of collegiality and collaboration was also accompanied by positive emotions (Refer to page 134). This is in agreement with the proposition that teacher professional development ought to include teachers' emotions (Alexander and Murphy, 1998; McCulloch, 2000; Peery, 2004; Rogers and Babinski, 2002). Hargreaves (2002a) was right to propose that emotions are moral phenomenon as they are intimately and inextricably bound up with our purposes. Purposes, the things that are important to us, "often drive or trigger our emotions". What this research study has shown is that these positive emotions are important in not only sustaining collegial and collaborative social practices in the present, but also reproducing collegial and collaborative social practices in the future. In other words, these positive emotions become a resource for members to help them in future collaborative efforts. This in essence contributes to the sustainability of teachers learning in groups.

The research study has also shown that the positive emotions which accompanied collegial and collaborative relations are also closely connected to morals. A consistent cultural value which was highly backgrounded in the Learning Circle members' discussions is the commitment they have towards pupils' learning and development. The importance of bringing to bear the moral purpose of teaching into teacher professional development and learning has been proposed by Day (1999), Grimmett and Neufeld (1994).and Kelchtermans (2004).

The cultural values that underlie symmetrical power relation had also enabled or constrained members to express projections or externalisations of self-identities. The freedom for individual expressions can also be perceived as projections or externalisations of self-identities. The freedom to externalise one's identity at the same time brings about the internalisation of one's identity, and thus bringing about the affirmation and consolidation of one's identity within a group. The accomplishment of the externalisation and internalisation of one's identity brings about a sense of worth as a person as he or she is being accepted by others. The accomplishment of the externalization and internalisation of one's identity also brings about a sense of self-constitution as a person – that is, being a complete human being. The importance of taking into account of teachers' identities in teacher learning has been raised by Day and Sachs (2004) and Woods (2002). In fact, the failure to develop one's identity has been

said to be a significant indication of the pathological development of a society (Honneth, 1994, cited in Dean, 1996, p. 236).

Expressions of individual identities in the form of historical experiences or stories had also contributed to the development and constitution of the collective identity of the group. As each member brought into the group his or her individual identities based on his or her past experiences and current roles, these externalisations could be shared to and empathised by other members. This thus provided opportunities for the formation of collective identities, where common experiences were formed during interactions and discussions. These common experiences will become common historical experiences or stories for members to use in future interactions and discussions. These shared stories/narratives have the potential to coalesce teachers together in future collaborative learning, and thus enhances the sustainability of the teachers learning in groups. What this research study has shown is that the free expressions of individual identity, along with the cultural value of reaching collective consensus, had contributed to the development of group identity and solidarity.

The formation of individual and collective identities is in tandem with Wenger's theory of communities of practice where learning is considered as a social activity and is the fundamental process by which we become who we are in the pursuit of shared experiences and enterprises (Wenger, 1998). He contended that learning is understood as social participation which involves more than just engagement in certain activities with certain people. He understood social participation as "a more encompassing process of being active members in the practice of social communities, and constructing identities in relation to these communities" (p. 4). Social participation is said to shape what we do, who we are and how we interpret what we do.

The notion of collective identities brought about by shared experiences is congruent to the importance of "building or rebuilding of shared understanding and language" (McLaughlin, 2002, p. 113). The main feeling that is attached to the formation of collective identities is a sense of self-worth as members feel accepted, belonged and united. And just like individual identities, collectively identities are also internalised the moment they are externalised. The formation of common or collective identities through stories also provides the context for learning such as reflecting, inquiring and thinking,

and working. In other words, stories provide the material resource for group members to talk and think with each other, and work together.

The importance of identity formation of adults learning in groups had been linked to the Habermas' notion of the lifeworld (Brookfield, 2005a). Brookfield (2005a) argued that the lifeworld contains the unacknowledged rules and conventions in speech, or symbolic structure, which frames how we form our identities, how we acquire cultural knowledge, and how we develop group solidarity. The intersubjective nature of the lifeworld (Habermas, 1987a) requires it to be dependent on group participants to renew and re-create it through communicative action – that is, a symbolic reproduction of the lifeworld. In doing so, the group participants gain a collective identity and group solidarity. This partly explains why members of the Learning Circle experienced a sense of camaraderie and group solidarity during their group discussions. The cultural values that underlie symmetrical power relation had contributed to the renewal and re-creation of the lifeworld of group members, and thus the development of group identity and solidarity. Besides the development of group solidarity through the symbolic reproduction of the lifeworld, the development of positive emotions through the collegial and collaboration relationships had also contributed to the group solidarity.

**<u>Teacher Change in Teachers' Learning</u>**

With regard to how teachers learn, the cultural values that underlie the symmetrical power relation had enabled or constrained members to enter into intellectual discussions involving the nexus between talk and thought, and between propositions and presuppositions. These underlying cultural values are contemporaneous with the social norms or rules evident at the Learning Circle site and Habermas' discourse ethics described earlier. These cultural values had not only enabled or constrained discursive interactions among members where talk is integrated with thought, but also maximised the individual occurrences for members to talk and think at the same time. The symmetrical power relation had afforded members to make individual intellectual assertions with minimal hindrance yet at the same time not allowing for a few members to dominate assertions. This balance between individual and collective freedom to talk, and thus think at the same time, is a feature of democratic living.

The notion of intellectual discussions involving the nexus between talk and thought, and between propositions and presuppositions, is linked to the notion of the need for

teacher's voice to be brought to bear in teacher professional development and learning (Ball, 1996; Cochran-Smith and Lytle, 1996; Guskey, 2000; Kelchtermans, 2004; Lester, 2003; Lytle, 1996) and teachers' lives in general (Calderhead, 2001; Fiszher, 2004; Goodson, 1997; Sarason, 1996). Besides concurring with the literature of the importance of bringing to bear teachers' voice in the decision-making of the learning practices in groups, what this research study has shown further is the importance of teachers' voice in group learning within symmetrical power relation insofar as it provided the material base for cognition. Talk and thought are dialectically and interdependently related – that is, the talk-thought nexus.

With respect to the talk-thought nexus, what is salient is the simultaneity of talking and thinking, and the inter-dependence between language and thought. Within intersubjective communications, as a member attempts to verbally articulate his or her thoughts to others, he or she is at the same time reconstructing his or her own understanding or knowledge so as to help all group members gain mutual understanding. In this instance, the implicit becomes explicit, and the undifferentiated become differentiated. What was once hazy becomes clear, and what was once disjointed becomes coherent. In Vygotskian terms, the cultural tool of language becomes the medium for cognition. At another level, the nexus between language and thought also affords the materialisation of the movement from practical consciousness to discursive consciousness (Giddens, 1984) and from 'doxa' to 'universe of discource' (Bourdieu, 1977) where taken-for-granted knowledge becomes more visible, and thus can become subject to the scrutiny of agents. The movement from practical consciousness to discursive consciousness is also synonymous to the movement from non-reflexive learning to reflexive learning (Habermas, 1975).

The movement from implicit to explicit awareness, undifferentiated to differentiated knowledge, hazy to clear consciousness, or disjointed to coherent understanding is also reflective of Habermas's notion of the lifeworld. Habermas (1987a) argued that during day-to-day disappointments where contradictions and contingencies abound, the lifeworld's horizon becomes a little less hazy as a segment of it comes into view. The lifeworld's knowledge and assumptions become questionable – that is, the "relevant segment of the lifeworld acquires the status of a contingent reality that could also be interpreted another way" (Habermas, 1987a, p. 131). In doing so, the lifeworld goes

through a symbolic reproduction as it is being renewed and re-created through communicative actions to reach rationally motivated mutual understanding.

The notion of the lifeworld acquiring the status of a contingent reality is also closely related to a disorienting dilemma (Mezirow, 2000) that would lead to a chain of events such as self-examination; critical assessment of assumptions; recognition of one's discontent; exploration of new roles, relationships and actions; planning a course of action; acquiring knowledge and skills; provisional trying of new roles; building competence and self-confidence; and reintegration into one's life on the basis of conditions dictated by one's new perspective. However, within a community that practices the cultural values that underlie symmetrical power relation the individuals' change in symbolic structures such as knowledge and norms inevitably attained a shared status. The research study has shown that the cultural values that underlie symmetrical power relation had created the social milieu where members are exposed to critique and conflicting views, and thus exposure to disorienting dilemmas.

As the lifeworld is defined as a "culturally transmitted and linguistically organised stock of interpretive patterns" (Habermas, 1987a, p. 124), it essentially has a linguistic structure in terms of content and a communicative structure in terms of form, and is intersubjective (Habermas, 1987a) as it represents a set of shared meanings for people to draw upon to communicate with each other so as to refer to items in the objective, subjective and normative worlds (Outhwaite, 1994). The lifeworld's knowledge and assumptions are thus linguistic in essence. Therefore, it is not surprising that members drew upon communicative linguistic structures in their attempts to transform their knowledge which is essentially linguistic. The research study has thus shown that the cultural values that underlie symmetrical power relation had created the social milieu where members have to communicatively reach consensual decisions, and in doing so unwittingly contribute to the symbolic reproduction of the members' lifeworlds.

The linguistic nature of the lifeworld alludes to the a priori status of language in the constitution of a human being. Besides understanding the lifeworld as embodying and thus promoting 'social integration' where group identities and solidarity are formed, and 'socialisation' where individual identities are harmonised within collective forms of life (Outhwaite, 1994), the lifeworld also plays a crucial role in 'cultural reproduction' where traditions and knowledge is not only passed from one generation to another, but

also renewed and re-created over time. The notion of learning and knowledge as being tied up in cultural reproduction is synonymous to the socio-cultural or socio-historical theory of Vygotsky. Hence, the symbolic reproduction of members' lifeworlds provided the symbolic resource for future collaborative group learning and thus ensuring sustainability of group learning.

The intersubjective nature of the lifeworld also attests to the generative nature of knowledge construction or reconstruction in the discussions that took place at the Learning Circle site, which resonates well with propositions that espouse a type of teacher professional development and learning that interrogates knowledge and is constructivist in approach (Alexander and Murphy, 1998; Cochran-Smith and Lytle, 1999; Corcoran, 1995; Day and Sachs, 2004; Forde et al., 2006; Hoban, 2002; Nelson and Hammerman, 1996). As an idea is articulated by a member, another member develops on that idea, which is then developed by another group member, and so on and so forth. At the end of each divergent-conclusion flow of discussion, an original idea takes on a different form as it goes through the morphological process of reconstruction upon reconstruction. Ideas are therefore intersubjectively constructed, reconstructed and shared among members. In this way, the structures of the lifeworld undergo a symbolic reproduction.

Insofar as knowledge is synonymous to signs, the semiotic analysis of how the Learning Circle's members co-construct knowledge based on the proposition-presupposition can be illustrated in the following diagram:
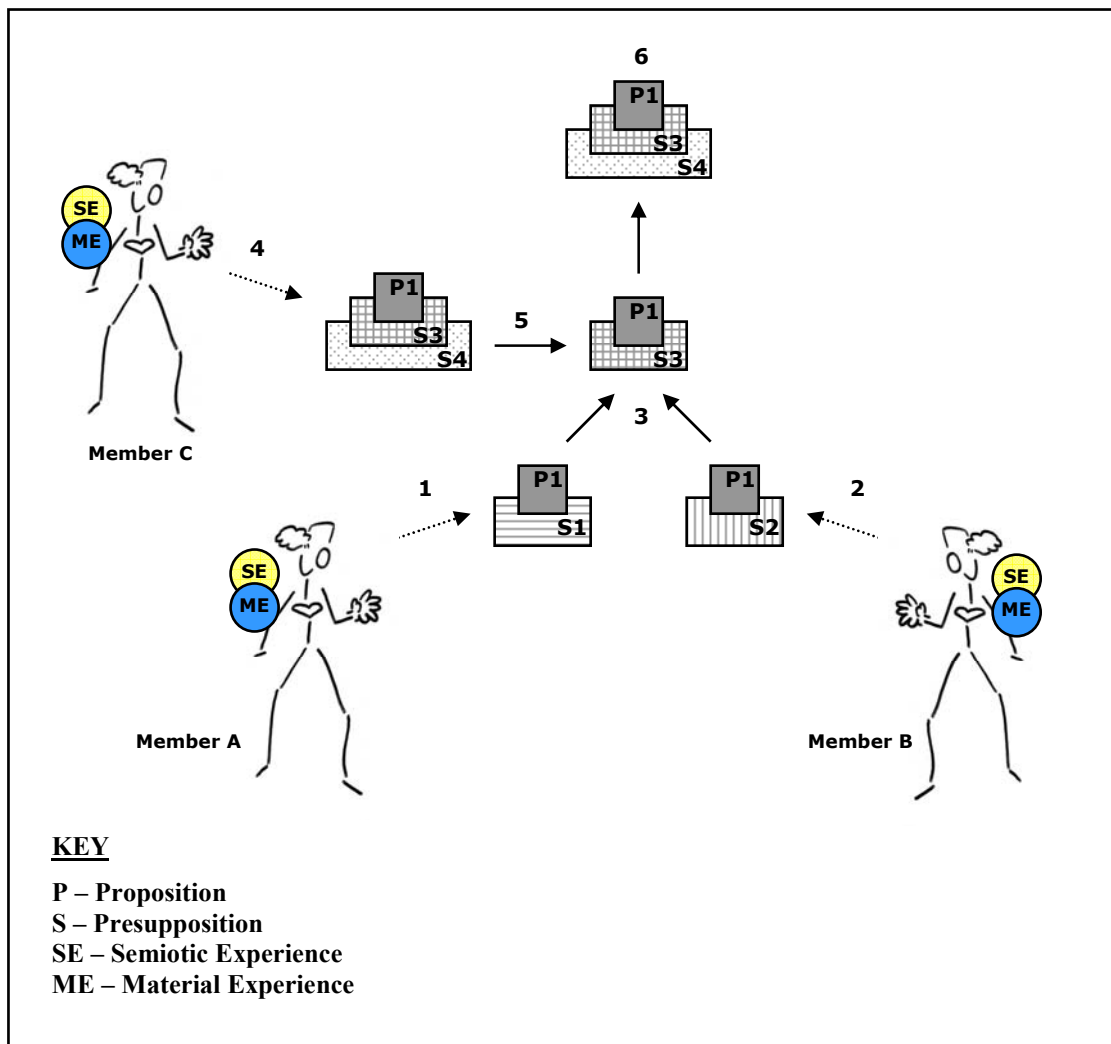
*Diagram 11: Semiotic Co-constructions*

| | |
|---|---|
| *Member A* | *Asserts Proposition P1 with Presupposition S1.* |
| *Member B* | *Agrees with Proposition P1 but asserted another presupposition – Presupposition S2.* |
| *Member A & B* | *Consolidate Presuppositions S1 and S2 to form Presupposition S3.* |
| *Member C* | *Agrees with Proposition P1 and Presupposition S3 but asserted a presupposition that undergird Presupposition S3 – Presupposition S4.* |
| *Members A, B & C* | Agree with Proposition P1 with Presuppositions S3 and S4. |

The five types of collective co-construction of signs, and therefore the co-construction of knowledge, that had been identified in the findings include (Refer to pages 187-194):

The research study found that besides bringing to bear teachers' life histories or stories/narratives, and thus teachers' language, in teacher professional development and learning (Ball, 1996; Goodson, 2003; Kelchtermans, 2004; Leitch and Day, 2001) what is more important is how teachers interact with other teachers using their stories/narratives in bringing about shared stories/narratives or knowledge. This form of intersubjective communicative action could be achieved when teachers adopt the cultural values that underlie symmetrical power relations in group settings. The research study thus gives explanatory support to Garet and his colleague's (2001) proposal that effective professional development be sustained over time and involves collective participation. Time is need for teachers to engage in co-construction of stories/narratives.

The social practices of building on each others' knowledge are also closely tied to the development and constitution of individual and collective identity which has been described earlier. Both are accompanied by positive emotions relating to self-esteem, self-worth and group solidarity. Echoing Habermas, McCarthy (1990) claimed that "members of our species become individuals in and through bring socialised into networks of reciprocal social relations, so that personal identity is from the start interwoven with relations of mutual recognition" (p. x). The accomplishment of both individual and collective identity brings about a positive feeling of self-constitution of individual self and collective selves.

The development of individual and collective identities and their links to emotions are also closely tied to rationality or reasons. The intersubjective nature of the social practices of building on each others' knowledge means that members are required to enter into mutual understanding through rational discourse – that is, within resource constraints, the better argument wins. Within the pragmatic field of actions, when members make assertions in the form of propositions, they have to lay bare their reasons in the form of presuppositions. In other words, asserted conclusions must be supported by premises – and hence, reasoned arguments, which become necessarily salient when collective decisions are demanded. The role of rationality plays a crucial role in determining the validity of propositions in the attempt to reach mutual understanding. The research study has shown that the intersubjective nature of the building on each others' knowledge such as during the Learning Circle's discussions can therefore be said to play an important role in not only sharpening the reasoning skills, but also

refining the professional or pedagogical knowledge of members at the individual and collective levels.

The place of rationality within the intersubjective communicative actions is therefore important in refining the professional or pedagogical knowledge of members. Although literatures on professional development suggests the importance placed on notions of collectivity, collaboration and communities (Day and Sachs, 2004; Garet *et al.*, 2001; Hoban, 2002; Huberman, 2001; Lester, 2003; Lieberman, 1994; Newmann, 2004; Peery, 2004; Rogers and Babinski, 2002; Villegas-Reimers, 2003), what the research study has shown is the centrality of reasoned argumentation within intersubjective communicative actions which is undergirded by the cultural values that underlie symmetrical power relation.

The importance of reasoned argumentation is more important than the formation of communities whether in the form of PLCs (Bolam *et al.*, 2005; DuFour, 2005) or COPs (Wenger, 1998; Wenger *et al.*, 2002). Reasoned argumentation would imply the need for communities of dissent, diversity and debate. Communities of dissent, diversity and debate provide the social milieu for critical thinking as defined by Siegel (1990) as requiring the motivation to act on the basis reasons; the assessment of reasons; and the habit or disposition to reason. Achinstein (2002) was right to claim that conflict is central to community, and that the community's potential for professional development and organisational learning is determined when teachers embrace their differences during conflicts. In this context of social interactions, taken-for-granted assumptions, beliefs and knowledge can be communicated and examined (Kelchtermans, 2004).

The general oversight is that consensus requires not only the presence, but also solution of conflicts. The balance between accepting diversity and consensuality mirrors exactly that of the nexus between divergent and convergent discourses present in Teachers Network Learning Circles' discourse. As McCarthy (1990) had rightly observed, Habermas' discourse ethics give priority to argumentation over participation as it makes participation possible. Hence, reasoned argumentation is more foundational than participation. Reasoned argumentation sets the stage for participation, and thus community formation and development. What the research study has shown is that the cultural values that underlie symmetrical power relations in teachers learning in groups had made possible the social practices of divergent (diversity and conflicts) and

convergent (consensuality and solutions) discourses which in turn made reasoned argumentation possible and sustainable.

The rationality that is employed during discussions at the Learning Circle site did not, however, take the form of instrumental rationality which has the tendency to favour the most efficient or cost-effective means to achieve a specific end but not in itself reflecting on the value of that end. The rationality that is predominantly being used in the discussions is one that assesses the validity of assertions made during discussions in the proposition- presupposition nexus within the context of pragmatic educational moral objectives. This form of rationality is intimately linked to the purpose of reaching mutual understanding and consensus in decision-making, and is necessarily dependent on the cultural values that underlie symmetrical power relation. The lack of instrumental rationality or reasoning in the discussions at the Learning Circle site is promising in terms of the development of the public sphere where people informally come together to explore how to organise and conduct their communal affairs which could affect formal political and legislative deliberations (Habermas, 1996).

The intersubjective nature of building on each others' knowledge during the Learning Circle is also not devoid of the values, ethics and morals. In other words, the assertions made in the form of propositions and supported by presuppositions not only point to the need for rationality, but also values, ethics and morals. Although there were negotiations that pertain to work conditions, members of the Learning Circle intuitively and implicitly shared the common moral goals of education or schooling (Kelchtermans, 2004). Besides reaching common pragmatic outcomes, the propositions and presuppositions made are motivated by members' values, ethics and morals that relate to teaching and life as a whole.

The intersubjective nature of building on each others' knowledge also means that members of the Learning Circle have to strive towards putting themselves in each others' shoes or positions, and this explains the manifestations of acts of empathy and sympathy described earlier. This also implies the development of moral consciousness. This is in tandem with Habermas' reconstructive moral theory by developing an action theory that links communication with moral consciousness and development (Habermas, 1990), and specifically locating it within his theory of discourse ethics. In simple terms, the act of communication actions to reach rationally motivated mutual

understanding inevitably demands that members develop or attain Kohlberg's postconventional and principled level of moral development.

The social practices of building on each others' knowledge also contain a historical aspect to learning where past experiences are drawn upon in view of the current situation as it is perceived in the future. This attests to the 'cultural reproduction' of the lifeworld mentioned earlier where knowledge is not only passed from one generation to another, but also renewed and re-created over time. Hence, the learning that takes place at the individual level can be diagrammatically captured by the following diagram.
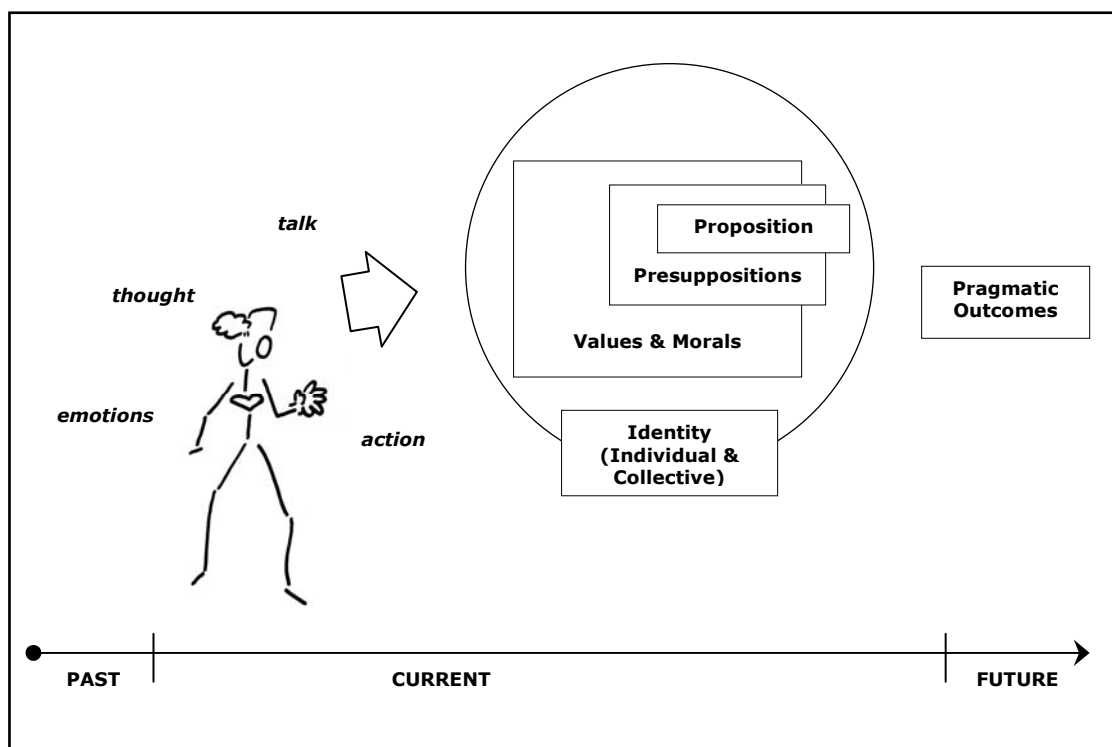


*Diagram 8: How a Participant Participates in Learning*

In summary, what the research study has shown is that teacher professional development and learning must go beyond notions of collegiality, collaboration, collectivity and communities to centrally look at the importance of power relations in learning in groups – specifically, symmetrical power relation and its positive influence or impact on teacher change and development. This study proposed that this symmetrical power relation be underpinned by the cultural values of (a) respect for human beings and equal treatment of human beings regardless of differences, and (b) respect for individual and collective freedom through consensual decision-making.

Furthermore, this research study has also shown that teacher change and development takes place in a holistic manner, as opposed to in isolation, which covers all domains of being a human being such as communication, cognition, action, emotion, moral and identity as evidence in the changes that took place in members which included the ability to develop collegial and collaborative relations; express one's individuality; express one's emotions; stay in touch and assert one's moral purpose of teaching; affirm and develop one's identity; and develop group identity and solidarity. In terms of learning, teaching change included the ability to integrate talking with thinking, and hence, the development of language and thought (cognition); construct and reconstruct knowledge individually and collectively; sharpen one's reasoning skills; be able to closely tie thinking to the development of one's emotions, morals, personal identity, group identity and solidarity

The change and development that took place are consistent with Day's (1999) suggestion that new modes of professional development need to take into consideration the 'whole person'. The holistic approach to human learning has also been acknowledged by Mezirow (1991; 1997; 2000). The holistic conception of human learning is also evident from situated cognitionists (Kirshner and Whitson, 1997) who seek to "develop a cohesive and coherent theoretical approach … for comprehending the complex interrelationships of all aspects of our human cognitively engagement with our worlds" (p. 2). The main implication is that change in one domain of a human being is interconnected with change in other domains. The holistic nature of change also attests to why Smith and his colleagues (2006) preferred the broad definition of change.

**MACRO CONDITIONS THAT SUPPORT**
**MICRO SYMMETRICAL/CONSENSUAL POWER RELATION**

With regard to system relations, the cultural values that existed within the seven social sites which stand external to the Learning Circle site vary in terms of their congruence to the cultural values of the Learning Circle site. Below is a summary of conclusions that pertain to system relations and integration, and depicted in the Diagram 19.

1. The cultural values at the school site are generally congruent with the cultural values at the Learning Circle site.

2. The cultural values at N4 Learning Symposium are fairly congruent with the cultural values at the Learning Circle site.

3. The cultural values at North Zone Action Research Educational Symposium are generally incongruent with the cultural values at the Learning Circle site.

4. The cultural values at Teachers Network Learning Circle Facilitators' Training (2005/6) are generally congruent with the cultural values at the Learning Circle site.

5. The cultural values at Teachers Network are generally congruent with the cultural values at the Learning Circle site.

6. The cultural values at the EPMS Kit site are more than less incongruent with the cultural values at the Learning Circle site.

7. The cultural values at the MOE Work Plan Seminar 2005 Policy Document site are more than less congruent with the cultural values at the Learning Circle site.

The findings from Stage 4 had shown that the cultural values at various social sites may or may not be congruent to the cultural values at the Learning Circle site. The degree of congruence or incongruence was dependent on the degree of compatibility with the cultural values that underlie symmetrical power relation. The findings from Stage 4 had also shown that the cultural values that underlie symmetrical power relations are dependent on appropriate conditions that create, protect and nurture these values, especially by people who are in leadership positions legitimated by the system such as the school principal and Teachers Network personnel. These people do have significant influence on the distribution of resources and cultural values through their positional authority. The literature review directly or indirectly support this view (Bolam and McMahon, 2004; Darling-Hammond, 1994; Guskey, 1995; Guskey, 2000; King and Newmann, 2004a, 2004b; Lester, 2003; Villegas-Reimers, 2003).

The research study had found that there was evidence of the tendency for system imperatives of efficiency and control to colonise the lifeworld. This is consistent with Habermas notion of the system tendency to colonise the lifeworld (Habermas, 1987b). This is also consistent with the paradox of education change within contradictory system structures such as the tendency for top-down change (Angus, 1998; Caldwell, 1997; Hargreaves, 1999; Townsend, 1998) even in matters of professional development (Anderson, 1997; Fenstermacher, 1987; Pace, 1992; Richardson and Anders, 1994b). However, there were people in positions of leadership who believed the type of teacher learning that values the cultural values of symmetrical power relations. They were the ones who had created, protected or/and nurtured these cultural values and contributed to the materialisation of these cultural values.

Level of
Hierarchy in
theMOE

MOE Work Plan
Seminar 2005
Policy
Documents

EPMS
KIT

NZ AR Edn
Symposium

Teachers
Network

N4 Learning
Symposium

TN LC Facilitators'
Training

The School

CONGRUENCE to the
cultural values of
Learning Circle.

INCONGRUENCE to
the cultural values of
Learning Circle.
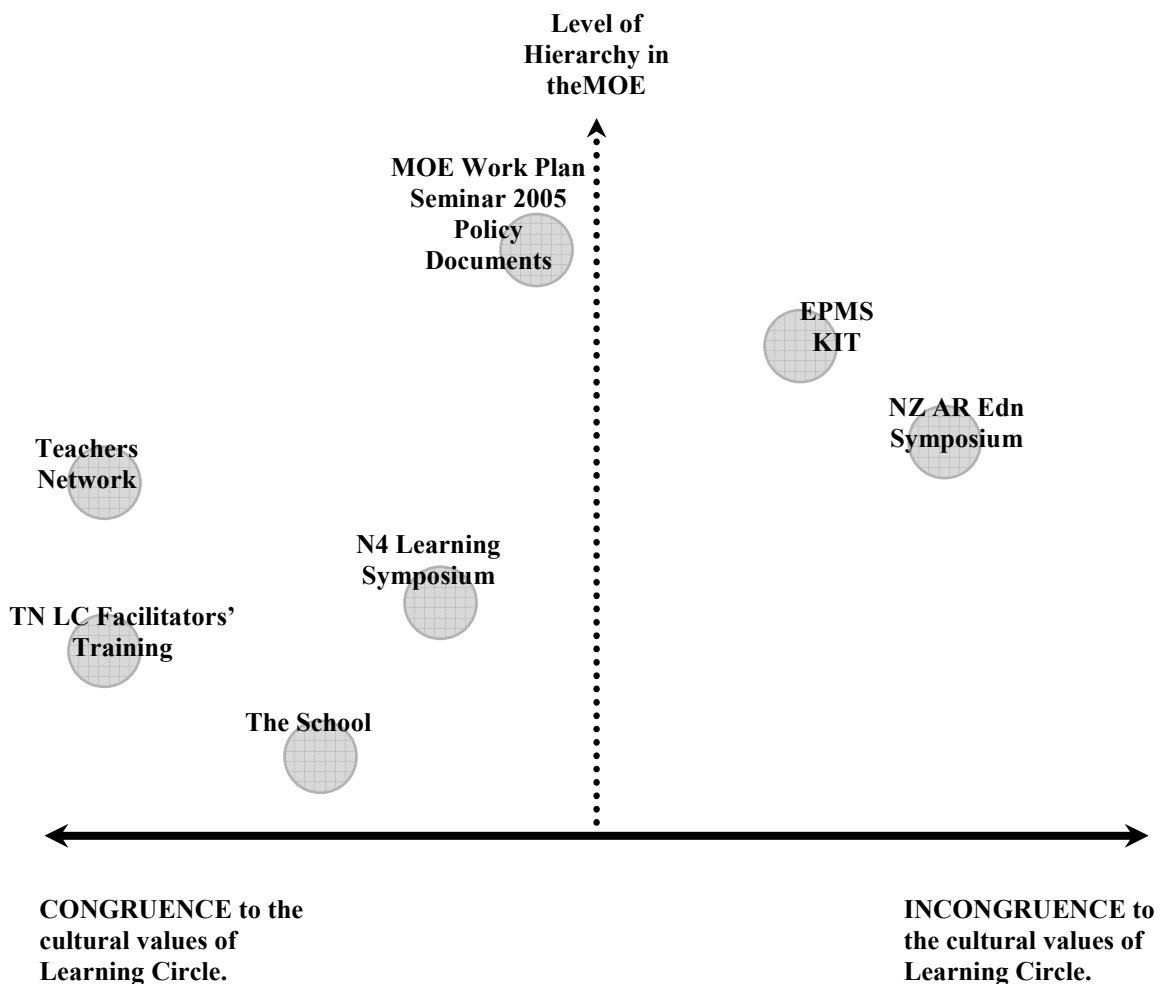
*__Diagram 19: System Relations and Integration of Social Sites__*

**Support from the School Principal**

In the case of the school of the study, the school principal placed Learning Circle as a primary and an integral thrust of its professional development endeavours for teachers involving all grade levels and spanning over a number of years. This is consistent with Garet and his colleagues' proposal for fostering coherence so that professional development activities are perceived by teachers to be a part of a coherent programme for teacher learning" (Garet *et. al.*, 2001, p 927). Furthermore, the school legitimised and supported the links between Learning Circles efforts with that of classroom pedagogies. For example, the school principal and senior management gave the autonomy for teachers to adopt strategies that they came up with in order to improve students' learning. This is consistent with the literature review that proposed the close link between teacher professional development and student outcomes (Boyle *et. al.*, 2004; Garet *et. al.*, 2001; Guskey, 2002; Hawley and Valli, 1999; Sparks and Hirsh, 1997; Villegas-Reimers, 2003).

Both material and symbolic resources were given by the principal with the support of her senior management team. For the former, time and material resources were allocated to afford teachers quality and protected time in professional development social practices. For the latter, the school principal adopted and practised the same cultural values that are used in Learning Circles for the general way of working in schools. For example, the primary cultural values that afford symmetrical relationships were drawn upon in the relationship in the day-to-day relationships between the principal and teachers. In essence, the school principal was conscious to balance between individual needs of teachers and that of the school as an organisation which is accountable to the Ministry of Education. This is consistent with Guskey's (1995) proposal to find "the optimal mix of individual and organisational processes that will contribute to the success in a particular context" (p, 119).

The extent of coherence is, therefore, in terms of not only material structures, but also symbolic structures. And the task of the school principal in providing material and symbolic support cannot be overstated. However, between the two, the research has found that the latter is more important and foundational. In this regard, cultural values determine how material resources are distributed and used. Although material resources are important in determining how social practices take place, cultural values are foundational and are prior to material resources. In the school of study, the school

principal was the embodiment of the cultural values that afford symmetrical relationships.

The school principal's task was not only to provide support, but also protect the primary cultural values that underlie symmetrical relationships in Learning Circles. Although she may not use the language of democratic participation and living, she embodied the basic values of respect for human beings and equal treatment of human beings regardless of differences, and for individual and collective freedom through consensual decision-making. This embodiment had not only influenced the social practices of Learning Circles in the school, but also the general way of relating with her senior management team and school teachers. Furthermore, she is conscious of these values and the practices that promote these values, unlike the teachers within the Learning Circle site.

The school principal is also conscious in terms of the system imperatives of power and money which include the need for efficient use of resource, surveillance, control, appraisal and 'showcasing' or 'window-dressing'. She is also realistic in terms of accepting the inevitability of the system imperatives, which she herself is situated – that is, the modern capitalist state. However, her sense of spiritual and idealistic convictions had enabled and constrained her to resist and moderate aspects of system imperatives. The need for efficiency was balanced with human considerations. Human considerations had influenced and determined how resources were used, but in an efficient manner. Mechanism and tools for surveillance and control were used with sensitivity and respect to teachers. For example, having individual closed door conversations with teachers to give an account of their class performance at the end of the year. Showcasing or window-dressing was done with a human touch and without excesses.

All in all, she was conscious not only to resist and moderate the system imperatives, but also to maximise opportunities that were within her purview to promote the cultural values that underlie symmetrical power relations. This delicate balance is not without risk, courage and intelligence. However, the convictions that she held on to with regard to values of teacher empowerment, and of individual and collective freedom through consensual decision-making are too great as they have become embodied over time and become a central part of her identity as a principal and educator.

Resorting to moderation of system imperatives did not however mean reproducing system imperatives - rather, to protect potential emancipatory sites, and thus giving these sites the chance to survive and thrive. Even in cases where the Learning Circle sites were confronted with the possibility of being colonised by system imperatives, both resistance and moderation were applied. For example, during the North Cluster 4 Learning Symposium, being a member of the committee, she made efforts to influence certain aspects of the structure of the symposium in order to protect the cultural values that she cherished. Also, she had decided not to send her teachers to make presentations at the North Zone Action Research Educational Symposium but came together with two key teachers. While her presence is a form of respect for people at higher positions, not making teachers present at the symposium is a form of resistance.

## Support from Teachers Network Personnel

These cultural values were also embodied in the pioneers of Teachers Network, especially those who were in position of advantage by virtue of their legitimised position in the organisation and ministry such as the deputy-director and permanent secretary. As for the first deputy-director of Teachers Network, both courage and intelligence were evident in order to legitimise the creation of Teachers Network along with its vision and mission statements within a system that privileges system imperatives. Some examples include:

- Gaining the support from the deputy-director for Training and Development Division and the then Permanent Secretary for Education.
- Selectively recruiting staff members who share the same vision and mission.
- Selectively recruiting teachers to be trainers for facilitators of Learning Circles in schools in order to encourage the notion of 'By Teachers, For Teachers'.
- Encouraging a flat organisational structure for Teachers Network.
- Nurturing the concepts of Learning Circles to evolve over time to meet the needs of teachers but not neglecting the needs of schools.

The attempts of the pioneers of Teachers Network to move from individuals to collectivities were consistent with the notion that "prior social ties operate as a basis for movement recruitment and that established social settings are the locus of movement emergence" (Diani, 2003, p. 7). The eventual outcome is the movement from 'resistance

identity' to 'project identity' (Castells, 1997, p. 8). While the former is generated by those actors that are in positions or conditions devalued or stigmatised by the logic of domination, thus building trenches from, or opposed to, those permeating the institutions of societies, the latter on the basis of whichever cultural materials are available to social actors, build a new identity that redefines their position in society and, by doing so, seek the transformation of overall social structure.

The commonality evident at the social sites of the school and Teachers Network is that the cultural values that underlie symmetrical power relation are embodied in people. The sharp implication is that the symbolic tools and practices (egs. Critical Friend, RER, Dialogue, etc) that Teachers Network legitimised were own their own not sufficient to materialise the cultural values for democratic participation. If this was the case, then instrumental rationality would have indeed colonise the lifeworld that are strongly encouraged by the proponents or champions of the slogan "For Teachers, By Teachers".

Besides the school principal who embodied the cultural values that underlie symmetrical power relations, another key member of the school and proponents of Teachers Network's vision and mission was the Learning Circle facilitator. The training that was provided for her included the whole gamut of the psychological or symbolic tools of facilitating discussions that privilege symmetrical power relations. However, the analysis of discourse analysis showed that what is more fundamental is the buying-in of the cultural values that underlie these tools.

The second commonality is that the cultural values that underlie symmetrical power relation requires moral courage in the lives of proponents and champions who will fight for these values. This moral courage also implies the courage to face up to or confront forces of 'injustice', albeit with tact. The third commonality is the need to use intelligence in balancing between system and lifeworld imperatives – that is, understanding that the system requires the lifeworld for its maintenance. The lifeworld is seen as sites of learning that interrogates and engages with knowledge through communicative action in order to change pedagogical practices to instill in students to become knowledge workers in a knowledge economy.

The pioneers, proponents and champions of Teachers Network took advantage of this opportunity to meet the needs of the system and at the same time meet the needs of the teachers. The system provides both the material (time and space) and symbolic (rules of legitimisation) resources for the maintenance of lifeworld experiences. However, knowing that a democratic form of social arrangements was not realistically practical in a political culture that does not tolerant, and can at times punish or discipline resistance from below, they have decided to legitimise the values and practices that promote the notion of "For Teachers, By Teachers". Teachers Network and its version of action research, which is termed as 'Teachers Network Learning Circles', have now been legitimised throughout the education system. The need for legitimisation across institutions is consistent with the literature review that supports the notion of institutional and system wide support for professional development (Bolam and McMahon, 2004; Darling-Hammond, 1994; Kelchtemans, 2004) and educational reform (Hargreaves, 1999; Townsend, 1998).

The intelligence that had been described above is what I termed as 'critical intelligence'. It is the ability to protect and nurture lifeworld practices using the system's resources knowing that the system requires these lifeworld practices, but not at the same time not jeopardasing the system's need for efficiency and control. Conversely, it is the ability to create, protect and nurture lifeworld practices by not allowing the system's imperatives of money and control to destroy the lifeworld practices. Hence, a person with 'critical intelligence' understands the necessity of the interdependent relationship between the system and lifeworld, and the need to balance both system's and lifeworld's needs. This is consistent with the proposal proposal for 'top-down' and 'bottom-up' integration (Hargreaves, 1999), and allowing schools to be more 'reflexive' given the broad guidelines and framework of the government (Porter, 1999). The balance between the system's and lifeworld's needs is perhaps the answer to Miles' (1998) proposition that education change needs to be balanced with stability.

Teachers Network, along with its programmes such as Teachers Network Learning Circles, teachers' workshops and annual teachers' conference, can be said to be a kind of social movement.

> "Social movements can be viewed as collective enterprises seeking to
> establish a new order of life. They have their inception in a condition of

unrest, and derive their motive power on one hand from dissatisfaction with the current form of life, and on the other hand, from wishes and hopes for a new system of living. The career of a social movement depicts the emergence of a new order of life." (Blumer, 1969b, p. 9)

The discourse analysis at Stage 4 had also shown that Teachers Network can be considered as a form of New Social Movement (NSM) based on three criteria which Crossley (2002) had observed: reluctance to engage in the big 'P' politics; emphasis upon internal democracy; and focus upon everyday ways of acting and relating. This is consistent with recognition struggles, in the lower case, which involves "confronting everyday institutionalised patterns and practices that deny social groups participatory citizenship struggles that challenge the basic coding of rights and obligations in nation states and constitute different varieties of collective 'we'" (Hobson, 2003, p. 3). However, agreeing with Crossley (2002) I am persuaded to use Habermas' conceptions of NSM which essentially comprise the following characteristics:

- The colonisation is the cause of the various grievances and strains.
- The administrative advances associated with colonisation destroy once unquestioned traditions, inadvertently politicising the domain of life to which those traditions belonged by opening them up to planning and, in doing so, drawing citizens out of their 'privatism' into the public-political domain.
- The administrative system proves largely unreceptive to public opinion and pressure since bureaucratic structures of the system are indifferent to communicative action and debate – frustrating the very projects that it sets in motion, amplifying the intensity of these projects and their tendency to follow 'alternative' and 'contentious' routes.

The concepts of NSMs described by Habermas (1987a, 1988) resemble that of the findings of the study. First, the pioneers of Teachers Network were unhappy with the intensification of work as a result of high demand for efficiency along with its controlling and 'punishing'/'disciplining' mechanisms in the form of appraisal (egs. EPMS, staff ranking, 5 per cent guidelined or compulsory D grade, self-appraisal (egs. SEM, School Internal Appraisal Report), and micro-management through holistic organisational framework (SEM, External Validation) resulting in alienation or loss of meaning. These mechanisms do not only influence agents' economic, but also moral

aspects of being human as found in the discourse analysis of the EPMS. For example, a D Grade means not only a negative pay prospects and promotion, but also a negative worth of a moral person. These mechanisms are however imbedded within wider national cultural values primarily the culture of taking directive and initiative from the top, and the culture of productive efficiency (Hairon, 2006).

Second, teachers learning through self-initiated informal modes of communications such as coaching, mentoring or 'coffee-shop' talk were destroyed as a result of efficient ways of working such as teacher-proof curriculum materials. However, the need to return to such collective, collaborative and collegial settings is in fashion because of the need for teachers to engage in knowledge, and the need to change pedagogical practices. This would mean a return to informal structures – and thus less efficient way of working, and encouraging teachers to enter into critical dialogue which may result in encouraging spaces for debate, which is again a threat to system imperatives. Specifically, the return to these informal structures and its effects would stand in sharp and uncomfortable contrast with the national cultural value of taking directive and initiative from the top, and the cultural value of productive efficiency.

Third, the return to traditional platforms of learning, and hence, communicative forms of learning, had to be transformed in order to fit the needs of the system. Hence, the form of traditional forms of learning may be there, but without substance such as the materialisation contrived collegiality, imposed collaboration, superficial dialogue, imposed work of inquiry, and showcasing or window-dressing.

Here in lies the limitations and struggles of Teachers Network Learning Circles. The vision and mission statements must eventually be embodied by teachers at the school sites. They themselves must be fighting for the values that underlie the motto "For Teachers, By Teachers". They themselves must want this. If this does not happen, the embodiment of these values will only reside within people at the sites of Teachers Network. What makes the difference of this transition is the coalition of leaders at the Teachers Network and schools sites to provide the impetus and support for the creation, protection and nurturing of these values with the teachers' willingness to embrace and practice these values. The current task for Teachers Network is obviously to create proponents of these values at the level of schools. However, this is not without problems or dilemmas. Examples include the following:

- Learning Circle facilitators are usually chosen by school principals, or imposed by school principals who may not embody the cultural vales congruent to Teachers Network. However, Teachers Network strives to educate school principals on the benefit and values of Learning Circles before officially embarking on Learning Circles.

- Learning Circles may be imposed in schools – along with imposed collegiality and collaboration, based on system imperatives of power and money in the form of efficiency over individual freedom or autonomy.

- Although MOE has declared that school principals have autonomy, 'controlling' and 'disciplining' mechanisms such as the SEM, appraisal and staff ranking enabled or constrained principals or cluster superintendents to take the path of normalcy or stay in the centre instead of the edges of the periphery of power. This essentially discourages principals to encourage the values that resemble the essence of social movements that underpinned Teachers Network and Teachers Network Learning Circles.

- The principle of 'voluntary participation' had been taken out in the Teachers Network Learning Circles handbook in order to help in encouraging schools to accept it at the schools sites. Although the strategy is to convince members at the next stage after they have been imposed to start a Learning Circle group based on human needs to communicate, learn and collaborate in a community whose main interest is to improve students' learning, the initial thrust is essentially disempowering.

- Teachers Network now does not have the privilege to have the monopoly to recruit people. It is, rightfully so, opened to all in the teaching service. The argument for this move is that the established core culture ensures that even if 'wrong' persons passed through the selection process, they would resign before their contracts end because the mismatch of values would stand in stark contrast.

- Workload for PDOs has increased as they have to take onboard increasing work and projects so much so, that hand-holding of Learning Circle facilitators at schools sites is undermined. This would undermine the transition of Teachers Network values from the Teachers Network site to schools sites. Furthermore, the embodiment of the desired cultural values may dissipate in the transition from the Teachers Network site to schools sites – jeopardising both the values and skill development to be competent Learning Circle facilitator.

- The latter generation of Teachers Network Learning Circles may not understand the full nature of the system and power relation at work, and may eventually be good in the tools but not its political force.

- Teachers Network Learning Circles limit changes within the classroom only. At best, the findings of Learning Circles can influence school policies relating to curriculum which has bearing on classroom teaching. However, the impact on work conditions that impact classroom change is tenuous, and the impact on macro education policies are negligible.

- The forms of inquiry in Teachers Network Learning Circle are considered to lack rigour. The observation phase of Learning Circles does not specify the different range of research methods, tools and analyses that members can employ. The main aim is to get teachers to become reflective teachers in a democratic setup. The lack of rigour inadvertently undermines the strength of action research findings, which eventually blunts any challenge to dominant education discourses that impinge on teachers' day-to-day practices.

- The essence of social movements – that is, power issues, is not directly central in the discourse of Teachers Network or Teachers Network Learning Circles. At best, power issues can only be alluded to from the vision and mission statements. In the day-to-day materialisation of Learning Circles, the focus is on reflective practice, dialogue and group learning. However, this is understandable as power discourses have a negative connotation in the Singapore political culture. Avoiding it would thus help with the integration of Learning Circles in schools sites.

- The action research fad in Singapore has taken a negative feature – that is, the promotion and decision to advance teacher-researchers through imposed forms of change that lacks sensitivity to notions of empowerment or emancipation. And although notions of reflective practitioners and inquiry has been advocated by the Minister of Education, one unintended consequence is for leaders within the education system to rationalise and implement programmes without a deep knowledge or appreciation of the need to empower teachers. This perhaps explains why the discourse at the education minister's level has closer congruence to the Learning Circle Site, but not at the zone level (Diagram 19).

Although the above examples can be perceived as obstacles and hindrances, they are nevertheless sites of struggles, which are necessarily manifestation and materialisation

of social movements. The good news is that these sites of struggles are synonymous to sites of negotiations. For example, the decision to drop the written phrase 'voluntary participation' is to allay potential fears of school principals to notions of resistance, and in doing so, allowing for the integration of Learning Circles in schools sites. In another example, the lack of rigour in Learning Circles is understandable in order to allay potential fears of teachers towards research discourse. However, the onus is on the agents of social movements to play a more active role in pursuing and promoting lifeworld values through the embodiment of the cultural values that afford symmetrical power relations. And in doing so, it will afford the creation, protection and nurturing of potential emancipatory sites for the materialisation of 'discursive will formation' (Habermas, 1989).

These sites of struggles or negotiations are social sites for the materialisation of the 'activist teacher professional' (Sachs, 2003) which comprise of trust, active trust and generative politics. As described in the literature review, trust is needed to reduce complexity by creating social cohesion through collaboration and mutual respect. Active trust requires outward strong commitment of time, energy and intellectual resources to make joint decisions. And generative politics foster conditions where desired outcomes can be achieved without being imposed from the top. This is dependent on:

- creating situations in which active trust can be built and sustained,
- giving autonomy to those most affected by specific programmes or political outcomes, and
- decentralisation of power.

However, the findings of the study also showed that this is not without problems or dilemmas as stated above especially in relation to the prevalence of system imperatives in capitalist societies and their tendencies to colonise the lifeworld. This, in my view, is unavoidable. As much as the system and lifeworld are interlinked with each other, they are also constantly in a state of threat towards each other. The rationalisation and differentiation of the lifeworld have made possible the complexity of the system or creating subsystems such as power and money, but the system's development is at the expense of the lifeworld (Outhwaite, 1994) – a turning back against the lifeworld, and "shrinking it to a subsystem instead of being the foundation" (p. 92). It is therefore

justifiable to propose that sites of struggles are also sites of negotiations by virtue of the close inter-dependence of the system and lifeworld. The tensions and struggles between the system and lifeworld is, therefore, a positive inevitability, and ought to be so as they inherently contain principles of resistance, empowerment and emancipation. As Crossley (2002) has discussed in his attempt to include the concept of crisis from Bourdieu's theory of practice and Smesler's (1962) value-added model of movement formation: strains, struggles and crises "provide the key to the intelligibility of movement activism" (p. 188).

In summary, what the research study has found is that the macro conditions that support the cultural values that underlie symmetrical power relation to bring about positive teacher change and development at the micro level need to be created, protected and nurtured by people who are in leadership positions who can provide both the material and symbolic resources to put to practice these cultural values. These people not only embody, but also champion these cultural values, and understand the necessity to continually balance both the system's and lifeworld's needs with moral courage and intelligence. The creation, protection and nurturing of these cultural values and practices are crucial because of the tendency for the system to colonise these values and practices to the simple level of efficiency and control.

The preservation of these cultural values and practices are synonymous to the symbolic reproduction of the lifeworld which contains the linguistic structures of members of the community which are important in the development of the group's communication, thinking, moral norms, identity and solidarity. In contrast, the system's values are reduced to automatic, or at least 'inconspicuous', co-ordination of the effects of action (Outhwaite, 1994), which are usually carried out by 'strategic action' where outcomes are reached by influencing the opponents' definition of the situation through external means such as weapons or goods, threats or enticements. Conversely, in 'communicative action' actors commit and harmonise their plans of action through internal means to pursue their goals only on the condition of an agreement (Habermas, 1990). While the former reflects asymmetrical power relation, the latter reflects symmetrical power relation.

The preservation of the lifeworld is also important insofar as it guarantees the sustainability of collegial and collaborative relationships in teachers learning in groups.

As discussed earlier, as members enter into an intersubjective communication they not only brought to bear their own professional knowledge, experiences and rules of discussion, but also were enabled or constrained to come to developed shared professional knowledge, experiences and rules of discussion through consensual decision-making, and in doing so, developed shared linguistic structures for group learning. These shared linguistic structures become a resource for members to draw upon in their future learning in groups.

The research study also showed that the social site of teacher learning, which has the characteristic of intersubjective communicative action and where members relate, work and learn in collegial, collaborative and democratic manner, to change and develop knowledge of curriculum and classroom practice not only is needed by the system for its development and maintenance, but also contributes to teacher empowerment, and therefore has emancipatory potential. The research showed that in order to attain a knowledge-based economy, the system requires a teaching force with the appropriate knowledge, skills and dispositions of a knowledge worker. However, this would require change in the curriculum and classroom practices that would prepare students with these knowledge, skills and dispositions. This in turn would require teachers to become knowledge workers with the knowledge, skills and dispositions to interrogate and produce knowledge in communities and networks. However, this would necessitate a type of teacher learning that is goes beyond the system imperatives and values intersubjective communicative action.

**SYMMETRICAL POWER RELATION**

**AND TEACHER EMPOWERMENT**

The research study has shown that the cultural values that underlie symmetrical power relation had contributed to teacher empowerment within the context of teachers learning in groups insofar as empowerment is defined as building people's capacities such as knowledge, energy and authority to act successfully within an existing system and structures of power - working within the system, on their own behalf (Inglis, 1997; Maynard, 2004).

Firstly, the symmetrical power relation had contributed to teacher empowerment insofar as it devalued or did not promote asymmetrical or conflictual power relation prominent in modern societies as alluded to by Foucault's notion of 'resistance' to domination (Foucault, 1978) and Bourdieu's notion of 'fields' of struggles for resources or capital (Bourdieu and Wacquant, 1990), which is assumed to be deriving primarily from self-interested strategic actions, and thus reproducing the status quo for asymmetrical relation. Although Foucault admitted to a positive notion of power (Foucault, 1977), I tend to agree with critiques of Foucault who argued that Foucault's attempt to chart only repression "does not focus very much on the productive mechanisms of power" (Mills, 2003, p. 124). This research study has thus shown that a more productive mechanisms of power in teacher group learning in the form of consensual or democratic participation not only possible, but also beneficial to teacher development.

Although a Foucauldian framework might challenge Habermas' discourses on democratic participation as being a form of self-control or self-surveillance as opposed to bringing about self-freedom from the powers of society, it can be argued that the act of democratic participation requires one to freely, or without coercion, make assertions on life matters in the presence of interested others, and requires discussion or debate in the presence of others. The space for open critique and debate provides a potentially sustained critique of not only the content, but also the rules of discussion that participants draw upon to participate in democratic discussions. In this way, self-control or self-surveillance is kept at bay. What makes self-freedom and empowerment possible is the awareness of cultural values that one draws upon to make decisions and the ability to critique and change them.

To be empowered based on the idea that one is not constrained by cultural values, even if they do not originate from oneself, is a fallacious argument. The freedom to take actions necessitates the need to draw upon cultural values. Decisions and actions are based on personal values that are at the same time belonging to the communities that people reside in. The cultural values of respect for human beings and equal treatment of human beings regardless of differences, and respect for individual and collective freedom through consensual decision-making are inherently universal. This explains why members of the Learning Circle are attracted to and are in agreement with the social rules that underlie the cultural values that underpinned Teachers Network Learning Circles' discussions.

Participation in the Learning Circle did play not only a confirmatory role to participants' existing cultural values, but also an educative role. Participants may commence with a partial or fallacious knowledge of the values and practices of democratic life, but participation in the Learning Circle allowed for the exposure, questioning, clarifying, experimenting and embracing of democratic values and practices. By participating in the Learning Circle's discussions, members had the opportunities to develop and gain democratic attitudes and skills along the way. Members were, therefore, empowered insofar as they were able to build the capacity to act successfully within an existing system and structures of power (Inglis, 1997; Maynard, 2004). Not only was the way of learning democratic participation empowering, but also the learning democratic participation in itself is empowering (Brookfield, 2005a).

The importance of empowerment in teacher professional development and learning ahs been raised by Smylie (1995b) when he proposed that workplace learning ought to provide for the following steps of changes in conditions for teacher learning: (1) ongoing opportunities for individual members to work together and learn from each other; (2) opportunities for collegial collaboration in an open atmosphere that allow communication and the examination of taken-for-granted assumptions and beliefs: (3) collaboration that affords shared power and authority, and participatory decision-making; and (4) promotion of a certain degree of autonomy and choice for individual members within collaborative environment. However, the findings from the study pointed to the need to reverse the order. In other words, for collegial collaboration to take place, teachers must be given autonomy and choice in order to empower them to

enter into participatory decision-making. This would set the ideal stage for teachers to learn in collegial and collaborative social setting.

Secondly, members of the Learning Circle were able to learn to exercise – individually or collectively – the flexibility in the extent of using the psychological or symbolic tools provided by Teachers Network in completing their action research project. These tools and their underlying cultural values can be drawn upon to build members' capacities to work within the Learning Circles' discussions, and at the same time, they can be critiqued and challenged, and thus be modified or not drawn upon during discussions. In post-structuralist terms, the agent has priority over structure in determining agency. In other words, agents are not cultural dupes in determining social practices within the structure and agency dialectic (Giddens, 1984).

Thirdly, the nexus between talk and thought common in the Learning Circle's democratic-oriented discussions in order to help group members gain mutual understanding is empowering insofar as it afford members with the material base to critique and reconstruct his or her own and members' collective knowledge. In doing so, implicit knowledge transforms into explicit knowledge. He or she can be said to be engaged in ideological critique where unquestioned or taken-for-granted knowledge in the form of system's beliefs, values and practices are laid bare in the open and put to challenge, and thus increasing the possibility for change (Brookfield, 2005a). The Learning Circle's democratic-oriented discussion had thus provided opportunities for members to acquire the disposition and skills to critique ideological knowledge.

Fourthly, the talk-thought nexus common in the Learning Circle's democratic-oriented discussions had also provided opportunities for members to 'name' or give a name to the material existence or experience in sign form, which is predominantly linguistic in content and form (Chandler, 2002; Crow, 2003; de Saussure, 1974; Zeman, 1977). Unlike animals that can only be 'in the world', humans can be both 'in the world' and 'with the world' (Freire, 1972), and thus, able to stand outside of the world to objectify and critique it, and inevitably change it. Members were enabled and constrained to 'name' their past experiences in view of 'naming' possible future experiences. For example, in the attempt to construct a future intervention programme, members would recall and talked about past intervention programmes or strategies. The opportunity and ability to create signs in the present in view of possible future material experiences

means that decisions can be made in the present that influence and determine material experiences in the future.

This is empowering because it is synonymous to being able to 'emerge' out of their 'submerged' world (Freire, 1972, 2005) – making it possible to critique and change the world. Without this ability, humans would be sucked into the intensive machineries of labour which are governed primarily by the system imperatives of power and money. It is also empowering because it enhances the development of agency or autonomy at both the individual and collective levels. It is no surprise then that literature on education change challenged the silencing of teachers' voices (Calderhead, 2001; Cochran-Smith and Lytle, 1996; Kelly, 1995; Goodson, 1997; Sarason, 1996). In terms of autonomy, it is also no surprise that literature pointed to the importance of teachers' say in professional development and learning matters (Ball, 1996; Fiszher, 2004; Guskey, 2000).

Fifthly, the democratic-oriented discussions that took place in the Learning Circle were contemporaneously contributing to the symbolic reproduction of the members' lifeworlds as they entered into intersubjective communicative actions. This is empowering insofar as they inevitably challenges and prevents the tendency for the internal colonisation of the lifeworld. The democratic-oriented discussions acted as preventions of the system imperatives of power and money to penetrate or invade even deeper into the symbolic reproduction of the lifeworld (Habermas, 1987b) – influencing people's behaviour, morality, ethics and rationality. The system imperatives thus have the tendency to disempower, alienate and dehumanise people – reducing life values to only money (efficiency) and power (control).

Finally, the holistic nature of teacher change and development is consistent with the notion of humanising learning. The system imperatives of control and money have the tendency to decimate or whittle down human values, thinking and behaviours to the level of efficiency and control, which is contemporaneous to dehumanising the 'whole person'. The symmetrical power relation that underlie the discussions in the Learning Circle contained cultural values that gave members the right to speak, think, feel and act, taking into consideration individual freedom within a collective interest. In this sense, 'communicative action' was more privilege than 'strategic action' predominant in system's discourse.

In summary, the research study has found that the cultural values that underlie symmetrical power relation had brought about teacher empowerment. Members were not only able to practice democratic participation, but also had learnt the social rules of democratic participation in a non-coercive manner. The predominant democratic discourse had also given opportunities for members to make reasoned decisions on how to make the best use of the psychological or symbolic tools and guidelines given to them, as opposed to unquestioningly following them. The learning that had taken place during the Learning Circle's discussions was holistic and not reduced to the system's needs for imperatives (for efficiency and control) and strategic actions. The learning favoured lifeworld's needs for intersubjectivity and communicative action, which were conducive for the development of all aspects of a human being – in other words, humanising the learning experience. The predominant communicative action had provided the condition for members to talk out their thoughts, and in so doing, place their taken-for-granted or ideological knowledge in the open to be critiqued and change by oneself and by others.

The research findings on teacher empowerment had also shown that the Learning Circle site has the potential to emancipate members, as defined Inglis (1997) and Thomas (1993), is synonymous to Habermas' notion of the public sphere (1996). The extent of the effects of the public sphere at the Learning Circle site is, however, limited to the school curriculum policies that impinge on classroom practices. For example, the findings from their action research projects had influenced the school's senior management to consider doing a revamp to students' worksheets for the whole grade level.

Although the degree of emancipation was limited to the curriculum, it is still crucial in the development of Habermas' notion of the discursive or political will formation. The development of the public sphere also implies the prevention of privatism and a "structurally depoliticised public realm" where people are encouraged to pursue private goals without regard to the effects on others (Habermas, 1996). Hence, the Learning Circle site has potential for the formation of political or discursive will formation, and in which lies the "creation and protection of spaces within which a radical concept of democracy, as a process of shared learning carried out in and through communicative action, might flourish" (Alway, 1995, p. 127).

# CHAPTER 6

# CONCLUSION

I have embarked on this research study with a personal agenda and concern that I have towards how teachers in general are experiencing the impact of education change and reforms in both their professional and personalise lives. Based on my personal past experience as a teacher in public schools in Singapore, the literature that pertain to the relationship between education change and reforms, and findings from my master dissertation (Hairon, 2003) I found that Apple's 'intensification thesis' (Apple, 1986; Ballet *et al.*, 2006) and the 'labour process theory of teachers' work' proposed by Smyth and his colleagues (2000) holds to be true. Indeed, the system imperatives of money and power are true insofar as they have penetrated the day-to-day practices and mindset or colonise the 'lifeworld' of the teachers.

The discovery of Teachers Network Learning Circles prior to the commencement of the research study had provided a sense of hope insofar as they might be social sites for teacher empowerment and emancipation. Furthermore, I also wish to know what cultural values and practices are predominant in Teachers Network Learning Circles, and they influence the way members of Learning Circles relate, work and learn with each other. In addition to this, I was influenced by sociological readings such as Habermas, Foucault and Bourdieu which emphasise the importance of power in human interactions. In view of all these, I embarked on the research study to understand the culture of Teachers Network Learning Circles in terms of how members relate, work and learn with each other.

The decision to adopt the critical ethnography by Carspecken (1996, 2001) was because it focuses on cultural description and interpretation, power and the relationship between micro and macro sociological analysis. However, I did not use the critical ethnography in a wholesale manner in the research study as encouraged by Carspecken (1996). Securing access to Learning Circles sites were initially difficult partly because the degree of intrusion of the researcher into the personal community lives of teachers, and partly because of the difficulty in finding Learning Circles sites that put into practice the ideals or essence of Teachers Network Learning Circles. Eventually, only one site was

found which on hindsight was a blessing because this had been manageable in terms of securing depth in the study. In addition to this site, seven other social sites were also analysed but with varying rigour. This included the school where the Learning Circle resided in, Teachers Network Learning Circle's facilitator training, Teachers Network, North Zone Cluster 4 Learning Symposium, North Zone Action Research Educational Symposium, Enhanced Performance Management System Kit and the MOE Work Plan Seminar 2005 policy document.

The research study has shown that the predominant power relation at the Learning Circle is symmetrical or consensual in character, and the two cultural values that underlie the symmetrical power relation are (a) respect for human beings and equal treatment of human beings regardless of differences; and (b) respect for individual and collective freedom through consensual decision-making. These cultural values had been used by members to enter into social practices of relating, working and learning with one another, and brought about positive change and development which encompassed the communication, cognitive, emotion, moral and identity domains.

In terms of teacher change this included the ability to develop collegial and collaborative relations; express one's individuality; express one's emotions; stay in touch and assert one's moral purpose of teaching; affirm and develop one's identity; and develop group identity and solidarity. In terms of learning, teaching change included the ability to integrate talking with thinking, and hence, the development of language and thought (cognition); construct and reconstruct knowledge individually and collectively; sharpen one's reasoning skills; be able to closely tie thinking to the development of one's emotions, morals, personal identity, group identity and solidarity. In addition to this, these cultural values had also brought about teacher empowerment as they relate, work and learn with each other.

The research study has also shown that the macro conditions that support the cultural values that underlie symmetrical power relation to bring about positive teacher change and development at the micro level need to be created, protected and nurtured by people who are in leadership positions who can provide both the material and symbolic resources to put to practice these cultural values. These people not only embody, but also champion these cultural values, and understand the necessity to continually balance both the system's and lifeworld's needs with moral courage and intelligence. The

creation, protection and nurturing of these cultural values and practices are crucial because of the tendency for the system to colonise these values and practices to the simple level of efficiency and control.

With regard to teacher emancipation, the research study has only showed a limited notion of emancipation where members were able to critique and change an aspect of school life – that is, the curriculum as opposed to the school or the wider school contexts. However, I argue that the accomplishment of teacher empowerment would provide the potential foundation for emancipation as the former is needed for the latter.

## REFLECTIONS ON THE RESEARCH STUDY

Reflecting back on the research study, although I had made attempts at minimising the effects of the power-as-the-researcher, I found that may not have brought to bear more participants language into the analysis of data (Bourdieu, 1990a; Bourdieu and Wacquant, 1992). This is consistent with a potential weakness in the discourse analysis where it lacked extensive interviews with participants that reside within each social site to validate my analysis. However, this is rightfully so as the task of researchers is in the creation of new knowledge and understanding based on epistemological competence, and inadvertently the creation of new language. Yet, the power of social inquiry is to make the obvious known and the complex simple to lay people. And yet, new language is required for new ways of thinking and living. This to me may be an irreconcilable dilemma.

Another point of reflection is the possibility of doing ethnology where a study of two Learning Circle sites from different schools is carried out. This would perhaps increase the degree of validity of the study of findings from the study are consistent. If the findings are not consistent, it would still be interesting to know the contextual differences that exist between the two groups and schools. The other possibility is to do an ethnology of a Learning Circle site and compare to another site of teacher learning which is considered traditional such as an in-service training course at a university or a series of workshops conducted by a training company. The difference in terms of power relation would possibly throw a different light into how both symmetrical and asymmetrical power relations influence teacher change and development.

A final point of reflection is to do with the issue of generalisability of the research findings. Although the findings of the research study cannot be generalised to all Teachers Network Learning Circles in the positivist sense of the word, the findings of this study are 'transferable' (Guba and Lincoln, 1994) or 'relatable' (Bassey, 1981, cited in Bell, 1999) to other social sites that have similar features and contexts to that of the Learning Circle social site. This is synonymous to the concept of 'internal generalisation' (Gobo, 2004) where the representativeness of the characteristic of a case is preferred to the representativeness of the case (p. 452). The extent and strength of this transferability is also enhanced based on the humanistic nature of the inquiry which involves understanding universal basic human phenomena such as speech, thought, emotions, moral, identity, and power.

## IMPLICATIONS OF THE RESEARCH STUDY

In terms of the implications of the research study to teacher professional development and learning especially in group settings, I had found the following to be worthy of consideration but without being too prescriptive:

1. *Learning in groups needs to embrace cultural values that contribute to symmetrical or consensual power relation.* They are (a) respect for human beings and equal treatment of human beings regardless of differences; and (b) respect for individual and collective freedom through consensual decision-making. This set the foundation for positive teacher change and development. This would also imply the need to not only provide democratic-oriented participation in teacher professional development and learning social milieu, but also educate teachers in knowledge, skills and disposition of democratic competence.

2. *Learning involves the holistic development of the human being which includes the development of communication, cognition, action, emotion, moral, personal identity and collection identity.* Teacher professional development and learning experiences ought to engage all domains of being human as each domain are interconnected and interdependent on each other. The importance of communication is evident when we consider the reality that all human knowledge has linguistic content and structure, and to be able to construct and reconstruct knowledge would also require communicative competence either

within oneself or among other people. Communicative competence is therefore important to construct and reconstruct knowledge in today's knowledge society. Communicative competence is also closely tied to cognitive competence as both language and thought are interdependent on each other. Both communicative and cognitive competences need to be applied in action consistent with the notion of 'job-embedded' learning. Teacher professional development and learning must also bring to bear the importance of acknowledging and affirming teachers' emotions and morals, and the development of individual and collective identity.

3. *The object of learning is individual and collective empowerment and emancipation.* Learning would be more meaningful and attractive if the teacher is convinced that he or she would be empowered to change the conditions of his or her workplace for the better. This partly explains why literature points to the need for 'job-embedded' learning, greater decision-making power and teachers as change agents in professional development matters. A main reason for lack of teachers' interest in investing time in professional development activities is teachers' lack of time, and this is brought about by work conditions which they cannot change. Empowering teachers to change their work conditions would therefore become an attractive option. Hence, integrating empowerment and emancipation into teacher professional development and learning opportunities, platforms and programmes becomes a persuasive concept.

4. *School leaders ought to provide, protect and nurture not only the structural support, but also the cultural support for the democratic-oriented teacher professional development and learning.* School leaders cannot plainly provide appropriate structural support such as time or room allocation hoping or believing that teachers would imbibe the values and practices of democratic-oriented group learning. They need to concomitantly embody these values for learning that encourages democratic participation. The embodiment of these values would naturally translate to change in the material conditions of teachers for the better. The content of teacher learning in groups need to include democratic participation. In this regard, I agree with Allman (2001) that the process of social transformation must be inherently educational

5. *Teacher learning needs to provide the avenue for teachers to learn to survive and thrive within the system imperatives of money (efficiency) and power (control).* First, teachers need to gain the knowledge of the inter-linkages and inter-dependence of system and lifeworld imperatives. Although the needs of the system and lifeworld are contradictory, they nevertheless feed into each other. Second, the knowledge of making use of resources from the system to fulfill the communicative action need of the lifeworld. Third, the knowledge of balancing the needs of both the needs of the system and lifeworld by creating, protecting and nurturing lifeworld experiences but not at the expense the system. The attainment and practical application of all this knowledge is what I term as 'critical wisdom'.

**FINAL WORDS**

As the journey for the search for teacher emancipation ends, I come to realise that action research or engagement in action research alone does not guarantee teacher emancipation. I now understand why Habermas sought to find not so much a tool, strategy or procedure (eg. action research), or a specific location (eg. a Learning Circle or an action research project), but rather a more universal and foundational principle such as his discourse ethics and universal pragmatics in order to provide a critical response to system imperatives. I think critical ethnography had served the research objectives quite well. Also, I am quite confident now that teacher learning, in response to the system's continual colonising effects on teachers' lives, does have the potential to empower and emancipate teachers. In terms of future research work, I now see the emancipatory value of doing research with teachers as opposed to on teachers.

# REFERENCES

Achinstein, B. (2002) *Community, Diversity, and Conflict Among Schoolteachers: the ties that blind*, New York: Teachers College Press.

Adams, J., Hayes, J. and Hopson, b. (1976) *Transitions: understanding and managing personal change*, London: Martin Robertson.

Ainscow, M., Booth, T. and Dyson, A. (2004) Understanding and developing inclusive practices in schools: a collaborative action research network, *International Journal of Inclusive Education*, 8 (2), pp. 125-139.

Alexander, P. A. and Murphy, P. K. (1998) The research base for APA's Learner-Centered Psychological Principles, in N. M. Lambert and B. L. Coombs (Eds.) *How Students Learn: Reforming Schools Through Learner-Centred Education*, pp. 25-60, Washington, D. C.: The American Psychological Association.

Alexy, R. (1978). Eine theorie des praktischen diskurses, in W. Oelmüller (Ed.) *Normenbegründung, Normendurchsetzung*, as cited in Habermas, J. (1992). *Moral consciousness and communicative action* (Translated by Christian Lenhardt and Shierry Weber Nicholsen), Cambridge: Polity Press.

Allman, P. (2001) Revolutionary Social Transformation: Democratic Hopes, Political Possibilities and Critical Education, Bergin & Garvey.

Alway, J. (1995) *Critical Theory and Political Possibilities: Conceptions of Emancipatory Politics in the Works of Horkheimer, Adorno, Marcuse, and Habermas*, London: Greenwood Press.

Anderson, J. R. (1983) *The Architecture of Cognition*, Cambridge, M.A.: Harvard University Press.

Anderson, S. E. (1997) Understanding teacher change: revisiting the concerns based adoption model, *Curriculum Inquiry*, 27 (3), pp. 331-367.

Angus, M. (1998) The Rules of School Reform, London: Falmer Press.

Apple, M. W. (1986) *Teachers and Texts: A Political Economy of Class and Gender Relations in Education*, London: Routledge.

Apple, M. W. and Beane, J. A. (1999) *Democratic Schools; Lessons from the Chalkface*, London: Open University Press.

Argyris, C., & Schön, D. (1978) *Organizational Learning: A Theory of Action Perspective*, Reading, MA: Addison Wesley.

Ashdown, J. (2002) Professional Development as 'Interference'?: Insights from the Reading Recovery in-service course, in C. Sugrue and C. Day (Eds.) *Developing Teachers and Teaching Practice: International Research Perspectives*, pp. 116-129, London: Routledge/Falmer.

Aspin, D. and Chapman, J. (2001) Towards a philosophy of Lifelong Learning: the concept of lifelong learning for all, in D. Aspin and J. Chapman (Eds.) *International Handbook of Lifelong Learning*, Part One, pp. 3-33, Dordect, The Netherlands: Kluwer Academic Publishers.

Aspin, D., Chapman, J., Hatton, M. and Sawano, Y. (2001) Introduction and overview, in D. Aspin and J. Chapman (Eds.) *International Handbook of Lifelong Learning*, Part One, pp. xvii-xlv, Dordect, The Netherlands: Kluwer Academic Publishers.

Ball, D. L. (1996) Teacher learning and the mathematics reforms: What do we think we know and what do we need to learn? *Phi Delta Kappan*, 77, pp. 500-508.

Ballet, K., Kelchtermans, G. and Loughran, J. (2006) Beyond intensification towards a scholarship of practice: analysing changes in teachers' work lives, *Teachers and Teaching: theory and practice*, 12 (2), pp. 209-229.

Baroway, W. (2004) The complex of school change: personal and systemic codevelopment, *Mind, Culture, and Activity*, 11 (1), pp. 9-24.

Bassey, M. (1981) Pedagogic research: on the merits of the search for generalization and study of single events, *Oxford Review of Education*, 7 (1), pp. 73-93.

Bell, J. (1999) *Doing Your Research Project: A guide for first-time researchers in education and social science*, 3rd Edn., Buckingham: Open University Press.

Berger, P. and Luckman, T. (1966) *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*, Harmondsworth: Penguin.

Bernstein, B. (1996) *Pedagogy, Symbolic Control and Identity: theory, research and critique*, London: Taylor and Francis.

Bhaskar, R. (1986) *Scientific Realism and Human Emancipation*, London: Verso.

Blumer, H. (1969a) *Symbolic Interactionism: Perspective and Method*, Englewood Cliffs, N.J.: Prentice-Hall.

Blumer, H. (1969b) Collective behaviour, in A. McClung-Lee (Ed.) *Principles of Sociology*, New York: Barnes and Noble.

Bogdan, R. C. and Biklen, S. K. (2003) *Qualitative Research for Education: An introduction to theories and methods*, 4th Edn., Boston: Allyn and Bacon.

Bohman, J. (2003) 'Criticial Theory as Practical Knowledge: Participants, observes, and critics', in S. P. Turner and P. A. Roth (Eds.) *Philosophy of the Social Sciences*, pp. 91-109, Oxford: Blackwell.

Bolam, R. and McMahon, A. (2004) Literature, definitions and models: towards a conceptual map, in C. Day and J. Sachs (Eds.) *International Handbook on the Continuing Professional Development of Teacher,* pp. 33-63, Maidenhead: Open University Press.

Bolam, R., McMahon, A., Stoll, L., Thomas, S. and Wallace, M. (2005). *Creating and sustaining effective professional learning communities*. Research Report No. 637. UK: Department for Education and Skills.

Borko, H., Davinroy, K. H., Bliem, C. L. and Cumbo, K. B. (2000) Exploring and supporting teacher change: two Third-Grade teachers' experiences in a Mathematics and Literacy Staff Development Project, *The Elementary School Journal*, 100 (4), pp. 273-306.

Bottery, M. and Wright, N. (2000) *Teachers and the State: Towards a directed profession*, London: Routledge.

Bourdieu, P. (1977) *Outline of the Theory of Practice (translated by Richard Nice)*, Cambridge: Cambridge University Press.

Bourdieu, P. (1990a) A lecture on the lecture. In *In other Words: Essays toward a Reflexive Sociology*, pp. 177-198, Stanford: Stanford University Press.

Bourdieu, P. (1990b) The scholastic point of view. *Cultural Anthropology*, 5 (4), pp. 380-391.

Bourdieu, P. and Wacquant, L. J. D. (1992) *An Invitation to Reflexive Sociology*, Chicago: University of Chicago Press.

Boyle, B., While, D. and Boyle, T. (2004) A longitudinal study of teacher change: what makes professional development effective? *The Curriculum Journal*, 15 (1), pp. 45-68.

Boyle, B., Lamprianou, I. and Boyle, T. (2005) A longitudinal study of teacher change: What makes professional development effective? Report of the second year of the study, *School Effectiveness and School Improvement*, 16 (1), pp. 1-27.

Broaddus, K. and Bloodgood, J. W. (1999) "We're supposed to already know how to teach reading: Teacher change to support struggling readers", *Reading Research Quarterly*, 34 (4), pp. 426-451.

Brookfield, S. (2001) Repositioning ideology critique in a critical theory of adult learning, *Adult Learning Quarterly*, 52 (1), pp. 7-22.

Brookfield, S. (2005a) *The Power of Critical Theory: Liberating Adult Learning and Teaching*, San Francisco: Jossey-Bass.

Brookfield, S. (2005b) Learning democratic reason: the adult education project of Jürgen Habermas, *Teachers College Record*, 107 (6), pp. 1127-1168.

Bryman, A. (2001) Introduction: A Review of Ethnography', in A. Bryman (Ed.) *Ethnography: Volume I*, pp. ix-xxxix, London: Sage.

Byrd, D. M. and McIntyre, D. J. (1999) Introduction: Professional Development Schools, in D. M. Byrd and D. J. McIntyre (Eds.) *Research on Professional Development Schools: Teacher Education Yearbook VII*, pp. vii-5, Thousand Oaks, CA: Corwin Press.

Calderhead, J. (2001) International experiences of teaching reform, in V. Richardson (Ed.) *Handbook of Research in Teaching*, 4th Edn., pp. 777-800, Washington, DC: American Educational Research Association.

Caldwell, B. J. (1993) Paradox and uncertainty in the governance of education, in H. Beare and W. L. Boyd (Eds.) *Restructuring Schools: An International Perspective on the Movement to Transform the Control and Performance of Schools*, pp. 158-173, London: Falmer Press.

Caldwell, B. J. (1997) The impact of self-management and self-government on professional cultures of teaching: a strategic analysis for the twenty-first century, in A. Hargreaves and R. Evans (Eds.) *Beyond Educational Reform: Bringing Teachers Back In*, pp. 62-76, Buckingham: Open University Press.

Carroll, P. S. (1994) Metamorphosis: One teacher's change/one class' reaction, *The English Journal*, 83 (6), pp. 22-28.

Carspecken, P. F. (1996) *Critical Ethnography in Educational Research: A Theoretical and Practical Guide*, London: Routledge.

Carspecken, P. F. (2001) Critical Ethnographies from Houston: Distinctive Features and Direction, in P. F. Carspecken and G. Walford (Eds.) *Critical Ethnography and Education*, pp. 1-26, Oxford: Elsevier Science.

Castells, M. (1997) *The Information Age: Economy, Society and Culture, Volume II: The Power of Identity*, Oxford: Blackwell.

Chandler, D. (2002) *Semiotics: The Basics*, London: Routledge.

Clegg, S. (1989) *Frameworks of Power*, London: Sage.

Clement, M. and Vandenberghe, R. (2000) Teachers' professional development: a solitary or collegial adventure? *Teaching and Teacher Education*, 16, pp. 249-305.

Clewell, B. C. and Campbell, P. B. (2005) *What do we know? Seeking effective math & science instruction*, Washington, D.C.: Urban Institute.

Cochran-Smith, M. and Lytle, S. (1993) *Inside/Outside: Teacher Research and Knowledge*, New York: Teachers College Press.

Cochran-Smith, M. and Lytle, S. (1996) Communities for teacher research: fringe or forefront?, in M. W. McLaughlin and I. Oberman (Eds.) *Teacher Learning: New Policies, New Practices*, pp. 92- 112, New York: Teachers College Press.

Cochran-Smith, M. and Lytle, S. (1998) Teacher research: the question that persists, *International Journal of Leadership in Education*, 1 (1), pp. 19-36.

Cochran-Smith, M. and Lytle, S. (1999) Relationships of knowledge and practice: teacher learning in communities', in A. Iran-Nejad and C. D. Pearson (Eds) *Review of Research in Education*, 24 (2), pp. 251-307.

Contu, A. and Willmott, H. (2003) Re-embedding situatedness: the importance of power relations in learning theory, *Organization Science*, 14 (3), pp. 283-296.

Corcoran, T. B. (1995) *Helping Teachers Teach Well: Transforming Professional Development*, Policy Briefs, Consortium for Policy Research in Education.

Cranton, P. (2006) *Understanding and Promoting Transformative Learning*, 2nd Edn., San Francisco, C.A.: Jossey-Bass.

Crossley, N. (2002) *Making Sense of Social Movements*, Buckingham: Open University Press.

Crow, D. (2003) *Visible Signs: An Introduction to Semiotics*, Lausanne, Switzerland: AVA.

Cuban, L. (1988) A fundamental puzzle of school reform, *Phi Delta Kappan*, 69 (5), pp. 341-344.

Daniels, H. (2004) Activity theory, discourse and Bernstein, *Educational Review*, 56 (2), pp. 121-132.

Daniels, H. (2005) Vygotsky and educational psychology: some preliminary remarks, *Educational and Child Psychology*, 22 (1), pp. 6-17.

Daniels, H. (2006) Activity, discourse and pedagogic change, in R. Moore, M. Arnot, J. Beck and H. Daniels (Eds.) *Knowledge, Power and Educational Reform*, pp. 159-178, Abingdon, Oxon: Routledge.

Darling-Hammond, L. (1994) Developing professional development schools: early lessons, challenge, and promise, in L. Darling-Hammond (Ed.) *Professional Development Schools: Schools for Developing a Profession*, pp. 1-27, New York: Teachers College Press.

Darling-Hammond, L. (1998) Teacher learning that supports student learning, *Educational Leadership*, 55 (5), pp. 6-11.

Darling-Hammond, L., Wise, A. E. and Klein, S. P. (1999) *A Licence to Teach: Raising Standards for Teaching*, San Francisco, CA: Jossey-Bass.

Day, C. (1993). Reflections: a necessary but not sufficient conditions for professional development, *British Educational Research Journal*, 19 (1), pp. 83-93.

Day, C. (1997) Teachers in the twenty-first century: time to renew the vision, in A. Hargreaves and R. Evans (Eds.) *Beyond Educational Reform: Bring Teachers Back In*, pp. 44-61, Buckingham: Open University Press.

Day, C. (1999) Developing Teachers: The Challenges of Lifelong Learning, London: Falmer.

Day, C. and Hadfield, M. (2004) Learning through Networks: trust, partnerships and the power of action research, *Educational Action Research*, 12 (4), pp. 575-586.

Day, C. and Sachs, J. (2004) Professionalism, performativity and empowerment: discourses in the politics, policies and purposes of continuing professional development, in C. Day and J. Sachs (Eds.) *International Handbook on the Continuing Professional Development of Teacher,* pp. 3- 32, Maidenhead: Open University Press.

de Saussure, F. (1974) *Course in General Linguistics*, Fontana.

Dean, J. (1996) Civil society: beyond the public sphere, in D. M. Rasmussen (Ed.) *The Handbook of Critical Theory*, pp. 220-242, Oxford: Blackwell.

Denzin, N. K. and Lincoln, Y. S. (2000) *Handbook of Qualitative Research*, 2$^{nd}$ Edn., Thousand Oaks, CA: Sage.

Dewey, J. (1916) *Democracy and Education*, New York: Macmillan.

Diani, M. (2003) Introduction: social movements, contentious actions, and social movements: 'From metaphor to substance'? in M. Diani and D. McAdam (Eds.) *Social Movements and Networks: Relational Approaches to Collective Action*, pp. 1-18, Oxford: Oxford University Press.

Dilthey, W. (1976) *Dilthey: Selected Writings* (Edited by H. P. Rickman), Cambridge: Cambridge University Press.

Dilthey, W. (1976) *Der Aufbau der geschichtlichen Welt in den Geisteswissenschaften*, Frankfurt am Main: Suhrkamp.

Dosse, F. (1997) *History of Structuralism (Volume 1): The Rising Sign, 1945-1966 (Translated by Deborah Glassman)*, Minneapolis, MN: University of Minnesota.

DuFour, R. (2005) What is a professional learning community? In R. DuFour, R. Eaker and R. DuFour (Eds.) *On Common Ground: The Power of Professional Learning Community*, pp. 31-43, Bloomington, I.N.: Solution Tree.

Eekelen, I. M., Vermunt, J. D. and Boshuizen, H. P. A. (2006) Exploring teachers' will to learn, *Teaching and Teacher Education*, 22, 408-423.

Elliot, J. (2000) Towards a synoptic vision of educational change in advanced industrial countries, in H. Altrichter and J. Elliot (Eds.) *Images of Educational Change*, pp. 176-220, Buckingham: Open University Press.

Elliot, J. (2004) Using research to improve practice: the notion of evidence-based practice, in C. Day and J. Sachs (Eds.) *International Handbook on the Continuing Professional Development of Teacher,* pp. 265-290, Maidenhead: Open University Press.

Emerson, R. M. (2001) Four ways to improve the craft of fieldwork, in A. Bryman (Ed.) *Ethnography*, Volume II, pp. 35-49, London: Sage.

Engeström, Y. (1987) *Learning by expanding*, Helsinki, Finland: Orienta-Konsultit.

Engeström, Y. (1999) Innovative learning in work teams: analysing cycles of knowledge creation in practice, in Y. Engeström, R. Miettinen and R. I. Punamäki (Eds.) *Perspectives on Activity Theory*, pp. 377-406, Cambridge: Cambridge University Press.

Fairclough, N. (2001) Critical discourse analysis as a method in social scientific research, in R. Wodak and M. Meyer (2001), *Methods of Critical Discourse Analysis*, pp. 121-138, London: Sage.

Fairclough, N. and Wodak, R. (1997) Critical discourse analysis, in T. van Dijk (Ed.), *Discourse Studies: A Multidisciplinary Introduction*, Volume 2, pp. 258-284, London: Sage.

Fenstermacher, G. D. (1987) On understanding the connections between classroom research and teacher change, *Theory into Practice*, 26 (1), pp. 307.

Fielding, M. (1996) Empowerment: emancipation or enervation? *Journal of Education Policy*, 11 (3), pp. 399-417.

Fiszher, E. P. (2004) *How Teachers Learn Best: An Ongoing Professional Development Model*, Lanham, MA: Scarecrow Education.

Flew, A. (1979) *A Dictionary of Philosophy*, 2nd Edn., New York: St. Martin's.

Foucault, M. (1977) *Discipline and Punish*, Harmondsworth: Peregrine Books.

Foucault, M. (1978) *The History of Sexuality, Volume I: An Introduction*, London: Penguin Press.

Foucault, M. (1980). *Power/Knowledge: Selected Interviews and Other Writings, 1972-1977*, New York: Pantheon Books.

Forde, C. McMahon, M., McPhee, A. D. and Patrick, F. (2006) *Professional Development, Reflection and Enquiry*, London: Paul Chapman.

Freire, P. (1972) *Pedagogy of the Oppressed*, London: Penguin.

Freire, P. (1973) *Education for Critical Consciousness*, New York: Continuum.

Freire, P. (2005) *Education for Critical Consciousness*, London: Continuum.

French, E. and Delahaye, B. (1996). Individual change transition: moving in circles can be good for you, *Leadership and Organizational Development,* 17(7), pp. 22-28.

Fromm, E. (1941) *Escape from Freedom*, New York: Holt, Rinehart and Winston.

Fullan, M. (1987) Implementing the implementation plan, in M. Wideen and I. Andrews (Eds.) *Staff Development for School Improvement*, pp. 213-222, New York: Falmer Press.

Fullan, M. (1991) *The New Meaning of Educational Change.* London: Cassell.

Fullan, M. (1993) *Change Forces: Probing the Depths of Educational Reform*, London: Falmer Press.

Fullan, M. (1995) The limits and the potential of professional development, in T.R. Guskey and M. Huberman (Eds.) *Professional Development in Education: New Paradigms and Practices*, pp. 253-267, New York: Teachers College Press.

Fullan, M. (2000) Infrastructure is all, *TES*, Jun 23 2000, p. 15.

Fullan, M. and Hargreaves, A. (1991) *What's Worth Fighting For In Your School?,* Buckingham: Open University Press.

Futrell, M. H., Holmes, D. H., Christie, J. L. and Cushman, E. J. (1995) *Linking education reform and teacher professional development: the efforts of nine school districts*, Occasional Paper Series, Washington, D.C.: Center for Policy Studies, Graduate School of Education and Human Development, George Washington University.

Gadamer, H. G. (1975) *Truth and Method,* 2nd Rev. Edn. (Edited and translated by J. Weinsheimer and D. G. Marshall), New York: Crossroad.

Gall, J. P., Gall, M. D. and Borg, W. R. (1999) *Applying Educational Research: A Practical Guide*. 4th Edn., New York: Longman.

Garcia-Morales, V. J., Lopez-Martin, F. J. and Llamas-Sánchez, R. (2006) Strategic factors and barriers for promoting educational organisational learning, *Teaching and Teacher Education*, 22, pp. 478-502.

Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F. and Kwang, S. Y. (2001) What makes professional development effective? Results from a national sample of teacher, *American Educational Research Journal*, 38 (4), pp. 915-945.

Geuss, R. (1981) *The idea of a critical theory: Habermas and the Frankful School*. Cambridge: Cambridge University Press.

Giddens, A. (1984) *The Constitution of Society*, Cambridge: Polity Press.

Giddens, A. (1979) *Central Problems in Social Theory*, London: Macmillan.

Giddens, A. (1984) *The Constitution of Society*, Cambridge: Polity Press.

Glatthorn, A. (1995) Teacher development, in L. Anderson (Ed.) International Encyclopedia of Teaching and Teacher Education, 2nd Edn., London: Pergamon Press.

Gobo, G. (2004). Sampling, representativenss and generalizability, in C. Seale, G. Gobo, J. F. Gubrium and D. Silverman (Eds.) *Qualitative Research Practice*, pp.435-456, London: Sage.

Glickman, C. D., Gordon, S. P. and Ross-Gordon, J. M. (1998) *Supervision of Instruction: A Development Approach, 4th Edn.,* London: Allyn and Boston.

Goh, C. T. (2000) *Prime Minister Goh Chok Tong's National Day Rally 2000 Speech in English: Transforming Singapore.*                  .

Goodson, I. (1997) Trendy theory and teacher professionalism, in A. Hargreaves and R. Evans (Eds.) *Beyond Educational Reform: Bringing Teachers Back In*, pp. 29-43, Buckingham: Open University Press.

Goodson, I. (1998) 'Patterns of Curriculum', in A. Hargreaves, A. Lieberman, M. Fullan and D. Hopkins (Eds.) *International Handbook of Educational Change (Part 1)*, pp. 231-241, London: Kluwer Academic Publishers.

Goodson, I. (2003) *Professional Knowledge, Professional Lives*, Maidenhead: Open University Press.

Gramsci, A. (1995) *Further Selections from the Prison Notebooks,/Antonio Gramsci* (ed. trans. D. Boothman), Minneapolis: University of Minnesota Press.

Greeno, J. G. (1993) Direction of post-Vygostkian research, in E. Forman, N. Minick and C. A. Stone (Eds.) *Contexts for Learning: Sociocultural Dynamics in Children's Development*, pp. 369-381, New York: Oxford University Press.

Grimmett, P. P. and Neufeld, J. (1994) The struggle for authenticity in a changing educational context, in P. P. Grimmett and J. Neufeld (Eds.) *Teacher Development and the Struggle for Authenticity: Professional Growht and Restructuring in the Context of Change*, pp. 1-12, New York: Teachers College Press.

Grundy, B. and Kemmis, S. (1982) Educational Action Research in Australia: The State of the Art (An Overview), in S. Kemmis and R. McTaggart (Eds.) *The Action Research Reader*, pp. 83-97, Deakin University Press.

Guba, E. G. and Lincoln, Y. S. (1994) Competing Paradigms in Qualitative Research, in N. K. Denzin and Y. S. Lincoln (Eds.) *Handbook of Qualitative Research*, pp. 105-117. Thousand Oaks, CA: Sage.

Guskey, T. R. (1986) Staff development and the process of teacher change, *Educational Researcher*, 15 (5), pp. 5-12.

Guskey, T. R. (1995) Professional development in education: in search of the optimal mix, in T.R. Guskey and M. Huberman (Eds.) *Professional Development in Education: New Paradigms and Practices*, pp. 114-127, New York: Teachers College Press.

Guskey, T. R. (2000) *Evaluating Professional Development*, Thousand Oaks, CA: Corwin Press.

Guskey, T. R. (2002) Professional development and teacher change, *Teachers and Teaching: theory and practice*, 8 (3/4), pp. 381-391.

Habermas, J. (1970) *Toward a Rational Society*, London: Heinemann.

Habermas, J. (1972) *Knowledge and Human Interests* (trans. Jeremy J. Shapiro), London: Heinemann.

Habermas, J. (1973) *Legitimation crisis*, Boston: Beacon Press.

Habermas, J. (1975) *Theory and Practice* (trans. J. Viertel), Boston: Beacon Press.

Habermas, J. (1979) *Communication and the Evolution of Society* (Edited and translated by Thomas McCarthy), Boston, MA: Beacon.

Habermas, J. (1983) *Moralbewusstsein und Kommunicative Handeln* (Translated as Moral Consciousness and Communicative Action), Frankfurt: Suhrkamp.

Habermas, J. (1984) *The Theory of Communicative Action, Vol. 1: Reason and the Rationalisation of Society* (Translated by Thomas McCarthy). Boston, MA: Beacon.

Habermas, J. (1987a) *The Theory of Communicative Action: Vol. 2: Lifeworld and System – A Critique of Functionalist Reason* (trans. Thomas McCarthy), Boston: Beacon Press.

Habermas, J. (1987b) *The Philosophical Discourse of Modernity: Twelve Lectures*, Cambridge, MA: MIT Press.

Habermas, J. (1989) Justice and solidarity: On the Discussion Concerning Stage 6, in T, Wren (Ed.) *The Moral Domain*, Cambridge, M.A.: MIT Press.

Habermas, J. (1990) *Moral Consciousness and Communicative Action* (Translated by Christian Lenhardt and Shierry Weber Nicholsen), Cambridge: Polity Press.

Habermas, J. (1992) *Autonomy and Solidarity: Interviews with Jürgen Habermas (Rev. Edn.)*, Cambridge, MA: MIT Press.

Habermas, J. (1994) *The Past as Future*, Lincoln: University of Nebraska Press.

Habermas, J. (1995) *Moral Consciousness and Communicative Action*, Cambridge: Polity Press.

Habermas, J. (1996) *Between Facts and Norms: Contributions to a Discourse Theory of Democracy*, Cambridge, MA: MIT Press.

Haggarty, L. and Postlethwaite (2003) Action research: a strategy for teacher change and school development, *Oxford Review of Education*, 29 (4), pp. 423-448.

Hairon, S. (2003) A qualitative study of Singapore primary school teachers' conceptions of educational change, *Teaching and Learning*, 24 (2), pp. 105-115.

Hairon, S. (2006). Learning. In H. P. Tan (Eds.) Critical Perspectives on Education: An Introductory Text for Educators, pp. 59-79. Singapore: Pearson Prentice-Hall.

Hairon, S. (2006). Action research in Singapore Education – constraints and sustainability, *Educational Action Research*, 14 (4), pp. 513-523.

Hargreaves, A. (1994) *Changing Teachers, Changing Times: teachers' work and culture in the postmodern age*, London: Cassell.

Hargreaves, A. (2002a) Teaching in a box: emotional geographies of teaching, in C. Sugrue and C. Day (Eds.) *Developing Teachers and Teaching Practice: International Research Perspectives*, pp. 3-25, London: Routledge/Falmer.

Hargreaves, A. (2002b) Teaching and Betrayal, *Teachers and Teaching: theory and practice*, pp. 393-407.

Hargreaves, A. and Evans, R. (1997) Teachers and educational reform, in A. Hargreaves and R. Evans (Eds.) *Beyond Educational Reform: Bringing Teachers Back In*, pp. 1-18, Buckingham: Open University Press.

Hargreaves, D. (1999) Schools and the future: the key role of innovation, in OECD (Ed.) *Innovating Schools*, pp. 45-57, Paris: OECD.

Hart, M. (1990) Critical theory and beyond: further perspective on emancipatory education, *Adult Education Quarterly*, 40, pp. 125-138.

Hartzler-Miller, C. (2002) Teaching for social change: the interplay of social knowledge, content knowledge and personal biography, *The International Social Studies Forum*, 2 (2), pp. 141-155.

Haugaard, M. (2002) *Power: A Reader*, Manchester: Manchester University Press.

Hawley, W. D. and Valli, L. (1999) The essentials of effective professional development: a new consensus, in L. Darling-Hammond and G. Sykes (Eds.) *Teaching as the Learning Profession*, pp. 127-150, San Francisco, CA: Jossey-Bass.

Hoban, G. F. (2002) *Teacher Learning for Educational Change: A Systems Thinking Approach*, Buckingham: Open University Press.

Hobson, B. (2003) Introduction, in B. Hobson (Ed.) *Recognition Struggles and Social Movements: Contested Identities, Agency and Power*, pp. 1-17, Cambridge: Cambridge University Press.

Hollway, W. and Jefferson, T. (2000) *Doing Qualitative Research Differently: Free Association, Narrative and the Interview Method*, London: Sage.

Honneth, A. (1994) The social dynamics of disrespect: on the location of Critical Theory today, *Constellations*, 1 (20), pp. 255-269.

House, E. R. (2000) Economic change, educational policy formation and the role of the state, in H. Altrichter and J. Elliot (Eds.) *Images of Educational Change*, pp. 13-19, Buckingham: Open University Press.

Huberman, M. (2001) Networks that alter teaching: conceptualisations, exchanges and experimentations, in J. Soler, A. Craft and H. Burgess (Eds.) *Teacher Development: Exploring Our Own Practice*, pp. 141-159, London: Paul Chapman.

Huffman, J. B. and Jacobson, A. I. (2003) Professional learning communities, *International Journal of Leadership in Education*, 6 (3), pp. 239-250.

Hughes, C. (2004) New times? New learners? New voices? Towards a contemporary social theory of learning, *British Journal of Sociology of Education*, 25 (3), pp. 395-408.

Hunsaker, L. and Johnston, M. (1992) Teacher under construction: a collaborative case study of teacher change, *American Educational Research Journal*, 29 (2), PP. 350-372.

Husu, J. (2002) Navigating through pedagogical practice: teachers' epistemological stance towards pupils, in C. Sugrue and C. Day (Eds.) *Developing Teachers and Teaching Practice: International Research Perspectives*, pp. 58-72, London: Routledge/Falmer.

Hutchins, E. (1995) *Cognition in the Wild*, Cambridge, M.A.: MIT Press.

Inglis, T. (1997) Empowerment and emancipation, *Adult Education Quarterly*, 48 (1), pp. 3-17.

Ingvarson, L. (2000) Teacher control and the reform of professional development, in H. Altrichter and J. Elliot (Eds.) *Images of Educational Change*, pp. 159-172, Buckingham: Open University Press.

John-Steiner, V. and Mahn, H. (1996) Sociocultual approaches to learning and development: a Vygotskian framework, *Educational Psychologist*, 21 (3/4), pp. 191-206.

Johnson, R. (1983) *What is Cultural Studies, Anyway?* Occasional paper, SP No. 74, Centre for Contemporary Cultural Studies, University of Birmingham, UK.

Johnston, M. (1994) Contrasts and similarities in case studies of teacher reflection and change, *Curriculum Inquiry*, 24 (1), pp. 9-26.

Kelchtermans, G. (2004) CPD for professional renewal: moving beyond knowledge for practice, in C. Day and J. Sachs (Eds.) *International Handbook on the Continuing Professional Development of Teacher,* pp. 217-237, Maidenhead: Open University Press.

Kelly, P. P. (1995) Teaching as A Profession? Http://education.boisestate.edu/pkelly/webpages/920PPR.html.

Kilgore, D.W. (2001) Critical and postmodern perspectives on adult learning, in S. B. Merriam (Ed.) *The New Update on Adult Learning Theory*, pp. 53-61, San Francisco: Jossey-Bass.

Kincheloe, J. and McLaren, P. (2000) 'Rethinking Critical Theory and Qualitative Research', in N. K. Denzin and Y. S. Lincoln (Eds.) *Handbook of Qualitative Research*, 2nd Edn., pp. 279-313, London: Sage.

King, M. B. and Newmann, F. M. (2004a) Key Link: Successful Professional Development Must Consider School Capacity, *Journal of Staff Development*, 25 (1), pp.26-30.

King, M. B. and Newmann, F. M. (2004b) Will teacher learning advance school goals? *Phi Delta Kappan*, 81 (8), pp. 576-580.

Kirshner, D. and Whitson, J. A. (1997) Editor's introduction to situated cognition: social, semiotic and psychological perspectives, in D. Kirshner and J. A. Whitson (Eds.) *Situated Cognition: Social, Semiotic, and Psychological Perspectives*, pp. 1-16, Mahwah, N.J.: Lawrence Erlbaum.

Klette, K. (2000) Working-time blues: how Norwegian teachers experience restructuring in education, in C. Day, A. Fernandez, T. E. Hauge and J. Møller (Eds.) *The Life and Work of Teachers: International Perspectives in Changing Times*, pp. 146-158, London: Falmer Press.

Knowles, M. S. (1975) *Self-directed Learning: A Guide for Learners and Teachers*, New York: Association Press.

Knowles, M. S. (1980) *The Modern Practice of Adult Education: From Pedagogy to Andragogy*, Chicago: Association Press.

Lave, J. and Wenger, E. (1991) *Situated Learning: Legitimate Peripheral Participation*, Cambridge: Cambridge University Press.

Lee, K. Y. (1966). *New bearings in our education system: an address by the Prime Minister, Mr. Lee Kuan Yew, to principals of schools in Singapore on Aug 29,* 1966. Singapore: Ministry of Culture.

Lester, J. H. (2003). Planning effective secondary professional development programs, *American Secondary Education*, 32 (1), pp. 49-61.

Leithwood, K. A. (1992) The principal's role in teachers' development, in M. Fullan and A. Hargreaves (Eds.) *Teacher Development and Educational Change*, pp. 86-103, London: Falmer Press.

Lieberman, A. (1994) Teacher development: commitment and challenge, in P. P. Grimmett and J. Neufeld (Eds.) *Teacher Development and the Struggle for Authenticity: Professional Growht and Restructuring in the Context of Change*, pp. 15-30, New York: Teachers College Press.

Lieberman, A. and Grolnick, M. (2005) Education reform networks: changes in the forms of reform. In M. Fullan (Ed.) *Fundamental change*, pp. 40-59, Dordrecht, The Netherlands: Springer.

Lieberman, A. and Miller, L. (2004) *Teacher Leadership*, San Francisco, CA: Jossey-Bass.

Leitch, R. and Day, C. (2001) Reflective processes in action: mapping personal and professional contexts for learning and change, *Journal of In-Service Education*, 27 (2), pp. 237-259.

Little, D. (1991) *Varieties of Social Explanation: An Introduction to the International Relations*, New York: Macmillan.

Little, J. W. (1992) Teacher development and educational policy, in M. Fullan and A. Hargreaves (Eds.) *Teacher Development and Educational Change*, pp. 1-9, London: Falmer Press.

Longworth, N. (2001) Learning communities for a learning society, in D. Aspin, J. Chapman, M. Hatton and Y. Sawano (Eds.) *International Handbook of Lifelong Learning*, Part Two, pp. 591-617, Dordect, The Netherlands: Kluwer Academic Publishers.

Lovett, S. and Gilmore, A. (2003) Teachers' learning journeys: the quality of Learning Circle as a Model of Professional Development, *School Effectiveness and School Improvement*, 14 (2), pp. 189-211.

Macey, C. (2000) *The Penguin Dictionary of Critical Theory*, London: Penguin Books.

MacKenzie, I. (1999) Power, in F. Ashe, A. Finlayson, M. Lloyd, I. MacKenzie, J. Martin and S. O'Neill (Eds.) *Contemporary Social and Political Theory: An Introduction*, pp. 69-87, Buckingham: Open University Press.

Mahn, H. (1999) Vygotsky's methodological contribution to sociocultural theory, *Remedial and Special Education*, 20 (6), pp. 341-350.

Manning, P. K. (1987) *Semiotics and Fieldwork*, London: Sage.

Manning, P. K. (2004) Semiotics and data analysis, M. Hardy and A. Bryman (Eds.) *Handbook of Data Analysis*, in pp. 567-587, London: Sage.

Marcuse, H. (1964) *One Dimensional Man*, Boston: Beacon Press.

Marcuse, H. (1970) *Five Lectures*, Boston: Beacon Press.

Marsick, V. J. and Watkins, K. E. (2001) Informal learning and incidental learning, in S. B. Merriam (Ed.) *The New Update on Adult Learning Theory*, pp. 25-33, San Francisco: Jossey-Bass.

Martini, T. S. and Dion, K. L. (2001) Developmental expectations of personal change for the self and others, *Basic and Applied Social Psychology*, 23 (1), pp. 21-28.

Maynard, M. (2004) Feminist Issues in Data Analysis, in M. Hardy and A. Bryman (Eds.) *Handbook of Data Analysis*, pp. 131-145, London: Sage.

Marx, K. (1983). *The Portable Karl Marx*. New York: Penguin Books.

McCarthy, T. (1978) *The Critical Theory of Jürgen Habermas*, Cambridge: MIT Press.

McCarthy, T. (1990) Introduction, in J. Habermas (Ed.) *Moral Consciousness and Communicative Action* (Translated by Christian Lenhardt and Shierry Weber Nicholsen), pp. i-xiii, Cambridge: Polity Press.

McCullough, G., Helsby, G. and Knight, P. (2000) *The Politics of Professionalism: Teachers and the Curriculum*, London: Continuum.

Mead, G. H. (1934) *Mind, Self, and Society*, Chicago: University of Chicago Press.

Meadwell, H. (1994) The foundation of Habermas's universal pragmatics, *Theory and Society*, 23, pp. 711-727.

Merriam, S. B. (Ed.) (2001) *The New Update on Adult Learning Theory*, San Francisco: Jossey-Bass.

Merriam, S. B. (2002) *Qualitative Research in Practice: Examples for discussion and analysis*, San Francisco: Jossey-Bass.

Mezirow, J. (1991) *Transformative Dimensions of Adult Learning*, San Francisco: Jossey-Bass.

Mezirow, J. (2000) Learning to think like an adult: core concepts of Transformation Theory, in J. Mezirow (Ed.) *Learning as Transformation: Critical Perspectives on a Theory in Progress*, pp. 3-33, San Francisco: Jossey-Bass.

Mezirow, J. (1997) Transformative Learning: Theory to Practice, *New Directions for Adult and Continuing Education*, 74, pp. 5-12.

McKenzie, P. (2001) How to make lifelong learning a reality: implications for the planning of educational provisions in Australia, in D. Aspin and J. Chapman (Eds.) *International Handbook of Lifelong Learning*, pp. 367-377, Dordect, The Netherlands: Kluwer Academic Publishers.

McLaughlin, M. W. (2002) Sites and sources of teachers' learning, in C. Sugrue and C. Day (Eds.) *Developing Teachers and Teaching Practice: International Research Perspectives*, pp. 95-115, London: Routledge/Falmer.

Miles, B. M. (1998) Finding keys to school change: a 40-year odyssey, in A. Hargreaves, A. Lieberman, M. Fullan and D. Hopkins (Eds.) *International Handbook of Educational Change (Part 1)*, pp. 37-69, London: Kluwer Academic Publishers.

Mills, C. (1959) *The Sociological Imagination*, Harmondsworth: Penguin.

Mills, S. (2003) *Michel Foucault*, London: Routledge.

Moore, M. J. (2005) The transtheoretical model of the stages of change and the phases of Transformative Learning: Comparing Two Theories of Transformational Change, *Journal of Transformative Education*, 3 (4), pp. 394-415.

Morrow, R. A. (1994) *Critical Theory and Methodology*, London: Sage.

Mortimore, P., Saravanan, G., Leo, E. Myers, K., Sharpe, L. Stoll, L. and Mortimore, J. (2000) *The Culture of Change: Case Studies of Improving Schools in Singapore and London*, London: Bedford Way Paper, Institute of Education, University of London.

Nelson, B. C. and Hammerman, J. K. (1996) Reconceptualising teaching: moving toward the creation of intellectual communities of students, teachers and teacher educators, in M. W. McLaughlin and I. Oberman (Eds.) *Teacher Learning: New Policies, New Practices*, pp. 3- 21, New York: Teachers College Press.

Noblit, G. W. (2004) Reinscribing critique in educational ethnography: critical and postcritical ethnography, in K. deMarrais and S. D. Lapan (Eds.) *Foundations for Research: Methods of Inquiry in Education and the Social Sciences*, pp. 181-201, London: Lawrence Erlbaum Associates.

Organisation for Economic Co-operation and Development (OECD) (1995) *Teachers Matter: Attracting, Developing and Retaining Effective Teachers*, Paris: OECD.

Orr, J. E. (1996) *Talking About Machines: An Ethnography of a Modern Job*, Ithaca, New York: ILR Press.

Outhwaite, W. (1994) *Habermas: A critical introduction*, Cambridge: Polity Press.

Pace, G. (1992) Stories of teacher-initiated change from traditional to whole-language literacy instruction, *The Elementary School Journal*, 92 (4), pp. 461-476.

Pearce, C. L. and Conger, J. A. (2003) All those years ago: the historical underpinnings of shared leadership, in C. L. Pearce and J. A. Conger (Eds.) *Shared Leadership: Reframing the Hows and Whys of Leadership*, pp, 1-18, London: Sage.

Peery, A. B. (2004) *Deep Change: professional development from the inside out*, Lanham, MA: ScarecrowEducation.

Pennington, M. C. (1995) The teacher change cycle, *TESOL Quarterly*, 29 (4), pp. 705-731.

Piaget, J. (1954) *The Construction of Reality in the Child*, New York: Basic Books.

Porter, J. (1999) *Reschooling and the Global Future: Politics, Economics and the English Experience*, Oxford: Symposium Books.

Poster, C. (1999) *Restructuring: The key to effective school management*, London: Routledge.

Prus, R. C. (1999) *Beyond the Power Mystique: Power As Intersubjective Accomplishment*, New York: State University of New York Press.

Richardson, V. and Anders, P. L. (1994a) The study of teacher change, in V. Richardson (Ed.), *Teacher Change and the Staff Development Process: A Case in Reading Instruction*, pp. 159-180, New York: Teachers College Press.

Richardson, V. and Anders, P. L. (1994b) A Theory of Change, in V. Richardson (Ed.), *Teacher Change and the Staff Development Process: A Case in Reading Instruction*, pp. 199-216, New York: Teachers College Press.

Richardson, V. and Placier, P. (2001). Teacher change, in V. Richardson (Ed.) *Handbook of Research in Teaching*, 4th Edn., pp. 905-947, Washington, DC: American Educational Research Association.

Riley, K. and Stoll, L. (2004) Inside-out and outside-in: why schools need to think about communities in new ways, Education Review, 18 (1), pp. 34-41.

Rogers, D. L. and Babinski, L. M. (2002) *From Isolation to Conversation: Supporting New Teachers' Development*, Albany, NY: State University of New York Press.

Ryen, A. (2004) Ethical Issues, in C. Seale, G. Gobo, G., J. F. Gubrium, and D. Silverman (Eds.) *Qualitative Research Practice*, pp. 230-247, London: Sage.

Sachs, J. (2003) *The Activist Teaching Profession*, Buckingham: Open University Press.

Sarason, S. B. (1990) *The Predictable Failure of Educational Reform*, San Francisco, CA: Jossey-Bass.

Sarason, S. B. (1996) *The Culture of The School and The Problem of Change*, New York: Teachers College Press.

Schwandt, T. A. (2000) 'Three Epistemological Stances for Qualitative Inquiry: Interpretivism, Hermeneutics, and Social Constructionism', in N. K. Denzin and Y. S. Lincoln (Eds.) *Handbook of Qualitative Research*, 2nd Edn., pp. 189-213, London: Sage.

Schön, D. (1983) *The Reflective Practitioner: How Professionals Think in Action*, New York: Basic Books.

Schön, D. (1987) *Educating the Reflective Practitioner,* San Francisco: Jossey-Bass.

Scollon, R. (2001). Action and text: towards an integrated understanding of the place of text in social (inter)action, mediated discourse analysis and the problem of social action, in R. Wodak and M. Meyer (2001), *Methods of Critical Discourse Analysis*, pp. 139-183, London: Sage.

Schutz, A. and Luckmann (1973) *The Structure of the Lifeworld*, Evanston: IL: Northwestern University Press.

Senge, P. (1990) *The Fifth Discipline*, New York: Doubleday.

Senger, E. S. (1999) Reflective reform in mathematics: the recursive nature of teacher change, *Educational Studies in Mathematics*, 37 (3), pp. 199-221.

Siegel, H. (1990), *Educating Reason: Rationality, Critical Thinking and Education*, London: Routledge.

Skinner, B. F. (1974) *About Behaviourism*, New York: Knopf.

Smelser, N. (1962) *Theory of Collective Behaviour*, London: Routledge and Kagan Paul.

Smith, M. J. (2000) *Culture: Reinventing the Social Sciences*, Buckingham: Open University Press.

Smith, C., Hofer, J., Gillespie, M., Solomon, M. And Rowe, K. (2006) How teachers change: a study of professional development in adult education, in P. R. Villa (Ed.) *Teacher Change and Development*, pp. 11-155, New York: Nova Science Publishers.

Smylie, M. (1988) The enhancement function of staff development: organizational and psychological antecedents to individual teacher change, *American Educational Research Journal*, 25 (1), pp. 1-30.

Smylie, M. (1995a) Teachers' reports of their interaction with teacher leaders concerning classroom instruction, *The Elementary School Journal*, 93, pp. 85-98.

Smylie, M. (1995b) Teacher learning in the workplace: implications for school reform, in T. R. Guskey and M. Huberman (Eds.) *Professional Development in Education: New Paradigms and Practices*, pp. 92-113, New York: Teachers College Press.

Smyth, J. (1991) *Teachers as Collaborative Learners: Challenging Dominant Forms of Supervision*, Milton Keynes: Open University Press.

Smyth, J. (1995) Teachers' work and the labour process of teaching, in T. R. Guskey and M. Huberman (Eds.) *Professional Development in Education: New Paradigms & Practice*, pp. 69-91, New York: Teachers College Press.

Smyth, J., Dow, A., Hattam, R., Reid, A. and Shacklock, G. (2000) *Teachers' Work in a Globalizing Economy*, London: Falmer Press.

Sparks, D. and Hirsh, S. (1997) *A New Vision for Staff Development*, Alexandria, VA: Association for Supervision and Curriculum Development and National Staff Development Council.

Spillane, J. P. (2002) Local theories of teacher change: the pedagogy of district policies and programs, *Teachers College Record*, 104 (3), pp. 377-420.

Stenhouse, L. (1975) *An Introduction to Curriculum Research and Development*, London: Heinemann.

Stoll, L. (1999) School culture: black hole or fertile garden for school improvement?, in J. Prosser (Ed.) *School Culture*, pp. 30-47, London: Paul Chapman.

Swartz, D. (1997) *Culture and Power: The Sociology of Pierre Bourdieu*, Chicago: The University of Chicago Press.

Tang, N. (2000). Teachers' Network: a new approach in the professional development of teachers, *ASCD Review*, 9 (3), 48-55.

Thomas, J. (1993). *Doing Critical Ethnography*. London: Sage.

Tickle, L. (2000) *Teacher Induction: The Way Ahead*, Buckingham: Open University Press.

Tight, M. (2000) *Key Concepts in Adult Education and Training*, 2nd Edn, London: Routledge/Falmer.

Thomas, J. (1993) *Doing Critical Ethnography*, London: Sage.

Townsend, T. (1998) *The Primary School in Changing Times: The Australian Experience*, London: Routledge.

Turner, S. P. and Roth, P. A. (2003) Introduction. Ghost and the Machine: Issues of Agency, Rationality, and Scientific Methodology in Contemporary Philosophy of Social Science, in S. P. Turner and P. A. Roth (Eds.) *The Blackwell Guide to the Philosophy of the Social Sciences*, pp. 1-17, Oxford: Blackwell.

Usher, R., Bryant, I. and Johnston, R. (1997) *Adult Education and the Postmodern Challenge*, New York: Routledge.

Villegas-Reimers, E. (2003) *Teacher Professional Development: An International Review of the Literature*, Paris: UNESCO.

Vygotsky, L. S. (1934) *Thought and Language*, Cambridge, M.A.: MIT Press.

Vygotsky, L. S. (1978) *Mind in society: the development of higher psychological processes*, in M. Cole, V. John-Steiner, S. Scribner and E. Souberman (Eds), Cambridge, M.A.: Harvard University Press.

Vygotsky, L. (1996) *Thought and Language (2nd. rev. edn. by Alex Kozulin)*, Boston: MIT Press.

Wenger, E (1987) *Artificial Intelligence and Tutoring System: Computational and Cognitive Approaches to the Communication of Knowledge*, San Fracisco: Morgan Kaufmann.

Wenger, E. (1998) *Communities of Practice: Learning, Meaning, and Identity*, Cambridge: Cambridge University Press.

Wenger, I., McDermott, R. and Snyder, W. M. (2002) *Cultivating Communities of Practice*, Boston, M.A.: Harvard Business School Press.

Wertsch, J. V. (1985) *Vygotsky and the social formation of mind*, Cambridge, M.A.: Harvard University Press.

Wheatley, M.J. (1992) *Leadership and the New Science*, San Francisco, CA: Berrett-Koehler.

Wideen, M. F. (1994) *The Struggle For Change: The Story of One School*, London: Falmer Press.

Wilson, S. M. and Berne, J. (1999) Teacher learning and the acquisition of professional knowledge: an examination of research on contemporary professional development, *Review of Research in Education*, 24, pp. 173-209.

Willis, P. (1977) *Learning to Labor: How Working Class Kids Get Working Class Jobs*, London: Gower.

Wodak, R. (2001) What CDA is about – a summary of its history, important concepts and its development, in R. Wodak and M. Meyer (2001), *Methods of Critical Discourse Analysis*, pp. 1-113, London: Sage.

Woods, P. (2002) Teaching and learning in the new millenium, in C. Sugrue and C. Day (Eds.) *Developing Teachers and Teaching Practice: International Research Perspectives*, pp. 73-91, London: Routledge/Falmer.

Zimpher, N. L. and Howey, K. R. (1987) Adapting supervisory practices to different orientations of teaching competence, *Journal of Curriculum and Supervision*, 2 (2), pp. 101-127.

Zeman, J. (1977) Peirce's Theory of Signs, in T. Sebeok (Ed.) *A Profusion of Signs*, Bloomington, IN: Indiana University Press.

# Appendix A

**DESCRIPTION OF THE LEARNING CIRCLE'S PARTICIPANTS AT THE SCHOOL OF STUDY**

The description of the Learning Circle's participants at the school of study below was built up based on by fieldnotes which include observation, naturalistic interviews and artifact analyses, and formal interviews. The information contained in the description are based on the fieldnotes collected in 2005.

### _Surhana_

Surhana is a female graduate Malay-Muslim teacher at the school of study. She is married but planned not to have any child as her husband wishes to complete his part-time undergraduate study. She is in her late 20s and has about five years of teaching experience up to 2005. Up to date, she has taught in the school for five years too. By virtue of her being the Learning Circle facilitator for Primary 4, she is the Level Coordinator for Action Research. In addition to this, she has other coordinating roles such as artistic performances. Her experience of Teachers Network Learning Circles started when the school embarked on Learning Circles in 2001/2. In terms of career development, Surhana wishes to move upwards but not as quickly as how the school's senior management wants her to be, and in this way enjoy life and work at a personally decent pace – that is, without too much stress. This is consistent with the general cultural value of the Malay-Muslim community. In this way too, she does not get too troubled by disruptions or diversions in the task that she does. She does, however, take pride and joy in the responsibilities that are given to her. She has aspirations to learn and progress in the area of her work. This is evident from her desire to take up a master degree in the future, and coordinating responsibilities that have been given to her, but without the excess stress of taking on an official position such as a subject or level head. In terms of personality, Surhana is a jovial, friendly, relational and easy-going person. She generally loves her work and believes that she ought to help her students learn and achieve academically. She does, however, in balancing between work and life as a whole. In terms of work relations, she is closest to Maimuna and Teresa in order of importance.

## *Maimuna*

Maimuna is a female graduate Malay-Muslim teacher at the school of study. She is married and has one child who is studying in a primary school. She is in her early 30s and has about 12 years teaching experience up to 2005. Up to date, she has taught in the school for two years. She had been a head of department before. However, she holds no key positions in the present school of study. She is new to the concepts and practices of Learning Circles. In terms of career development, she is happy being a teacher as this would give her more time for family commitments such as raising her child and taking care of home chores. This explains why Maimuna was most of the time concern with completing the discussions in Learning Circles quickly. Her inexperience in Learning Circles, and thus the unfamiliarity with the notion of reflection, dialogue and consensus had also exacerbated this further. Her need for efficiency, hence, rest in her need to meet family commitments. In terms of personality, Maimuna is a friendly, jovial, relational and easy-going person. With regard to work relations, she is most comfortable with Surhana, followed by Teresa and Kalpana. Although she has concerns for her students' learning, her first priority is her family.

## *Edward*

Edward is a male non-graduate Christian Chinese teacher. He is unmarried. He is in his late 20s and has about three years of teaching experience up to 2005. The school of study is his first school posting. He is the Level Coordinator for English Language. Edward is not new to Learning Circles since his posting to the school. In terms of career development, Edward wishes to pursue a degree programme. With regard to work attitude, Edward is diligent, resourceful, helpful and takes pride in his work. In fact, he had contributed much to the generation of ideas. He is also involved in voluntary in church work. In terms of personality, Edward is friendly, conscientious and practical person. He generally loves his work and is committed to his students' learning. In terms of work relations, she is closer to Bob. However, he is an okay person to work with in general.

## *Bob*

Bob is a male graduate Chinese teacher. He is unmarried, is his mid-20s, and has about slightly below two years of teaching experience up to 2005. The school of study is his first school posting. His experience in Learning Circles started the moment he joined the school as a teaching staff. This is his second-year of Learning Circles. I see Bob as essentially a beginning teacher who is coping with the demands of work. In terms of work attitude, Edward generally takes his work seriously. With respect to personality, Bob is a serious person and has unique ways of seeing the world that is different from the Learning Circle participants. This may have contributed to the difficulty in building close bonds with other participants of the Learning Circle. He is committed to his students' learning and academic achievements. In terms of work relations, he is most comfortable with Edward. However, I observed that he struggles with building close relationship with Learning Circle participants.

## *Karna*

Karna is a female graduate Christian Indian teacher. She is unmarried, in her mid-20s and has about two years of teaching experience up to 2005. The school of study is her first school posting. She is the Level Coordinator for Science. Karna, like Bob, is generally new to Learning Circles since her posting to the school. In terms of career development, Karna wishes to pursue a master degree in education. She, like Bob, is essentially concerned about being familiar with the work demands of a beginning teacher. With regard to work attitude, Karna is diligent, serious and takes pride in her work. In terms of personality, Karna is generally friendly and conscientious person. She also enjoys think intellectually. She generally loves her work and is committed to her students' learning. In terms of work relations, she is closer to Maimuna, Surhana and Teresa.

## *Teresa*

Teresa is a female non-graduate Chinese teacher. She is unmarried, in her late 20s or early 30s and has about six years of teaching experience up to 2005. The school of study is her first school posting. She is a Consortium Head of the grade level, and is therefore a member of Senior Management. Teresa, like Surhana, has been doing Learning Circles since the school first made the decision to do a whole school approach to Learning Circles. In terms of career development, Teresa shows openness to climb higher in the organisation, unlike Surhana. With regard to work attitude, Teresa is intensely dedicated to her work and takes pride in her work. In terms of personality, Teresa is a jovial, relational and easy-going person. She generally loves her work and is committed to her students' learning. In terms of work relations, she is closer to Surhana and Maimuna.

# Appendix B

1. **School leader**

   a) Knows formality and protocols but balanced – that is, without over doing it.
   b) Dislikes showmanship.
   c) Supportive

2. **Individuality within collectivity**

   a) Self-expression.
   b) Freedom for self-expression.
   c) Self-identity.
   d) Shared leadership.
   e) Taking initiative.
   f) Expressing personal ideals.
   g) Expressing creative and aesthetical ideas.
   h) The class is an extension of the teachers' identity.

3. **Collectivity among individuality**

   a) Collective identity.
   b) Shared experiences.
   c) Each participant brings into the group his or her individual identities based on his or her past experiences and current roles. The structure of encouraging individual expression in Learning Circle allows participants to externalise their identities. These externations are shared or/and empathised by other participants. These experiences provide opportunities for solidarity. Besides this, the structure of Learning Circle also provides opportunities for participants to create common experiences, feelings, knowledges, and therefore the formation of common identities.

4. **Camaraderie**

   a) High
   b) Empathy
   c) Sympathy
   d) Consensus
   e) Telling of stories.

5. **Easy mood**

   a) Humorous – that is sharing and consensual in nature
   b) Teasing – that is sharing and consensual in nature
   c) Over food and drinks

6. **Energetic**

## 7. Discursive

a) Generative
b) Flexible
c) Turn-taking

## 8. Consensual power

a) Regardless of age or experience.
b) Decisions are made on the better argument.
c) Power symmetry.
d) Power sharing.

## 9. Formality and informality

a) Flexibility in action research cycle.
b) Initiatives within division of labour.
c) Deviations in structured framework.
d) Seriousness with humour.
e) Flexibility and diversity within efficiency - flexibility but within time constraints
f) Easiness together with productiveness.
g) Time demanding but meaningful and energising.

## 10. Structure of Learning Circle: Enabling

a) Privileging values of camaraderie, dialogue, critical friend, openness, trust
b) Leader-facilitator embodies and exemplifies these values
c) Rule of consensus making to be drawn upon
d) Opportunities for Diversity, flexibility and fluidity
e) Requiring the leader-facilitator to internalise and externalise the beliefs, values and principles of Learning Circles.
f) The requirement of collectively forming research questions leads participants to enter into discursivity and forms of logical thinking – such as inductive, deductive and abduction, and therefore having potential for ontological or epistemological inquiring – albeit not consciously.
g) Although the structure of Learning Circle de-emphasises hierarchical relationship, participants may draw upon the wider cultural rule of valuing hierarchical relationship.

## 11. Intellectual discussion

a) Questioning assumptions/assertions.
b) Challenging assumptions/assertions.
c) Clarifying assumptions/assertions.
d) Verifying assumptions/assertions using inductive reasoning.
e) Identifying with shared assumptions/assumptions and experiences.
f) Elaborating assumptions/assertions.
g) Defending assumptions/assertions.
h) Sharing assumptions/assertions.
i) Agreeing assumptions/assertions.

j) Metatheoretical analysis assumptions/assertions.

k) Discussion – pedagogical assumptions are surfaced, clarified, questioned and understood.

l) Regardless of individual differences – class, gender, experience, age, personality, etc..

m) Good listening enables good talk and discussion.

n) Discursive.

o) Unconscious discussion within ontological and epistemological arenas.

p) Surfacing of pedagogical assumptions and questioning of assumptions, or resurfacing of previous assumptions and further questioning of these assumptions.

q) Relating to research design.

r) Empirical verification.

s) Measurability matters – empiricism, tools of observation, verify and corroborate, abduction, one case (depth) and aggregate (breadth), resource constraints, justifications.

t) Presentation matters – reluctance in presenting their findings and having to face up to people's questions.

u) Elaboration from one.

v) Analogy from another.

w) Ideas developed one after another.

## 12. Verbal contribution varies from individual to individual

a) Bob seemed to have the least verbal contribution
b) Could this be due to personality differences?

## 13. Body language

a) Most of time body language and communication is not questioned or brought under scrutiny – participants use too much of it.

## 14. Identity

a) Integration of role and personality – which has been shaped by past experiences.
b) Personality shapes a person identity.
c) Role competence makes up part of one's identity.
d) Self-esteem is affected by role competence.

e) The class is an extension of the teachers' identity, and closely tied to teachers' emotions.

## 15. Leadership in Learning Circle facilitator

a) Bricoleur of knowledge.
b) Quasi-determines power distribution.
c) Arbitrator or integrator of knowledge.
d) Administrative leader.
e) Alignment of the action research cycle.
f) Operationalising of conceptual and theoretical discussion and decisions.

## 16. Uncertainty within certainty

## 17. Individual identities to collective identities

a) Telling of stories/experiences
b) Sharing of stories/experiences
c) Empathising other stories/experiences
d) Sharing of common experiences – past and present, leading to collective identities

## 18. Legitimate power is based on expertise, experience, intellectual charisma, social charisma

## 19. Communicative consensus making

a) Everyone contributes.
b) Everyone refutes.
c) Everyone co-constructs.
d) Everyone clarifies.
e) Everyone understands.
f) Everyone agrees.
g) Everyone questions and agrees to contesting concepts that are related to practices – coherence in theoretical and practical concepts.
h) Democratic process of decision making.
i) Clarification of symbolic assertions – verbal and corporeal language.
j) Agreeing on standards.
k) Disagreements are through open, clear and reasoned dialogue, and collegial – open in criticism yet negotiating and humouring.
l) Exploratory or propository – forming hypothesis.
m) Shared understanding through rephrasing or repetition.
n) Shared understanding through giving examples.
o) Ideas are developed from one person to another – collective synergy.
p) Distribution and division of labour are open, transparent and negotiable.
q) Decisions are based on reasoned argument which is linked to experienced knowledge or moral authority.
r) Shared decision making process.
s) Rationale for work load and work distribution is surfaced, critiqued and agreed upon.
t) Employing expertise of others to influence decision-making.

## 20. Collegial

a) Humouring.
b) Teasing.
c) Sharing food.
d) Empathising.
e) Sympathising.
f) Sharing of personal-work problems or difficulties.
g) Varying degree of relationship - some could work and relate better with some.
h) Creative and aesthetic expression.

## 21. Shared leadership

a) Taking turns within division of labour.
b) While some are conceptual leaders, others are operational leaders.
c) Division of labour does not remain static but change in different context.
d) Source of leadership – knowledge, experience and willingness to contribute.
e) The main participants that exert greater influence are Surhana, Teresa and Edward – legitimate role and experience.

## 22. Learn-Work-Relate Integration

a) Sharing of real life experiences provides a context for learning – thinking, inquiring, etc..
b) This sharing forms the basis for relationship building – empathy, sympathy, etc..
c) Application of theory to practice – thinking and planning intervention or strategies.
d) Pragmatism at work.
e) Process and product integration.

## 23. Collaborative

a) Division of labour.
b) Sharing of workload.
c) Reasons for workload and work distribution are surfaced, critiqued and agreed upon.

## 24. Community of practice

a) Inclusive.
b) Progressively includes another member into the community.
c) Face-to-face interactions.
d) Negotiations of meanings.
e) Discursive practice.
f) Division of labour based on experience, personal strengths and personalities.
g) Division of labour does not remain static.

## 25. Gender stereotypes

### RELATIONSHIP

**1. Collegiality**

- Humouring.
- Teasing.
- Empathising.
- Sympathising.
- Engaging.
- Sharing of personal-work problems or difficulties.
- Sharing of individual and collective experiences.
- Sharing of food and drinks.
- High camaraderie.
- Humour is an expression of shared experience – thoughts and feelings.
- Humouring could mean a sense of easiness and 'I'm OK, You're OK' - that is, "We are equal," or "We are among equals."
- Varying degree of relationship - some could work and relate better with some.
- Creative and aesthetic expression.
- Consensual through humour and teasing.
- The value of caring for each other and supporting each others' assertions or intellectual positions is privileged.

**2. Collaboration**

- Division of labour.
- Sharing of workload.
- Reasons for workload and work distribution are surfaced, critiqued and agreed upon – the process of reasoning.
- Equal sharing of work according to specialisation.
- Equal sharing of work according to quantity.

**3. Individuality within collectivity**

- Self-expression.
- Expressions are based on personal historical experiences.
- Freedom for self-expression.
- Self-identity.
- Shared leadership.
- Taking initiative.
- Expressing personal ideals.
- Expressing creative and aesthetical ideas.
- The class is an extension of the teachers' identity.
- Sharing of meanings to words and phrases.
- The person who gives the name to a practice – giving meaning to an object, usually has a sense of ownership of the name and meaning that he or she has created. It becomes an extension of his or her identity.

## 4. Collectivity among individuality

- Collective identity.
- Shared experiences.
- Each participant brings into the group his or her individual identities based on his or her past experiences and current roles. The structure of encouraging individual expression in Learning Circle allows participants to externalise their identities. These externalisations are shared or/and empathised by other participants. These experiences provide opportunities for solidarity. Besides this, the structure of Learning Circle also provides opportunities for participants to create common experiences, feelings, knowledges, and therefore the formation of common identities.
- Sharing of real life experiences provides a context for learning – thinking, inquiring, etc..
- This sharing forms the basis for relationship building – empathy, sympathy, etc..
- Shared experiences bring about shared identity, which is linked to participants' self of worth as a person

## 5. Identity

- Integration of role and personality – which has been shaped by past experiences.
- Personality shapes a person identity.
- Role competence makes up part of one's identity.
- Self-esteem is affected by role competence.
- The class is an extension of the teachers' identity, and closely tied to teachers' emotions.
- Participants' identity is related to his or her self-esteem, self-worth or ego.

## 6. Individual identities to collective identities

- Telling of stories/experiences.
- Sharing of stories/experiences.
- Empathising other stories/experiences.
- Sharing of common experiences – past and present, leading to collective identities

## 7. Community of practice

- Inclusive.
- Progressively includes another member into the community.
- Face-to-face interactions.
- Negotiations of meanings.
- Discursive practice.
- Division of labour based on experience, personal strengths and personalities.
- Division of labour does not remain static.
- Symbolic interactions.
- Experienced ones modeling the less experienced ones.
- Rules that are not valued are not treated as negative instead welcomed but responded using the preferred rules – that is, inclusive but not harming its own central or core rules. The onus is on the less experienced to assimilate.

### 8. Formality and informality

- Flexibility in action research cycle.
- Initiatives within division of labour.
- Deviations in structured framework.
- Seriousness with humour and fun.
- Flexibility and diversity within efficiency - flexibility but within time constraints.
- Easiness together with productiveness.
- Time demanding but meaningful and energising.
- Certainty in uncertainty.
- Idealism within pragmatism.
- Process and product integration.

### 9. Structure of Learning Circle: Enabling

- Privileging values of camaraderie, dialogue, critical friend, openness and trust.
- Leader-facilitator embodies and exemplifies these values.
- Rule of consensus making to be drawn upon.
- Opportunities for diversity, flexibility and fluidity.
- Requiring the leader-facilitator to internalise and externalise the beliefs, values and principles of Learning Circles.
- The requirement of collectively forming research questions leads participants to enter into discursivity and forms of logical thinking – such as inductive, deductive and abduction, and therefore having potential for ontological or epistemological inquiring – albeit not consciously.
- Although the structure of Learning Circle de-emphasises hierarchical relationship, participants may draw upon the wider cultural rule of valuing hierarchical relationship.
- The phases of Learning Circle provides the problem activities for teachers to engage in an ideal speech situation and discursive will formation.
- The tasks or questions within tasks in Learning Circles enables or constrains individuals to collectively work towards goals that pertain to their work and learning.

- What missing –

  o Language for 'observation' for quantitative and qualitative paradigms – and ontological and epistemological concepts.
  o Verbal concepts relating to 'observation'
  o Coherent verbal concepts relating to 'observation'

### 10. Learning Circle facilitator

- Bricoleur of knowledge.
- Quasi-determines power distribution.
- Arbitrator or integrator of knowledge.
- Administrative leader.
- Alignment of the action research cycle.

- Operationalising of conceptual and theoretical discussion and decisions.

## 11. Shared leadership

- Taking turns within division of labour.
- While some are conceptual leaders, others are operational leaders.
- Division of labour does not remain static but change in different context.
- Source of leadership – knowledge, experience and willingness to contribute.
- The main participants that exert greater influence are Surhana, Teresa and Edward – legitimate role and experience.

## __LEARN__

## 12. Intellectual discussion

- Questioning assumptions/assertions.
- Challenging assumptions/assertions.
- Clarifying assumptions/assertions.
- Verifying assumptions/assertions using inductive reasoning.
- Identifying with shared assumptions/assumptions and experiences.
- Elaborating assumptions/assertions.
- Defending assumptions/assertions.
- Sharing assumptions/assertions.
- Agreeing assumptions/assertions.
- Metatheoretical analysis assumptions/assertions.

- Discussion – pedagogical assumptions are surfaced, clarified, questioned and understood.

- Regardless of individual differences – class, gender, experience, age, personality, etc..

- Good listening enables good talk and discussion.

- Discursive.

- Unconscious discussion within ontological and epistemological arenas.

- Surfacing of pedagogical assumptions and questioning of assumptions, or resurfacing of previous assumptions and further questioning of these assumptions.

- Relating to research design.

- Empirical verification.

- Measurability matters – empiricism, tools of observation, verify and corroborate, abduction, one case (depth) and aggregate (breadth), resource constraints, justifications.

- Presentation matters – reluctance in presenting their findings and having to face up to people's questions.

- Elaboration from one.

- Analogy from another.

- Ideas developed one after another.

- Discursive – generative, flexible and turn-taking.

- Application of theory to practice – thinking and planning intervention or strategies.

- Rules

    o Consensus
    o Integrative
    o Synthesis
    o Inclusive

- By virtue of time limitation, some premises have to be considered true assumptions until proven otherwise.

- Assertions made are based on personal historical experience.

- The value of supporting each others' assertions or intellectual positions is privileged.

- Consensus making through reasoning.

- Building on of a person's externalisation of concepts through language – that is, semiotic construction.

- The practice of building on each others' ideas is closely linked to building partnerships, alliance and emotional bonding.

- Verbal contribution varies from individual to individual.

    o Bob seemed to have the least verbal contribution.
        o Could this be due to personality differences?
        o Is this a correct observation?

## 13. Communicative consensus making

- Everyone contributes.
- Everyone refutes.
- Everyone co-constructs.
- Everyone clarifies.
- Everyone understands.
- Everyone agrees.

- Everyone questions and agrees to contesting concepts that are related to practices – coherence in theoretical and practical concepts.
- Democratic process of decision making.
- Clarification of symbolic assertions – verbal and corporeal language.
- Agreeing on standards.
- Disagreements are through open, clear and reasoned dialogue, and collegial – open in criticism yet negotiating and humouring.
- Exploratory or propository – forming hypothesis.
- Shared understanding through rephrasing or repetition.
- Shared understanding through giving examples.
- Ideas are developed from one person to another – collective synergy.
- Distribution and division of labour are open, transparent and negotiable.
- Decisions are based on reasoned argument which is linked to experienced knowledge or moral authority.
- Shared decision making process.
- Rationale for work load and work distribution is surfaced, critiqued and agreed upon.
- Employing expertise of others to influence decision-making.
- The value supporting each others' assertions or intellectual positions is privileged.
- Disagreements are done tactfully and with respect.
- Agreements are made through reasoning.
- Support for assertions made are done through reasoning.

## 14. Consensual power

- Regardless of age or experience.
- Decisions are made on the better argument.
- Power symmetry.
- Power sharing.
- Legitimacy is based on expertise, experience, intellectual charisma, social charisma

## RELATIONSHIP

1. **Collegiality.**

   - **Humour.**
     - Expression of current shared experience – thoughts and feelings.
     - Expression of past shared experience – thoughts and feelings.
     - Expression of a sense of easiness derived from symmetrical power relations – *"I'm okay, you're okay,"* or "We are among equals."

   - **Teasing.**
     - Expression of a sense of easiness derived from symmetrical power relations – *"I'm okay, you're okay,"* or "We are among equals."

   - **Care for each other through empathy and sympathy.**
     - Sharing of personal-work problems or difficulties.
     - Sharing of individual and collective experiences.

   - **High camaraderie.**
     - Active listening.
     - Affirmation of each others' assertions or intellectual positions is privileged.
     - Tensions are usually resolved through collegial negotiation through the use of reason, fraternising and humouring.
     - Consensual through humour and teasing.
     - Sharing of food and drinks.
     - Sharing of work.
     - Emotions.
       - Feelings of being accepted by others.
       - Feelings of being accepted even though each of us are uniquely different.
       - Feelings of being understood by others.
       - Feelings of being able to understand and empathise with others.
       - Feelings of being empathised by others.
       - Feelings of being heard by others.
       - Feelings of being supported by others.
       - Feelings of being able to share similar experiences with each other.
       - Feelings of being free to share personal weaknesses to each other.
       - Feelings of being respected by others.
       - Feelings of being able to contribute to claims of others.
       - Feelings of being able to receive contributions from others.
       - Feelings of being able to agree with others and to be agreed by others.
       - Feelings of being united.
       - Feelings of being liked by others.
       - Feelings of being affirmed by others and to affirm others.
       - Feelings of being respected by others and to respect others.
       - Feelings of having a role in the Learning Circle.
       - Feelings of being collegial.
       - Feelings of being at ease with each other.
       - Feelings of being encouraged and to encourage others.
       - Feelings of being to synergise.

- Feelings of being able to help others and be helped by others.
- Feelings of being critical of others' views and to be critiqued.
- Feelings of being equal with each other in decision-making processes.
- Feelings of having strong conviction about pedagogical, professional and personal theories.
- Feelings of being true to oneself.
- Feelings of being true to the profession.
- Feelings of being committed to students, parents and fellow colleagues.
- Feelings of setting reasonably good standards in the teaching profession.
- Feelings of being competent in the role within Learning Circle.

## 2. Collaboration.

- Division of work is done consensually – that is, the decision for work distribution is concluded when everyone agrees to it.
- Reasons for workload and work distribution are surfaced, critiqued and agreed upon through the process of reasoning.
- Equitability of work distribution takes into consideration specialisation or individuals' talents, skills and personalities, equal spread of workload and willingness to help each other.
- The willingness to help each other stems from the unhindered projection and expression of individual identities.

## 3. Individuality within collectivity.

- **Self-expression.**
  o Freedom for self-expression.
  o Self-expressions are spontaneous but influenced by rules of turn-taking, personality and roles.
  o Self-expressions are influenced by personal historical experiences.
  o Projections and expressions of self-identities are unhindered.
  o The freedom to project and express one's identity allows individuals to initiate help or support to others.
  o The freedom to project and express one's identity allows individuals' ideals to be openly expressed.
  o The freedom to project and express one's identity allows for free expression of creative and aesthetical ideas.
  o The freedom to externalise one's identity also brings about the internalisation of one's identity, and thus bringing about the affirmation and consolidation of one's identity within a group.
- The person who gives a name to a practice – giving meaning to an object, usually has a sense of ownership of the name and meaning that he or she has created, and this becomes an extension of his or her identity.
- Sharing of meanings to words and phrases.
- The accomplishment of the externalisation and internalisation of one's identity brings about a sense of worth as a person – that is, to be accepted by peers for being who he or she is.

- **Identity.**
  o Personality contributes to the shaping of the person's identity.
  o Role competence makes up part of one's identity.

- o Personal identity is shaped by the integration of role and personality – which has been shaped by past experiences, within a group.
- o Role competence influences the self-esteem of the person.
- o Participants' students are extensions of participants' identities.
- o Participants' identities are closely tied to participants' emotions.
- o Participants' identities are related to his or her self-esteem and self-worth.

4. **Collectivity among individuality.**

- **Collective identity.**
  - o Past and current shared experiences bring about collective identities.
  - o Each participant brings into the group his or her individual identities based on his or her past experiences and current roles. The structure of encouraging individual expression in Learning Circle allows participants to externalise their identities. These externalisations are shared or/and empathised by other participants. These experiences provide opportunities for solidarity.
  - o The structure of Learning Circle provides opportunities for participants to create common experiences, feelings, knowledges, and therefore the formation of common identities.
  - o The formation of common and collective identities brings about a sense of self-worth as an individual within a group who shares common experiences as the individual. The feelings attached to this are those of a sense of agreement, solidarity and unity. Part of being human is to be able to communicate one's own experiences of the world with another human, and for the other to accept and affirm those experiences.

- **Sharing of life stories and experiences.**
  - o The telling and sharing of real life stories and experiences provides a context for learning – thinking, inquiring, etc.. This sharing forms the basis for relationship building – empathy, sympathy, etc..
  - o Past and current shared stories and experiences bring about shared and collective identities which influence participants' sense of worth as persons in the collective sense.

5. **Community of practice.**

- **Inclusivity.**
  - o Progressively includes other members into the community.
  - o Rules that are not valued are not treated as negative instead welcomed but responded using the preferred rules – that is, inclusive but not harming its central or core rules. The onus is on the new participants to assimilate without imposition.

- **Discurvity.**
  - o Talking and thinking at the same time.
  - o Face-to-face interactions.
  - o Negotiations of meanings – symbolic interactions.
  - o Discursive practices – talking and thinking are located within a plan of action.

- **Modeling.**
  - o More experienced participants modeling the less experienced participants.

- **Division of Labour.**
  - Division of labour is based on experience, personal strengths and personalities.
  - Division of labour does not remain static. It changes according to the situated need.

# WORK

## 1. Informality within Formality.

- Flexibility in action research cycle. Participants modify the official procedures of Learning Circle to suit the contextual need of the group. Deviations of structured framework are part of the values of Learning Circle. The form is secondary to the substance.
- Division of labour is not rigid. Participants can initiative changes within the division of labour. However, and centrally, these changes are agreed upon collectively.
- There is a flow of seriousness and humouring in the routines of Learning Circle discussions.
- Flexibility and diversity within efficiency - flexibility but within time constraints.
- Easiness together with productiveness.
- Time and energy demanding but meaningful and 'energising' derived from being able to struggle through problems of inquiry into something meaningful.
- Certainty in uncertainty.
- Idealism within pragmatism.
- Process and product integration.

## 2. Enabling Structure of Learning Circle.

- **Values.**
  - Privileging values of camaraderie, dialogue, critical friend, openness and trust.
  - The facilitator embodies and exemplifies these values.
  - Participants also embody and exemplify these values.
  - The rule of consensus making is drawn upon in moments of exploring ideas – divergent discussion.
  - The rule of consensus making is drawn upon at key decisive moments – convergent discussion.
  - The norm is for the facilitator to internalise and externalise the beliefs, values and principles of Learning Circles.

- **Practices.**
  - Opportunities for diversity, flexibility and fluidity.
  - The requirement of collectively forming research questions leads participants to enter into discursivity and forms of logical thinking – such as inductive, deductive and abduction, and therefore having potential for ontological or epistemological inquiring – albeit not naming them in these terms.
  - The phases of Learning Circle provide the problem activities for teachers to engage in an ideal speech situation and discursive will formation.

- o The tasks or questions within tasks in Learning Circles enables or constrains individuals to collectively work towards goals that pertain to their work and learning.
- o The requirement to do research provides the space for engaged discussions and debate on matters relating to ontology (questions of our existence with the world) and epistemology (questions of our ways of knowing).
- o The linguistic terms and graphic representations of the components of Learning Circles such as AOC (Area of Concern), RQ (Research Question), Reflection Log, - along with their materialisation, provide the psychological and material artifacts or tools for the transformation of the mind, practice and identities. Although a Foucaultian perspective may propose that these are mechanisms of control, the fact that Learning Circle values the notion of 'By Teachers, For Teachers' promotes the value that teachers ought to perceive and use these structures in enabling rather than constraining manner.

- Although the structure of Learning Circle de-emphasises hierarchical relationship, participants may draw upon the wider cultural rule of valuing hierarchical relationship.

- What missing –

  - o Language - or signs – for 'observation' for quantitative and qualitative paradigms – and ontological and epistemological concepts.
  - o Verbal concepts relating to 'observation'
  - o Coherent verbal concepts relating to 'observation'

3. **Learning Circle Facilitator.**

- **Administrator.**
  - o The facilitator's role is to initiate, maintain and close discussions which then are translated to plans for future practical activities – all of which are done consensually.
  - o Alignment of Learning Circle action research cycle.
  - o Administrative leader.

- **Knowledge.**
  - o The facilitator's role is to produce and reproduce a culture of learning – exploration of knowledge, contestation of knowledge and agreement of knowledge – all of which are done consensually.
  - o Bricoleur of knowledge.
  - o Arbitrator or integrator of knowledge.
  - o Operationalising of conceptual and theoretical discussion and decisions.
  - o Arbitrator of signs.

- **Human Relations.**
  - o The facilitator's role is to create and maintain collegial relationships among participants.
  - o Quasi-determines and co-determines power distribution. Although most of time the facilitator co-determines power distribution – that is, making sure that everyone has a right to assert his or her influence, I suspect that at the initial stages of the formation of a Learning Circle, the facilitator plays a

more active role and therefore quasi-determines power distribution. Its quasi nature lies in the fact that although the facilitator has been given more power, the expectation to embody and exemplify the value of equal power causes him or her to allow others to challenge or buy in to this value.

- Role model of learning, working and relating to each other.

**4. Shared leadership.**

- Leadership roles are multifarious – writing down discussion and planning notes, initiating and defending proposals, initiating situated arguments. While some are conceptual leaders, others are operational leaders.
- Leadership roles are not rigid. Taking turns within division of labour. This week someone does task A, next week someone else does task A – even for the task of facilitation. Although, the Learning Circle does so as a result of Surhana's absence, the official Learning Circle framework espouses the idea of rotation of leadership as allegorised by the flight of geese.
- Division of labour does not remain static but change in different context.
- Source of leadership and influence – knowledge, experience and willingness to contribute. In this regard, the main participants that exert greater influence are Surhana, Teresa, Edward and Maimuna based on legitimate role and experience in teaching and in participation of Learning Circle. However, there are moments when Karna and Bob were in positions of influence. In all cases, core belief is that the better reason prevails.

## <u>LEARN</u>

**1. Intellectual Discussion.**

- **Assertions and presuppositions.**
  o Assertions are made along with presuppositions (arguments comprising conclusion and premises) within a pragmatic field of action motivated by beliefs and values.
  o Assertions made are historical – that is, they are influenced by the person's past experiences in view of the current situation as it is perceived in the future.
  o Support for assertions made is done through reasoning.
  o Reasons are not without emotions. On the contrary, they are based on beliefs (convictions) and values (principles). Reasons are therefore not separable with emotions.
  o Discussions characterise by identifying, clarifying, elaborating, questioning, challenging, verifying, sharing, defending, agreeing and consolidating.
  o By virtue of time limitation, some premises have to be considered true assumptions until proven otherwise.
  o Topics cover pedagogy, inquiry and division of labour.

- **Discussions.**
  o Discursive – talk and thought.
    ▪ Undergirded by and beliefs and values.
    ▪ Generative – producing more and more ideas.
    ▪ Spontaneous and not rigidly structured.
    ▪ Structured in a way of allowing for turn-taking.

- Active listening – listen, think and response.
- Ideas are elaborated and developed or built up from one to another.
- For each stage of the action research cycle, participants engage in discussions that start from exploratory (divergent) to focus (convergent) practices.
- Exploration of ideas are manifested through the emergent of crazy, wild and creative ideas.
  - Consensus through reasoning.
  - Regardless of individual differences – class, gender, experience, age, personality, etc..
  - The practice of building on each others' ideas is closely linked to building partnerships, alliance and emotional bonding.
  - The value of supporting each others' assertions or intellectual positions is privileged.
  - Application of theory to practice – thinking and planning intervention or strategies.

  - Verbal contribution varies from individual to individual.

    - Bob seemed to have the least verbal contribution.
      - Could this be due to personality differences?
      - Is this a correct observation?

- **Inquiry.**
  - Research design.
  - Empirical verification.
  - Measurability matters – empiricism, tools of observation, verify and corroborate, abduction, one case (depth) and aggregate (breadth), resource constraints, justifications.
  - Presentation of results – reluctance in presenting findings primarily because of having to face up to people's questions within a more formal setting.
  - Previous years' presentations have been fulfilling because they could express their findings in their informal fashion. Having said this, this year presentation is satisfying too because presentation is in a form of a booth constructed by all participants, and the more formal presentation in the classrooms were only meant for invited guest presenters. The booth was an extension and projection of the collective identity.
  - Unconscious discussion within ontological and epistemological arenas.

- **Rules.**
  - Consensus.
  - Integrative.
  - Synthesis.
  - Inclusive.
  - Collegial open contestation.
  - Fallibilistic.

- Assertions made are based on personal historical experiences.
- Building on of a person's externalisation of concepts through language – that is, semiotic construction.

2. **Communicative consensus making**

- **Exploration.**
  - Participants propose, contribute, clarify, question, refute, co-construct, understand and agree.
  - Participants explore propositions and hypotheses.
  - Participants question and agree to contest concepts that are related to theoretical and practical concepts.
  - Ideas are developed from one person to another – collective synergy.
  - Clarification of symbolic assertions – verbal and corporeal language.
  - Shared understanding through rephrasing or repetition and giving examples and analogies.

- **Disagreements.**
  - Disagreements are expressed through open, clear and reasoned dialogue, and collegial tone – open in criticism yet negotiating and humouring.
  - Disagreements are done tactfully and with respect for the individual.

- **Decisions.**
  - Decisions are based on reasoned arguments and linked to experience, knowledge and skill, and moral authority.
  - Rationale for work load and work distribution is surfaced, critiqued and agreed upon – open, transparent and negotiable.
  - Democratic process of decision making. Shared decision making process.
  - The value of supporting each others' assertions or intellectual positions is privileged.

## CONSENSUAL POWER

**1. Symmetrical Power Relations.**

- **Symmetrical power relations.**
  - 'Power with' rather than 'Power to'.
  - Power sharing.
- **Consensus decision-making.**
  - Everyone's voice is to be heard before decisions are made. This applies for discussions for every stage of the Learning Circle action research cycle.
  - No one is left out in the decision-making process.
  - No assertion should be left unanswered.
  - No one should feel that they have been imposed to agree on decisions.
  - Disagreements are not seen as something negative.
  - Disagreements are welcomed as long as they do not impose on others.
  - Disagreements are all right as long the person asserting them is opened for corrections and disagreements by others.
  - Disagreements that are externalised and projected in an inappropriate manner are very rare, and if they do take place, they are handled politely and the onus is on the person to realise his or her mistake. At times, disagreements are postponed in order to give more breathing space for thoughts and feelings to be more settled.
  - Although there were moments of conflictual power, they were rare, momentary and shifting to consensual power.
  - Misunderstandings should not be left unclarified.
  - It is perfectly fine to bring up uncertainties and doubts.

- o Suspending one's judgement in the context of assertion or validating assertion is valued.
  - o Diverse and detracting opinions or views are welcomed.
  - o The strength of disagreements lies in the supporting reasons.
  - o It is good to be critical at the same time being open to critique.
  - o The force of influence is based on expertise, experience, intellectual charisma and social charisma. However, the final decision is made on the better reasoned argument.
  - o The group believes in synergy - two heads are better than one.
  - o The value or principle of consensus decision-making takes precedence over efficiency needs. In other words, the extent of the Learning Circle project is contingent on the effectiveness of consensus decision-making. In addition, where there are modifications to Learning Circle tools, the core principle of consensus decision-making cannot be breeched.
- **Equal treatment.**
  - o Everyone is treated as equals regardless of age, experience or status.
  - o Everyone has the right to make an assertion – to make a stand, clarify a stand, elaborate on a stand, defend a stand, critique a stand, reject a stand and accept a stand.
  - o Everyone is accepted as they are in terms of personality and idiosyncrasy.
  - o Everyone is treated with respect.
  - o Individual participants' experiences are respected.
  - o The right to make assertions also includes the right to externalise and project one's identity.
  - o Although the facilitator has the normative power to control material and symbolic realities during Learning Circle discussions, the fact that he or she has to embody (internalise) and project (externalise) the value and principle of consensus decision-making, results in everyone being treated as equal. Everyone has equal right to assert a claim but only the better reasoned argument prevails.
  - o Although it is right to give due respect to everyone equally, the nature of it varies based on a person's role, experience and age.
  - o Differing and detracting opinions or views are welcomed.
  - o Cockiness or arrogance is not valued in Learning Circle although it is tolerated based on the value of accepting each others' unique personalities and right to assert during Learning Circle's discussions.
  - o Mistakes made in social interactions are followed by the person's expression of regret, apology or retraction. In other words, social mistakes are allowed by virtue of the right to assert but the onus is on the person to realise it and make amends for it. In addition, mistakes in social interactions are also addressed by other members of participants by arbitration or moderation.
  - o Workload distribution is based on fairness, and is decided through consensual reasoned discussions – which are based on skills, talents and willingness to contribute. Attempts are made to make workload distribution equal but discriminatory taking into consideration the strengths and weaknesses of individual participants.
  - o Humouring and teasing is an indication that participants accept one another's unique personalities and idiosyncrasies.
  - o Thinking of crazy ideas through exploration is an indication of acceptance of individuals' identities.

## HIERARCHICAL SCHEME OF CODES

### CONSENSUAL POWER

- **Symmetrical power relations.**
  - 'Power with' rather than 'Power to'.
  - Power sharing.
  - Symmetrical structure, symmetrical agency

- **Consensus decision-making.**
  - Everyone's voice is to be heard before decisions are made. This applies for discussions for every stage of the Learning Circle action research cycle.
  - No one is left out in the decision-making process.
  - No assertion should be left unanswered.
  - No one should feel that they have been imposed to agree on decisions.
  - Disagreements are not seen as something negative.
  - Disagreements are welcomed as long as they do not impose on others.
  - Disagreements are all right as long the person asserting them is opened for corrections and disagreements by others.
  - Disagreements that are externalised and projected in an inappropriate manner are very rare, and if they do take place, they are handled politely and the onus is on the person to realise his or her mistake. At times, disagreements are postponed in order to give more breathing space for thoughts and feelings to be more settled.
  - Although there were moments of conflictual power, they were rare, momentary and shifting to consensual power.
  - Misunderstandings should not be left unclarified.
  - It is perfectly fine to bring up uncertainties and doubts.
  - Suspending one's judgement in the context of assertion or validating assertion is valued.
  - Diverse and detracting opinions or views are welcomed.
  - The strength of disagreements lies in the supporting reasons.
  - It is good to be critical at the same time being open to critique.
  - The force of influence is based on expertise, experience, intellectual charisma and social charisma. However, the final decision is made on the better reasoned argument.
  - The group believes in synergy - two heads are better than one.
  - The value or principle of consensus decision-making takes precedence over efficiency needs. In other words, the extent of the Learning Circle project is contingent on the effectiveness of consensus decision-making. In addition, where there are modifications to Learning Circle tools, the core principle of consensus decision-making cannot be breeched.

- **Equal treatment.**
  - Everyone is treated as equals regardless of age, experience or status.
  - Everyone has the right to make an assertion – to make a stand, clarify a stand, elaborate on a stand, defend a stand, critique a stand, reject a stand and accept a stand.
  - Everyone is accepted as they are in terms of personality and idiosyncrasy.
  - Everyone is treated with respect.
  - Individual participants' experiences are respected.

- The right to make assertions also includes the right to externalise and project one's identity.
- Although the facilitator has the normative power to control material and symbolic realities during Learning Circle discussions, the fact that he or she has to embody (internalise) and project (externalise) the value and principle of consensus decision-making, results in everyone being treated as equal. Everyone has equal right to assert a claim but only the better reasoned argument prevails.
- Although it is right to give due respect to everyone equally, the nature of it varies based on a person's role, experience and age.
- Differing and detracting opinions or views are welcomed.
- Cockiness or arrogance is not valued in Learning Circle although it is tolerated based on the value of accepting each others' unique personalities and right to assert during Learning Circle's discussions.
- Mistakes made in social interactions are followed by the person's expression of regret, apology or retraction. In other words, social mistakes are allowed by virtue of the right to assert but the onus is on the person to realise it and make amends for it. In addition, mistakes in social interactions are also addressed by other members of participants by arbitration or moderation.
- Workload distribution is based on fairness, and is decided through consensual reasoned discussions – which are based on skills, talents and willingness to contribute. Attempts are made to make workload distribution equal but discriminatory taking into consideration the strengths and weaknesses of individual participants.
- Humouring and teasing are indications that participants accept one another's unique personalities and idiosyncrasies.
- Thinking of crazy ideas through exploration is an indication of acceptance of individuals' identities.

## RELATIONSHIP

1. **Collegiality.**

- **Humour.**
  - Expression of current shared experience – thoughts and feelings.
  - Expression of past shared experience – thoughts and feelings.
  - Expression of a sense of easiness derived from symmetrical power relations – *"I'm okay, you're okay,"* or "We are among equals."

- **Teasing.**
  - Expression of a sense of easiness derived from symmetrical power relations – *"I'm okay, you're okay,"* or "We are among equals."

- **Care for each other through empathy and sympathy.**
  - Sharing of personal-work problems or difficulties.
  - Sharing of individual and collective experiences.

- **High camaraderie.**
  - Active listening.
  - Affirmation of each others' assertions or intellectual positions is privileged.
  - Tensions are usually resolved through collegial negotiation through the use of reason, fraternising and humouring.

- o Consensual through humour and teasing.
- o Sharing of food and drinks.
- o Sharing of work.
- o Emotions – feelings of being …
  - accepted by others.
  - accepted even though each of us are uniquely different.
  - understood by others.
  - able to understand and empathise with others.
  - empathised by others.
  - heard by others.
  - supported by others.
  - able to share similar experiences with each other.
  - free to share personal weaknesses to each other.
  - able to contribute to claims of others.
  - able to receive contributions from others.
  - able to agree with others and to be agreed by others.
  - united.
  - liked by others.
  - affirmed by others and to affirm others.
  - respected by others and to respect others.
  - collegial.
  - at ease with each other.
  - encouraged and to encourage others.
  - able to synergise.
  - able to help others and be helped by others.
  - critical of others' views and to be critiqued.
  - equal with each other in decision-making processes.
  - true to oneself.
  - true to the profession.
  - committed to students, parents and fellow colleagues.
  - able to set reasonably good standards in the teaching profession.
  - competent in the role within Learning Circle.
  - able to have a role in the Learning Circle.
  - able to have strong conviction about pedagogical, professional and personal theories.

## 2. Collaboration.

- Division of work is done consensually – that is, the decision for work distribution is concluded when everyone agrees to it.
- Reasons for workload and work distribution are surfaced, critiqued and agreed upon through the process of reasoning.
- Equitability of work distribution takes into consideration specialisation or individuals' talents, skills and personalities, equal spread of workload and willingness to help each other.
- The willingness to help each other stems from the unhindered projection and expression of individual identities.

## 3. Individuality within collectivity.

- **Self-expression.**
  - o Freedom for self-expression.

- o Self-expressions are spontaneous but influenced by rules of turn-taking, personality and roles.
  - o Self-expressions are influenced by personal historical experiences.
  - o Projections and expressions of self-identities are unhindered.
  - o The freedom to project and express one's identity allows individuals to initiate help or support to others.
  - o The freedom to project and express one's identity allows individuals' ideals to be openly expressed.
  - o The freedom to project and express one's identity allows for free expression of creative and aesthetical ideas.
  - o The freedom to externalise one's identity also brings about the internalisation of one's identity, and thus bringing about the affirmation and consolidation of one's identity within a group.
- The person who gives a name to a practice – giving meaning to an object, usually has a sense of ownership of the name and meaning that he or she has created, and this becomes an extension of his or her identity.
- Sharing of meanings to words and phrases.
- The accomplishment of the externalisation and internalisation of one's identity brings about a sense of worth as a person – that is, to be accepted by peers for being who he or she is.
- The accomplishment of the externalization and internalisation of one's identity brings about a sense of self-constitution as a person – that is, being complete as a human person.

- **Identity.**
  - o Personality contributes to the shaping of the person's identity.
  - o Role competence makes up part of one's identity.
  - o Personal identity is shaped by the integration of role and personality – which has been shaped by past experiences, within a group.
  - o Role competence influences the self-esteem of the person.
  - o Participants' students are extensions of participants' identities.
  - o Participants' identities are closely tied to participants' emotions.
  - o Participants' identities are related to his or her self-esteem and self-worth.
  - o Participants' life stories are respected and accepted.

4. **Collectivity among individuality.**

- **Collective identity.**
  - o Past and current shared experiences bring about collective identities.
  - o Each participant brings into the group his or her individual identities based on his or her past experiences and current roles. The structure of encouraging individual expression in Learning Circle allows participants to externalise their identities. These externalisations are shared or/and empathised by other participants. These experiences provide opportunities for solidarity.
  - o The structure of Learning Circle provides opportunities for participants to create common experiences, feelings, knowledges, and therefore the formation of common identities.
  - o The formation of common and collective identities brings about a sense of self-worth as an individual within a group who shares common experiences as the individual. The feelings attached to this are those of a sense of agreement, solidarity and unity. Part of being human is to be able to

communicate one's own experiences of the world with another human, and for the other to accept and affirm those experiences.

- **Sharing of life stories and experiences.**
  - o The telling and sharing of real life stories and experiences provides a context for learning – thinking, inquiring, etc.. This sharing forms the basis for relationship building – empathy, sympathy, etc..
  - o Past and current shared stories and experiences bring about shared and collective identities which influence participants' sense of worth as persons in the collective sense.

5. **Community of practice.**

- **Inclusivity.**
  - o Progressively includes other members into the community.
  - o Rules that are not valued are not treated as negative instead welcomed but responded using the preferred rules – that is, inclusive but not harming its central or core rules. The onus is on the new participants to assimilate without imposition.

- **Discurvity.**
  - o Talking and thinking at the same time.
  - o Face-to-face interactions.
  - o Negotiations of meanings – symbolic interactions.
  - o Discursive practices – talking and thinking are located within a plan of action.

- **Modeling.**
  - o More experienced participants modeling the less experienced participants.

- **Division of Labour.**
  - o Division of labour is based on experience, personal strengths and personalities.
  - o Division of labour does not remain static. It changes according to the situated need.

## WORK

1. **Informality within Formality.**

- Flexibility in action research cycle. Participants modify the official procedures of Learning Circle to suit the contextual need of the group. Deviations of structured framework are part of the values of Learning Circle. The form is secondary to the substance.
- Division of labour is not rigid. Participants can initiative changes within the division of labour. However, and centrally, these changes are agreed upon collectively.
- There is a flow of seriousness and humouring in the routines of Learning Circle discussions.
- Flexibility and diversity within efficiency - flexibility but within time constraints.
- Easiness together with productiveness.

- Time and energy demanding but meaningful and 'energising' derived from being able to struggle through problems of inquiry into something meaningful.
- Certainty in uncertainty.
- Idealism within pragmatism.
- Process and product integration.
- Avoiding extremes of postmodernity and modernity.

2. **Enabling Structure of Learning Circle.**

- **Values.**
  o Privileging values of camaraderie, dialogue, critical friend, openness and trust.
  o The facilitator embodies and exemplifies these values.
  o Participants also embody and exemplify these values.
  o The rule of consensus making is drawn upon in moments of exploring ideas – divergent discussion.
  o The rule of consensus making is drawn upon at key decisive moments – convergent discussion.
  o The norm is for the facilitator to internalise and externalise the beliefs, values and principles of Learning Circles.
  o The phrase 'critical friend' infers the value of questioning and accepting each others' propositions and presuppositions and at the same time maintaining collegial relations. Value is placed on being a human person – a friend to immediate colleagues. However, a friend is someone who has the moral obligation to question or challenges each other propositions and presuppositions.

- **Practices.**
  o Opportunities for diversity, flexibility and fluidity.
  o The requirement of collectively forming research questions leads participants to enter into discursivity and forms of logical thinking – such as inductive, deductive and abduction, and therefore having potential for ontological or epistemological inquiring – albeit not naming them in these terms.
  o The phases of Learning Circle provide the problem activities for teachers to engage in an ideal speech situation and discursive will formation.
  o The tasks or questions within tasks in Learning Circles enables or constrains individuals to collectively work towards goals that pertain to their work and learning.
  o The requirement to do research provides the space for engaged discussions and debate on matters relating to ontology (questions of our existence with the world) and epistemology (questions of our ways of knowing).
  o The linguistic terms and graphic representations of the components of Learning Circles such as AOC (Area of Concern), RQ (Research Question), Reflection Log, - along with their materialisation, provide the psychological and material artifacts or tools for the transformation of the mind, practice and identities. Although a Foucaultian perspective may propose that these are mechanisms of control, the fact that Learning Circle values the notion of 'By Teachers, For Teachers' promotes the value that teachers ought to perceive and use these structures in enabling rather than constraining manner.

- Although the structure of Learning Circle de-emphasises hierarchical relationship, participants may draw upon the wider cultural rule of valuing hierarchical relationship.

- What is missing –

    o Language - or signs – for 'observation' for quantitative and qualitative paradigms – and ontological and epistemological concepts.
    o Verbal concepts relating to 'observation'.
    o Coherent verbal concepts relating to 'observation'.
    o Questioning of assumptions but not of values, ethics or morals although this is done indirectly or non-discursively.

3. **Learning Circle Facilitator.**

- **Administrator.**
    o The facilitator's role is to initiate, maintain and close discussions which then are translated to plans for future practical activities – all of which are done consensually.
    o Alignment of Learning Circle action research cycle.
    o Administrative leader.

- **Bricoleur of Knowledge.**
    o The facilitator's role is to produce and reproduce a culture of learning – exploration of knowledge, contestation of knowledge and agreement of knowledge – all of which are done consensually.
    o Bricoleur of knowledge.
    o Arbitrator or integrator of knowledge.
    o Operationalising of conceptual and theoretical discussion and decisions.
    o Arbitrator of signs.

- **Human Relations.**
    o The facilitator's role is to create and maintain collegial relationships among participants.
    o Quasi-determines and co-determines power distribution. Although most of time the facilitator co-determines power distribution – that is, making sure that everyone has a right to assert his or her influence, I suspect that at the initial stages of the formation of a Learning Circle, the facilitator plays a more active role and therefore quasi-determines power distribution. Its quasi nature lies in the fact that although the facilitator has been given more power, the expectation to embody and exemplify the value of equal power causes him or her to allow others to challenge or buy in to this value.

- Role model of learning, working and relating to each other.
    o Models the values and practices of Learning Circles.
    o Mediates interactions in Learning Circle's discussions.
    o Moderates interactions in Learning Circle's discussions.
    o Manages consensus decision-making interactions.

**4. Shared leadership.**

- Leadership roles are multifarious – writing down discussion and planning notes, initiating and defending proposals, initiating situated arguments. While some are conceptual leaders, others are operational leaders.
- Leadership roles are not rigid. Taking turns within division of labour. This week someone does task A, next week someone else does task A – even for the task of facilitation. Although, the Learning Circle does so as a result of Surhana's absence, the official Learning Circle framework espouses the idea of rotation of leadership as allegorised by the flight of geese.
- Division of labour does not remain static but change in different context.
- Source of leadership and influence – knowledge, experience and willingness to contribute. In this regard, the main participants that exert greater influence are Surhana, Teresa, Edward and Maimuna based on legitimate role and experience in teaching and in participation of Learning Circle. However, there are moments when Karna and Bob were in positions of influence. In all cases, core belief is that the better reason prevails.

**5. Professional Interest.**

- Learning Circle's project involved work that is integrated with the moral purpose of teaching – that is, students' learning especially in regard to their academic achievement.
- The moral purpose of teaching is the main motivation for participants' to be active in the Learning Circle's project.
- Great satisfaction and fulfillment is experienced when time and energy invested in Learning Circle's work have contributed to students' learning.
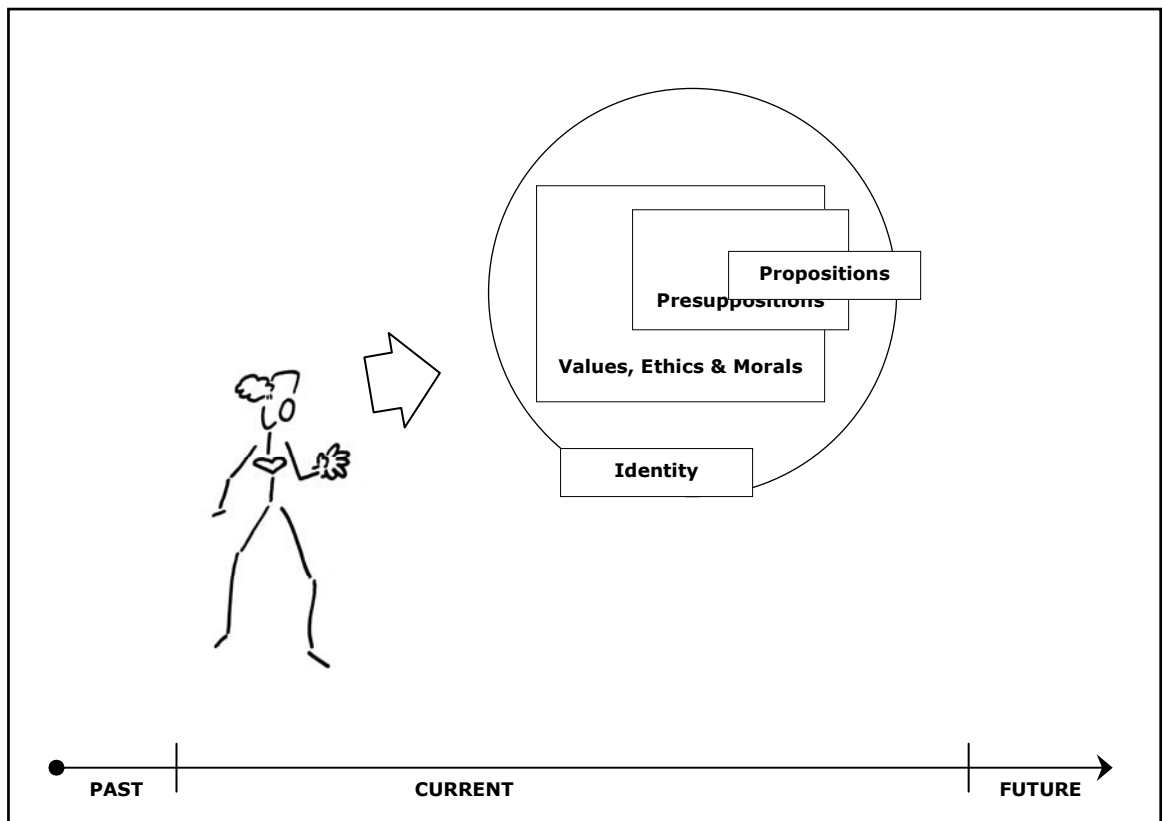
## LEARN

**1. Intellectual Discussion.**

- **Assertions and presuppositions.**
  - Assertions or propositions are made along with presuppositions (arguments comprising conclusion and premises) within a pragmatic field of action motivated by beliefs and values.
  - Assertions made are historical – that is, they are influenced by the person's past experiences in view of the current situation as it is perceived in the future.
  - Support for assertions made is done through reasoning.
  - Reasons are not without emotions. On the contrary, they are based on beliefs (convictions) and values (principles). Reasons are therefore not separable with emotions.
  - Assertions made are linked to the person's cognition *(reasoning)* and cognitive structures *(schemas such as professional or pedagogical knowledge)*. When a person makes an assertion, he is externalising his or her theories *(making a claim about one's cognitive theories)* and internalising his or her theories *(consolidating one's cognitive theories)*. The very articulation or 'naming' of one's theory theory helps in the clarification and consolidation of one's theory.
  - Assertions made are linked to the person's identity. When a person makes an assertion, he or she is externalising his or her identity *(making a claim to*

*one's identity)* and internalising his or her identity *(consolidating one's claim or identity)*.

- o Discussions characterised by identifying, clarifying, elaborating, questioning, challenging, verifying, sharing, defending, agreeing and consolidating.
- o By virtue of time limitation, some premises have to be considered true assumptions until proven otherwise.
- o Topics cover pedagogy, inquiry and division of labour.



- **Discussions.**
  - o Discursive – talk and thought.
    - ▪ Undergirded by and beliefs and values.
    - ▪ Generative – producing more and more ideas.
    - ▪ Spontaneous and not rigidly structured.
    - ▪ Structured in a way of allowing for turn-taking.
    - ▪ Active listening – listen, think and response.
    - ▪ Ideas are elaborated and developed or built up from one to another.
    - ▪ For each stage of the action research cycle, participants engage in discussions that start from exploratory (divergent) to focus (convergent) practices.
    - ▪ Exploration of ideas is manifested through the emergent of crazy, wild and creative ideas – divergent, spontaneous and aesthetic.
  - o Consensus through reasoning.
  - o Regardless of individual differences – class, gender, experience, age, personality, etc..
  - o The practice of building on each others' ideas is closely linked to building partnerships, alliance and emotional bonding.

- The value of supporting each others' assertions or intellectual positions is privileged.
- Application of theory to practice – thinking and planning intervention or strategies.

- Verbal contribution varies from individual to individual.

  - Bob seemed to have the least verbal contribution.
  - Could this be due to personality differences?
  - Is this a correct observation?

- **Inquiry.**
  - Research design.
  - Empirical verification.
  - Measurability matters – empiricism, tools of observation, verify and corroborate, abduction, one case (depth) and aggregate (breadth), resource constraints, justifications.
  - Presentation of results – reluctance in presenting findings primarily because of having to face up to people's questions within a more formal setting.
  - Previous years' presentations have been fulfilling because they could express their findings in their informal fashion. Having said this, this year presentation is satisfying too because presentation is in a form of a booth constructed by all participants, and the more formal presentation in the classrooms were only meant for invited guest presenters. The booth was an extension and projection of the collective identity.
  - Unconscious discussion within ontological and epistemological arenas.

- **Rules.**
  - Consensus.
  - Integrative.
  - Synthesis.
  - Inclusive.
  - Collegial open contestation.
  - Fallibilistic.

- Building on of a person's externalisation of concepts through language – that is, semiotic construction.

2. **Communicative consensus making**

- **Exploration.**
  - Participants propose, contribute, clarify, question, refute, co-construct, understand and agree.
  - Participants explore propositions and hypotheses.
  - Participants question and agree to contest concepts that are related to theoretical and practical concepts.
  - Ideas are developed from one person to another – collective synergy.
  - Clarification of symbolic assertions – verbal and corporeal language.
  - Shared understanding through rephrasing or repetition and giving examples and analogies.

- **Disagreements.**

- Disagreements are expressed through open, clear and reasoned dialogue, and collegial tone – open in criticism yet negotiating and humouring.
- Disagreements are done tactfully and with respect for the individual.

- **Decisions.**
  - Decisions are based on reasoned arguments and linked to experience, knowledge and skill, and moral authority.
  - Rationale for work load and work distribution is surfaced, critiqued and agreed upon – open, transparent and negotiable.
  - Democratic process of decision making. Shared decision making process.
  - The value of supporting each others' assertions or intellectual positions is privileged.

3. **Semiotics in Learning.**

- **Semiotics and Communication.**

  - ***Naming of past, current and future experiences.*** Learning Circle's structure – such as discussions towards an authentic project, provides time and space for participants to 'name' what they have and had previously experienced and possible future experiences.

    Humans hold within us past experiences that are both material and semiotic in nature. For example, in the field of education, a teacher may hold material experiences such as a picture of a boy pushing a girl, and the girl's voice of "Hey!" and the teacher's feeling of anger. At the same time, the teacher could semiotically 'name' that experience as 'bullying', 'injustice' and 'lack of class control'. In this case, and in most cases of human life, linguistic signs are used. The former experience is for me a material experience (ME) while the latter a semiotic experience (SE). Both material and semiotic experiences reside in cognitive structures are dialectically interconnected to each other.

    Current experiences also comprise both material and semiotic experiences. The moment a past experience is articulated or communicated, it creates a material existence such as a sound that could be heard. At the same time, this sound contains a semiotic existence which can be connected immediately to past semiotic experiences. Besides relying on past material and semiotic experiences, current experiences rely on possible future material experiences. This dependence on past and future experiences is however done without conscious knowledge of speakers most of the time.

    Future experiences however consist only of semiotic experience as material experiences are only possible in the future – in other words, 'naming' of possible future material experiences.
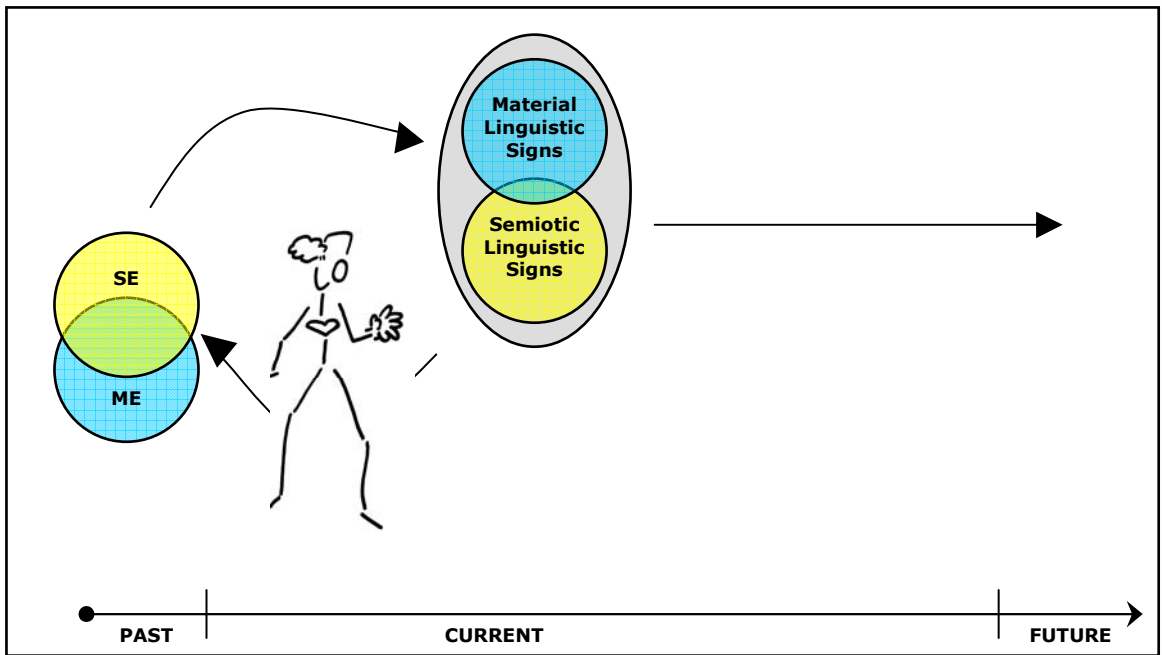
o *Co-naming of past, current and future experiences.* The collective nature of discussions towards an authentic project provides time and space for participants to 'co-name' what they have and had previously experienced in view of possible future experiences. By virtue of Learning Circle's developmental phases, the semiotic interactions are more developmental as in 'building' on each others' communicated thoughts rather than nebulous or haphazard interaction of thoughts. The collective nature of discussion provides rigour in judging the validity of participants' knowledge or theory. Participants propose, contribute, clarify, question, refute, construct, understand and agree.
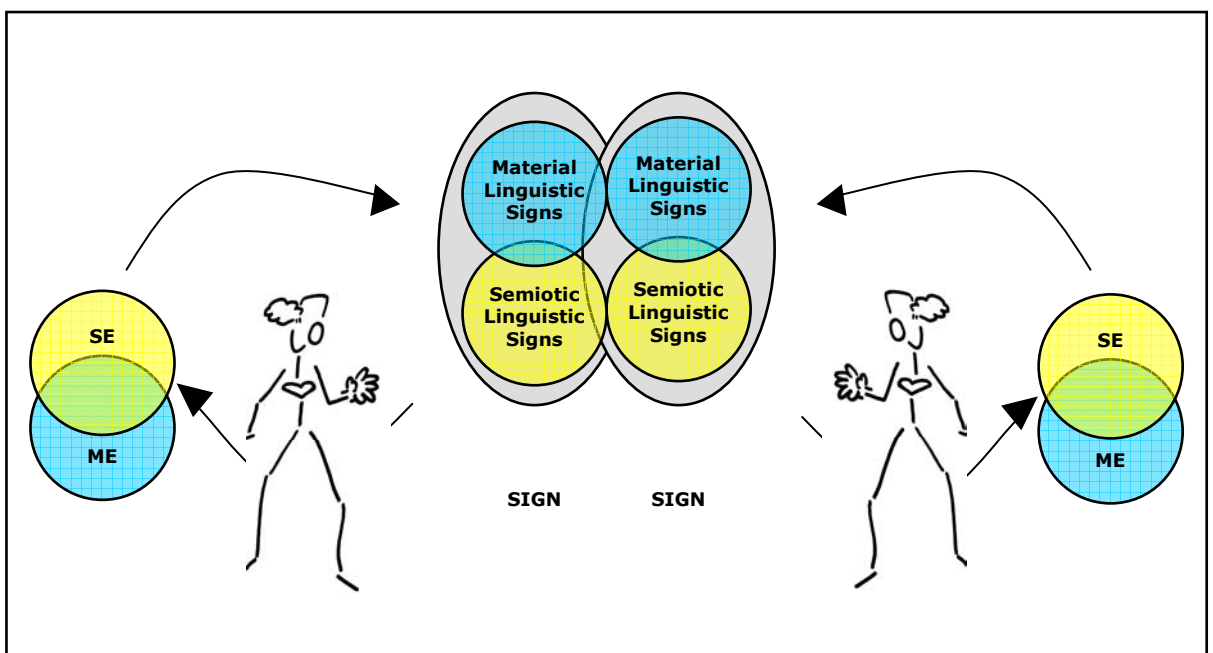
- **Semiotics and Cognition.**

  o *Naming of past, current and future experiences.* The act of 'naming' is also an act of cognition – that is, to cognise, understand or bring into existence the knowledge of the material world which may exist as internal objects of experience (historical/past) or external objects of experiences (current/present). Experience becomes knowledge when experience is being recognised, cognised and objectified. In this sense, humans are with the world rather than being in the world (Freire). In terms of human rationality, the ability to 'name' past, current and future experiences gives humans the ability to reason – that is, to give meaningful relationships between causes and effects; and between one experience to another. Reason is essentially a semiotic construction. … the construction of signs and transformation of signs also transform the cognition and knowledge.

  o *Co-naming of past, current and future experiences.* The act of 'co-naming' is at once an act of collective cognition. Knowledge residing within individuals are recognised and laid bare for others to critique. Past and present knowledges are put in the open, clarified, critiqued and co-constructed through semiotic or sign interaction. The phases of Learning Circle, which require exploration of knowledges but agreement to knowledges, require participants to co-construct signs and therefore co-construct knowledges. Co-construction of signs is at once a co-construction of knowledges or past and present experiences. The co-construction of signs therefore guarantees the transformation and construction of human cognition. The cognitive development of each participant is heightened as a result of discussions with other participants. This is synonymous to Vygotsky's concept of ZPD (Zone of Proximal Development). Each participant brings with him or her knowledges that are new to each other, and through discussions all participants benefit with increased knowledges.

  Forms of collective construction of signs and therefore collective cognition.

  1. Agreement
  2. Synthesis
  3. Analysis
  4. Disagreement

*1.* <u>*Agreement*</u>
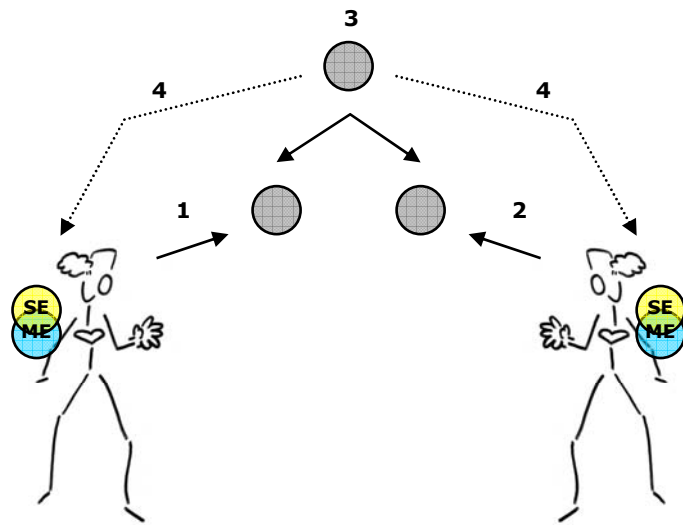


*2.* <u>*Synthesis*</u>
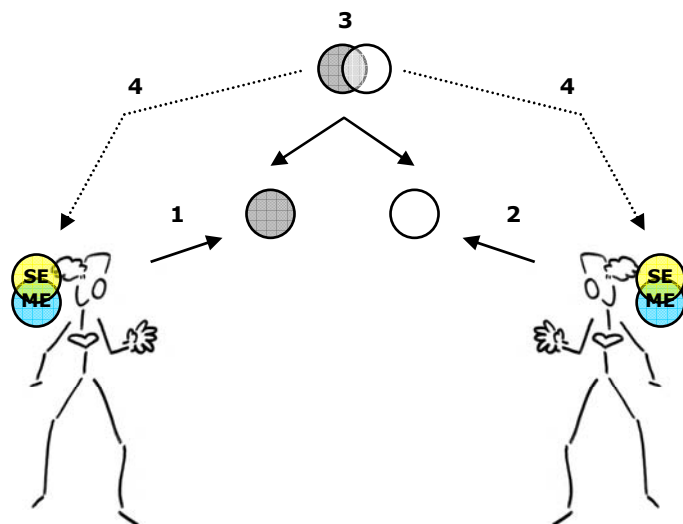
## 3. *Analysis*

### a) *Refinement*
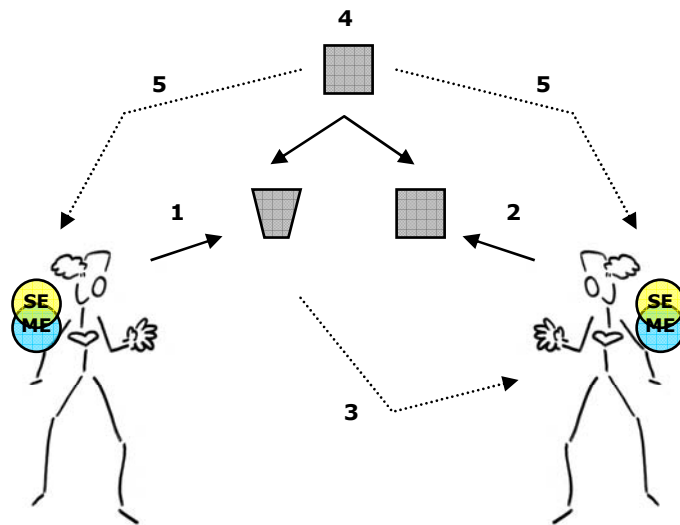


### b) *Paradigmatic Analysis*
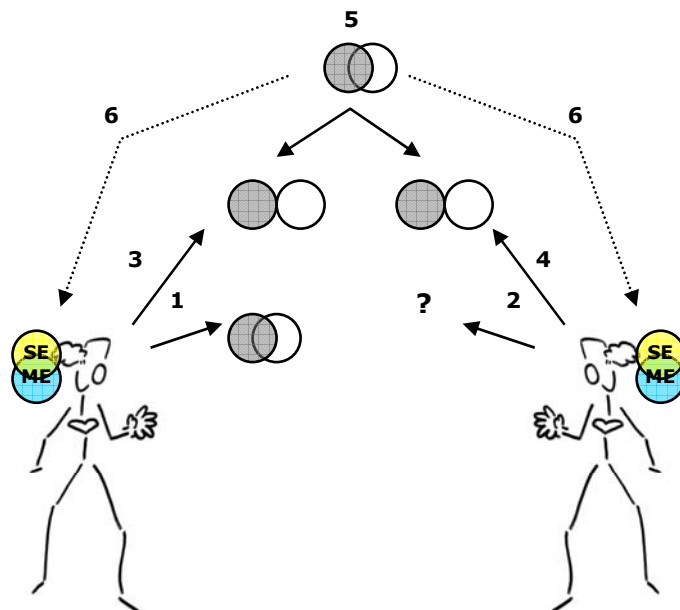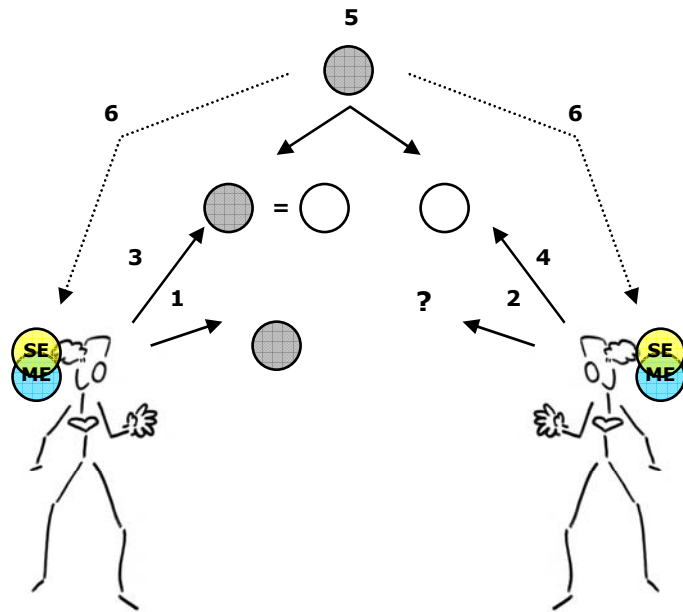
*c)* *Syntagmatic Explanation*
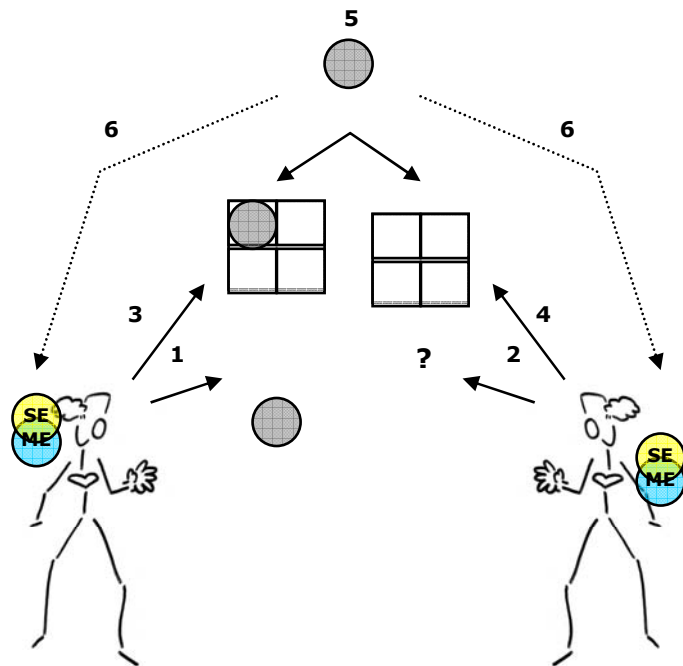
## 4. *Disagreement*
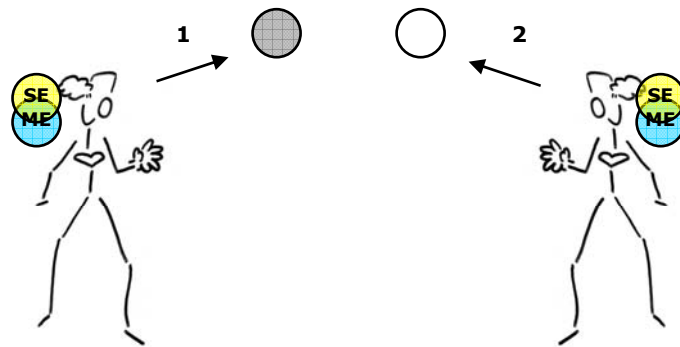


## 5. *Semiotic Creation*

If inter-subjective understanding of signs system fails, another possible way of attaining inter-subjective understanding is through current actual practical experiences. For example, if a hearer does not have, or is lacking, the necessary signs to understand the speaker's assertion of sign/s, the speaker could provide the necessary experience/s where semiotic experiences could be produced by material experiences.
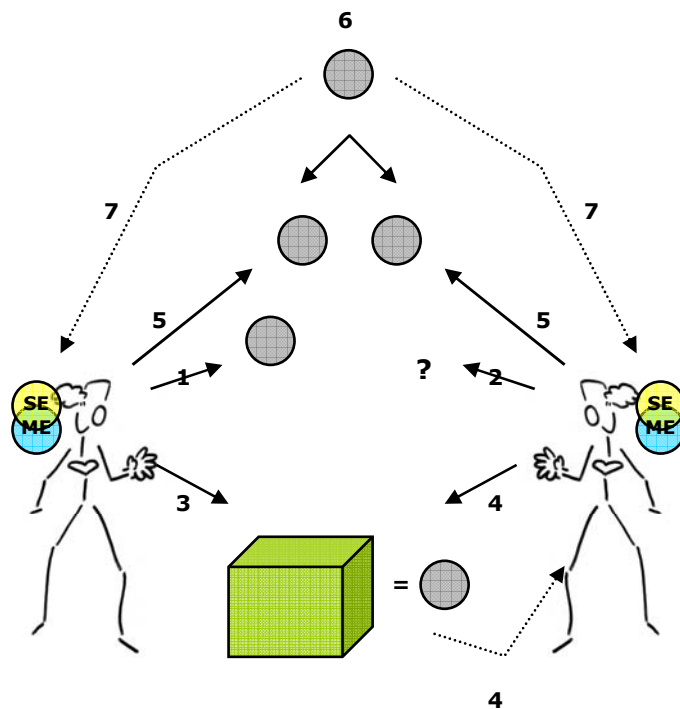
- **Semiotics and Agency.**

  o *Naming of past, current and future experiences.* The ability of 'naming' the world is synonymous to the ability to be 'with the world' as opposed to be 'in the world' (Freire). To be 'with the world' enables one to grasp the existence of a subject-object reality. To be able to 'name' the world gives the possibility of identifying and categorising the objects of reality. Therefore, one is able to grasp the inter-linkages between intention, action and consequences. Making meaningful inter-linkages between them result in the creation of reasons of past, present and future decisions and actions. The ability to 'name' future experiences is the potential to change one's world conditions. The act of 'naming' is therefore an act of power.

  o *Co-naming of past, current and future experiences.* The act of 'naming' in a collective setting is an act of intention for future collective actions or course of actions (verbal and non-verbal) based on past and current experiences. These experiences are meaningfully structured which forms the reasons for future actions or course of actions. The act of 'naming' future collective experiences is the potential to collectively change world conditions. The act of collective 'naming' is therefore an act of collective power.

- **Semiotics and Morals.**

  o *Naming past, current and future experiences.* The act of 'naming' past, current and future experiences brings about the ability to understand the existence of not only subject-object reality and reasons in the inter-linkages between intention, action and consequence, but also the existence of what is acceptable, good and right. Being able to experience diverse consequences, humans derive the signs of acceptable/unacceptable, good/bad and right/wrong. Morals are therefore inter-twine with knowledge, rationality and action. In a generic sense, morals can be understood as other signs such as values and ethics.

  o *Co-naming past, current and future experiences.* The act of 'naming' past, current and future experiences brings about collective linking of knowledge, rationality, action and morals – what is right and wrong, good and bad or acceptable and unacceptable. The communicative and collective nature of Learning Circle discussions encourage participants to question presuppositions to assertions but may or may not explicitly question participants' values, ethics and morals. However, assertions made by participants are grounded in values, ethics and morals but without participants' conscious knowledge. There were consistent moments where participants raised an assertion supported by values, ethics and morals but attention is given to the assertion rather than the underlying values, ethics or morals of the speaker. This could due to either all participants share the same core values, ethics and morals about the core purpose of education or/and participants' reluctance to offend each other since values, ethics and morals are intimately linked to the value of the person and his or her identity.

- **Semiotics and Identity.**

  o *Naming of past, current and future experiences.* The act of 'naming' is an act of identity formation – that is, being able to 'name' one's past experiences is one at the same time establishing one's identity or one's meaning of the experienced world in contrast to others' meanings of their experienced worlds. Also, being able to 'name' one's current experiences is one at the same time asserting and establishing one's identity or one's meaning of the experienced world in contrast to others' meanings of their experienced worlds. Likewise, 'naming' of one's future experiences is an act of identify assertion and formation. The ability to 'name' is also an act of identifying the existence of oneself in contrast to the material world.

  o *Co-naming of past, current and future experiences.* The act of 'naming' through collective discussions is an act of collective identity formation – that is, being able to 'name' shared past or current experiences in one at the same time establishing and asserting the collective identity or shared meaning of the experienced world in contrast to other groups' meanings of the experienced worlds.

- **Semiotics and Self-Constitution and Emotions.**

  o *Naming past, current and future experiences.* The act of 'naming' past, current and future experiences brings about a sense of holism or completeness of being a human where meanings and knowledges of the past, current and future become coherent and conjoined. The sense of holism or completeness of being a human where meanings and experiences of the past, current and future become coherent and conjoined as a result of 'naming' past, current and future experiences brings about a sense of meaning and purpose to one's existence.

  o *Co-naming past, current and future experiences.* The act of 'naming' past, current and future experiences in collectivity brings about a sense of collective holism or collective completeness of being humans where meanings and knowledges of the past, current and future become coherent and conjoined. The sense of collective holism or completeness of being humans where meanings and experiences of the past, current and future become coherent and conjoined as a result of 'naming' past, current and future experiences brings about a collective sense of meaning and purpose to life existence. The values and practices of Learning Circles allow participants' to be predispose to collectively name their past, current and future experiences in a manner that lead to the following experiences and feelings of being -

    - accepted.
    - understood.
    - empathised.
    - sympathised.
    - cared.
    - open, frank or transparent.
    - trusted.

- in agreement.
- appreciated.
- affirmed.
- respected.
- worthy or dignified.
- a member of the community.
- a human among fellow humans.

  o The emotions that are involved in collective 'naming' include happiness, joy, elation and peace – in simplicity, being happy. However, when collective 'naming' faces problems – that is, not being able to reach agreement, emotions include frustration, anger and alienation – essentially, unhappiness.

- **Semiotics and Power.**

  o *Naming past, current and future experiences.* The ability to 'name' past, current and future experiences is synonymous to the ability to control past, current and future experiences but within the symbolic realm. The ability to 'name' past experiences is therefore synonymous to the ability to identify or bring to consciousness and change one's histories. The ability to 'name' future experiences is also synonymous to the potential ability to identify and plan for change in one's future histories. The ability to 'name' past, current and future experiences is therefore an act of power.

  o *Co-naming past, current and future experiences.* The ability to collectively 'name' past, current and future experiences is synonymous to the ability to collectively control past, current and future experiences within the symbolic realm. Collective 'naming' however requires intersubjective critique and agreement of participants' assertions through an ideal speech situation. Once successful, collective 'naming' becomes collective power.

# Appendix C

## Learning Circle 3
## Fieldnotes

*25 May 05*
*Wednesday*
*3.15pm – 4.30pm*

### *Initial Moments*

I reached the school at 2.30pm and frustrated myself about the exact time to be in school. Was it 2.30pm or 3.00pm? I saw the new security guard – this time in uniform. Having checked in at the gate I walked quickly to the General Office. It was quiet, and yes, all the teachers were having a meeting. I quickly asked for Surhana from one of the school clerks. She asked her colleagues to confirm her whereabouts and made attempts to call her from her mobile. After waiting for 10 minutes or so, I decided to eat something. I just felt hungry and being mindful of my gastritis, I told the clerk that I would be the canteen to have some food.

The shops at the canteen were in the midst of closing. One of the shop owners was sympathetic to know that I hadn't had my lunch decided to sell me her plate of rice with vegetables. Thank God for that. I sat eating along with a piece of chicken drumstick bought from a Malay-Muslim shop. I returned to the General Office 10 minutes later.

At about 3 in the afternoon, streams of teachers came out passed the General Office. Most of them looked pretty relaxed and happy, except for some. I saw Karna who looked dazed. Later on I suspected that her pupils' Science results weren't terrific. I saw Bob passed by clad in his PE attire. He took looked slight dazed. I met Sis and she took some time to prepare the tables and chairs, and called for Karna and Bob. She also spoke to Cara who is a relief teacher. She was about to leave the school. I could only guess that that week is the final week and teachers therefore had tonnes and tonnes of work to complete. Only by the end of the LC meeting that I found out that the P4 teachers have to prepare pupils' record book and at the same time have individual interviews with the management committee members perhaps to give account of their results. I overheard a conversation in the LC later on something about 'chopping head session' from Bob. In addition, LCs for the rest of the levels had their meeting the day before.

I also met Laura and at a distance she smiled at me. After saying "I must go and shake your hand," I talked about how Jack had apologised for not meeting her during the Principal's Forum on 20 May 05 Friday. She said that she was one of those who prefer to sit behind – the backbencher. This is an interesting response. Is she someone who doesn't like the limelight or she was just not keen in official meetings. I talked about coming for visits and she is all right with me coming in at any time – "Any time is good time for her." However, she would prefer that I worked with Surhana on this matter, which I brought up to Surhana later on and she was all right with it too – from July onwards.

*Meeting*

On the whole I noticed that teachers were busier than the previous meeting. I saw Maimuna and Bob glanced at their watches once halfway through, and at the end of the meeting, I could see that teachers could not wait to leave and attend to the P4 individual teachers interviews, and perhaps handling report books matters. However, I am surprised that the meeting was still engaging and intellectual, and filled with easy and humorous moments. This is really amazing. Even Karna chipped in along the way even though I noticed that she was feeling slightly down.

Surhana started the meeting by focusing on the main task for the day – that is, planning the intervention programme. She showed a slight sense of easiness when asked about the previous discussions done. She was all right not to be so sticky with the exact phrase of the research question when asked to be reviewed. What surprised me was Edward's insistence to bring the materials from previous meetings down. He wasn't rudely insistent or demanding – not at all. He was just keen to review what they had discussed earlier. Perhaps, he is taking the work seriously. I could only suspect that he was once an LC facilitator. Surhana naturally relented and guided him to the exact location of the materials. I guess Surhana didn't want to waste time. I also surmised that she knows that research questions can change over time. Once the materials were brought down, Karna volunteered to handle the charts and do the writing bit.

This is another observation that I had made – the idea of the fraternity of teachers. Group members willingly volunteer to chip in instead of having ordered roles set. Even the idea and practice of leadership is not permanently located within one person. It is portable dependent on situation, expertise and argument made by group members. Work allocation is also based on voluntarism based on these ideals. Work is closely integrated with personal relations among group members.

Edward raised an issue about the research question saying that it has its vagueness in the word proficient. I think this is important because it has direct influence on the type of intervention programme that want to construct later on. In addition, there was a good amount of time given to discussing the phrase 'answering Science questions'. Eventually, another word was added to the research question – 'application-type Science questions'. That was my contribution to capture the concepts that they had raised. Well, proficiency in the English language is beginning to become for me an important tool for effective and efficient work in LC meetings. Currently, the research question is – *How do we get our pupils to be more proficient in answering application-type Science questions?* This might go through further revisions still I guess such as 'our pupils' to 'P4 pupils'. Edward's questioning was really helpful as it further clarified and sharpened the research question. This is a good example of being critical friends.

After we got over the issues relating to the research question, we focused on the intervention programme. Surhana called upon Edward to share his ideas, and he did. He had the idea of degrees or levels of difficulties corresponding to the knowledge-understanding-application structure. It was a good first initial idea for others to chip in too. Maimuna too in my view demonstrated intellectual inclinations. Her questions also brought about healthy intellectual conversations among group members. Eventually, they agreed to have 3 levels – Level 1, 2 and 3. Level 1 comprises of worksheets for pupils to do either in the classroom or as homework. Level 2 and 3 comprises of worksheets combined together to be done in supplementary lessons. I was told that they

have only 4 Science lessons per week and 2 lessons must be experiments. I am amazed that they can link their thinking to their work in such fluent and integrated manner.

I am also amazed at how they communicated together in terms of work allocation. It was done in a communicative manner – likened to bargaining but within a family setting where one would propose along with providing their justifications for it. Some asked or chose to take on certain topics based on their interest and preference. Some were more tentative and were given suggestions by others. There is allowance for recognition of personalities in a very non-threatening way – more collegial and communicative. The topics include:

1. Matter
2. Water
3. Air
4. Transport
5. Heat
6. Light
7. Plant and animals
8. Life cycle of plants and animals
9. Our body system

*Note: The first 6 topics are P4 while the last 3 are P3.*

Surhana concluded with a touch of administrative work – deadlines and the person to be receiving worksheets who is Shirling by Week 3 Term 3 and analysis of base scores by Karna by Week 1 Term 3.

The group also talked about success indicators. Again Edward was the one who brought this up – the idea of research question being measurable. I think he had in mind also the preparation for presentation at a conference in November. In this regard, they'd agreed to three indicators:

1. Upward trend of level's result based on monthly topical tests.
2. Booklet A and B.
3. TOS for application questions.
4. Observation.

In this matter, I observed that Surhana is more relaxed about thinking too far ahead about research tools by stating that there are many ways to observe. On the whole I find that this LC meeting was very intellectually engaging in terms of clarifying where their pupils are having problems with.

***Closing Moments***

Edward made an announcement about the coming P5 camps next week, which they debated about PE attire. I asked him if I could come and visit, and he was more than happy to welcome me.

*Critical Incidents*

*1.  Checking-In.* There was no checking in. I wonder why. Maybe there wasn't enough time. Perhaps, my first appearing is more important.

*2.  Camaraderie.* Camaraderie is still high. It's a strong value in the culture of LCs.

*3.  Easiness.* Easiness was maintained although this time round productivity is higher.

*4.  Intellectual discussion.* Intellectual discussion and thinking was high regardless of personality. Group members were engaged. Cara eventually became more vocal at the final quarter of the meeting, and she remained in the meeting throughout even though she mentioned earlier that she might leave halfway through. Karna was also involved silently, while writing and spoke up at one instance even though she was troubled by her pupils' results.

*5.  Energy.* Energy is still high. Time passed by quickly but not boringly or meaninglessly.

*6.  Power.* Today I found that Edward exert more power. This was perhaps based on the idea that he had about the intervention programme and perhaps his previous experience which had given him the conceptual grasp and practical wisdom in LC processes.

*Researcher-Participants Relationship*

*1.  Role and Identity of Researcher*. I am becoming to be more involved in their action research project through asking questions and chipping in their action research project. Once I shared about how a friend of mine is also trying to find the link between language and Science results – and the difficulties relating to it.

*2. Digital Voice Recording*. The digital voice recording devices were no longer an issue at all. Group members got on with their project work.

*3. Note-taking*. I'd decided to take notes but this time just taking down what was written on the butcher paper. It's like studying and working along with them. Perhaps, I need to take down critical moments – maybe.

*Action Plan*

1.  Get to know group members individually. Perhaps, in my school visits.
2.  Arrange for a plan for school visits with stated objectives.
3.  Writing the fieldnotes within the next three days is really helpful. Also, I find that going in trying to remember what happen also has helped me to remember better.

---

*Hairon Salleh*
*28 May 05*
*3.15pm*
*Rivervale Walk*

# Appendix D

**School Visit 9**
**Fieldnotes**

*14 Oct 05*
*Friday*
*10.00am – 11.00am*

### *Arrival at school*

I arrived at the school in time to see the changeover of students taking canteen breaks. The Primary 2 and 4 students just completed their canteen breaks, while Primary 3 and 6 students began their canteen breaks. The students were as usual either eating, or playing – card games or physical sports or games. I decided to meet two teachers first before interviewing pupils.

I walked up to the staffroom. It was locked. I looked at the glass door and noticed that not many teachers were in the staffroom. I went back to the staircase and saw Edward dismissing his students. He seemed friendly with his students. I signaled to one of his students to get his attention.

He was clad in his usual dark blue track pants and collared T-shirt which has a mixture of red and dark blue colours. He told me that Teresa Chong was in the office and that Maimuna is probably in the staffroom.

### *Conversation with Maimuna*

Fortunately I caught Maimuna entering the staffroom. I stood outside the locked glass door and gave a look of requesting to go in to a lady teacher, Mrs Chan, whose name I later got to know. I approached Maimuna and we talked. She was about to start marking a stack of workbooks. I asked her if it was all right for me to sit in her class to understand her students better. At first she told me that she would not have any intervention lessons as the next two weeks will be exam week. The first week is PSLE week and the following week is school exam week. So I told her that I wouldn't mind sitting in her class after the exams when students will be involved in post-exam activities which could include fieldtrips, games or completing of school syllabi. In the midst of it I expressed by empathy towards being a teacher and that this period is a heavy period for her and all teachers.

Maimuna also mentioned about the pressure of having to get ready for the report for the learning symposium especially when she has to do the presentation. She told me that it would probably on the Saturday after the school term ends, which is 19 Nov 05. I offered my help to edit any reports although I told her that an English teacher could do a better job out of it.

Somehow Maimuna told me that I could still come on Monday 17 Oct 05 at 11.30am if I want to join in her class. I emphasised to her that it is not to see her teach, rather to understand the class better. She told me that she needs to do an intervention lessons with a tinge of embarrassment. I was rather neutral at this. However, on hindsight I think I should have expressed some form of empathy and understanding such as saying "Oh,

that's very understandable." I think I will write her an email after this. This causes me to consider the severity of our reluctance of being watched by someone else in class. But she was all right at the end of it – or I wish she would be all right. And yes, I think I really need to write her an email to clarify my intentions and assure her that I understand the demands placed on teacher which may lead to imperfections in classroom teaching.

She also explained to me about the banding of students. That in terms of ability students from ranked corresponding to Faith, Hope, Joy, Courage, Kindness and Patience using previous year's results for English Language and Mathematics.

She also told me that Teresa's class consists of mainly students with severe learning difficulties.

### *Conversation with Teresa*

I was first quite surprised to see Teresa bit clad in her usual track pants and collared T-shirt. She wore pants and blouse which are in grayish beige colours. I waited for her because I think she was trying to complete some forms to be submitted to the school clerks.

I told her my suggestion on observing her class but at a distance such as during PE lessons. She was all right with the idea. I suggested Monday as I would be sitting in Maimuna's class at 11.30am. She was all right with the idea partly because she doesn't teach PE. Perhaps, also talking face-to-face is more trust engendering than through emails. I don't really know. I was once told my Surhana that she is not willing to sit in her class not because she is afraid of being watched, but more to prevent her students from getting overexcited in the presence of a visitor and that would throw off the lesson.

She said that she will have to check with the PE teacher if he or she doesn't mind of me observing the students at a distance. She took down my mobile number and told me that she will contact me to let me know about Monday.

I chatted with Teresa about the day of his fiancé's proposal to her in school – sort of to celebrate with her. I asked her about the date to the big day but she told me that it is still not known.

In our conversation she also mentioned how pupils were banded and that it makes a big difference in terms of teaching as it is far easier to teach pupils within the same band. Further, this would also prevent pupils who are not within the normal homogenous range to be left out in learning. She is therefore for the idea of banding pupils together.

### *Conversation with students*

The first pupil that I spoke to was a Primary 3 Malay boy. He wore a green T-shirt and was sitting at a canteen bench alone. I asked him if he is in Primary 3 and he said, "Yes." I then asked him if he likes the school and he said, "Yes." However, he seemed not to be able to explain more in detail why he likes the school. He seemed preoccupied with other matters. Perhaps, I'm a stranger to him. Perhaps, language is hindering him from conversing with me.

I walked about the canteen and decided to enter the book store. It sells textbooks, story books, stationeries and other small decorative objects. Most of the students were buying small decorative objects.

Outside the bookshop, I talked to three Primary 6 girls – a Chinese girl, a Malay Muslim girl and an Indian Muslim girl. The Chinese girl was eating while I was asking questions. She doesn't seem to be fluent in the English language in contrast to the other two. While two liked the daily PE, the Indian Muslim girl does not like it because she consider it to be too tiring on her. The Chinese girl also seemed to be different – as in, not that normal, but I couldn't seem to put a finger on it.

I walked towards the multi-purpose court and talked to a group of Chinese girls sitting under an umbrella. They were playing Uno. I tried to gather some information about their feelings about the school. They seemed quite inattentive understandably because of the game.

I walked towards another group of pupils playing Uno. They are all Malays. On hindsight, they seemed to be friendly in contrast to the Chinese whom I had talked to. I went to another table with pupils playing Uno. They are Malays too.

After this, I went to the other side of the stone benches. This time round, pupils are primarily Chinese boys and they were playing 'Dual Strategy' – quite similar to magic cards, although I have no inkling to the rules of the games. I talked to them.

Once I had talked to three groups of Chinese boys, I talked to three girls sitting at a canteen bench. They were the ones who told me about Mrs Chan who is their form teacher. Then I talked to another group of Chinese girls whose form teacher is Mrs Chan.

Then I went back to the first site which I visited first. There I talked to another Malay group playing Uno.

After this, I went to talk to a group of Chinese girls who were walking out of the General Office. They were friendlier to strangers. I talked to them about their perception of the school.

On the whole, students like the school because of their teachers. These students that I had talked to were mainly Primary 6. I decided to focus on them because they are the oldest and hence with better communication skills and language competence in contrast to Primary 3. They like teachers who are not strict but friendly and funny. They also like teachers who teach well. It also seemed that students like subjects that they like and those that they like are those that they can do without

much problem. For example, they like Maths because "It is easy". It seemed that students are very much structured by the examination and meritocratic cultures that are so pervasive in Singapore. It's pervasive partly because the education system is pervasively controlled by the government.

Students' perceptions for daily PE however vary. However, I suspect that in general most students like the idea of daily PE. This is however my suspicion as it is limited to a few students.

## _Departure from school_

While signing out, I noticed that there are parents who visited the school, but the number isn't much. I could only see one to three parents' signatures that morning.

The security guard told me that he prefers to be working in this school as the management is better than others that he had worked in.


## _Research Method_

1. One challenge that I faced in doing naturalistic interview is that students in general do not know me, and even if they knew me, my role as an observer may be too difficult for students to grasp as their understanding of an observer is someone who observes classroom lessons in opposition to someone walking about the school. One way around this is to interview students from those classes that I had sat in such as Primary 4 students.

2. Another challenge to do with naturalistic interviewing is that students may not have the language competence to engage in in-depth conversations. Again, my proposal is to speak to Primary 4 students and those with language competence. Another alternative is to speak to Malay students using Malay although I may have to work harder at saying it in at level of daily informal tone and expression.

3. One lesson I had learnt today is to let students know my position and purpose – that is, that I am a visitor who is trying to understand the school better. This worked quire all right with students at the second half of my conversations with students.

4. I still find that the staffroom is quite a sacred place for teachers. Well, it is the only private place for teachers. And the only way for me to feel comfortable and for them to feel comfortable is to have someone else who knows me. Hence, the more teachers I know the better it is. How do I achieve this? I don't really know. Perhaps, I could ask Lan Chin if I could join in the staff contact time the week after.

5. The more I visited the school, the more I am feeling close to the school. Even at this time, I am beginning to feel that I want to contribute to the school. Also, being school make me see the needs of students and teachers alike. Already, I'm looking forward to helping Fei Ming develop a model of professional development for teachers at Primary 1 and 2.

_Hairon Salleh_
_14 Oct 05_
_4.00 pm_
_NIE Office_

# Appendix E

## Teachers Network Visit 3
## Fieldnotes

*23 May 06*
*Tuesday*
*10.30am – 11.30am*

### Introduction

I stopped my car at the usual check point, and was told that I should park my car at the visitors' car park. It's kind of interesting to note that the security guard had maintained the same instruction – that is, making sure that visitors only park at the visitors' car park. It's as if their main duty is to make sure that car park lots of full-time staff at TN are not used by outsiders.

My main purpose of visiting TN that morning was to do artifact analysis of TN's library – READ@tn. The library is opened from Monday to Friday, 8.30am to 6.00pm. The main users of the library are government and government-aided schools, junior colleges and centralised institutes; education officers of government and government-aided schools, junior colleges and centralised institutes; and lecturers and trainees of National Insitute of Education. However, only MOE Civil Service Card (CSC) Holders are allowed to borrow resources from the library. The library also provided delivery to schools: North Zone (Tuesdays), South Zone (Wednesday), East Zone (Thursday), and West Zone (Friday). Users of the library could also access information on the status of resources from the website or the library internet. The library also welcomes recommendation by users of the library.

The library is constructed, I suspect, out of a school's hall. An artifact that is obviously positioned is the vision and mission of TN. The vision and mission of TN have explicit and implicit values –

### OUR VISION
To build a fraternity of reflective teachers dedicated to excellent practice through a network of support, professional exchange and learning.

### OUR MISSION
To serve as a catalyst and support for teacher-initiated development through sharing, collaborative and reflection leading to self-mastery, excellent practice and fulfilment.

Below is a summary of signification related to words and phrases from the vision and mission statements.

***'to build'***
– leadership and initiation on the part of TN staff.

***'fraternity'***
- collegiality, collaboration, network and community; lack cultural values of collegiality, collaboration, networking and community life.

***'reflective'***
- importance of reflection in teachers' lives; and the lack of it.

***'dedicated'***
- importance of emotions and commitment in teachers' practice; and the lack of it.

***'network of support, professional exchange and learning'***
- importance of support from each other through sharing of knowledge and practice, and learning from each other.

***'to serve'***
- leadership through humility and service as opposed to hierarchical relationship.

***'as a catalyst and support for teacher initiated development'***
- importance of teachers themselves initiating their own development; TN's role is to support; the support itself is the catalysing action.

***'through sharing, collaborative and reflection'***
- TN hopes to provide the support for teachers to share, collaborate and reflect.

***'leading to self-mastery, excellent practice and fulfilment'***
- the outcome is teachers gaining self-mastery, excellent practice and fulfillment; the assumption is that self-mastery leads to excellent practice, and this leads to teachers' sense of fulfillment in their work.

```
         ┌─────────────┐
         │    SELF-    │
         │ FULFILMENT  │
         └─────────────┘
                ⬆
         ┌─────────────┐
         │  EXCELLENT  │
         │  PRACTICE   │
         └─────────────┘
                ⬆
         ┌─────────────┐
         │    SELF-    │
         │  MASTERY    │
         └─────────────┘
          ⬈      ⬆      ⬉
┌──────────┬──────────────┬─────────────┐
│ Sharing  │ Collaboration│ Reflection  │
├──────────┴──────────────┴─────────────┤
│    TEACHER-INITIATED DEVELOPMENT      │
└───────────────────────────────────────┘
                  ⬆
┌──────────┬──────────────┬─────────────┐
│ Network  │ Professional │  Learning   │
│ Support  │  Exchange    │             │
├──────────┴──────────────┴─────────────┤
│       TN AS CATALYST AND SUPPORT      │
└───────────────────────────────────────┘
```
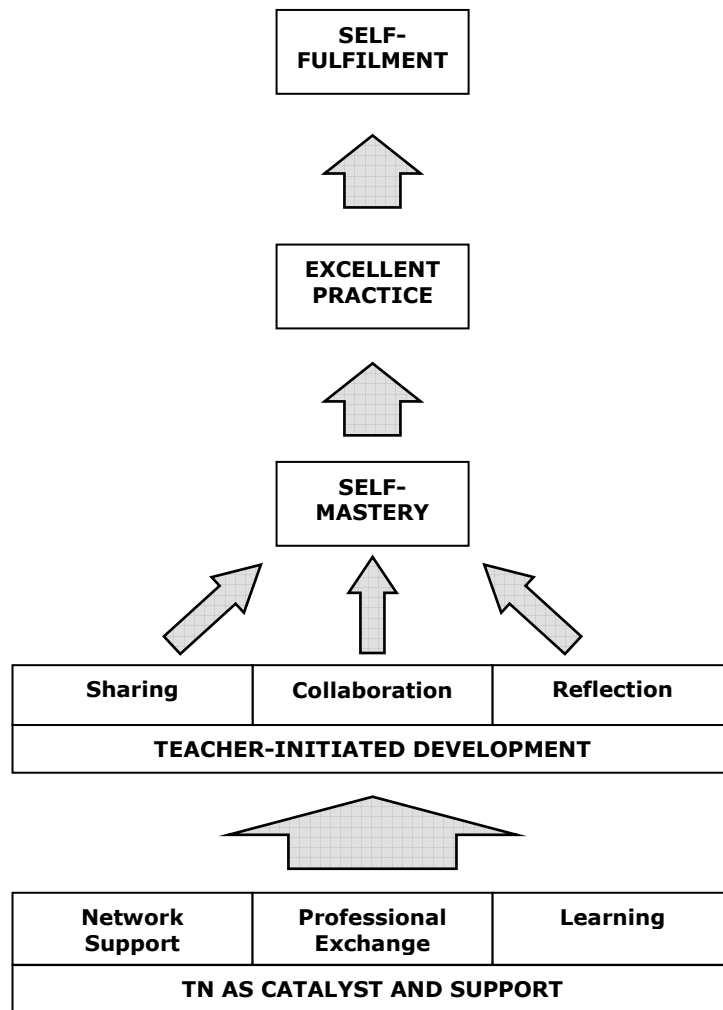
**Diagram 1: Concept Map of TN's Vision and Mission**

Based on the above analysis, it would seem to suggest that TN aims to provide the catalyst and support for teacher-initiated development. The choice of the word 'development' is rather interesting to me as it is a 'soft' word although it does have potentially for political activism. The word 'development' to me suggests a kind formality as in the phrase 'professional development' and therefore situating itself within formal discourse. Another example that would suggest this embeddedness is the phrase 'Training and Development Division'. Hence, there is a possible contradiction between the phrase 'teacher-initiated' and the word 'development'. The former suggests a more politically charged, or 'activitist' oriented, action, while the latter suggests putting to captive or control of such action – unless the early founders of TN means that teacher-initiation requires teachers to initiate their own professional development endeavours and projects but within the limits and boundaries of people in higher hierarchical positions. Or perhaps, the early founders of TN believe

*414*

in the need for teachers to initiate their own development but saw the limits of encouraging teachers to be 'activists'.

The library can be organised in terms of themes or 'corners', in the midst of the resources available. In other words, the library provides the main function of providing resources such as book, CD ROMs, Serials, CDs, videos ETD & Off-air Recording Collections, and services such as computer work stations, dubbing facilities, viewing facilities, display area. Along with it, the organisation of the library also indicates that it is promoting a certain perspective of teacher professionals that encourages certain values through the organisation according to themes.
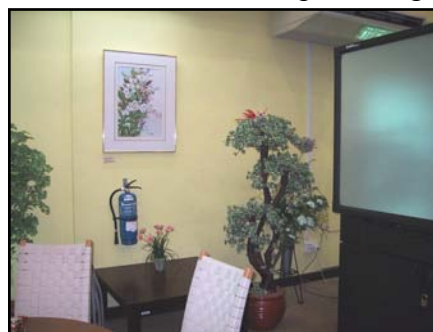
### Smartboard Meeting Area

In my view, the Smartboard Meeting Area signifies certain meanings and values that TN wants to promote in the lives of teachers.

- A teacher who is ICT competent *(Artifacts: Smartboard)*.
- A teacher who is constantly looking ahead *(Artifacts: Smartboard)*.
- A teacher who is proactive *(Artifacts: Teacher Work Attachement programme)*.
- A teacher who values collaboration, team spirit, discussion, dialogue and reflection *(Artifacts: Tables, chairs)*.
- A teacher who values equal power relations *(Artifacts: Table, chairs)*.
- A teacher who values creativity *(Artifacts: Framed pictures, music, wine bottles, plants)*.
- A teacher who learns on the job and off the job, and takes time to learn and reflect *(Artifacts: Framed pictures, music, wine bottles, plants)*.
- A teacher who values both formal and informal learning *(Artifacts: Formal books with wine bottles, relaxing ambiance with formal MOE Teacher Work Attachment programme advertisement)*.
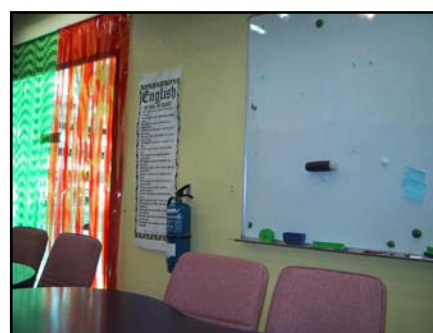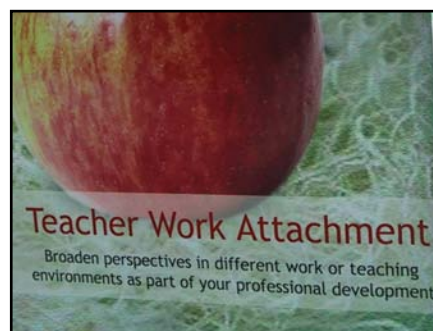
### Icreate Corner

The Icreate Corner has artifacts that signify certain values that TN wants to promote in teachers' lives.

- A teacher who values the integration of disorganised and organised learning *(Artifacts: Tables and chairs, Whiteboard,*

*markers and board magnets).*

- A teacher who values the integration of theoretical and practical learning *(Artifacts: Tables and chairs, Whiteboard, markers and board magnets).*
- A teacher who values the integration of work, learn, relate and play *(Artifacts: Tables, chairs, games, toys, etc.).*
- A teacher who values pedagogy *(Artifacts: Games, manipulatives, posters, charts, etc.).*
- A teacher who values creativity and diversity in pedagogy *(Artifacts: Games, manipulatives, posters, charts, innovative and colourful curtains, etc.).*
- A teacher who values students' learning *(Artifacts: Games, manipulatives, posters, charts, etc.)..*
- A teacher who values teamwork, discussion, dialogue, sharing of ideas and materials, reflection *(Artifacts: Tables, chairs, whiteboard, markers, board magnets, etc.).*
- A teacher who values inclusion *(Artifacts: Portable plastic chairs).*
- A teacher who values the fun aspects of learning *(Artifacts: Tables, chairs, whiteboard, markers, board magnets, etc.).*

### *Health Corner*

The Health Corner has artifacts that signify certain values that TN wants to promote in teachers' lives.

- A teacher who values the integration of body and mind *(Artifacts: Soothing music, coy, fountain, sofas, café bar).*
- A teacher who values collegiality *(Artifacts: Soothing music, coy, fountain, sofas, café bar).*
- A teacher who values the integration work and rejuvenation *(Artifacts: Soothing music, coy, fountain, sofas, café bar).*
- A teacher who values the integration work and home living *(Artifacts: Soothing music, coy, fountain, sofas, decorated wall, photo frames, home decors, cupboard).*

In the midst of all these, I could see the armour of MOE, and on its right, the president of Singapore and the left, his wife. TN in view is within the purview of the Ministry of Education. An implication to this is that funding and therefore control is from MOE. TN has the autonomy to pursue its vision and mission but within the outbound markers stipulated

by MOE, and the PAP government. It therefore cannot escape MOE's political discourse or structure.

## DISCOURSES

**Social movement**
- Collective initiation.
- Collective friendship.
- Collective work.
- New movement.
- Communities of practice.

Reflective practice.
Commitment.
Sharing of knowledge.
Supporting each other.
Distributed leadership.
Power symmetry.

Excellent practice.
Fulfillment of teaching.

## Integration of Informal and Formal Learning
- Activist versus system structures.

## New Disposition
- Embraces diversity.
- Technologically competent.
- Visionary.
- Proactive.
- Collaborative.
- Team player.
- Collegial.
- Dialogues.
- Reflective.
- Equal power relations.
- Creative.
- Integrates informal and formal learning.
- Integrates disorganised and organised learning.
- Integrates theory and practice.
- Integrates body and mind.
- Balances work and rest and recreation.
- Balances work and home.
- Balances lifeworld and system.
- Mastery of pedagogical content knowledge.
- Shares resources.
- Inclusive.
- Enjoys learning.

*Action Plan*

1.  Interview PDOs and the Deputy-Director of TN about the following -

    - What are cultural values that TN tries to promote in the lives of teachers that they meet?
    - What are TN's constraints and challenges?
    - Where does TN go from here?

## 1. HUMANISING LEARNING

- People are the end.
- Learning is part of being a person.
- Learning is a means to an end. The end is the development of the human person.
- Continuous learning and lifelong learning.

### a) Values

- People are at the centre of work.
- Values lie at the centre of work.
- Values come before productivity, and drive diligence.
- Commitment in what we do – being emotionally engaged.
- Being the best that one can be.
- Having a positive attitude.
- Change is from within.

### b) Learning is a Social Activity

- A collective activity.
- An interdependent activity.

    **Symmetrical Power Relations**
    - Non-threatening.
    - Learning involves accepting one another as equal.
    - Learning resides within shared leadership.

    **Sharing**
    - Learning involves sharing of thoughts and feelings to each other.
    - Keeping everyone in the loop.
    - Learning involves authentic listening from each other.

    **Thinking**
    - Learning involves collective thinking.

    **Feelings**
    - Learning involves our emotions: fun, enjoyable, satisfaction, fulfillment.

    **Decision-making**
    - Individual voice in collective decision-making.
    - Learning involves collective agreement.

- Consensus building through dialogue.

**Modeling**
- Learning is part of modeling.
- Modeling is equating what is preached and what is practised.
- Learning involves principles of community.

**Bonding**
- Learning involves ownership to the learning process.
- Learning involves the bonding of participants.
- Learning involves individual accountability to the group.
- Building camaraderie.
- Building solidarity.
- Learning involves team work.
- Celebrating collective successes.
- Learning involves individual contributions to collective good.

**Identity Formation**
- Identity building.
- Learning involves the expression and formation of individual identities.
- Learning involves the expression and formation of collective identities.

**Community of Practice**
- Unthreatening.
- Developing individual identities.
- Developing collective identities.
- Surfacing and questioning individual knowledge and assumptions.
- Surfacing and questioning collective knowledge and assumptions.
- Developing individual and collective knowledge.
- Putting to test personal and collective knowledge and assumptions – theories, in an action research project which involves change in pedagogical practice.

**Creativity Discourse**
- Thinking new things.
- Courage to think of new possibilities, thoughts and ideas.
- Being open-minded.
- Openness is important in learning.
- Learning is exploratory.
- Learning involves experimentation.

**c) Learning: Semiotics**

- Learning is creating.
- Space for people to articulate their thoughts, feelings and beliefs.
- Articulating and expressing individual and collective identities.
- Communicating and talking with others.
- Learning involves verbalising thoughts.
- Articulating and organising our thoughts.

- Learning involves reflection
- Learning involves questioning one's assumptions.
- Enabling … that is, surfacing and questioning assumptions or ideologies: Objective questions; Leading questions; Subjective questions; Propositional questions; Why do you say that?
- LO tools – suspend judgement, check-in, mental model and shared understanding.
- Learning moves from unstructured thoughts to structured thoughts – making the implicit to explicit; informal to formal; making the undifferentiated to the differentiated; making the tacit to the known; pre-theoretical to theoretical; idealism to pragmatism; making the non-discursive (ideological) to discursive (reflexivity).
- Learning involves the engagement of personal and tacit knowledge.

## d) Integration of Learning and Working Discourse

- Integration of work and learning.
- Integration of play and learning.
- Learning is enjoyable, fun and playful.
- Learning is not rigid, spontaneous.
- Learning is living.
- Learning is an informal activity.
- Learning resides within a practical activity – pragmatism.
- Learning has a practical end.
- Learning involves changing our teaching and learning.
- Learning involves changing pedagogies.
- Learning resides within a technical efficiency activity.
- Learning is involved in the discourse of becoming an effective teacher.
- Learning involves the use of standard guidelines and framework in order to meet the needs of technical efficiency.
- Learning is a formal activity.

### Project Discourse
- Project.
- Coordination with each other.
- Flexibility within structured roles.
- Multiple roles.
- Teamwork.
- Busy.
- High workload … has increased.

## e) Merging and Tension of Lifeworld and System.

- Informality-human within formality-technical discourse.
- Informality-human with formality-technical discourse.
- Activist within system structures.
- Lifeworld and system interdependence.
- Flat organisational structures within hierarchical structures.
- Teachers Network within Training and Development Division (Ministry of Education).

- Teachers Network encourages voluntarism for Learning Circles but allowing Learning Circles and the value of voluntarism to be hijacked by people in higher hierarchy.
- Teachers Network encourages power symmetry but allows for power asymmetry.
- Lifeworld is encouraged by allowing colonisation of lifeworld by the system – means-end rationality.
- Teachers Network encourages critical reflection but allowing high level of labour productivity and efficiency.

**Training and Development Division Discourse**
- Structured.
- Bureaucratic.
- Managerial.
- Control.
- Technical.
- Efficient.
- Hierarchical.
- Linear.
- Systemic.
- Accountability.
- Measurability.

**Social movement**
- Collective initiation.
- Collective friendship.
- Collective work.
- New movement.
- Communities of practice.

- Reflective practice.
- Commitment.
- Sharing of knowledge.
- Supporting each other.
- Distributed leadership.
- Power symmetry.

- Excellent practice.
- Fulfillment of teaching.

**Power Absent Discourse**
- Not addressed explicitly or specifically.
- Disadvantage: teachers involved in LCs do not see the primacy agency in professional development matters, and professionalisation of teachers on the whole.
- Advantage: avoid confrontational conflicts with the system and losing out in the introduction of a more democratic approach towards learning.
- True emancipation may not be achieved because the whole action of facilitating can be seen as an act of control, enculturation and normalisation – or ideological. People cannot be forced to be free.

**New Disposition**

- Embraces diversity.
- Technologically competent.
- Visionary.
- Proactive.
- Collaborative.
- Team player.
- Collegial.
- Dialogues.
- Reflective.
- Equal power relations.
- Creative.
- Integrates informal and formal learning.
- Integrates disorganised and organised learning.
- Integrates theory and practice.
- Integrates body and mind.
- Balances work and rest and recreation.
- Balances work and home.
- Balances lifeworld and system.
- Mastery of pedagogical content knowledge.
- Shares resources.
- Inclusive.
- Enjoys learning.

*Hairon Salleh*
*17 Jun 06*
*1.00pm*
*Rivervale Walk*

# Appendix F

Mr Hawazi Daipi,
Senior Parliamentary Secretary

Mr Gan Kim Yong,
Chairman, Group Parliamentary Committee on Education

General Lim Chuan Poh,
Permanent Secretary

Mrs Tan Ching Yee,
Second Permanent Secretary,

Miss Seah Jiak Choo,
Director-General of Education

Principals,

Colleagues, Ladies & Gentlemen

**Achieving Quality: Bottom Up Initiative,
Top Down Support**

**Focusing on Quality and Choice**

1.        We have embarked on a new phase in education in recent years.   We are shifting focus from quantity to quality, and from efficiency to choice in learning.   We have made many refinements in recent years, but they boil down to this basic shift in focus  -  from an efficiency-driven system to one focused on quality and choice in learning.

2.        The changes are percolating through our schools and tertiary institutions. We are progressively shifting the balance in education, from learning content to developing a habit of <u>inquiry</u>.   We are renewing our emphasis on an all-round education, so that we can help our young develop the strength of <u>character</u> that will help them ride out difficulties and live life to the fullest.   And we are injecting <u>fluidity</u> throughout the system  -  recognising more talents besides academic achievements, providing more flexibility in the school curriculum and streaming system, and introducing new pathways  -  all to help all our students discover their interests and talents, and know that through our education system they can go as far as they can.

3.        We have to press ahead with this new strategy in education.  We must give young Singaporeans a quality of education that will prepare them for life, much more than prepare them for examinations.   We must give each and every student a first class education.   As PM put it in his National Day Rally speech last month, we need a

<u>mountain range</u> of different talents, each one of us being the best that we can be, not just one or two peaks.

**Bottom-up Initiative, Top Down Support**

4.        But there is no large fix in education that will bring in the improvements that we want.   No big system-wide solution, like the introduction of streaming in the 1980s to reduce the huge attrition of students from the system.   The days for large fixes are over.

5.        The improvements in quality as we go forward will have to come from innovations on the ground  -   new teaching practices, new curricula responding to a school's unique needs, and new options and chances given to students.   Quality will be driven by teachers and leaders in schools, with ideas bubbling up through the system rather than being pushed down from the top.

6.        Our challenges are not different from that of several other Asian countries, like Japan, China, Korea and India.   We start like them from a centralised education system, with a heavy focus on national examinations.   The system has its strengths.   It produces people who are able to focus on a task and get the job done.   But in Singapore as in these other Asian nations, we know that our young will need much more than exam skills to prepare themselves for the future  -  a future driven by innovation, by doing things differently and with verve and imagination, not by replicating what has been done before.

7.        I visited Japan in July this year with MOE officials and Principals involved in planning our strategies to implement the Teach Less, Learn More (TLLM) initiative. Our interactions with education leaders and teachers in Japan were instructive.   The Japanese have implemented changes in education with great zeal.   They made huge cuts in the curriculum, reduced curriculum time, and introduced new, integrated learning subjects in all schools.  The changes were top-down, and implemented across the system.   But there appears to have been little buy-in on the ground.   Many school leaders and academics have expressed great discomfort with the changes, which they see as one-size changes for a very diverse student population.   At the same time, they have watched Japan's international rankings in math, science and even first language decline over the years.

8.        Japan remains the most innovative society in Asiaby far, in areas as far afield as manufacturing, architecture and fashion.    But they are losing confidence in their ability to stay ahead, and in the educational reforms that were aimed at doing so. From what we observed, they have excellent leaders and teachers in their schools. But the reforms were receiving little support, because they were implemented in a uniform fashion, top down.    There was little enthusiasm on the ground, and little ownership.   We can learn from their experience.

9.        We must recognise that every school is different.   Students vary in their interests and learning styles.   Some learn in a very different way from others, although they may be just as bright.   Teachers and schools must make the call on what is most meaningful for their students  -  what will help them learn better, and what will shape strength of character.   They are in the best position to develop new approaches to engage their students. Many of our schools are already doing this today.  At the primary level, we are seeing numerous innovations on the ground, in the SEED programme for lower primary classes.   Some primary schools are now developing niche areas of their

own, and obtaining additional support from MOE through the Programme for School-Based Excellence (PSE).  More secondary schools are customising the curriculum for various subjects so that students can learn more effectively.  Many are developing their own programmes to develop life skills amongst students, such as through the arts or outdoor experiences.

10.        MOE's role will be to provide <u>top-down support for bottom-up initiatives</u>. We want to give teachers more space and time to think through improvements in what they do and to be able to engage with students individually.  We also want to create for our students a greater flexibility of options, in what they want to learn and how.  Quality in education will flow from schools and teachers taking ownership of the changes and experiments that they wish to implement, and from learners making their own choices. Ownership in schools is key as we go forward in education.

11.        There are therefore two key thrusts that underpin our efforts going forward. We will <u>provide greater support for our teachers and leaders</u> in schools; and we will <u>provide more flexibility and choice for all our learners</u>, regardless of which school or course they might be in.   I will summarise our intent on each of the two thrusts, before elaborating on the specific initiatives we are taking.

*Greater Support For Teachers And Leaders In Schools*

12.        The teacher is at the heart of "Teach Less, Learn More" (TLLM).   TLLM is not a call for "teacher do less".   It is a call to educators to teach better, to engage our students and prepare them for life, rather than to teach for tests and examinations.

13.        This is why TLLM really goes to the core of quality in education.   It is about a <u>richer interaction between teacher and student  -  about touching hearts and engaging minds</u>, as today's seminar theme puts it.

14.         In order for our teachers to "teach less", that is, to better engage our students in their own learning through more effective pedagogies, they actually need more time, not less.   They need more time to reflect, to practise professional sharing, and to interact with their students.

15.        We will therefore give our teachers more time and space.   We will do this first, by <u>reducing the amount of content in the curriculum</u> so that teachers have space to make learning more engaging and effective.    Further, we will <u>build space into our teachers' weekly timetable to give them the time to reflect and share</u>.  Schools will get more teachers, progressively, so that they can make it possible for each teacher to have this additional time.

16.        We will prioritise new teacher resources by providing them first to schools that are ready to prototype their ideas for TLLM and bring in new school practices.  We will start by providing additional resources to 20 primary schools and 20 secondary schools.   The best practices developed in these prototyping schools can then be shared, adapted and further customised by other schools across the system.   We will have <u>many prototypes</u>, different designs of TLLM, eventually spreading into a mosaic of practices across our schools.

*More Flexibility And Choice For All Our Learners*

17.         The second thrust is to provide further flexibility and choice for all our students.   We need more diversity in our schools to help our young discover different

talents amongst themselves, and to have meaningful choices about the kind of education that they want to pursue.

18.    We build on the significant new choices that we have already introduced - such as the Integrated Programme schools and Specialised Independent Schools; the broader-based frameworks for admission into secondary schools, JCs and universities; the greater latitude that students have to take Higher Mother Tongue and Third Languages; and the flexibility offered to Normal course students to take some subjects at a more advanced level or pace.

19.    We will add to this diversity, and open more gates for students who want to take a different path.   We will introduce further flexibility into the Normal(Academic) Course, to allow some students to proceed faster, along a curriculum tailored to the 'O' levels.   We will allow some schools to introduce new 'O' level subjects from next year, catering to students with special talents and interests.   We will also study how to enable selected schools to offer niche programmes in collaboration with the polytechnics that cater to students with an interest in applied or practice-oriented learning.   And we will allow the polytechnics themselves to select students with special talents and achievements, besides their 'O' level examination results.

20.    Together, our two thrusts -   providing greater support for   initiatives owned by teachers and leaders in schools, and giving our learners greater flexibility and choice  -   will allow us to create new peaks of excellence in Singaporeeducation.  Together with the other initiatives we have taken in recent years, they will bring a level of quality, diversity and choice into education  -   rare for a centrally-funded, state education system elsewhere in the world.

21.    Every school must own this drive for quality, diversity and choice in education.   Then our school landscape will itself be a mountain range of excellence  - not just an Everest, K2 and Kanchenjungabut an entire Himalayan range, with different shapes and colours, inspiring all our young to follow their passions and climb as far as they can.

22.    Let me now elaborate on our specific initiatives we are taking.

**Greater Support For Teachers and Leaders in Schools**

23.    Earlier this year we set up a TLLM Steering Committee headed by Mrs Tan Ching Yee, Second Permanent Secretary, and Miss Seah Jiak Choo, Director General of Education, to explore how MOE and schools' efforts to realise TLLM could be coordinated and supported.   The team consulted numerous teachers and school leaders and the NIE, and sent study missions out to several countries to see what we could learn from a range of international practices.

24.    The key recommendation arising from the study was that we should provide more support to teachers for TLLM to succeed.   Teachers needed more time and space to tailor their teaching to suit their students' learning needs and get to know their students better.

25.    We will provide teachers greater support in the following 4 ways:

    a.    First, we will <u>reduce content</u> so as to give teachers more flexibility to customise their teaching;

b.	Second, we will free up <u>more time for teachers</u> to know their students better, reflect on their teaching and conduct more professional sharing;

c.	Third, we will <u>enhance teachers' professional development</u>, especially for beginning teachers; and

d.	Fourth, we will <u>establish an Education Leadership Development Centre</u> to provide the focus and resources to develop top quality school leaders, leaders who can provide the best seed beds for teachers to try out ideas and experiment.

<u>Creation of 'White Space' Through Content Reduction</u>

26.	Some schools are already taking bold steps to customise their curriculum to meet the needs of their students.	I thought it will be easiest to give a couple of examples.

27.	One school that has made significant changes in its curriculum to meet the needs of its students is Yishun Town Secondary School.	The teachers found that students were unable to sustain an interest in the humanities curriculum in their lower secondary classes, and asked themselves how it could be improved.	They decided to downsize content in order to focus on skills, and give teachers more space to get students engaged.

28.	I asked the school if we could see what goes on in the classrooms and why they decided to do this.	They agreed, so let's see what Yishun Town Secondary has done:

*(Start of video clip)*
***Mrs P Gopalan, HOD/Humanities:****"Our students in YT felt that there was too much content to memorize in history and geography and as a result they often lost interest.*
*The teachers then customized the curriculum to incorporate more skills in content teaching.  To further instil interest in students, lessons were taken beyond the classroom where students discovered new knowledge for themselves.*
*To complement our focus on skills, we introduced open book assessments that used case studies or scenarios.  Students then had to apply the knowledge learnt instead of just recalling facts.*

*We find that students have a deeper understanding of the lessons as well as a better grasp of the skills."*			*(End of video clip)*

29.	Another example of a school that has reworked the curriculum is Rulang Primary School.	The teachers got together and thought hard about how to provide a vibrant learning environment for Primary 1 pupils.	They took the curriculum, and reorganised along lines that would appeal to students and better engage them in learning.	They created activities that could arouse the interest of their young students, and brought the learning of language and process skills into a context that students found relevant and enjoyable.	As a result, Rulang found that students acquired a love for learning in Primary 1.	Many other primary schools will I am sure find this familiar in what they themselves have been doing.	Let's listen to Ms Janice Beh, Rulang's HOD for Niche and Innovation:
*(Start of video clip)*

***Ms Janice Beh, HOD, Niche and Innovation:****"We envisioned a culture where pupils are passionate, confident and self-motivated learners when we first went about redesigning our curriculum to encompass the essence of TLLM.*
*We discovered things which arouse pupils' curiosity and desire for knowledge, such as robotics and speech & drama. We also studied factors that motivate pupils, including their needs for peer recognition, and cross-referenced that with their learning styles.*
*To complement the curriculum changes, we also worked on the creation of an environment conducive for pupils' sociological, physical and psychological development, so that each child can develop his potential.*

*The implementation has been a rewarding one. We have noticed that pupils are more enthusiastic about pursuing their interests and are more daring to voice their opinions. The nurturing of responsible, thinking individuals is what we believe education is all about."*         *(End of video clip)*

30.         I have no doubt that other schools are taking a fresh look at their curriculum and pedagogy like Rulang Primary and Yishun Town Secondary. But we can do more to spur our schools in this direction.

31.         As a start, we will give teachers greater flexibility by reducing curriculum content in the next few years, so that they get 'white space' or more room to customise their teaching within the same curriculum time. The cuts will free up 10% to 20% of curriculum time in content-based subjects at primary and secondary school. (The new 'A' level curriculum that will be introduced for JC1 students in 2006 will see a 15-20% cut in content overall.) The cuts will be progressive, starting with some subjects at the lower primary and lower secondary levels next year. Content that has been removed will not be examined in the PSLE or 'O' Level examinations. By 2010, content cuts would have been made in all content-based subjects from primary to secondary levels. The cuts will be undertaken carefully and judiciously, so as to ensure that our students remain well-prepared for a post-secondary education and are still able to meet high international standards.

Giving Teachers More Time and Space

32.         We will do more to give our teachers the time to reflect on their teaching and plan their lessons. We will free up an average of 2 hours per week for each teacher. We will do so in two ways:

33.         First, by giving teachers 1 hour 'timetabled time' per week to reflect, plan their lessons, and engage in professional sharing. This hour will come from within each teacher's current total 'timetabled' time per week. This ensures that the baseline 1 hour set aside for professional planning and collaboration does not add to their current teaching load.

34.         To provide teachers with 1 hour 'timetabled time' per week, MOE will provide more teachers to schools and improve pupil-teacher ratios. Schools will be able to provide for this 1 hour 'timetabled time' in phases over the next few years, beginning with some schools in 2006.

35.         Second, all schools will each receive a Co-curricular Programme Executive (CCPE) by 2007 to assist teachers in non-teaching duties, particularly in the administration of Co-Curricular Activities and Community Involvement Programmes. This is expected to free up another 1 hour per teacher weekly, on average.

36.		These initiatives will add to the other resources that we have committed to provide schools.   Secondary schools will get a full-time school counsellor each next year, and every primary school and JC by 2008.  MOE has begun recruiting, training, and deploying counsellors to schools for this purpose.

37.		The Adjunct Teachers Programme, which seeks to attract former trained teachers to join the teaching profession, is also off to a good start.   550 adjunct teachers have been taken in since we began recruitment this year.

38.		We have also been recruiting and deploying Special Needs Officers in 14 selected mainstream schools, to help students with mild to moderate dyslexia and Autistic Spectrum Disorder integrate better.    The Special Needs Officer will complement what our teachers do to help students with these special needs.

39.		Taken together, the additional manpower we are providing schools will make them better resourced than ever before.    They will help teachers focus on delivering quality.

Strengthen Focus on Professional Development

40.		We will strengthen the professional development of teachers, to help them understand and use a wider repertoire of pedagogies and assessment modes to customise their lessons and meet their students' needs.   We have seen how Project SEED has unleashed some of this potential in our teachers.

41.		We will set up one Centre of Excellence for Professional Development in each zone.   It will serve as a focal point for sharing of best practices, and promote a system of continuous professional development that is more organically linked to actual practices in our schools.

42.		We will also deploy additional teachers to enable our schools to offload their more experienced teachers such as Senior Teachers and HODs, so that they can mentor teachers who are new in service.   Some schools have already started this rationalisation of teachers' workload.   They are giving the most experienced or best teachers time to coach the younger teachers and help them to absorb the ethos and values of the profession.  That way, overall quality goes up in teaching.

School Leadership Development

43.		To make all these changes come together, however, school leaders are critical.   Our leaders have to be well-informed, confident and supportive of their teachers.   They have to enthuse and energise their teachers, and give them the space to try out new approaches.   They have to keep their focus on the desired outcomes in education.   They must have the gumption to focus on things in education that are not measured in grades and awards  -  things like whether the average student gets an all round education although it does not show up in victories in inter-school competitions, or things like whether students are given the choice of subjects they want although it's not going to help in the school rankings.

44.		MOE will establish an Education Leadership Development Centre (ELDC) by end-2006 to strengthen the professional development of our potential and current leaders.  The Centre will allow us to provide systematic and high-level oversight of leadership development in the education service.  It will also devote resources to research on leadership models and approaches in education.   We will leverage on our

unique strength of close links among MOE, NIE and our schools to bring together the perspectives of policy makers, researchers and practitioners as we develop this Centre.

**Greater Emphasis And Ownership In Character Development**

45.         We must redouble our emphasis on character development.   But MOE cannot dictate how schools should do this.   Schools have to develop their own practices, and do what they consider most meaningful for their students.

46.         <u>We will give schools more ownership and encourage greater emphasis on character development</u>.   We all know that character development is much more than just the weekly Civics and Moral Education lessons that are timetabled.   It is not something that we can reduce to black and white in a textbook, or put into a neat package for classroom delivery.   It requires a <u>whole-school</u> approach.

47.         I know that some schools sometimes substitute their CME lessons for remedial lessons in other subjects.   PE is another period sometimes sacrificed.   Schools have to send very clear signals to their students about the importance of character development.   Otherwise, we risk producing a generation of exam-smart students without the courage of their convictions, or the resolve to stand together in difficulties.

48.         The whole-school approach for Character Development will need to involve both the formal and informal curriculum, and be embedded in the daily activities of the school for the students.   School leaders must shape an approach to character development that is suitable for their students, and champion the effort amongst their staff and other stakeholders of the school.   Finally, the core values that are espoused by the school have to direct decisions and guide behaviour at every level of interaction in the school, between students, teachers, school leaders, parents and other stakeholders.

49.         One school that has adopted such an approach is Westwood Secondary School.   Each day, instead of rushing back to their classrooms to start their lessons after flag-raising, students participate in dedicated activities that aim to build their character and confidence – a period which the school calls "Westwood Bytes".

50.         On Mondays, the Principal, Mrs Betty Low, would highlight a few inspirational stories and celebrate school successes  -  as many of you would do.   On Tuesdays, the whole school engages in physical exercise, led by PE teachers and student helpers.   On Wednesdays, every class takes turns to perform their own scripts in front of the school, building up the communication skills and confidence of each student.   On Thursdays, form teachers spend time to listen to their students' needs and provide coaching for personal effectiveness within each class.   And on Fridays, the school has a programme called "In-Touch" -- a student-led forum that discusses key issues of the day.   It is a powerful platform for students to develop critical thinking skills and the capacity to express their views and opinions coherently and with conviction.

51.         In addition to "Westwood Bytes" I understand students in the school have one period each week dedicated to international folk dancing.   This helps develop students' awareness of different cultures, their psychomotor skills, as well as teamwork and creativity.

52.        Taken individually, the things that Westwood Secondary does are not unique.   But it's the coming together of these elements, and the clear and sustained focus of the school on developing the character of their students that makes a difference.

53.        To achieve our desired outcomes of education, schools must place more emphasis on this whole-school approach to character development.   We have to look at the backgrounds and   experiences of our students, bring them out of their usual selves, put them through  new challenges and the difficult experiences that in one way or another shape strength of character, give them responsibilities, and help them develop a deep sense of belonging to the school.  School leaders will work out how best to do this in their own schools  - how best to bring together classroom practices, CCAs and the informal curriculum to create a whole-school environment that builds character in every student.

Making CME More Relevant and Engaging

54.        Within this whole-school approach, schools should also relook at what we do with the dedicated curriculum time that we provide through the CME syllabus.

55.        Several schools are doing so.   Again, an example, in Riverside Secondary School.  Their team of teachers got together and thought how best to integrate Character Development into their CME lessons, and do it in a way that students find engaging. They decided that it would be useful to create a platform for their students to speak openly about the issues they face – such as the physical and emotional changes they go through as adolescents.

56.        Let's listen to Mr Mohd Sani, a Senior Teacher, share with us what goes on at Riverside Secondary:

*(Start of video clip)*
**Mr Mohd Sani, Senior Teacher***: "We realized that the issues that our students face today as teenagers are complex and we needed to bring these issues out to the fore and discuss it openly with our students.*

*The character development package needed to be relevant to our students, to the realities they encountered on the media, their neighbourhood and their peers.  We felt also that it was important to build their sense of self efficacy and self-esteem.*

*Our teachers got together, took elements from the CME and Lifeskills package and designed our own customized approach to Character Development.*

*We see today, students who are more confident, able to work in teams and are prepared to assume positions of leadership."*

**Li Jun Yang: "***The lessons really engaged me.   It boosted my SELF ESTEEM and taught me to stand up after I fall and I always tell myself, 'just take it!'  If I do well, I will strive on whereas if I don't do so well, I turn it into a learning opportunity to succeed."        (End of video clip)*

Social-Emotional Learning

57.        MOE has reviewed the CME syllabus to make it more flexible for teachers, and to make CME more relevant and applicable for our students.

58.	Besides teaching the right values, the new CME syllabus will give attention to the learning of social emotional skills like managing your emotions, making responsible decisions, establishing positive relationships, and handling challenging situations.   These social-emotional skills are important, to help students live out their values through the ups and downs of life.

59.	We have developed a framework for social emotional learning that will be integratedwithin the revised CME syllabus, which will be ready in 2007.   However schools can take greater ownership of CME from next year, to adapt it to their students' needs the way Riverside has done.

## Flexibility and Choice for All Students

60.	We are bringing further diversity into our mainstream secondary school landscape.   We are encouraging more schools to offer new subjects and electives that are educationally meaningful, and which give their students choices beyond the core academic subjects that are essential to a good secondary level education.   Some of these new subjects will be of an academic nature, but others could be applied or practice-oriented.   Either way, they help us unlock different talents in our young.   They also allow more students to work hard at what they enjoy and have a passion for.

## Schools Offering New 'O' Level Subjects

61.	I spoke last year about MOE allowing some schools to offer new 'O' level subjects apart from the regular menu.   For a start, schools have been allowed to choose subjects offered by the Cambridge International Examinations.

62.	I am glad that 12 secondary schools1[1]will be offering 3 new GCE & IGCSE 'O' level subjects   -  Computer Studies, Drama and Economics - from 2006. Several of these schools already have well-developed programmes in these subject areas, and offering the new subject as an examinable subject at the 'O' levels was the natural progression.

63.	St Anthony's Canossian Secondary, for example, already has a Performing Arts Education Programme for all students in the first two years of their secondary schooling.   Drama was initially conceived a few years ago as an inter-disciplinary programme which merged the Oral aspect of Language learning with the Play component in the study of Literature.  Since 2003, the school has taught Drama as a subject with a structured curriculum within school hours.   With the experience built up and interest generated amongst its students and parents, it was therefore natural for St Anthony's Canossian to now offer Drama as an 'O' Level subject to its students.

64.	To help us visualise what the programme will look like in the school, I've also asked them for a video clip:

*(Start of video clip)*
**Kang Chee Hui, Teacher:***"The drama programme in our school started in 2000 as an effort to make literature accessible to all our students at the lower secondary levels. We have seen that drama has inculcated the spirit of creativity and exploration in our students as well as develop their confidence and interest in the performing arts.*

*Over the years we have received overwhelming response for the subject to be extended to the upper sec levels.*

*So we are really glad that we are now able to offer drama as an O-level subject to our students who would like to pursue it further."*

**Yeo Jia Le Gladys:** *"I enjoy drama because it is a subject that I can be creative and imaginative in. I can be whoever I want to be. Drama gives me a boost in confidence and self-esteem. I feel part of my self when I'm on stage and of course, the role that I'm playing. Taking drama as 'O' level subject gives me more window of opportunities and prompts more to both pathway for my academic life and beyond."* *(End of video clip)*

65. Over time, I expect several more schools to want to offer additional subjects, allowing them to develop niches that give our students greater choice, and that mark them out on the school landscape.

**Update on New N(T) Curriculum**

66. Another area of curriculum innovation is the new N(T) curriculum that we will be rolling out from 2007. It will be more meaningful and relevant to students' everyday lives. It will include more group work and presentations, more creativity, more hands-on activities and use of IT, which will make learning more engaging for our N(T) students – what we call "active learning in a realistic context." The new curriculum will also have less pen-and-paper tests for N(T) students, and more authentic assessments through individual and team coursework.

67. By 2007, all schools will start using the new N(T) curriculum in the core subjects. Another important element of the new N(T) curriculum will be its Elective Modules (or EMs). While MOE revamps the current N(T) syllabuses to make them more relevant to our students, the EMsallow schools to tailor their curriculum to meet the needs of their students.

68. I am glad that many schools have already come on board to offer interesting modules to their N(T) students. [Currently, 39 schools have implemented a total of 85 EMs involving 2430 N(T) students.]

69. Feedback from schools has been positive. Students say that they find greater engagement and enjoyment in learning with the more practical and hands-on approaches in the EM. They also develop deeper understanding of the concepts they learn and are able to learn more independently. Finally, the EMsare a practical way to whet the students' appetite in various courses at ITE and other post-secondary institutions, and gain an insight into related industries.

70. Let us take a look at how one school, Chai Chee Secondary, has taken advantage of EMsto widen the range of learning opportunities its students are exposed to:

*(Start of video clip)*
**Mdm Lim Moi Yin, Teacher & Career Guidance Counsellor:** *"When we heard we could offer the Elective Modules for NT students, we contacted ITE personnel for discussion immediately.*

*We felt that a more practice oriented course would be useful to NT students as it would expose them to a variety of learning opportunities, to stretch students' potential, to make lessons more meaningful for them by allowing them to have more hands on activities and at the same time to discover and identify their skills and abilities.*

*Through this programme, students can see the purposefulness and practicality of skills learnt now and be able to link them to their future ITE courses. We intend to run this programme for coming years, looking into areas like tourism and enterprise."*

**Muhammad Khairul Ezzad bin Annis: "***The different teaching methods in the course like group work and discussion have given me the opportunity to develop my social & communication skills. I have learnt new skills which I can apply in my daily life, like connecting a plug and understanding the dangers of electricity." (End of vide clip)*

71.        Many more schools have indicated their desire to introduce EMsfor their students.   We will support their efforts to do so.

**Greater Flexibility in the Normal(academic) Course**

Extending Elective Modules to N(A) Students

72.        Previously, we had restricted the EMs to the N(T) curriculum.  Principals have since asked that we consider opening up the EMsto N(A) students as well.   Many of our N(A) students do learn better with a more practical and hands-on approach.

73.        We will therefore open the EMs up to N(A) students from 2006.   Schools can introduce EMsof varying depth and difficulty, to suitably challenge and engage their students.   Students should therefore be exposed to a wide variety of courses in our polytechnics and ITE.

Allowing Selected N(A) Students to Bypass 'N' Levels

74.        Starting from next year, secondary 3 N(A) students will also be allowed to offer 2 subjects from an expanded range of 'O' level subjects at Sec 4, together with students in the Express course.   We will build on this flexibility.

75.        During focus group discussions with Principals about how we can do more to maximise the potential of this group of students, one of the issues that kept coming up was the possibility of allowing some of them to skip the 'N' level examinations in Sec 4 altogether so that they can get on track earlier for their Sec 5 'O' level curriculum.

76.        Currently, about 70% to 80% of the 10,000 N(A) students in each cohort do well enough at the 'N' level examinations to proceed to Secondary 5 for the 'O' levels. Not all do well at the 'O' levels.   But about 40% of N(A) students obtain at least five 'O' level passes.

77.        It would be educationally meaningful for some of these N(A) students, whom schools are able to identify as being likely to progress to Secondary 5 and obtain at least five 'O' level passes, to skip the 'N' Levels.  The time freed up from preparing and sitting for the 'N' level examinations can then be used to provide a more seamless transition between the 'N' and 'O' level curriculum, and pace their learning better over 5 years.  Schools can also use the time to engage students in enrichment activities and broader learning experiences.

78.　　　　We will give schools the <u>flexibility to select students at the end of Sec 2 or Sec 3, based on their school-based performance, who will be well served by skipping the 'N' levels enroute to Sec 5</u>.  Each school has a different profile of N(A) students so MOE will give them the flexibility to select this group of students.

79.　　　　Schools that are ready can select students from 2006.  The first batch of selected students will therefore bypass the 'N' level examinations in 2007.

80.　　　　The 'N' level examinations will however continue to be an important benchmark examination for the majority of N(A) students, who will benefit from preparing for it.   It will also provide them greater flexibility of choice in terms of progression.

**Study Feasibility of Niche Programmes in Schools that Link Up with Polytechnics**

81.　　　　Our secondary school curriculum is broad-based, and educationally sound for the majority of students.   Every student should continue to take a core content-based curriculum that includes maths, science, the languages and the humanities.   However, we should explore if we can offer variations besides the core curriculum, that caters to the interests and aspirations of students who are keen to progress on a more applied and practice-oriented path of education.   Some of these students will flow naturally into the polytechnics, while others will put their applied knowledge to good use in university.

82.　　　　We need to <u>accept that students have different learning styles, and different motivations in learning</u>.   Some will flourish in an academic or logic-driven environment with rigorous pen-and-paper type of assessments.   Others will learn better in a more open-ended project-based environment that allows them to create things, and not always strictly by the book.   Yet others will learn best by doing a combination of the two.

83.　　　　We will study two areas of possible changes to enhance the secondary school landscape.

<u>More Applied and Practice-Oriented Subjects Through Poly Links</u>

84.　　　　One area is to study how selected schools can work with polytechnics to <u>offer relevant applied and practice-oriented subjects and electives within</u> the secondary school curriculum.

85.　　　　In our visits to schools in Europe and Japan we see a tradition of students, including those who are very bright academically, doing things with their hands.   For example, when I visited the Tokyo Tech High School of Science and Technology this year - which gathers top students with a passion for maths and science from all over Japan   - I found students in overalls, working in a laboratory that resembled a factory floor.   They spoke excitedly about their interests in what they were doing, and the objects they were creating with their hands.

86.　　　　Students in the school are required to take an applied module in their upper grades, which included options like "electrical and electronic systems" and "mechanical systems".   A teacher in the school told me that its strategy was to leverage on technology to make the learning of maths and science relevant.   It developed an early fascination with the way things work, and with the world of engineering.

87.      We will study if there is room for secondary school curriculum offerings that are of the applied and practice-oriented nature, besides what we offer in our N(T) course.   One subject that is already in our school system is Design and Technology (or D&T).   We will explore if a few more such options should be offered by selected schools, in collaboration with the polytechnics.

88.      Some schools and polytechnics are already taking a first step in doing this. At Bishan Park Secondary School, for example, Secondary 3 students have been attending short electives in Nanyang Polytechnic on multi-media.   They go to the polytechnic once a week for five weeks; and work with the polytechnic lecturers to develop a multi-media learning package on a subject such as geography.   The final product is then uploaded into the school's intranet to be used by all students.

89.      The students gain because they learn multi-media in an authentic setting. They also gain a better sense of where their interests lie, besides what they find in their regular curriculum.   We will explore the scope for more such collaboration between schools and polytechnics.

Direct Polytechnic Admission for Selected Students

90.      Further, we will study if selected schools could establish links with the polytechnics so that capable and interested students can be offered places at the polytechnics after their lower secondary years.   These students can gain admission to the polytechnics after completing secondary school without having to sit for the 'O' level examinations.

91.      If feasible, this will free up time and space for these students to engage in broader learning experiences during their secondary school years, that will prepare them well for further education in the polytechnics, and possibly the universities.

92.      Mr Gan Kim Yong, who will be appointed Minister of State for Education from 1 Oct 2005, will chair a Review Committee comprising principals from schools and polytechnics, and MOE officials, to study the feasibility and details of this new pathway in education.   The Committee will hope to complete its work in 4 months.

**Joint Polytechnic Special Admission Exercise (JPSAE)**

93.      Finally, we will give the Polytechnics more flexibility in how they select students.   In the past two years, we have been giving our schools and universities greater flexibility in their admission of pupils, to allow a more diverse range of pupil achievements and talents to be recognised.

94.      This year, under the Direct School Admission  –  Secondary Exercise (DSA-Sec), 43 secondary schools will select some of their 2006 Sec 1 students earlier using criteria other than the PSLE results.   Similarly, we have also given our universities the leeway to admit up to 10% of their intake based on their own criteria.

95.      We will extend this flexibility to our polytechnics from 2006 under the new Joint Polytechnic Special Admission Exercise (or JPSAE).   Initially, the polytechnics will be able to admit up to 5% of their annual intake of students based on their special talents and aptitude, rather than purely on their GCE O-level results.

96.      The polytechnics will each set their own, independent criteria for the JPSAE.   Such criteria can include students who demonstrate a strong aptitude either

through work attachments, sustained involvement in course-related areas, or outstanding performance in projects or competitions; as well as students with outstanding achievements in leadership, community service, entrepreneurship, sports, or artistic and creative areas. The polytechnics would have the discretion to look at students' portfolios and to interview them, among other modes of assessment. They will set their own criteria to ensure that only students who are able to cope with the rigours of a diploma education are admitted under the JPSAE.

**Focusing on What We Cannot Measure**

97.        I have spoken in today's Workplan Seminar about the two key thrusts we have embarked on - <u>providing greater support for our teachers and leaders</u> in schools, and <u>providing more flexibility and choice for all our learners</u>.

98.        We will implement this by providing top down support for bottom up initiatives from schools. It is how we will achieve quality improvements in education as we go forward. Schools will know best what makes sense for their students, how to customise their curricula, and what choices and niches they can offer.

99.        But at the core of quality in education, are the things we cannot easily measure. Teachers and school leaders will have to touch the hearts of their students, and engage their minds. This is what we all know gives the real quality that shows up many years later, well after we have measured what we can in our schools.

100.       You know what I mean. The real satisfaction in education comes not from producing that bumper crop of A1 students, but when students who have graduated come back years later to schools to show their appreciation to the teachers that have affected their lives beyond just the grades.

101.       And as a nation, we will only be able to say that we have succeeded in educating our young when we see a whole generation of students pursuing their dreams with passion, seized with a joy for life and a desire to shape a better society.

102.       I do not have all the answers that are needed in education. Neither does MOE. Our schools have to think for themselves, and work collectively so that we nurture young Singaporeans who will ride the changes that will come into their lives in a more globalised world, and together create a bright future for Singapore.

103.       Our school leaders must be brave and committed to do the right things for their schools and students. You have my full support and MOE's full support. I am absolutely confident that you are up to this challenge in our next phase of education.

---

2[1]Anderson Secondary, CHIJ (Toa Payoh), Katong Convent, Pierce Secondary, St Margaret's Secondary, St Anthony's Canossian Secondary, and Tanjong Katong Girls' School will be offering Drama. Commonwealth Secondary, Tanjong Katong Girls' School and Westwood Secondary will be offering Economics. And Boon Lay Secondary, Serangoon Secondary and Springfield Secondary will be offering Computer Studies.
http://www.moe.gov.sg/speeches/2005/sp20050922.htm
Accessed on 23 Sep 05