

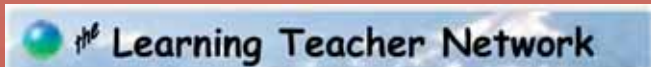
A Vision of European Teaching and Learning

PERSPECTIVES ON THE NEW ROLE OF THE TEACHER

This book is the third volume in *The Learning Teacher Network* trilogy on the new role of the teacher. Together with the two previous volumes, 'Towards the Teacher as a Learner' (2004) and 'Learning for the Future' (2005), the three publications are to be viewed as a whole. Independently but coherently the publications survey conditions, components and approaches to learning and the new role of the teacher; thereby they also reveal ingredients of essential continuous professional development. What is becoming clear is that professional performance ultimately depends on the quality of the learning that takes place within its context.

The transformation of education and training in Europe is a process, where all educational players are required to contribute with their own expertise and competences. School development derives from professionals in education and training, but must be properly supported by changes in curricula and policies on all levels. A holistic view on education, agreement and common understanding of the way forward are imperative keys to success.

This volume includes the five dimensions of a conceptual framework on the new role of the teacher, together with the supporting domains and definitions, as have been explored and identified by *The Learning Teacher Network*. Furthermore, the network also puts forward ten recommendations to professionals in the European educational community and for critical European initiatives.



A Vision of European Teaching and Learning

Magnus Persson (ed.)

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- PERSPECTIVES ON THE NEW ROLE OF THE TEACHER**



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Magnus Persson (Ed.)
A Vision of European Teaching and Learning
- Perspectives on the new role of the teacher

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PREFACE

A trilogy of publications

This publication is the third of a trilogy of publications reflecting the thematic discussions on learning and on professional competence of teachers and leaders in education. Analogous to the previous publications '*Towards the Teacher as a Learner*' (2004) and '*Learning for the Future*' (2005), this publication contains contributions on different aspects of the new role of the teacher in Europe. Seen as a whole, the trilogy highlights essential elements of practice and theory within a conceptual framework with dimensions vital for the teacher in the future.

This publication is one of the outcomes of the third year of *The Learning Teacher Network* on the new role of the teacher. Working within the framework of the European Union SOCRATES Programme, *The Learning Teacher Network* comprises 26 partner institutions and is joined by 70 non-contractual member institutions, in total representing 21 European countries.

The publication is a reflection of the issues raised during the third year of the network and presented at the third international conference in Ljubljana, Slovenia from May 18th - 20th, 2006. With more than 170 conference delegates from 18 countries participating and actively discussing at sessions, workshops, round tables and during breaks, this conference was another important event in promoting the thematic debate on a European level. In addition, all three conferences have been highly valuable European learning and contact events.

Originating from the network discussions and findings during three years, the publication also includes a conceptual framework on the new role of the teacher as identified by the network. In the book the framework is expressed and shown as five dimensions and the definitions of the core domains within each dimension.

Furthermore, the network delivers and presents ten recommendations to the educational community on the new role of the teacher. Six of the recommendations concern all educationalists and practitioners in Europe. Four recommendations are solid proposals for immediate action by European policy and decision-makers. These ten recommendations represent core elements which we propose to be permeating education - necessary for future teaching and learning, essential for ensuring professional behaviours and vital as key aspects to carry educational change. Consequently, we trust that the network recommendations will be included in educational approaches and actions.

Providing for venues of learning as well as for the exchange of knowledge and experience can be seen as a core philosophy of *The Learning Teacher Network* and hopefully the reader of this publication will find this book to be a valuable contribution to knowledge and learning.

Words of thanks

As the coordinator of the network I would like to express my deep appreciation of the partners and contributors who have shown strong commitment and devoted much time to develop the thematic issues. They have shared and generously contributed, not only to the content of the third conference and to this publication, but to the thematic network discussions in general.

Special thanks go to our colleagues at the East Sussex County Council's Language and Learning Support Service, UK, for the rigorous work of proof reading articles for this publication, thereby ensuring a good product in the sense of correct English language.

I would also like to thank the partners who organised the two network meetings held this academic year which took place in Leeuwarden, the Netherlands in October 2005 and in Ljubljana, Slovenia in May 2006. By these thriving meetings the network has had excellent venues for discussions, progression and developing the thematic area of the network.

Finally, a word of thanks to the European Commission, without whose financial and moral support *The Learning Teacher Network* would not be able to operate as a European platform for professional debate and thematic development.

The Learning Teacher Network

In October 2006 *The Learning Teacher Network* ends the period of community funding and will enter a new phase. Even though no longer funded by the European Commission, the network will continue as a European network.

The Learning Teacher Network™ will become an independent international network association which unites professionals in the ambition of creating front-line strategies for, and approaches to, teaching and learning. As such, the network will act as a European platform for professional debate in the vanguard of educational progress.

The objective of the network will be to foster the advancement and exploitation of teaching and learning for the benefit of education and thereby society, through

- Providing an international forum of professionals embracing an holistic view of education and concerned with professional development in both education and training
- Organising international events, such as conferences, training courses, symposia, seminars and meetings, to ensure the dissemination of new or pertinent knowledge in the thematic field

- Supporting, developing and promoting good professional development practice, international exchanges, the creation of new networks and projects, and the thematic interaction between educational players
- Gathering and disseminating information on all aspects of front-line policies, teaching and learning in education and training
- Offering consultancy and advice on the development of policy and practice.

Practitioners, schools and other educational institutions may find more information about the network on the website www.learningteacher.org

INTRODUCTION

What it is all about

This volume is the third of a trilogy of publications on the new role of the teacher. The trilogy is to be viewed as a whole, where the complete range of articles illustrates core elements of - and approaches to - practice, training and theory that are imperative for future professionals in education. This third volume contains a series of papers that mirror the thematic network discussions and to the issues raised at the third international conference (Ljubljana, Slovenia on May 18-20, 2006) of *The Learning Teacher Network*, an educational Comenius 3 network on the new role of the teacher.

If professionals in education are to prepare an even more diverse group of learners for much more challenging work they will need substantially more/new knowledge and radically different lifelong skills than most now have. The overall aim of the network for the now closing three year period has been to conceptualise a European dimension framework, to pin down and extract key factors in professional teaching and learning that will meet the demands of the future, and define qualities and competences that will be needed by professional teachers in Europe in order to perform in a changing society.

The network has carried out a successful sequence of three international conferences, three publications, and a conceptual framework with dimensions of the new role of the teacher, recommendations to the European educational community, and on-going network activities in themselves. Hereby, the network believes it has made a significant contribution to professional understanding, to school and training practice, to visions and changes of action, and to decision-making in this thematic field. By having done so, the network has also intended to contribute to the designation of schools as professional learning communities, thus revealing the required and desired environment for teaching and learning.

It would be presumptuous to assume that one single network would achieve a rapid transformation of teaching and learning patterns in the whole educational community. However, by providing European venues for professional debate the network functions as a significant communication platform, enabling stakeholders to meet, share and reflect on colleagues' expertise and findings, and to create new mindsets that transform into action. By doing so, the network becomes a source for new knowledge, understanding, inspiration and dissemination.

Thereby the network promotes and embeds the European dimension in education and brings added value to the discussions and actions between a rapidly growing

number of European professionals and educational communities. During three years of existence we have encountered a swiftly increasing interest from all over Europe in joining these negotiations, adding to the thematic debate amongst practitioners and policy-makers which in turn and over time will impact on the educational community agenda.

The New Role of the Teacher

Within Europe a range of influential players is addressing and identifying elements and schemes of strategic importance to accelerate the transformation of education in order to accomplish the European Union's Lisbon objectives. Future teacher qualifications and competences is one key area for debate and policy, where answers and new requirements will have implications for - and will impact upon - strategies for recruitment, teacher and leadership training and revision of existing educational targets and performance.

The answers to the questions in the thematic area of the new role of the teacher are complex; not only presenting and advocating but also problem solving and raising questions have been seen as important to the structure of the publications. The trilogy of publications does not intend to give once and for all final answers, as there is no such phenomenon in a world of processes. Instead, this book and the previous volumes carry the core philosophy of building understanding and competence, providing new knowledge, stimulating small scale research and solution finding, supporting current action and progression based on the needs of schools or training institutions themselves, enhancing professional reflection on practice, training or policies, and contributing to the process of forming high quality education for the future.

In this third volume, like the two preceding books, a range of aspects of major significance to the new role of the teacher is illustrated and discussed. Each of the three publications adds, depicts and describes new components from a detailed, holistic perspective; the entire content of the trilogy tries to reveal and answer clearly about the role of the future teacher and head teacher.

As a conclusion of investigation, discussion and clarification, and expressed as a conceptual framework, The Learning Teacher Network has identified the focal points of the new role of the teacher to be

- the implementation of key competences for lifelong learning
- the assurance of professional competence
- the understanding of learning processes
- the creating of professional learning communities, and
- the ensuring of values, forming a vision and responding to a mission.

How the book is structured

The book is composed of a variety of contributions, from theory and academic papers to practice, school related projects and accounts of practitioners' experiences. The papers are written by authors from ten European countries. Bringing into existence the European perspective, each author is driven by the true commitment and engagement for educational improvement, no matter what

professional role in education, jointly sharing the vision of proper and competent education that meets the present and future needs of the learners. By contributions from researchers, trainers and practitioners a wide range of perspectives is present, thereby contributing to a wide view on the thematic issues.

Regarding the structure of the book, the papers are deliberately mixed as to authors, professions and countries, as the targeted issues are interlinked regardless of work perspective, theory or practice, or national origin. For the same reason, this publication has not been divided into sections given the fact that the highlighted issues of learning, professional competence and development, research and school development projects, training and support mechanisms are all aspects on the new roles of the teacher and the head teacher, and these coherent ingredients are well interconnected.

In chapter 1 Magnus Persson portrays the network's findings and conclusions on the new role of the teacher, displayed as five dimensions of a conceptual framework and ten network recommendations to the educational community in Europe. The defined areas within each dimension and their corresponding definitions are presented in chapter 2. In chapter 3 the ten network recommendations are published in full.

From the perspective of a European Commission expert group's current investigations of European principles for the competences and qualifications of teachers, in chapter 4 Prof. Pavel Zgaga introduces the discussion on the requirement of teaching to be a graduate profession. In chapter 5 Dr. Linda Devlin recognises the potential of professional learning communities, in which is encompassed learning about leadership, research processes and the collaborative practice that motivates and drives the learning teacher. Advocating the importance of teachers' learning about learning and the production of knowledge, in chapter 6 Prof. Mats Ekholm draws attention to research on the process of innovation, the phases and strategies for school development, and the organisation and use of time for teacher development.

In chapter 7 Michaela Pišová and Pavel Brebera discuss an attempt to promote and assess the level of professional competence in teacher trainees, thereby also arguing for a definition of the concept of professional competence. In chapter 8 Bill Goddard states that trust, respect and fun are at the heart of educational activity; words not commonly seen in official documents related to the role of the teacher, but as an expression of interpersonal skills being essential components of the future learning process.

In chapter 9 Alfredo Gomes Dias displays thirteen doors to a European citizenship education, reflecting on the role of education towards the building of the European citizenship. Arguments for internationalism in education are highlighted by Dr. Mary Stiasny in chapter 10, emphasizing the importance of creating international understanding for a more inclusive world.

Starting with chapter 11, a set of papers address issues related to teachers' values and belief systems. Presenting experiences from the Comenius 2.1 APT Project, Bernd Hainmüller stresses the importance of values clarity in dealing with diversity in today's classroom. New teachers should be provided with tools that create a better understanding of their own personal motivations entering the profession, in addition to a thorough reflection on one's own personal belief system. In chapter 12 Gyöngyi Fábíán investigates the application of a technique called modified metaphor analysis for exploring teachers' beliefs, where the results suggest that the technique might serve as a way of identifying fundamental belief systems of teachers and promoting awareness of their professional self.

Chapter 13 highlights the hidden curriculum, where Katja Zalar argues that the interpersonal relations between the child and the teacher, and the personal qualities of an individual teacher, determine the success of reaching informal goals and are shown to be crucial for a positive orientation towards ethical and moral values. In chapter 14 Zuzana Strejcková, Marketa Melicharová and Helena Babaková explain a school programme for building good relationships, arguing that conscious attention and strategies for developing interpersonal, intercultural and social competences improve the learning environment and thus learning. In chapter 15 Linnar Holgersson and Gunvor Sand Edwall describe gender equality work in an upper secondary school with the aim of raising the level of awareness. The issue of gender equality is further discussed in the following chapter 16, where Eva W Hallonsten exemplifies this with a project that challenges experiences, beliefs and attitudes.

Three papers contribute with hands-on practice and successful learning experiences. Arguing that motivation is essential for learning, in chapter 17 Marjeta Zabukovec presents a school-based research project showing that learners, who are allowed to make mistakes and to use their own strategies to correct them, obtain more permanent knowledge. In chapter 18 John Greenacre and Bill Goddard report on a cross-curricular, action research project designed for teaching with learning and understanding, using astronomy as the learning base for staff and learners. In chapter 19 Charlie Russell and Frances Bradford focus on the life of struggling readers and present steps taken to ensure effective teaching of reading.

In chapter 20 Francia Kinchington and Bill Goddard examine the role of the future teacher as a creator of knowledge and how teachers can challenge current competence models to identify the pre-requisites and training needed for effective educators in the 21st century.

Dr. Tony Hayes and Francia Kinchington depict in chapter 21 the fundamental matter of developing from novice to expert practitioner and present strategies for aspiring head teachers such as the use of Critical Incidents supporting reflective practice.

In chapter 22 Nevenka Lamut argues that conversation with mastery in forming questions is underestimated as an important tool for learning, where the use of an

all inclusive question-making strategy for communication results in a change of teacher's behaviour and enables learners to more successfully develop thinking and understanding.

The following six chapters take in hand the importance of including and impacting information and communication technology in education with the aim to facilitate learning. Chapter 23, written by Keith W. Good, describes a starting point approach to design and technology by highlighting a study that shows good results with children in stimulating increased creativity and innovative thinking. In chapter 24 Fernando Albuquerque Costa and Sofia Viseu elaborate on a work model for teacher training, which could respond to the double challenge of helping teachers to construct a personal vision of the potential of technologies in the learning processes and to contribute effectively to the change of teachers' attitudes towards technologies.

In chapter 25 Simon Walker and Malcolm Ryan explore the transformation of learning through the appropriate use of technology and discuss the relationships of learning styles, context and teachers' skills and roles to the adoption and exploitation of a range of e-learning approaches. Research which investigates the benefits using a computer based learning improvement programme in order to support the learning counselling processes is presented by Mária Dávid, Magdolna Varga Estefán, Lajos Kis-Tóth, Dolli Budaházy-Mester, Tünde Taskó and Krisztina Szöke in chapter 26.

In chapter 27 Birgitta Andersson, Christina Johansson, Michael Kisberg, Lars Engström, Caroline Säfström and Irene Andersson outline a school project called 'The technology line', which provides to learners an unbroken line of learning of technology from pre-school to the end of compulsory schooling. As a practical example of young learners working with movie scripts and animations with support of computers, in chapter 28 Tomaz Murn, Sónia Henriques Pisa and Nevenka Lamut show practical suggestions of how to use software to create animations, and the experiences from an initiative of organising annual festivals.

Opening a discussion about evaluation and self-evaluation within the new role of the teacher, in chapter 29 Jana Kaziková and Prof. Karel Rýdl argue that the critical point is for the teacher to formulate and create the relevant questions. In the next chapter 30, Ferdinand Patscheider and Sonja Hartner give a concrete example of the development of a quality assurance system in South Tyrol, where schools now also are obliged to plan and carry out self-evaluation projects,

With the focus on developing and ensuring professional competence, and with reference to national perspectives, four papers consider teacher training, professional development and teachers' professional roles. In chapter 31 Dr. Beata Dyrda and Dr. Irena Przybylska highlight the variety of concepts concerning teachers' professional education and growth and outline the most recent tendencies in pedeutology, in particular focusing on the models of teacher education in Poland. Displaying the educational context of teacher training in Greece, in chapter 32 Michael Kamoudis addresses the major pedagogical

challenges and the issue of European policy, arguing the need to re-shape concepts and structures of teaching and training, turn the European discussion into action and ensure the development of new, cross-national practices. In chapter 33 Iwan Davies, Francia Kinchington and Dr. Tony Hayes attend to the issue of teacher workload and examine the process of workforce reform in England, exploring its development and implications for a primary school and a Local Authority. This sequence of papers ends with chapter 34, where Jaroslav Richter gives an account of a range of in-service training activities that contribute to the new role of the teacher in the Czech Republic.

The final chapter of the volume contains summaries from the four round table discussions at the Ljubljana conference on the key issues of research competence, a collaborative learning environment, new professional behaviours to master, and the transfer of learning (chapter 35).

Magnus Persson
The Learning Teacher Network Coordinator

1

Dimensions and Recommendations on the New Role of the Teacher

Magnus Persson

Abstract

During three years The Learning Teacher Network has made a thematic journey from investigating the *teacher as a learner* to defining the *learning teacher*, and further on to identifying core elements of *the teacher as a learner* him- or herself. At this stage the network discloses its findings on the characteristics of being a teacher and school leader in Europe, as well as the future competences required and the learning environment that must be implemented in all educational settings. This article targets the European setting, explains issues related to the new role of the teacher including the network's conceptual framework, and presents ten network recommendations to the educational community and for European action and initiatives.

European Action

Europe is united in the Lisbon Declaration from the year 2000. The declaration defines the strategic goal for the European Union to become by 2010 the most competitive and dynamic knowledge-based economy in the world. Within this, attention is to be paid to three aspects of life: the cultural, the social and the human capital. Using this term 'knowledge-based' directly involves and challenges education in Europe as the key player in such a process. But not only so; the target also urges for a transformation of education. To achieve the

objective, Europe's education and training systems need to adapt to the demands of the knowledge society.

In 2002 the Barcelona European Council adopted a detailed work programme for achieving by 2010 three strategic objectives and thirteen associated objectives. Following the adoption of the programme, the Commission established expert groups to work on one or more of the thirteen objective areas. The task is to identify common European principles on objective areas such as key competences for lifelong learning, teacher competences and qualifications, and much more.

The third generation of European educational programmes will be launched next year, covering the period of 2007-2013. These programmes are intended to support the process of including schools, training and other educational institutions in a European perspective and a common path forward – and as a vital step to achieve the Lisbon objectives. Within the overall title 'Education and Training 2010' four new generations of programmes have been prepared. The outstanding programme of the four will be the multi-billion euro programme 'An Integrated Action Programme in Lifelong Learning'. This programme will in turn comprise four sectoral programmes: Comenius, Erasmus, Leonardo da Vinci and Grundtvig. Within this initiative a number of quantified and ambitious targets have been defined. During the programme period at least one pupil in 20 in the Union will take part in Comenius; Europe will reach the target of 3 million Erasmus students by 2011; and by 2013 there should have been 150, 000 placements in companies each year under Leonardo da Vinci and 25, 000 adults each year benefiting from training/mobility under Grundtvig.

Influencing the New Role of the Teacher

There are five obvious key phenomena that underlie and influence actions for change when intending to reform education in Europe, and when addressing the need for new behaviours and approaches with professionals and policy-makers.

Let us keep in mind that 1.2 million teachers in Europe, active at work today, will be retired by 2012. This will result in a drain of professional experience, a substantially lowered average age of teachers in Europe, and of course showing a massive need for recruiting new teachers.

At the same time education is undergoing rapid change due to new technology and means of information and communication, new learning approaches and research, and an expectation of education that differs from before. We will have to accept and pro-actively adjust to the continuous change to and within the knowledge society.

What is becoming clearer by the day is that professional performance ultimately depends on the quality of the learning that takes place within its context: student learning in the first place, but also teacher learning and institutional learning. With respect to - and with a deeper understanding of - the core importance of focusing on the learning processes, the concept of learning replacing the one of teaching is a clear and indispensable shift of paradigm.

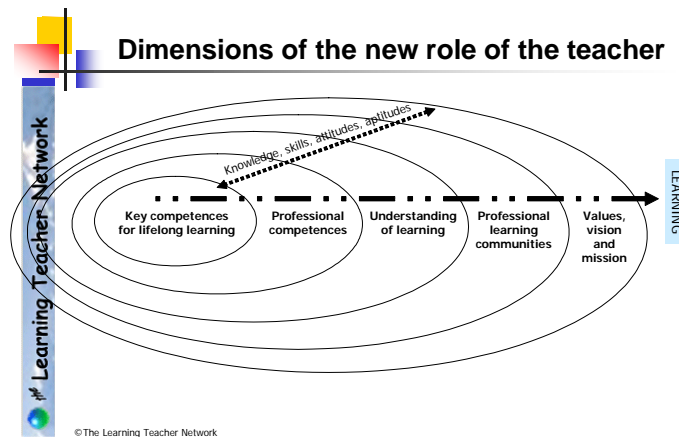
Education is a part of lifelong learning. The individual's learning is to be regarded as a lifelong project, which takes place not only in formal educational contexts, but also in all human activity. People learn throughout their lives, from the cradle to the grave, and they learn from all aspects of life. This requires a new educational perspective. At the same time lifelong learning can neither be implemented from above nor be controlled. The starting point must be the individual and an appreciation that different people have different needs, which vary over time. At each stage of time in an individual's life span, there should be appropriate educational opportunities

Finally, it goes without saying that the main issue in education is to identify characteristics of high quality performance, which is to be transformed into professional competences of teachers and leaders.

Five Dimensions of the New Role of the Teacher

Living in the information society creates a demand for flexibility and open-minded approaches to solutions, hence forcing education to provide for elements of lifelong skills. If teachers are to prepare an even more diverse group of learners for much more challenging work – for framing problems; investigating, integrating and synthesizing information; creating new solutions; learning on their own; and working co-operatively – they will need substantially more/new knowledge and radically different skills than most now have.

The Learning Teacher Network has framed five dimensions of the new role of the teacher, where each one contains a number of particular domains. Each dimension brings an additional facet to - or features of - the role of the teacher, and contributes to a holistic view on professional competence. As the five key areas for success, the framework points out the implementation of key competences in lifelong learning, the assuring of professional competence, the understanding of learning processes, the creating of professional learning communities, and the ensuring of values, the forming of vision, and the responding to mission.



Starting with the inner circle, each subsequent dimension represents an extended and crucial area for accomplishment, for competence building, for professional growth, and for optimal performance. As an underlying principle, the lifelong development of expertise and competent performance is the core issue to an educator.

The implementation of key competences for lifelong learning

The first dimension relates to basic skills, which is no longer the term to be used in Europe. Instead, the term 'key competences' is introduced and expected to be adopted on national levels as well. The terms 'competence' and 'key competence' are preferred to 'basic skills', which has been considered to be too restrictive as it was generally taken to refer to basic literacy and numeracy and to what is known as 'survival' or 'life' skills. The term 'competence' is considered to refer to a combination of skills, knowledge, aptitudes and attitudes, and to include the disposition to learn in addition to know-how.

This dimension, which is called 'Key competences for lifelong learning', is developed by the Commission's expert group for key competences. These eight areas are not specifically referring to teachers' skills or professional skills, but areas that are fundamental to all citizens. They should be key competences to be developed through education. They should be applied across the full range of education and training contexts throughout lifelong learning: general compulsory education, adult education and training, specific educational provisions for groups at risk of social exclusion, and educational provision for pupils with special educational needs. Of course to be applied as appropriate to national education and training frameworks. To each of these competences are connected corresponding definitions of skills, knowledge and attitudes.

This structure is the first European-level attempt to provide a comprehensive list of the key competences for lifelong learning that are needed for personal fulfilment, social inclusion and employment in a knowledge society. Therefore The Learning Teacher Network sees the issue of key competences as the core dimension, the starting point, on which more specific professional competences should be built. We strongly advocate the immediate implementation of these principles for lifelong learning and for every citizen, throughout Europe.

The assuring of professional competence

The second dimension, like the following ones to come, have been explored and developed by The Learning Teacher Network. This dimension is built on the first one, but relates specifically with the assuring of professional competence of practitioners, trainers and educationalists. Here we focus on the individual level, showing individual professional competences required for the future.

Personal competence reflects essential qualities indispensable for respectful approaches and high quality performance in teaching and learning. Having this competence includes qualities such as open-mindedness, flexibility, self-esteem, sociability, and self-management. But competence performing also includes creative thinking, critical thinking and reasoning, the abilities to work with

diversity, to act responsibly, to take increased responsibility for one's own actions, and to create safety and trust. Crucial is also the ability to exercise leadership and to make constructive decisions with proper timing.

Interpersonal competences embrace individual skills that one must master as a professional in order to interact and to be in accord with others in professional and public contexts. Such competence interconnects the facet of collaborative communication and action with acts to encourage the positive development of others. Not only does this include communication skills, collaborative and emotional intelligence, problem-solving and coherence making. It also includes the ability to share, to motivate, to negotiate, to participate and to work in teams. A capable professional in education must also carry conflict resolution and negotiation skills, and master coaching, peering and consultation.

Needless to say to the readers, *learning competence* is fundamental. This term is an expression of a uniting set of knowledge, skills and attitudes that describe the ability to understand learning processes, to involve oneself in continuous learning within a professional culture and knowledge base, and to create, transpose and transfer knowledge.

In addition, based on the concept of 'learning-to-learn' and combined with participation in continuing professional development, grows the ability also to master the diagnosing and leading of learning.

Research competence is the ability to phrase questions and explore a matter by systematically observing, measuring and/or assessing, and concluding, in order to create new knowledge and increase learning. Given a theoretical background, the practitioner need to include school-based research as a regular part of teaching and learning, e.g. in the form of action research.

By a *holistic view* is meant the appreciation of the importance of acquiring the 'helicopter perspective'. In other words, to consciously study and re-model daily work from new angles: as seen from without, observing oneself and one's daily actions, the past and implications for the future. Or, looking at the course of events in the surrounding world, and other external factors of relevance to one's profession.

Networking and partnerships answer to the necessary change of format for collaboration; it responds to new models of alliances that correspond to global and borderless work patterns and cooperation. Working in learning communities brings reflection on one's own and others' best practice, and collaboration with a wide range of community groups and stakeholders.

The concept of *agency of change* encompasses regular adaptation to the evolving society and exacts the ability to master the change process. One is expected to show adaptability and to take appropriate action with the proper judgement, timing and means. By doing so, one is expected to consciously and professionally revise existing structures and actions towards more appropriate solutions and activities.

The understanding of learning processes

To professionals in education is crucial also to master the understanding of learning processes. Teachers who do not master this should be compared to surgeons who do not really know what happens if one cuts here or there in the body during an operation. The network's proposal for the third dimension advocates that one pre-requisite for performing as teachers and leaders should be the ability to fully address and carry out the repeated cycle of conceptualising > understanding > transferring > advancing > mentoring learning.

An individual moves from being a novice in an area toward developing competency in that area through a series of learning processes. A deeper awareness of learning processes takes into account the role of prior knowledge in learning; learning for understanding; a meta cognitive approach to learning to help learners learn to take control of their own learning. It recognises that 'useable knowledge' is connected and organised around important concepts; and that learning is an active process and takes time. Competent learners and problem solvers monitor and regulate their own processing and change their strategies as necessary.

A major goal of schooling is to prepare learners for flexible adaptation to new problems and settings. Proper teacher competence supports learners' abilities to transfer what they have learned to new, various and diverse situations, rather than only the ability to remember. And, instead of discussing the best of teaching techniques, which is analogous to asking carpenters about tools and not about the construction, the point of departure is a core set of learning principles, making the selection of teaching strategies purposeful.

The creating of professional learning communities

The network's fourth dimension of the conceptual framework addresses the concept of professional learning communities; the learning environment. This dimension extends the perspective for action. It refers to collective qualities originating from, developed and maintained by a community of professionals in education.

Moral purpose is the base of society, so also of communities. Shared vision, interwoven with shared and protected values, is fundamental, to be developed from staff's unswerving commitment to students' learning.

A learning community exists when a group of people commit themselves to continual learning and to supporting others in this. It stimulates ongoing, collective inquiry into teaching and learning, and involves everyone in highly visible learning experiences.

Collective inquiry enables team members to understand learning processes and to develop meta-cognitive abilities and skills, in other words thinking about how to think and learning how to learn. It develops the ability to integrate formal and informal learning, declarative knowledge (or knowing that) and procedural knowledge (know-how). This in turn leads to new experiences and awareness. Gradually, the heightened awareness is assimilated into fundamental shifts in

attitudes and beliefs. Ultimately, it is this joint ability to examine and modify beliefs that enables team members to view the world differently and make significant changes in the culture of the organisation.

The core element of all learning activity - and social and intellectual growth - occurs in the mutual meeting between people, where new knowledge and experience germinate. The improvement of relationships is the single factor common to every successful change initiative. Collaboration by invitation is ineffective: meaningful collaboration must be embedded into the daily life of the school. All development initiates from the individual's response to the surrounding world, and the interpersonal communication is critical. The relationships between individuals are to be caring, supported by open communication, and made possible by trust.

Sustainability expresses a conscious, assiduous, continuous and long-term process that secures achievements, and implements new approaches and knowledge. It maintains a strategy of reconciliation of continuous improvement, collegial interactivity and common objectives. It addresses how particular initiatives can be developed without compromising the development of others in the surrounding environment, now and in the future.

The ensuring of values, forming of vision, and responding to mission

The network's fifth and final dimension targets the base and the goals of education and that each and every professional also must integrate in the new role of the teacher.

Human and societal norms and values are fundamental to education. Professionals are required to actively and consciously embrace the common and democratic values of our society and express these in practical daily action. An ethical behaviour illustrates the ability to behave with understanding and respect for other human beings and for the environment. To be concrete, this includes:

- Embracing a moral purpose
- Ability to apply ethical principles
- Respect the intrinsic value of others
- Safeguard the well-being of children
- Understanding and practicing honesty, integrity, and the "golden rule"
- Understanding and respect for those not like oneself – an appreciation of diversity
- Ecological thinking with respect and care for the immediate and wider environment

Vision is defined as an articulated and shared vivid mental image of something that is not yet present but that describes a desired and optimal future situation or condition in the future, created by the formation of an envisaged and visualised depiction of where to reach by united efforts.

In the context of the new role of the teacher the mission is to be seen as the special assignment given to a person or a group, or an operation assigned to a

person or team, in order to pursue an activity, perform a service or carry out specific program objectives in a professional way. The mission represents the articulated, professional undertakings to meet objectives and expectations.

Ten Recommendations

Six recommendations to the European educational community

The Learning Teacher Network puts forward ten recommendations for European approach and initiatives. Even though not having the character of the greatest distinction as the Ten Commandments, they should be seen as important suggestions for education in Europe. Six recommendations are proposals to teachers and leaders in the educational community, and four are specifically directed to European and national policy-makers. These ten recommendations represent core elements which we propose to be permeating education; necessary for the future teaching and learning, essential for ensuring professional behaviours, and vital as key aspects to carry educational change. Consequently, we trust that the network recommendations will be included in educational approaches and actions.

Firstly, school is a small part of life, but education is forever. We recommend teachers, leaders and learners to commit to lifelong learning, not as an additional but as an integral part of education. This comprises the ability to see and demonstrate learning as a process; holistic and throughout life. Teachers and leaders must carry the responsibility to comprehensively adjust education and its expressions to interdisciplinary movements for learning for life, in order to ensure a holistic view of the world and the process of individual growth for school learners.

Secondly, we want to emphasise the conscious growth from a beginner to a master, regardless of age. A teacher can have twenty-five years of experience, or one year's experience twenty-five times. Only the first of these alternatives is acceptable. In the concept of personalised learning, teachers and leaders must carry the responsibility and desire for the allocation of time for personal learning and self development. They should improve skills and knowledge, share and communicate experiences, knowledge and findings, in order to be constantly up-to-date. They must identify strategies for learning, and to change behaviour and approaches. This is linked to the crucial ability to involve oneself in continuous and research-based development and learning. Therefore, we recommend individuals, teams, schools and all levels of education to assure professional competence by regular, built-in and compulsory continuous professional development.

Thirdly, we strongly believe that competence is built from good relations. We mean that teachers and leaders must have the ability to develop, maintain, and sustain learning through building, maintaining and sustaining trustful relationships. This is the foundation for professional competence. Teachers and leaders must include personal, civic, interpersonal, research, networking and learning competences, which all originate from good relations and sharing, in the

face to face interaction and collaboration between individuals. This is intrinsically related to the respect of and interest in others.

Fourthly, the network recommends that education ensures that teachers and leaders have the ability to fully address and carry out the cycle of conceptualising > understanding > transferring > advancing > mentoring learning. Professionals need to be obliged to understand, bring into play and communicate the learning processes. Teachers and leaders must be experts in learning processes, equivalent to professionals in other highly advanced professions. Through this capability fixed teaching 'transportation' patterns are to be replaced by the mentored respect for each individual's learning and knowledge-building, where knowledge and skills also are transferable for use in other contexts. Furthermore, professionals should be required to verbalise their professional knowledge and skills to users and the public, and feed research and new pedagogical findings back into education.

Fifthly, it takes a village to raise a child. We urge schools to transform into professional learning communities. Please note that, as a concept, a learning community has a fundamentally different meaning than "a learning organisation". The focus is on content, not on structure.

Teachers and leaders must realise and comprehend the notion that future schools should be transformed into 24-hour, all age learning and community centres with the full range of pedagogical skills (competences) available. Professionals must recognise that formal education will no longer be a place for information and obtaining factual knowledge, but replaced by a meeting point with the following four main characteristics and tasks:

- a) helping the students to understand, filter and make structure of the flow of information in the modern society,
- b) providing a venue for socialisation and interaction in learning with others,
- c) challenging beliefs and biases,
- d) ensuring a learning platform for ALL, with full inclusion and with respect to special needs.

This recommendation stresses the ability of individuals and teams to contribute to a joint school staff action for the establishment of a complete and sustainable learning environment - based on a contextual approach and shared vision.

Sixthly, we would like to highlight the ability to include – with consciousness and awareness - in all educational activities

- a moral purpose
- a respect for the intrinsic value of others
- a shared vivid mental image of a desired future condition, and
- articulated, professional undertakings to meet objectives.

Teachers and leaders must embrace and ensure the democratic and ethical values of society, in order to protect, discuss and transmit fundamental principles of solidarity, freedom and human rights. Additionally, they must respond to and

acknowledge that the mission represents the articulated, professional undertakings to meet objectives and expectations, and on this path recognise change, understanding and sharing. Last but not the least, the professionals themselves must form and express a shared vision, without which there will be no clear and united direction for action, change and desired improvement. Therefore, we recommend that teachers and leaders ensure the values, form the mission, and respond to the mission.

Four recommendations for European initiatives

The Learning Teacher Network insists on the creation of a holistic view on education. European, national and local policy-makers must immediately initiate the necessary reforms in curricula and policies to accomplish the following:

- “*an interdisciplinary revolution*”; take steps for education to get away from the tradition from medieval monasteries of dividing the world up in subjects; instead, ensure a holistic view on all matters and the surrounding world;
- “*cross-phase perspectives*”; to ensure unbroken and comparable learning and assessment over school years, based on the true acceptance of a pupil’s long-term, individual development, knowledge and social growth;
- “*a merging reform*”; in a true sense and as to organisation, in reality interweave theory, teacher training, daily practice and continuous professional development.

Supported by European initiatives, all national, regional and local authorities must initiate a system of annual programmes for continuous professional development of educationalists and practitioners, within which each and every professional should be trained for regular capacity building and continuous learning within a professional culture and knowledge base.

Within such a programme, primarily the *understanding of learning processes* and *school-based research competence* must be provided for all teachers and leaders, being a compulsory ingredient in all training and continuous professional development.

Regarding the next recommendation, one of the critical elements for successful learning is creating conditions where everyone is able to reach success, and inject the feelings that come with it. Performance is highly related to self confidence, which due to many reasons is lacking for many professionals and learners today. Consequently, European research needs to be undertaken, surveying teachers’, leaders’ and learners’ self-esteem/self confidence, addressing the crucial objective of performance: ‘Have you ever worked in a winning team?’

And finally, as our tenth recommendation, we ask for a European initiative in developing scenarios which embrace new learning venues. As a consequence of the change of society, in ten years educational institutions will no longer be what they have been; school as a traditional institution will be an outdated concept. Instead, the concept of school as a 24-hour learning and community resource centre, and these centres performing as professional learning communities, will

need to come into reality. A European expert group must be formed to develop scenarios which embrace new learning venues.

By the network's framework and the ten recommendations, which we present to the European Commission and as widely as possible to the educational community, hopefully the Learning Teacher Network will have been able to make a contribution to the understanding of the future role of the teacher, and to some proposals for action. The network will be willing to share experiences and knowledge, and its findings, with everyone who will be interested in such.

As ending, a quote from Albert Einstein: "We can not solve the problems that we have today with the same view we had when we created them."

Today we need a vision for the future, a vision of successful European teaching and learning. By jointly sharing, looking forward, desiring change, and having dreams to realise, we will contribute to such a vision - to schooling that includes all, is beneficial to all, and contributes to a richer life for each child and each adult.

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2

Ten Recommendations to the European Educational Community

The Learning Teacher Network

A. Recommendations to teachers and leaders in the educational community

1. “School is a small part of life – education is forever”

Commit to lifelong learning not as an additional but as an integral part of education

Pedagogical skills/competence: The ability to see and demonstrate learning as a process; holistic and throughout life.

Teachers and leaders must carry the responsibility to comprehensively adjust education and its expressions to interdisciplinary movements for learning for life, in order *to ensure a holistic view of the world and the process of individual growth* for school learners.

**2. “Growth from a beginner to a master”
Assure professional competence and CPD¹**

Pedagogical skills/competence: The ability to involve oneself in continuous and research-based development and learning.

In the concept of personalised learning, teachers and leaders must carry the responsibility and desire for the *allocation of time* for personal learning and self development, upskilling of skills and knowledge, and the sharing and communication of experiences, knowledge and findings, in order to be *constantly up-to-date*, identifying strategies for learning, and *to change behaviour and approaches*.

**3. “Competence is built from good relations”
Build, maintain and sustain trustful relationships**

Pedagogical skills/competence: The ability to develop, maintain, and sustain learning through building *trustful relationships*, which is the foundation for professional competence.

Teachers and leaders must include personal, civic, interpersonal, research, networking and learning competences, which all originate from good relations and sharing, in the face to face interaction and collaboration between individuals; and intrinsically related to the respect of and interest in others.

**4. “Transporting or moving learners?”
Understand, bring into play and communicate the learning processes**

Pedagogical skills/competence: The ability to fully address and carry out *the cycle of conceptualising > understanding > transferring > advancing > mentoring learning*.

Teachers and leaders must be experts in learning processes, equivalent to professionals in other highly advanced professions. Through this capability fixed teaching ‘transportation’ patterns are replaced by the mentored respect for each individual’s learning and knowledge-building, where knowledge and skills also are transferable for use in other contexts. Furthermore, they are required to verbalise their professional knowledge and skills to users and the public, and feed research and new pedagogical findings back into education.

¹ CPD = Continuing Professional Development

5. “It takes a village to raise a child”

Create professional learning communities

Pedagogical skills/competence: The ability to contribute to a joint school staff action for the establishment of a complete and sustainable learning environment based on a contextual approach and shared vision.

Teachers and leaders must realise and comprehend the notion that future schools will be transformed into 24-hour, all age learning and community centres with the full range of pedagogical skills (competences) available; that formal education will no longer be a place for information and obtaining factual knowledge but a meeting point with the following four main characteristics and tasks:

- a) helping the students to understand, filter and make structure of the flow of information in the modern society,
- b) providing a venue for socialisation and interaction in learning with others,
- c) challenging beliefs and biases, and
- d) ensuring a learning platform for ALL, with full inclusion and with respect to special needs.

Note: A learning community has, as a concept, a fundamentally different meaning than “a learning organisation”.

6. “We form the future”

Ensure the values, form the vision and respond to the mission

Pedagogical skills/competence: The ability to include – with consciousness and awareness - in all educational activities

- a moral purpose
- a respect for the intrinsic value of others
- a shared vivid mental image of a desired future condition, and
- articulated, professional undertakings to meet objectives.

Teachers and leaders must embrace and ensure the democratic and ethical values of society, in order to protect, discuss and transmit fundamental principles of solidarity, freedom and human rights. Additionally, they must respond to and acknowledge that the mission represents the articulated, professional undertakings to meet objectives and expectations, and on this path recognise change, understanding and sharing. Last but not the least, the professionals themselves must form and express a shared vision, without which there is no clear and united direction for action, change and desired improvement.

B. Recommendations for European initiatives

7. Create a holistic view on education

European, national and local policy-makers must immediately initiate the necessary reforms in curricula and policies to accomplish:

- “*an interdisciplinary revolution*”; get away from the tradition from medieval monasteries of dividing the world up in subjects; instead, ensure a holistic view on all matters and the surrounding world;
- “*cross-phase perspectives*”; ensure unbroken and comparable learning and assessment over school years, based on the true acceptance of a pupil’s long-term, individual development, knowledge and social growth (based on each one’s learning styles, time needed, and abilities);
- “*a merging reform*”; in a true sense and as to organisation, in reality to interweave theory, teacher training, daily practice and CPD.

8. Assure professional competence and CPD

Supported by European initiatives, all national, regional and local authorities must initiate a system of annual programmes for continuous professional development of educationalists and practitioners, within which each and every professional should be trained for regular capacity building and continuous learning within a professional culture and knowledge base.

Within such a programme, primarily the *understanding of learning processes* and *school-based research competence* must be provided for all teachers and leaders, being a compulsory ingredient in all training and CPD.

9. Undertake European research on teachers’, leaders’ and learners’ self-esteem

European research needs to be undertaken, surveying teachers’, leaders’ and learners’ self-esteem/self confidence, addressing the crucial objective of performance: ‘Have you ever worked in a winning team?’

10. Develop scenarios which embrace new learning venues

As a consequence of the change of society, in ten years educational institutions will no longer be what they have been; school as a traditional institution will be an outdated concept. Instead, the concept of school as a 24-hour learning and community resource centre, and these centres performing as professional learning communities, will need to come into reality.

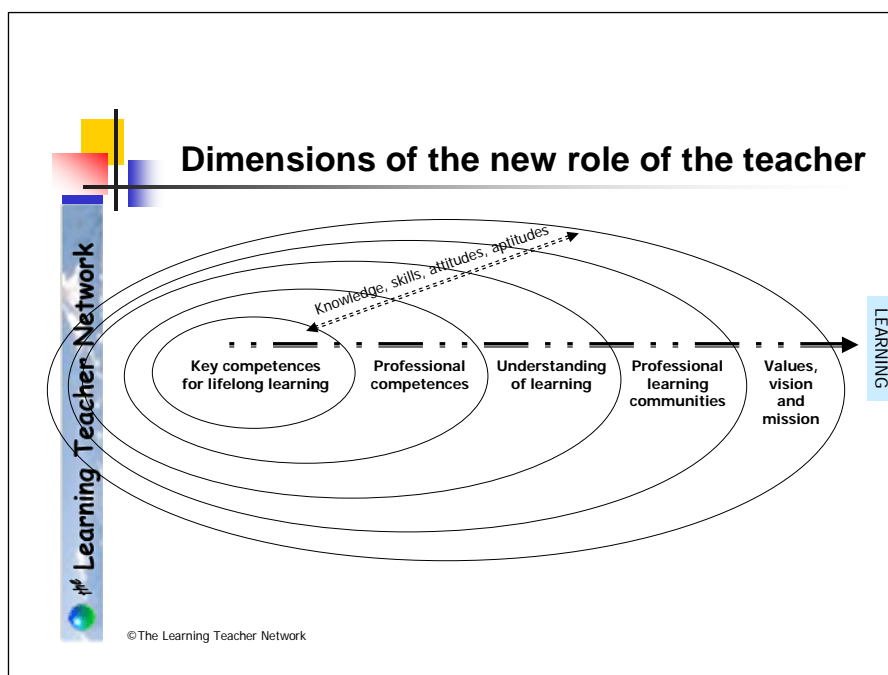
A European expert group must be formed to develop scenarios which embrace new learning venues.

3

Dimensions and Definitions

The Learning Teacher Network

Dimensions of the New Role of the Teacher



1. The implementation of key competences for lifelong learning: Domains and definitions

Dimension	1. The implementation of key competences for lifelong learning		
<p align="center">FRAMEWORK FOR THE NEW ROLE OF THE TEACHER IN A KNOWLEDGE-BASED SOCIETY</p>	<p>Communication in the mother tongue</p> <p>Communication is the ability to express and interpret thoughts, feelings and facts in both oral and written form in the full range of societal and cultural contexts - work, home and leisure.</p>	<p>Communication in a foreign language</p> <p>Communication in foreign languages is the ability to understand, express and interpret thoughts, feelings and facts in both oral and written form in an appropriate range of societal contexts - work, home, leisure, education and training - in languages other than the mother tongue and the language(s) of instruction at school, according to one's wants and needs.</p>	<p>Mathematical literacy and basic competences in science and technology</p> <p>At the most basic level, mathematical literacy comprises the use of addition and subtraction, multiplication and division, percentages and ratios in mental and written calculation for problem-solving purposes. As mathematical competence develops further, it involves, as appropriate to the context, the ability and willingness to use mathematical modes of thought (logical and spatial thinking) and presentation (formulas, models, constructs, graphs/charts) which have universal application in explaining and describing reality. / Scientific competence is the ability and willingness to use the body of knowledge and the methodology employed in the field of science to explain the natural world. Competence in technology is viewed as the application of that knowledge in order to modify the natural environment in response to perceived human wants or needs.</p>
	<p>Learning-to-learn</p> <p>'Learning-to-learn' comprises the disposition and ability to organise and regulate one's own learning, both individually and in groups. It includes the ability to manage one's time effectively, to solve problems, to acquire, process, evaluate and assimilate new knowledge, and to apply new knowledge and skills in a variety of contexts - at home, at work, in education and in training. In more general terms, learning-to-learn contributes strongly to managing one's own career path.</p>	<p>Interpersonal and civic competences</p> <p>Interpersonal competences cover all forms of behaviour that one must master as an individual in order to be able to participate in an efficient, constructive way and resolve conflict in social life, in interaction with other individuals (or groups) in personal, family and public contexts.</p> <p>The scope of civic competences is broader than that of interpersonal competences by virtue of their existence at societal level. They can be described as the set of competences that allow the individual to achieve participation in civic life.</p>	<p>Entrepreneurship</p> <p>Entrepreneurship has an active and a passive component: the propensity to bring about innovation oneself but also the ability to welcome and support innovation brought about by external factors. Entrepreneurship includes welcoming change, taking responsibility for one's actions (positive or negative), setting objectives and meeting them and having the motivation to succeed.</p>
			<p>Digital competence</p> <p>Digital competence involves the confident and critical use of Information Society Technologies (IST) for work, leisure and communication. These competences are related to logical and critical thinking, to high-level information management skills, and to well-developed communication skills.</p> <p>At the most basic level, ICT skills comprise the use of multi-media technology to retrieve, assess, store, produce, present and exchange information, and to communicate and participate in networks via the Internet.</p>

(This table: From the European Commission's work group for key competences, Progress Report Nov. 2004)

¹ Information Society Technologies: offering services based on the use of: Information and Communication technologies (ICT), the Internet, digital content, electronic media, etc. via for example a personal computer, a mobile telephone, an electronic banking machine, an eBook, digital television etc.

2. The assuring of professional competence: Domains and definitions

Specific teaching and learning competences in teaching and learning, as part of capacity building and complementary to the eight key competences for lifelong learning. The competences refer to individual qualities.

2. The assuring of professional competence				
Dimension	Personal and social competence	Interpersonal competence	Learning competence	Research competence
FRAMEWORK FOR THE NEW ROLE OF THE TEACHER IN A KNOWLEDGE-BASED SOCIETY	<p>Personal competence reflects essential qualities indispensable for respectful approaches and high quality performance in teaching and learning.</p> <ul style="list-style-type: none"> • Open-mindedness • Flexibility • Creative thinking • Critical thinking and reasoning • Responsiveness and the ability to work with diversity • Ability to act responsibly, to take increased responsibility for one's own actions, and to create safety and trust • Self-esteem • Sociability • Self-management • Ability to exercise leadership and to make constructive decisions with proper timing 	<p>Interpersonal competences embrace individual skills that one must master as a professional in order to interact and to be in accord with others in professional and public contexts. Such competence interconnects the facet of collaborative communication and action with acts to encourage the positive development of others.</p> <ul style="list-style-type: none"> • Communication skills • Collaborative and emotional intelligence • Coherence making • Ability to share • Ability to motivate • Ability to negotiate • Ability to participate and work in teams • Problem-solving • Conflict resolution and negotiation skills • Coaching, peering, and consultation 	<p>Learning competences is an expression of a uniting set of knowledge, skills and attitudes that describes the ability to understand learning processes, to involve oneself in continuous learning within a professional culture and knowledge base, and to create, transpose and transfer knowledge. In addition, based on the concept of 'learning-to-learn' and combined with participation in continuing professional development, grows the ability also to master the diagnosing and teaching of learning.</p>	<p>Research competence is the ability to phrase questions and explore a matter by systematically observing, measuring and/or assessing, and concluding, in order to create new knowledge and increase learning. Given a theoretical background, the practitioner includes school-based research as a regular part of teaching and learning, e.g. in the form of action research.</p> <ul style="list-style-type: none"> • Ability to conduct school-based research, internet and apply data • Evaluative skills including to set and assess goals
		<p>Holistic view</p> <p>Appreciation of the importance of acquiring the helicopter perspective and to consciously study and re-model daily work from new angles: as seen from without, observing oneself and one's daily actions, the past and implications for the future, the course of events in the surrounding world, and other external factors of relevance to one's profession.</p>	<p>Networking competence</p> <p>Networking and partnerships answer to the necessary change of format for collaboration; arisen from the impact of the technological world, and responding to new models of alliances that correspond to global and borderless work patterns and cooperation. In order to keep pace with the evolving knowledge society, evidence of effective practice is reviewed and engaged with current innovation and research. Working in learning communities brings reflection on one's own and others' best practices, and collaboration with a wide range of community groups and stakeholders.</p>	<p>Change agency</p> <p>The concept of agency of change encompasses regular adaptation to the evolving society and exacts the ability to master the change process. One is expected to show adaptability and to take appropriate action with the proper judgement, timing and means in order to consciously and professionally revise existing structures and actions towards more appropriate solutions and activities.</p>

3. The understanding of learning processes: Domains and definitions

3. The understanding of learning processes					
Dimension	Conceptualising learning	Understanding learning	Transferring learning	Advancing learning	
FRAMEWORK FOR THE NEW ROLE OF THE TEACHER IN A KNOWLEDGE-BASED SOCIETY	<p>'Useable knowledge' is connected and organised around important concepts; it is 'conditionalised' to specify the contexts in which it is applicable; it supports understanding and transfer (to other contexts) rather than only the ability to remember. Instead of discussing the best of teaching techniques, which is analogous to asking carpenters about tools, the point of departure is a core set of learning principles, making the selection of teaching strategies purposeful. The many possibilities then become a rich set of opportunities from which a mentor constructs an instructional programme rather than a chaos of competing alternatives. Sociocultural processes are human activities that take place in cultural contexts and are mediated by language and other symbol systems. Such processes emphasise the interdependence of social and individual processes in the co-construction of knowledge, and through social mediation knowledge becomes refined, viable, and gains coherence.</p>	<p>A deeper awareness of learning processes takes into account the role of prior knowledge in learning; learning as an active process; learning for understanding; adaptive expertise; and learning as a time-consuming endeavour. By this is required that: mentors draw out and work with the pre-existing understandings and preconceptions that learners bring with them; a meta-cognitive approach to learning can help learners learn to take control of their own learning by defining learning goals and monitoring their progress to achieve them; practices focus on sense-making, self-assessment, and reflection on what worked and what needs improving; learning is influenced in fundamental ways by the context in which it takes place; to develop competence in an area of inquiry, learners must have a foundation of factual knowledge, understand facts and ideas in the context of a conceptual framework, and organise knowledge in ways that facilitate retrieval and application; and the recognition that learning takes time.</p>	<p>A major goal of schooling is to prepare learners for flexible adaptation to new problems and settings. Learners' abilities to transfer what they have learned to new situations provides an important index of adaptive, flexible learning; seeing how well they can do this help educators evaluate and improve their mentoring. Instructional differences become more apparent when evaluated from the perspective of how well the learning transfers to new contexts and situations. The most effective learning occurs when learners transport what they have learned to various and diverse new situations. Transfer can be explored at a variety of levels, including transfer from one set of concepts to another, one school subject to another, one year of school to another, and across school and everyday, non-school activities.</p>	<p>Leading others' learning may be summarised as: the most important task for the teacher is to lead the students' learning processes, and the hallmark of leadership is to support and challenge the teacher's learning processes.</p>	<p>An individual moves from being a novice in an area toward developing competency in that area through a series of learning processes. Competent learners and problem solvers monitor and regulate their own processing and change their strategies as necessary. The major ideas that characterise understanding of learning also have implications for teaching/mentoring. The development of expertise and competent performance is the core issue to an educator. Teachers are key to enhancing learning at schools. In order to coach in a manner consistent with new theories of learning, extensive learning opportunities for teachers are required. What is known about learning applies to teachers as learners as well as students as learners. Research evidence indicates that the most successful teacher professional development activities are those that are extended over time and encourage the development of teachers' learning communities. These kinds of activities have been accomplished by creating opportunities for shared experiences and discourse around shared texts and data about student learning, and focus on shared decision-making. The learning communities of professionals also allow for differing kinds of background training and for variations in their readiness to learn. Reflective practice, team learning and renewal of knowledge, as well as interpreting and communicating information, are components that evolve from such programmes. Successful professional development programmes involve teachers in learning activities that are similar to ones that they will use with their students.</p>

4. The creating of professional learning communities: Domains and definitions

The domains refer to collective qualities originating from, developed and maintained by a community of professionals in education.

4. The creating of professional learning communities			
Dimension	Vision and values	Learning	Learning relationships
FRAMEWORK FOR THE NEW ROLE OF THE TEACHER IN A KNOWLEDGE-BASED SOCIETY	<p>More purpose is the base of society, so also of communities.</p> <p>Shared vision, interwoven with shared and protected values, is fundamental, developed from staff's unwavering commitment to students' learning with consistently articulated common values and shared learning. The notion of communicative leadership stands for the vital communication around its collective commitment to guiding principles that express what the professionals in the school believe and what they seek to create together, articulated in a common vision. Staff are encouraged not only to be involved in the process of developing a shared vision but to use that vision as a guidepost in making decisions about teaching and learning in the school, thus building strategic awareness. Sharing vision is not just agreeing with a good idea; it is a particular mental image of what is important to an individual and to an organisation. This identifies and makes a learning community unique.</p> <p>Of major importance is a deepened understanding of the mission and the creation of meetings where teachers' notions of teaching in relation to pupils' learning are challenged, also around the ideological context of the curriculum and how consequences are to be interpreted. Shared understandings bind communities together and bind members to shared goals and shared work.</p>	<p>A learning community exists when a group of people commit themselves to continual learning and to supporting others in this. It stimulates ongoing, collective inquiry into teaching and learning, and involves everyone in highly visible learning experiences.</p> <p>Collective inquiry enables team members to understand learning processes and to develop meta-cognitive abilities and skills, in other words thinking about how to think and how to learn. It develops the ability to integrate formal and informal learning, declarative knowledge (or knowing that) and procedural knowledge (know-how). This in turn leads to new experiences and awareness. Gradually, the heightened awareness is assimilated into fundamental shifts in attitudes and beliefs. Ultimately, it is this joint ability to examine and modify beliefs that enables team members to view the world differently and make significant changes in the culture of the organisation.</p> <p>Mutual learning is characterised for example by</p> <ul style="list-style-type: none"> • Understanding of learning processes - Meta-cognitive abilities and skills - Integration of formal/informal learning and declarative/procedural knowledge • Continuous learning within a professional culture and knowledge base • Creation, transposing and transfer of knowledge • Collective inquiry • Reflective practice • Action orientation 	<p>The core element of all learning activity and social and intellectual growth occurs in the mutual meeting between people, where new knowledge and experience germinate. The improvement of relationships is the single factor common to every successful change initiative. Collaboration by invitation is ineffective; meaningful collaboration must be embedded into the daily life of the school. All development initiates from the individual's response to the surrounding world, and the interpersonal communication is critical. The relationships between individuals are caring, supported by open communication, made possible by trust.</p> <p>Learning relationships include</p> <ul style="list-style-type: none"> • Creating a collaborative learning environment • Collaboration in teams – team learning • Development of professional competence • Effective, apt and transparent communication • Peering and coaching (mentoring), and feedback • Connectedness • Building strategic capacity and 'learning power' in order to reach and proclaim agency (ownership) • Empowerment
			<p>Sustainability expresses a conscious, assiduous, continuous and long-term process that secures achievements, implements new approaches and knowledge, and maintains a strategy of reconciliation of continuous improvement, collegial interactivity and common objectives. It addresses how particular initiatives can be developed without compromising the development of others in the surrounding environment, now and in the future.</p> <p>What elements must be firmly in place to motivate and encourage members to continually engage in learning activities and act on what they have learned for the benefit of students?</p> <p>Amongst key expressions are</p> <ul style="list-style-type: none"> • sustaining the collaborative learning environment, e.g. by clear structures for teacher interaction and interdependence, • sustaining a transparent, strategic and conceptual framework, based on the power and influence of the individuals to effect the objectives and activities of the community, • sustaining continuous improvement, e.g. by continuous training in group process skills and change management, • coherence making, e.g. by celebrating positive actions and progress made towards community goals, • agreed procedures for monitoring, assessing and making evident understanding, performance, processes, and results, • resilience, by collectively be persistent and keep going when questioned or criticised by others, and seeing failure as an opportunity to learn, • ensuring and maintaining commitment to the described four dimensions.

**5. The ensuring of values, forming of vision and responding to mission:
Domains and definitions**

Dimension	5. The ensuring of values, forming of vision and responding to mission		
	Values and ethics	Vision	Mission
<p>FRAMEWORK FOR THE NEW ROLE OF THE TEACHER IN A KNOWLEDGE-BASED SOCIETY</p>	<p>Human and societal norms and values are fundamental to education. Professionals are required to actively and consciously embrace the common and democratic values of our society and express these in practical daily action. An ethical behaviour illustrates the ability to behave with understanding and respect for other human beings and for the environment.</p> <ul style="list-style-type: none"> • Embracing a moral purpose • Ability to apply ethical principles • Respect the intrinsic value of others • Safeguard the well-being of children • Understanding and practicing honesty, integrity, and the "golden rule" • Understanding and respect for those not like oneself – an appreciation of diversity • Ecological thinking with respect and care for the immediate and wider environment 	<p>By vision is understood the defined, articulated and shared vivid mental image of something that is not yet present but that describes a desired and optimal future situation or condition in the future, created by the formation of an envisaged and visualised depiction of where to reach by united efforts.</p>	<p>In the context of the new role of the teacher the mission is to be seen as the special assignment given to a person or a group, or an operation assigned to a person or team, in order to pursue an activity, perform a service or carry out specific program objectives in a professional way. The mission represents the articulated, professional undertakings to meet objectives and expectations, and on this path recognise change, understanding and sharing.</p>

4

Teachers – A Graduate Profession

Pavel Zgaga

Introduction²

In the knowledge society, the education of teachers and trainers needs to be at a higher education level and supported by partnership between higher education institutions and the institutions where they will gain employment. For that reason they are graduate profession. To compete with comprehensive demands of their working places they need an advanced level of education based on research but also a broad set of knowledge, understanding and skills. The higher education reforms of today bring a momentum which could importantly help to ensure high quality teaching and outcomes, in particularly giving a possibility that teacher and trainer education programmes are delivered in all three cycles and strengthening opportunities for advancement and mobility within the profession.

Why a graduate profession?

In the knowledge society, teaching and training can be well founded only as *a profession based on tertiary level – university or equivalent – initial education* (or other appropriate professionally recognized levels for trainers) *opened to a*

² *The paper summarizes author's contribution to the European Testing Conference on Common European Principles for the competences and qualifications of teachers, Brussels, 20 – 21 June 2005 (see at the web site http://europa.eu.int/comm/education/policies/2010/testingconf_en.html)*

continuous professional development in a lifelong learning perspective. History of the development of pre-university teachers and trainers into a graduate profession has been long and multifarious. On one side, qualifications for teachers in education institutions which correspond to the level of upper-secondary general education were traditionally based on university studies in most cases, however, most often in their teaching subject only. On the other side, teachers at primary and lower secondary school level attained the status of graduate profession only in the second half of 20th century. We have entered knowledge society but in certain cases qualifications for teachers and trainers – in particularly at pre-school level as well as in vocational education and training and in some other specialized areas – are still on pre-tertiary level only.

All teachers and trainers at all levels of education and training should be properly equipped to respond to the evolving challenges of the knowledge society. They play crucial role in supporting learning experiences of pupils, students and adult learners. At the same time, they are also key players in the implementation of the educational reforms and innovation in education. Last but not least, they form an important group which promotes development, inclusiveness and cohesion in a society. With regard to these tasks, there is no difference between teachers and trainers working at various levels of pre-university education and training. To compete successfully with all these tasks, they all need an *advanced level of education* comparable to other (more traditional; graduate) professions competing with similar tasks in other professional and disciplinary areas. And more: they should also have the opportunity to continue their *studies at all three cycles to the highest level* for progression within their profession. A common European Qualifications Framework can importantly improve this opportunity in terms of comparability, flexibility, mobility, employability, specialization etc. All these provide necessary elements which make teaching and training an *attractive profession*.

Teacher and trainer education is *multidisciplinary* and *research based*; university (higher education) environment can support its character in a most appropriate way. To compete successfully with the challenges of their profession, teachers and trainers need 1) a knowledge of their subject matter; 2) a knowledge of pedagogy; 3) the skills and competences required to guide and support learners; and 4) an understanding of the social and cultural dimension of education. Their education emphasizes as academic and scientific basis as practical skills and provides them with the competences and confidence necessary for autonomous professional work. Therefore, it rests on balanced partnerships: it should be provided in a partnership of various disciplines and research approaches as well as in partnership with educational institutions and social environments where graduates are going to start and develop their professional life and where their needs for continuous professional development are forming.

Key issues of teachers profession in Europe

A need for flexibility. Regulations on teacher and trainer profession should not demonstrate as an obstacle to free mobility throughout the Union but as necessary – most often nationally based – common denominator for the profession and its

individual members. Today, there is a need for greater flexibility in teachers and trainers initial education; on one hand to facilitate geographic mobility, on the other to facilitate internal mobility in its various aspects. Trends in population and a lack of teachers, for example, call against rigid systems of qualifications. Initial qualifications should not close teachers and trainers in a narrow area of a professional work; rather they should have a systemic possibility to move – possibly with a reasonable amount of additional training – from working in one to another level (area, etc.) of education. Similarly, and due to the multidisciplinary character of the profession, there should be also better systemic opportunities for graduates without pedagogical qualifications to qualify for teaching and training, often within lifelong learning perspective.

A need for compatibility and quality. Teaching and training is a regulated profession; there are special (national; institutional, etc.) provisions on level, profile, specialization, etc. which give guidelines and assure necessary quality standards in teacher and trainer education. These provisions reflect a whole range of concrete needs rooted in different environments as well as in different traditions of teacher and trainer education across Europe. However, teachers and trainers must be able to move within their profession throughout the Union. With full respect to different environments and traditions we need today a common understanding of teachers and trainers as a graduate profession and easier ways to recognize their qualifications. Common European principles for competences and qualifications can substantially contribute to greater compatibility and comparability of the systems of teacher and trainer education.

European Qualification Framework. Ministers from 45 European countries recently met at the Conference of the Bologna Process in Bergen, Norway (19-20 May) and, among other issues on their agenda, adopted the overarching framework for qualifications in the European Higher Education Area (EHEA), comprising three cycles, generic descriptors for each cycle based on learning outcomes and competences, and credit ranges (expressed in ECTS). They also underlined the importance of ensuring parity between the overarching framework for the EHEA and the proposed broader framework of qualifications for lifelong learning as now being developed within the European Union. All EU countries are members of the Bologna Process and the adopted overarching framework for the EHEA will help elaborating national frameworks in the following years in all our countries.

Take the momentum; abolish anomalies. We should take advantage of this momentum, modernize teacher and trainer education and ensure a proper place for it in the EHEA. It is particularly important to ensure that teacher and trainer education programmes will be delivered in all three cycles thus strengthening opportunities for advancement and mobility within the profession – like in other, often more traditional graduate professions. Also for reasons of attractiveness to a profession!

Anomalies have been identified several times with regard to traditional models of teachers and trainers initial education. E.g.: although students may have

accumulated (in particular in consecutive models) an equivalent of a total of 300 points ECTS and even more to obtain their initial teacher education qualification, in a number of countries these outcomes do not result in a second cycle award. It is a reason against attractiveness to a profession!

The challenge of three cycles for teacher and trainer education. Several networks and initiatives are active today in Europe trying to make teacher and trainer education compliant with the Bologna, first, second and also third cycle degree structures as well as comparable with other disciplinary areas. In particular, today the second cycle brings a real challenge to inherited traditional structures. Competing with these challenges, the Education Working Group within the TUNING project,³ supported by the European Commission, recently identified and suggested a number of possible broad pathways to second cycle awards:

- a first cycle degree in the chosen subject(s) of 180-240 ECTS, followed by a consecutive teacher/trainer education award of 90-120 ECTS (a minimum of 90 ECTS where subject didactics or pedagogy is included in the first cycle degree), and including a research training component;
- a first cycle degree in the chosen subject(s) of 180-240 ECTS, followed by a second cycle consecutive teacher/trainer education award of 60 ECTS, followed, within a specified time limit, by a second cycle award in Education Sciences or structured induction (to include research training) of 60 ECTS;
- a first cycle integrated degree where the teaching subject(s) and education components are offered concurrently of 240 ECTS, followed by a second cycle award in Education Sciences/structured induction (to include research training) of 60 ECTS.

Open questions

A lot of open questions remain for further discussions, as for example:

- *Is the principle of teachers and trainers as a graduate profession* important enough to be emphasized in the Common European Principles for the competences and qualifications of teachers and trainers?
- Should it be kept as one of the main principles?
- If yes, can the text describing it be improved? If not, why not? Does the principle need to be replaced with something else?
- Is the principle of teachers and trainers as a graduate profession visible throughout the paper, and reflected in the competences and recommendations?
- To what extent will an acceptance of the proposed recommendations help to ensure that the principle is embedded in policy developments? What

³ *The Tuning Project is supported by the European Commission in the framework of the Socrates programme, see <http://www.relint.deusto.es/TuningProject/index.htm>. The mentioned findings are published in the Final Report – Phase 2, 2005.*

could be further (or not yet identified) challenges in implementing this principle?

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5

Professional Learning Communities

– Can they help Learning Teachers keep their balance?

Linda Devlin

Professional Learning Communities (PLCs) are ubiquitous features of the educational landscape with a multitude of purposes and complex processes. There is great variation in the focus of the communities but the dynamic nature of professional learning processes is generic. It is these synergistic processes that optimise individual, organisational and community learning. This paper is particularly concerned with enquiry and research supported PLCs where the learning is not confined to the focus of the collaborative undertaking but encompasses learning about leadership, about research processes and not least about the collaborative practice, which motivates and drives the learning teacher. It is important to recognise the potential of these communities as a balancing feature within the wider educational environment. It is essential that leaders and members of the communities work towards building and then sustaining the support mechanisms for interdependent continual learning that ensure the community achieves a state of dynamic equilibrium.

The case study communities which provide the community environment for the evidence presented are six Professional Learning Communities funded by the National College for School Leadership (NCSL). In an attempt to build on what is already known (Hopkins and Jackson 2003) about collaborative learning a research programme was established which explored the support likely to be needed for practitioner research to flourish across a network of schools. The way

in which collective learning is constituted at inter- and intra-school level and how learning with a group differs from learning as an individual (Eraut, 2002) is also an area of interest. Allied to the exploration of these learning processes are questions concerned with understanding of the operation of communities, the relationship between research conducted within the community and other processes that influence how far innovative practices can be replicated and disseminated (Huberman 1993). In particular, this paper addresses:

How do Professional Learning Communities support schools to learn from research and evidence?

How is this evidence used to inform practice and moderate decision making thus ensuring that learning teachers keep their balance?

The case study research process has involved engagement with researchers to reflect on the process of enquiry and research and the implications of the findings. The data collection methods included: documentary analysis; interviews with practitioner researchers and those that support them in the school, the network and the wider environment ; focus group interviews with pupils; participant observation of meetings and lessons. This evidence was analysed on the basis of the principles underpinning the community leadership, collaboration and enquiry based learning. Leadership development in a community who are committed to building a research ethos and evidence-based practice should enable individuals to focus on classroom practice while developing opportunities to share experiences and findings with colleagues at whole school level and beyond. The use of locally generated evidence can be the basis of substantial difference to the response of schools to the demands of the political, economical and social factors influencing their immediate environment and support balanced decisions about future practice.

How do Professional Learning Communities support schools to learn from research and evidence?

Since the late 1990's the UK government has encouraged schools to work more collaboratively through a range of initiatives in secondary and primary schools, including the Networked Learning initiative from which the case study evidence is presented. Many of these initiatives have also included a collaborative research element. However establishing practitioner research as a worthwhile activity in schools, according to network researchers, has a number of dimensions:

- the need to recognise the value of the research outcomes with respect to academic and other research;
- through the quality of the research processes, the work is regarded as valid and reliable within the network context;
- enquiry and research is established as an important activity that teachers should undertake as part of their professional duties in school.

In most network schools this represented a substantial cultural change and, as most staff in schools did not initially recognise their research role, some of the networks established a considerable research portfolio from a very low level of research awareness and capacity.

The views expressed about research in schools by respondents were in line with a recent literature review of action research in schools which suggested that teachers “often held a hierarchical view of research in which the academic was seen as ‘better’ than that undertaken by teachers.” (Black-Hawkins 2004). There certainly was some indication that the researchers in the case study networks did not always see themselves in the same role as the university staff and researchers:

The expectation was that the university colleagues involved would take a leading role and it was very difficult to persuade them in the early stages that they were co-researchers with equal merits and responsibilities for the research process. (Network Co-leader)

However, over time, some of those who had been involved in network research activities recognised that they had “more credibility within their local area than much of the material relating to national initiatives” (Teacher Researcher). Colleagues responded positively to the research outcomes “especially when they had been engaged with evidence collection or analysis” (Teacher Researcher).

The validity and reliability of such research was provided by what has been called “contextualised understanding” (Bentley and Horne 2003), that is the understanding of colleagues teaching similar pupils in similar environments who “respect teachers’ knowledge as well as knowledge from research and reform” (Lieberman 1999). Teachers viewed practitioner research as an opportunity for them to visit educational theory, and to apply this in other contexts. The vast majority of teachers involved in research within their networks were confident to talk about the theoretical basis for their work and present their views in staff meetings.

The status of practitioner research was clearly raised in schools where the findings had some impact upon the culture of the school that is in producing immediate and visible results. In the first year of one network’s existence, research projects seem to have been largely designed to combat short-term problems like bullying, lack of group work expertise or an inadequate physical environment for learning. In two other networks, teacher-researchers were given opportunities to disseminate their findings at staff meetings and workshops: strong support for their work from senior management ensured wide interest and a good take-up of the practices that were on show.

Notions of making a positive difference to pupils and colleagues also helped to establish the status of practitioner research in the network schools. In another, teachers were introduced to quantitative research methods that could be used to gauge the changes in the attitudes of groups of students during the course of a particular programme. Where such methods were employed, teachers expressed strong support both for their own professional judgement and that of their colleagues. In one network there was a strong reaction against a suggestion from a higher education representative that such judgements were inadequate to assess progress and added value. Where teachers assess that practitioner research has made a difference to the learning of pupils with whom they are in daily contact, the status of such research is further raised. The findings and lessons drawn from

such research is seen as fit for purpose – fit for the purpose of individual teachers in their own classrooms, and fit for the purposes of other teachers who know and trust them in other classrooms within the network.

Writers on practitioner research stress the need to make it a high priority within schools, with opportunities being staged within the school's procedures to undertake and discuss research. Recent literature reviews suggest that the advocacy of the head teacher and senior management within the school is paramount, with research outcomes being reflected in school improvement planning (McLaughlin 2004, McIntyre 2004). Clearly the allocation of dedicated funding and time to action research activities, as well as accreditation of research activities, also sent out clear messages about the priority being given to such work:

Network leaders have designed opportunities to spark enthusiasm among the staff and the research has been part of this agenda. The practitioner research is not currently a shared identity across the network as many staff still do not see themselves as part of this, but the notion of school improvement as action enquiry is stated as part of the explicit values of school. This approach is also explicit in the sharing of high professional expectations. (Teacher Researcher)

These findings indicate that the support provided for the enquiry and research process is an essential component of a sustainable learning community and certainly makes it possible for teachers in communities to make use of the research outcomes produced at a local level to inform practice and produce a balanced and potentially more relevant local knowledge base.

How is this evidence used to inform practice and moderate decision making thus ensuring that learning teachers keep their balance?

The education research community are increasingly aware of the existence and value of practitioner generated knowledge in relation to the research they undertake. However there is a tendency to be critical of the work by practitioners and as a result the view is that

“a great deal of educational policy and practice continues to be dominated by the short term, leaving people ill equipped to deal with complexity and change. Despite education being overtly about knowledge itself, its own knowledge base remains largely tacit, fragmented and underdeveloped.” (DfES, 2003 p 14)

The recent Networked Learning Communities, NCSL initiative has recognised the importance of enquiry based ‘networked learning’ and the potential for school-based inter-organisational evidence to influence the wider local and national system. Jackson, 2005 comments

“There can be little doubt that the knowledge base housed within Networked Learning Communities will be a significant factor in supporting the rigour of leadership and learning for new networks.”

The remaining issue is how can this knowledge be built through research into practice and shared to enhance the local and national knowledge base.

One of the purposes of the Professional Learning Communities studied is to support collaborative experiential learning for teachers and other staff in schools. The objective is that through this process a set of common beliefs are established around a shared area of interest relating to how students learn and how to teach. The evidence from the PLCs has been that teachers share concerns and identify very similar issues in their work. The emerging themes have been around active learning opportunities for pupils, opportunities for creativity, addressing pupil preferred learning styles, forms of assessment and the development of the curriculum. The broader issues have included the need to cope with challenging work, diverse learners, varied learning processes and radically different learning environments.

The PLCs have created thinking space for groups of teachers to come together and discuss hypotheses and how they can evidence and 'test' their ideas collaboratively about teaching and learning practice.

These collaborative explorations have not only highlighted shared areas of interest but encouraged discussion and research about why these issues exist for education professionals in relation to local and national policy agendas. Teachers have been guided to appropriate reading, shared professional development opportunities, 'surfing' relevant internet sites and most importantly critically appraised the literature and other information sources that they have gleaned together. This challenges the concept of the teacher as 'knower' model relying on the ownership of 'inside knowledge of the school (Cochrane-Smith and Lytle, 1993) and raises the collective capacity to respond to the issues the groups have identified. The supported critical reflection process has enabled teachers to

"make sense of their environment in relation to the local, national and international policy back cloth and then hone their provision to accommodate and personalise learning at staff and pupil levels." (Head Teacher)

The building of research capacity and a collective understanding of research methodology has been central to the work of the case study PLCs working with Universities. Research models that are externally imposed by academics are seen by many in the profession as an add on to teaching and learning (Sachs, 2003) and other aspects of the school environment. In the PLCs the research is undertaken collaboratively between researchers (HEI-based) and practitioners (school-based) and is integral to the work of the school. Through the PLCs researchers can work together in environments that provide unique research sites, which would otherwise be difficult to access. This access results from the ongoing relationship between researchers, which in turn leads to trust and the development of a culture in which people are willing to share their thoughts, concerns. It can ultimately contribute to the production of knowledge, which is rooted in the community and may resonate with other practitioners. At present this tends to fall short of influencing policy and the national agenda but as the networks widen and interlink with other communities the flow of evidence supported practice will increase and is already becoming available for wider critique. It is this process that can secure the status of the research in the profession and bring confidence to practitioners

about their studies which enables them to optimise the wider learning environment.

In the light of the potential advantages of collaborative models of educational research it is essential to ensure that the usual criticisms of cannot establish a foothold and cast doubt on the value of the findings. The PLC researcher partners can help to ensure that the studies undertaken meet

“ the criteria of scientific validity, high-quality and practical relevance that is sometimes lacking in existing evidence on educational activities, processes and outcomes.” (Davies, 1999).

One of the roles of the university mentors is to ensure that the research processes are explicitly addressed and integrated with routine practice. This area of learning was found to be particularly significant for the LEARN network researchers and mentors. Certainly the mentors knowledge and experience of practitioner research has made a vital contribution to the enhancement of the research process. The mentors have also had to evolve a way of working that is front loaded in that their input has been personalised to the individual practitioner researchers. The need to respond to the varying needs of school-based colleagues and create tailored support for professional learning in this sphere requires exceptional inter-personal skills as well as the experience in the research field. The emergent relationships between the members of the research team and the evolving impact on professional learning is a critical factor in the success of the collaborative research initiative.

The focus of the mentors on the quality of the research processes has made a contribution to securing the objective that the research outcomes are regarded as valid and reliable within the network context and beyond. However a further issue is that the research output may be perceived as irrelevant to the everyday lives of teachers (Gore and Gitlin, 2004). This hurdle has been relatively easy to overcome in the PLCs because the output is not founded on the need to write for academic audiences. The dissemination of the new knowledge has evolved from the need to share the research findings in ways, which are accessible to others for scrutiny. The development of ‘living theories’ (Whitehead,) serve to inform evaluative work within schools and create knowledge makers who will debate and inform evidence gathering processes and decision making within their organisations. The research and its outcomes relates directly to the context of the audience enhancing the credibility of the work. The dissemination of the process also becomes relevant locally as it is seen to be ‘doable’ by colleagues, which has had a significant impact on the possibilities for building research capacity of the institution and the network.

However there is still a need to acknowledge the potential for misconceptions and variation in perceptions of research in practice as these do not simply exist between individuals from different educational contexts. A gap can exist between enlightened professionals and the mainstream educators’ perception of their role in research and knowledge generation. To ensure that evidence informed practice moves forward their needs to be an underpinning professional competence and the

belief in the ideas and how to respond to them across the community. This can only be achieved by bringing on board not only the researchers but the critical mass of the community population. This has been achieved successfully in PLCs where

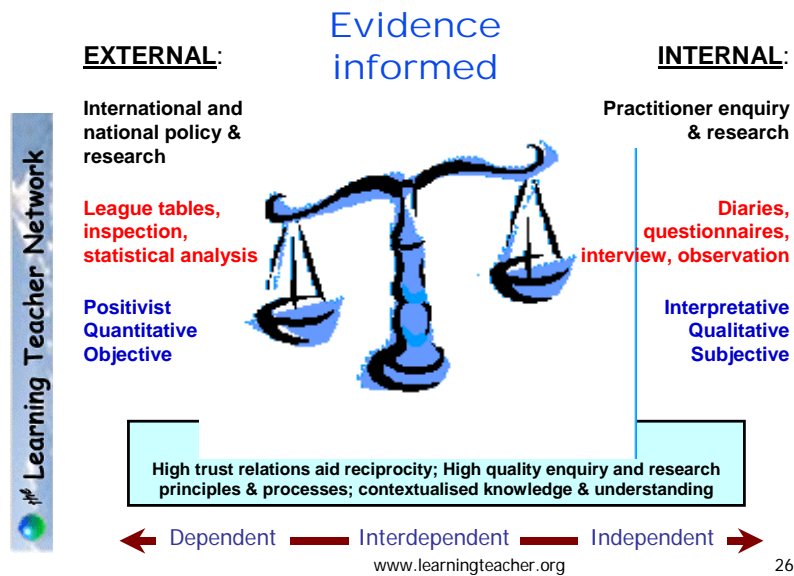
“Network leaders have designed opportunities to spark enthusiasm among the staff and the research has been part of this agenda. The network approach is also explicit in the sharing of high professional expectations.”
(Researcher B, NLG)

The recognition that the new knowledge which stems from research and evidence gathering does not simply exist around knowing something theoretical (cognitive dimension) it is also concerned with know how (practical dimension), know why (moral dimension) and know you (social/relational dimension). In the case of the PLCs the latter dimension was particularly significant in that it allows for the development of powerful research based relationships, which enhanced the rigour and potential of the work and the likelihood of it being shared across the network.

The approach of the PLCs highlights the need for the multi-skilling of teachers that challenges standardised practices (Hargreaves, A. 2000). In research contexts teacher’s development of professional knowledge is initially based on the curiosity to explore, innovatively, new ways of teaching and learning. The research process tends to cultivate tacit unsystematic knowledge that challenges the rigidly stratified type through teachers sharing their pedagogical discoveries. Research active staff gradually build their knowledge and understanding of research techniques and because of their informed position become more confident in risk taking. They have also developed networking skills enabling them to transfer knowledge about, for example ‘transition’ partnerships between primary and secondary schools involved in sharing ideas and projects. One teacher commented that

“I enjoy working with the researchers from other schools and this helped me to realise that we are all in different situations. It is always a bit of a battle to share the outcomes of the projects in school it is a lot easier for me to share the work with colleagues in the network.”
(Teacher, NLG)

How can Learning Teachers keep their balance?



As research-embracing Professional Learning Communities become established a range of support mechanisms for sharing activities and findings with the members of the communities become increasingly likely to recognise the research outcomes from their own domain. Although the practitioner research forms the basis of decision-making and practice across the PLC the external information is woven into the outputs. This contributes to ensuring parity of esteem between researchers and practitioner researchers and fills some of the existing unhelpful gaps (Darville) such as those indicated by Furlong and Oancea, 2005.

“Traditionally it has been assumed that there is a clear distinction between the worlds of research and practice – that there are two communities’. On the one hand there is the world of research, based on explicit systematic work aimed at the growth of theoretical knowledge. Practice and policy on the other hand are seen as taking place in the real world a world based on different forms of knowledge – for example on tacit knowledge and on practical wisdom.” (P 50)

The case study PLCs have demonstrated that research narratives, which are narrow and excluding, need to be significantly revised once attitudes change to recognise the potential contribution to community knowledge production. Practitioners can be convinced of their roles as researchers and recognise their role and contribution to educational knowledge.

Cochran-Smith and Lytle (1998) believe that the most persistent question that needs to be addressed for research in practice is whether the generation of

localised knowledge can contribute to the renewal of the professions knowledge base. The case study evidence suggests that this question should be how this can be achieved rather than raising doubts about the value of research in practice. Given the resources for research and the opportunity for in depth work it is possible to generate valuable relevant research within these communities. This research takes into account external and internal research and initiates action, which is well informed and recognised as a secure basis for change. Collaborative learning can also enhance levels of scrutiny of the research by using the community as a vehicle for the interpretation of the results as well as relating the findings to what is already known in the field. These shared experiences and opportunities for collaborative learning enable Learning Teachers to thrive even in changing environmental conditions.

Professional Learning Communities provide stable sustainable environments in which we find out what works in particular settings with particular learners. The agenda is set by identifying questions that 'bubble up' in the workplace about policy, practice and learning. If the PLCs encourage systematic approaches to gathering evidence and teachers handle multivariate analysis on a day to day basis in classrooms/educational contexts then an informed and balanced approach to change can be achieved. As Tivy (1971) pointed out in relation to ecological communities

"Change and stability are not mutually exclusive concepts. Stability is achieved by ensuring that the community thrives by optimising the conditions prevailing in the environment. Change is achieved incrementally not radically."

This ecological concept of dynamic equilibrium is one, which the leaders of PLCs should strive for through the development of the high trust relations that enable dialogue between community members. Community members can evolve positive attitude to evidence-informed change agendas based on the confidence that they have in each other. They can collaboratively manage the research processes to ensure that researchers can share not only their successes but also failures and in this way construct contextualised knowledge and understanding. Learning Teachers can adopt a balanced position and approach to managing learning and make a significant contribution to building and sustaining their communities.

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6

Learning About Learning Among Teachers

Mats Ekholm

Teachers in different countries spend years in universities or in specially designed training institutes to prepare themselves for the task of being a teacher. The length of this training period varies between countries. Three years of studies are enough to prepare a primary teacher in some countries like Austria, Belgium and Ireland. In Finland and France it takes you five years to be prepared for the same task. It takes you four/four and a half years of studies to be prepared for a job as a teacher in the upper secondary school if you live in countries like Greece, Norway and Sweden. It takes you six or more years of studies if you prepare for the same kind of job in countries like Germany, Spain or Switzerland.

During these pre-service study years teachers deepen their knowledge in different subjects that they will teach about and they learn about the knowledge that exists about teaching and learning. In some countries the learning schemes that are used during the pre-service education are fairly open and shared by many different categories of teachers, in others the learning schemes are differentiated for different teacher categories from the early beginning of the teacher education. In Sweden teacher students preparing for preschool, primary school, lower secondary school and upper secondary school all participate in the same teacher education programme during the beginning of their pre-service study years. Not until later in their studies they go to different paths to specialize for different teaching tasks in the school system.

In strong contrast to this solution on how you might prepare students for their future profession, teacher students of Germany immediately go to specific training programmes, where they are prepared for their future lives within primary schools or the different kinds of secondary schools like Realschule, Gymnasium, Oberschule, Berufsschule or Sonderschule. The way that the Swedes train their teachers during the pre-service period creates many more possibilities for the teachers to find a career where you can use your professional knowledge in different school environments. The German system locks the teachers in the different school forms that exist in that country and hinders exchange between different kinds of teachers.

The learning that takes place during the pre-service study years in most countries will be used by the teachers over a period of thirty to forty years. During such a long period the knowledge basis for the subjects that the teacher has specialized in changes to a large extent. And so does the knowledge basis of teaching and learning. Teachers therefore have to engage themselves in continuous learning. Through professional development activities teachers seek to update, develop and broaden the knowledge that they acquired during their pre-service training. They also develop new skills and professional understanding. By participation in professional development activities teachers in many countries also become informed about reforms and new demands that the owners of the schools and of the school system put on the teachers.

The strategies to get teachers and school leaders to get involved in continuous professional learning are rather different in different countries. In many countries like for instance Germany, the Flemish part of Belgium, Denmark, France, Greece, Ireland, Italy, England, Wales, Northern Ireland, participation in in-service training for teachers is a question for the single teacher. There are no requirements for a minimal time of participation in in-service training. It is she or he who initiates the participation that usually takes place in another place than at the local school, for instance in a specific institution that deals with in-service training of teachers. In some other countries, like Austria, the French speaking parts of Belgium, Finland, Hungary, the Netherlands, Sweden and Switzerland in-service training of teachers is a compulsory part of the working year. In some of these countries the teachers usually are trained at the local school where they work, together with their colleagues. In Sweden the time allocated for this kind of activities – to develop the competence of the teachers – consists of 6 % of the yearly working time, which corresponds to 13 working days.

Schools facing new expectations

During the last decades new expectations have been directed towards schools in many European countries. They are more often getting the signal from the central parts of the system that they ought to act rather independently but at the same time very accountably within the decentralised power structure that has been developed in many of the countries. There are demands for more autonomous local schools, and thereby also demands for more professional teachers that work together with more responsible local school leaders. These demands are put forward in countries with very different basic structure of the school system – from an already highly

decentralised system like the British once was to highly centralised systems like the Swedish. The formulations of the demands seem to have varied with the existence of economies that have been characterised by austerity. When money is short, it is more important that local parts of the school system create new solutions that cost less than the old ones.

Politicians in most European countries have turned their faith to political management strategies like the goal-based accountability model instead of trusting implementation models of school improvement (see Seashore-Louis and Van Velzen, 1986), and thereby put their faith also to the power of the local school leaders to get the improvement process running. In the cluster of expectations that this political management strategy contain there is also expectations on schools and school leaders that they ought to organise self-evaluations of the local school.

School based reviews are thought to create good overviews of what is going on in the local school and could thereby be used as a starting point of the improvement process. When school based reviews are made it will now and then create a necessity for the staff to change their teaching styles and classroom organisation. While such an operation is done in a school it is obvious that the school leader will be the focus of attention from both within and beyond the school. To make such changes often leads to negotiation and conflict solving. During such moments of work of the local school the school leader needs to be prepared to articulate and react on the behalf of the school as a whole. To deal with such difficult situations that may rise when improvement work is needed, school leaders are also expected to involve themselves in the in-service training of the teachers.

Local working plans

In several of the countries where new definitions of the responsibilities of the local school, the role of the teachers and of the school leader's work are made, there are also discussions running on what kind of basic organisation there should be in schools. Some countries have started the future already in the way the authorities try to get local schools to behave. I will use the Dutch, the Norwegian and the Swedish systems as examples here. In all three of these systems the central parts of the school system have required the local schools to work out working plans. The idea of a common shared working plan for the local school, that would give each school an evident profile, reminds of the local curriculum of British schools, but it has a somewhat different flavour. Behind this request there seem to be a vision of another organisational structure of the local school than usually is perceived today. The central parts of these school systems want to replace the images of professional/collegial respectively natural/spontaneous local school organisations (Miles and Ekholm, 1985) with an image of a responsible-group-based organisation.

In such a school organisation it is assumed that the goals of education are reasonably clear, but that the teaching is a somewhat ambiguous process. The ambiguity is resolved by seeing the organisation as an interdependent collection of parts, guided by feedback from each other and from environment. Key words in such an organisation are trust, learning and collaboration. The responsible-group-

based school stresses both the social aspects of communication, good problem solving, positive climate, and the technical aspects of teaching. In this kind of school the local policy of the school is owned by the members of the whole staff. In the working plan the policy is expressed and it has come out of the interaction and joint work of the really involved people. That means that the local school has examined what is behind central guidelines for the school and transformed this thoughts and ideas to the local conditions of the school. The local policy changes and develops through the shared experience of learning and adapting to environmental pressures by the members of the school. The school leaders in such schools concentrate on leading, helping and to engage all members of the school in thoughtful joint work and improvement. As the teaching in such a school is seen as an active involvement of the student, which means that learning often takes place through inquiries and problem-solving, the manager's traditional time scheduling tasks run into trouble. Parts of these kinds of learning strategies are not as easy to foresee and regulate as ordinary lectures. Therefore the school leader needs to work with less prescribed time schedules.

It remains to be seen whether schools that have the image of the responsible-group-school will be more common in the future in different European countries than today. However, it seems to be of importance for the school management structure if this organisational structure of the local school replaces the more common images of the professional/ collegial and the natural/spontaneous schools. If other organisational images of local schools grow strong in the minds of politicians as well as of teachers there may be a wider use of school leaders than seems to be the case of today. The rather restricted areas of actions that school leaders are allowed to be involved in - to administrate economy and time scheduling, to chair teacher meetings, to deal with delinquent children, to meet parents and authority people - could be broadened. Research about effective behaviours among school leaders has shown that they need to do other things if they are going to give more to the school (Ekholm et al, 2000).

Among the things that a more effective school leader does is to clarify goals of the school and remind the staff of all the goals, to co-ordinate both decisions and actions so that many members of the school really share the responsibility of the "production", to co-ordinate the evaluation of the work of the adults of the school, to co-ordinate improvement work of the teaching and learning processes, and also to help the students to express their views on the life in school. School leaders that are competent to lead the development of their schools also need to understand the dynamics of school improvement. There are several crucial tasks that need to be taken care of if the school really is to improve and there are several important roles that need to be played at the local school if the improvement is to take place and institutionalised status gained.

Important improvement tasks

When schools improve their inner lives they need to make judgements of their own effectiveness (Ekholm, Vandenberghe and Miles 1987). Improvement requires that someone at the school is interested in making such judgements and also is able to do this task. There is also a need to understand the ideology of the

local school if it is to be improved. The local school therefore has to express and understand what general goals it is striving for and express what direction the improvement ought to go toward. This understanding must be deeper than an analysis of the "official" goals of the local school. It is important to look at the hidden curriculum of the school as well. The school needs to accomplish the task of self study. It needs to have good knowledge about its own routines and habits. There must be a continuous assessment of the "production process" of the school - of the work that is done by the staff of the school - otherwise improvement cannot occur, except by chance. It is here that school based reviews come in.

Good self-study is difficult without another task - giving open reactions. People at the school must regard it as legitimate, safe and "legal" to give open reactions and present criticism on how well the "production process" is going. The climate of the school needs to support constructive criticism and demands for new solutions, free of restraint from colleagues. People must be able to tell others what they really see and understand of what is going on.

Local innovations are also needed if the school is to improve its inner life. Innovations need to keep the ideology of the school and the more limited goals of the improvement efforts in mind. New ideas that are born must be connected with the school's goal of improvement; they are not produced in a value vacuum. Innovations may very well be unique at the local school, but mostly there are elements of borrowing apparent, that demands for open channels between the local school and other schools that have tried to solve the same problem.

Judgement of efficiency and inventing new solutions usually lead to a need for another task - to set priorities. When resources are limited as they usually are in schools, you have to decide what is most important and what you can let go. When the improvement process is under way, there is a need for combining the old and the new. Older parts of the system often resist the new innovations. Energy must be concentrated on helping the school take the new routines, ideas, practices into its old life. Carrying out this task means to try to understand the whole of the local organisation, to see the interplay of its parts, and to give concrete help to all parts of the school, new and old, that are involved in the change.

Improvement roles

All these tasks - and probably a few others - need to be accomplished if the school is to be successful in its improvement work. Connected to these crucial tasks are several roles in the school that have to be played by the people of the school. In the same way as the role of the maths teacher is important if the school is to succeed in its efforts to develop mathematical knowledge among the students, the role of the critic is useful if the school will be able to develop its inner life. The role of the critic requires someone in the school who puts energy into systematic studies of the production process, into defining goals and into giving critical reactions to the actual effectiveness of the school. As you easily can see this example of a role that serves the interest of improvement work of the local school may very well include a range of tasks. The specific role of the critic within a school is a role that is especially well suited for school leaders to play.

Visionaries, who concentrate on the background issues underlying the school's goals, who sketch scenarios of the future of the school and how it might look then, are needed in the school that tries to improve itself. Visionaries also talk about present goals that should be kept for the future. Aside from being able to create futuristic scenarios and base them on the improvement goals of the school, people who can be recruited for this role at the school usually are good at inspiring others to believe that a certain future can happen.

Working almost hand in hand with the visionaries you need people at the school that take the role as inventors. This role demands creativity and fantasy, the capacity to turn visions into a decision for reality. Innovators must act with other roles to be useful. If they are isolated at the school and kept in a kind of refrigerator, as we found was the case in some Swedish schools that were followed for several years (Sandström and Ekholm, 1984), the ideas of the innovators will stay unused. To be used innovations need to be actualized, brought into real routines and working patterns. The role of the innovator does not involve engagement into this path. The innovative work uses energy so there is a need for a role of the builder to take over here.

The builder role often includes emphasis on the priority-setting task. Builders are often powerful people at the school that can propose the parts of the old system that must be thrown out to make way for the new and have a good sense of what the new patterns will take in terms of time and energy as they are put into place. Builders - like visionaries - are optimistic, but they are very practical too.

The roles of the visionary, the innovator and the builder need to be complemented by the role of the pusher. This is someone at the school that serves as the advocate of the new ideas and patterns. This role helps the innovator and builder by mobilizing a larger part of the school members toward the new goals that the visionary has identified and take on the innovations worth fighting for and encouraging. The pusher sometime needs to remind people of the local school of the improvement engagement that the school have become involved in. In this role lies the burden of asking people about what they have done and not have done so far and reminding them about time limits that have been promised. This role too, seems to fit school leaders very well.

If new patterns are to stay in place over the years to come, some other roles are needed too. One is the stabilizer, someone who helps the local system to settle down in its new form, reach a new point of balance after the critics have pointed out weak spots, and the inventors, builders and pushers have introduced new ideas and begun finding space for them in school. A close role-cousin to the stabilizer is the resister, a role needed if the improvement is to grow into the local organisation and stay there over time. The role of the resister is to doubt the conclusions of the critics and the visionaries, to see weak points in the work of the builders. They also need to be brave enough to doubt the good intentions of the work of innovators and pushers. Resisters are important in the improvement process; they are a sort of filter that only lets new things pass through after a good deal of time. They encourage realistic revisions of improvements.

There would be few changes in a school if people that act as resisters were in a majority. There must be many supporters and followers if the improvement will come through. Supporters keep inventors alive; encourage critics, builders and visionaries. They applaud, give energy to the improvement effort and are the heart of the mobilization process. Followers are sometimes early resisters who gradually become converted to the new, finding it useful for themselves and the school.

When school leaders are expected to take a lead of the improvement process, they need to understand all the crucial tasks that need to be fulfilled. And their big task is to find people at the school that can play the important roles in the improvement process. The school leaders cannot by themselves act in all the roles that are needed if the improvement work will be successful. They may be able to play one or maybe two of the many roles. Others need to take most of the roles if the improvement work will be fulfilled. The school leader that is wise enough to answer to the contemporary expectations on his role in the school, treats the roles of the improvement process as serious as he have treated the more well accepted roles of different teachers in the traditional school structure. It ought to be as natural to the school leader to find a person well suited as innovator at the school as it is to find a person well suited for the task of lecturing in history at the school. School leaders who take this viewpoint for granted have been able to respond to the expectations on their position that says that they ought to be the managers of the improvement process as well as of the day-to-day-life of the school.

To become successful in the emphasis to develop the local school, the school leader needs to learn more together with the teacher about the knowledge that have been developed about the different stages that schools go through when they change. It is important to understand all four phases of innovation – initiation, implementation, institutionalisation and transformation – that are described in the research literature (Blossing, 2000) and to apply them to the history of the local school. It is useful knowledge that has been brought up by this research about how initiatives can be taken to school improvement. The experience to use such starting strategies as school based review, problem inventory, ideological discussion, action materials, to make study visits and to receive study visits, to participate in centrally arranged projects or to use a consultant is described in the literature and the advice from the researchers that you need to use at least three of these methods to be sure to succeed to initiate change at the school is good to know.

New content of the role of the teacher

To be able to manage the expectations that schools face in today's Europe, teachers and their school leaders need to broaden their knowledge about the processes that take place when their school changes, so that they may learn together and so that the school itself learns. A new description of the role of the teacher is at hand to help the profession to cope with the new expectations. I see the future directed role of teachers to consist of several different parts. Teachers of future schools will be engaged in continuous learning together with colleagues and school leaders to be able to improve their schools. They therefore have to focus on learning as a scientific concept and as a practical state of activity not only for

students but also for themselves and for their school leaders. Teachers in the future will surely go on delivering lessons but my belief is that if they are going to be able to cope with the new responsibilities of autonomy and responsibility for the school that they are working at they need to focus much more on diagnosis of learning and of leadership for learners. Knowledge about ways that can be used to diagnose such healthy status among humans as that of learning has not been well developed so far. Teachers and school leaders in the future need to engage themselves in a process of knowledge production in this area as the research work runs slowly. The need for knowledge about diagnosis of learning is acute and needs to be taken care of immediately. The knowledge about the different ways that teachers can use when they lead learners in their efforts to learn are much better developed and can be collected by teachers and school leaders from already existing sources.

The modern expectations on schools also place expectations on teachers and school leaders to act professionally in their relationships with colleagues and to those adults upon which the school depends. Teachers need to learn about the group dynamics that occur when teachers work together in teams to be able to find their new professional profile. Many teachers have been used to working in isolation, where feedback from colleagues has seldom occurred. In modern schools this will change and feed back as well as cooperative work will become a daily routine. These new routines need to be met by better knowledge that teachers and school leaders have to learn. Their learning also needs to focus on the relations that develop between teachers and parents who are responsible for the young persons who learn at the school.

As schools of the future are expected to act more as responsibly, units with a good deal of autonomy to find out good ways to stimulate the learning activities of the students teachers and school leaders need to collect more of the knowledge that exists about the life of local organisations. They need to study what people in other schools and in other organisations have learnt about the ways in which goals are kept in mind, in what ways norms develop in local organisations and how reward systems at the local organisational level may be designed to stimulate better work. They also need to see that there are many ways to organise time to reach good learning results at the local level, so that they can leave ancient constructions like 45 or 60 minute lessons that maximise the teaching and instead find out time rhythms that maximise learning. Teachers and school leaders also need to learn more about different ways to group people at the school to reach different pedagogical aims and they need to develop knowledge about the many variations that school based reviews can be designed in to see that this part of their work has many inbuilt possibilities. In most countries there also seems to exist a need for teachers and school leaders to learn more about different ways that they can follow to appear more often in the public dialogue about education and learning and about the quality of schools that goes on at the system level. As teachers and school leaders seldom appear in the debate about these things their views have little influence on the policies that are developed for the schools. The need to organise their actions in this field to be able to become a more evident part

of the ongoing dialogue about education, which also demands learning from the collective body of teachers as well as by the school leaders.

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7

Addressing Professional Competence

Michaela Pišová and Pavel Brebera

Key words

defining professional competence: competence as a holistic concept, assessing professional competence (in teacher trainees), case study.

Abstract

Is the teacher / student teacher 'professionally competent'? A simple question, yet very difficult to answer. The paper will offer a discussion of an attempt to promote and assess the level of professional competence in teacher trainees. In order to do that the concept of professional competence will be defined and a case study of evaluation of student teacher professional development presented.

I. Defining professional competence

The term *competence* has recently re-entered the scene of pedagogical terminology and has become one of the key words in pedagogical discussions. A closer scrutiny, however, reveals that theoreticians as well as practitioners often do not perceive its meaning in the same way, that the definitions offered in the literature differ considerably. Let us support this statement by providing just a few questions related to the definition of competence:

Firstly, it may be noted that in the American, Australian and British literature (for more details see Eraut, 1994, pp. 179-180) and pedagogical documents two variations of the term - *competence* and *competency* - have occurred. Although inconsistently, these two words are not used as synonyms. While *competence* is

given a generic or holistic meaning and refers to a person's overall capacity, *competency* refers to specific capabilities, usually in a direct performance-related sense. Wood and Powers (1987, in Eraut, 1994, p. 179) describe the distinction in the following words:

“‘Competence’, then, must be distinguished from the ‘competencies’ assessed in contemporary testing programmes. It rests on an integrated deep structure (‘understanding’) and on the general ability to co-ordinate appropriate internal cognitive, affective and other resources necessary for successful adaptation.”

Different questions were raised by Hayes (1999, pp. 3-4), Eraut (1994, pp. 166-167) and others. They pointed out that the semantic potential of the word *competence* may be judged on a binary scale, where a person is assessed to be either competent or not competent, or on a graduated scale where *competent* is a position somewhere in the middle of the way from novice to expert: “If we think of a continuum ranging from just knowing how to do something at the one end to knowing how to do something very well at the other, knowing how to do something competently would fall somewhere along this continuum.” (Pearson, 1984, p. 32). A competent performance would then mean ‘satisfactory’ or ‘tolerably good’ rather than excellent or expert (Hayes, 1999, p. 3).

A number of other questions might be mentioned. Is the concept of competence a prescriptive (normative) or a descriptive one? Is the search for competence driven primarily by - currently global - economic and political factors, which significantly influence the issues of qualifications and standards in teaching, or is the main stimulus an exploratory one, i.e. a need to gain deeper insight into the teaching profession? Is the term clearly distinguished from other pedeutological terms, such as for instance teaching skills, teacher knowledge, etc.? And if so, what is the level of agreement among educationalists in this area?

The above are just a few out of many problems to be encountered once we try to define professional *competence* in teaching. They are to a large extent related to the fact that humanities including educational sciences are synchronously multi-paradigmatical (cf. Bertrand, 1998 or for a survey of paradigms in pedeutological research Burns, 1995). The interpretation of the concept of competence then may well reflect different underpinning assumptions as it has been used within all the three paradigms dominant during the last five decades. Eraut (1994, p. 160) describes them in the following way:

1. *behaviourist* paradigm, which resulted in the so-called competency-based training and education of teachers (CBT). CBT has relied on the analysis of teacher observable behaviour which led to very detailed specifications of competent behaviour, to long normative lists of specific skills representing the aims of teacher pre-graduate education as well as evaluative instruments for in-service training;

2. *generic / personalistic* approaches, which differ from the previous paradigm in almost every respect. These are centred on overarching qualities (personal characteristics, capabilities, skills) linked rather to excellent job performance, focused more on mid-career professionals and more on selection than training;

3. *cognitive* approach which does not equate competence and observable behaviour in a specific educational situation. The distinction made by linguists, namely first by Chomsky, between *competence* (being able to speak in a certain way) and *performance* (actually speaking in that way) can hardly be considered irrelevant to the world of work. Similar contrast has been formulated by cognitive psychology: “Competence refers to what a person knows and can do under ideal circumstances, whereas performance refers to what is actually done under existing circumstances.” (Messick, 1984, *ibid.* p. 178)

For the purpose of this study it is vital to make our standpoint explicit. Many educationalists point out that most existing definitions and classifications of competences combine mainly behaviourist and cognitive approaches (cf. Švec, 1999, p. 19; Nezvalová, 2001, p. 8 and others). We believe that if the cognitive approach to competence is applied consistently and considered in the light of the concepts related to hermeneutic pedagogy as well as humanistic psychology, it may offer a new way how to embrace ‘teacher professional self’ in all its domains – cognitive, emotional, ethical (values and attitudes) and conative ones. The holistic view – competence as a gestalt – makes it possible to respect individual differences amongst teachers; it is a highly individualised, flexible and dynamic construct, a distant aim or horizon, towards which professionals move all their professional lives, but which is never fully achieved. (cf. Wallace, 1991, p. 58, and others). A teacher’s actions at school are perceived as a complex and changeable process of teacher – pupil personal encounters in the field of the content of education rather than transmission of knowledge. Such concept is not based on a detailed analysis of teacher observable performance, but on the analysis of the roles and professional values; emphasis is put on teacher ethical responsibility (Vonk, Giebers, 1992, in Spilková, 1996, p. 208; cf. also Eraut, 1994, pp. 204-205).

The concept of competence as a meta-construct corresponds to the current significant shift in the perception of teacher roles, to the model of open professionalism (Vonk, in Štech, 1994, p. 316). The model of open professionalism increases the teacher’s responsibility for the identification, analysis and provision for children’s needs in terms of their socialisation and general cultivation, for negotiating the aims, content and optimal procedures of educational work, for critical analysis of one’s own actions. This view also reflects dynamic demands posed on the teaching profession by the society and social changes. The so-called knowledge society expects a teacher (and school as an institution) to be capable not only of reflecting ongoing social changes, but of anticipation of further development and catering for pupils’ needs in this sense.

A working definition of teacher professional *competence* for the purpose of our research may then read as *a set of operationalisable internal schemata which encompass internalised knowledge, reflected experience, self-awareness and professional value and belief systems, and which guide effective goal-oriented situated actions.* (Píšová, 1999, p. 15).

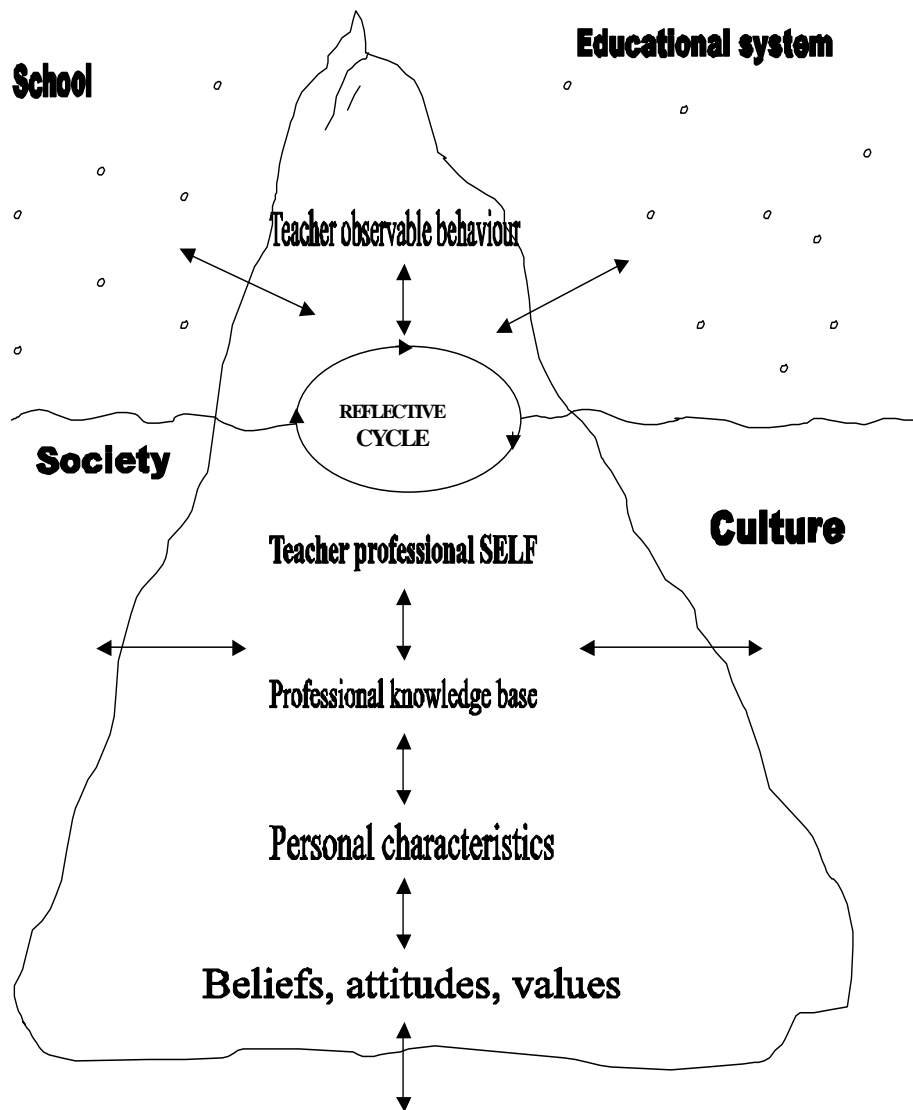
If we accept this view, then – as Eraut (1994, p.167) points out - a person's professional competence has at least two dimensions, scope and quality:

“The scope dimension concerns what a person is competent in, the range of roles, tasks and situations for which their competence is established or may be reliably inferred. The quality dimension concerns judgments about the quality of that work on a continuum from being a novice, who is not yet competent in that particular task, to being an expert acknowledged by colleagues as having progressed well beyond the level of competence.”

A graphical expression of this perception of teacher professional competence, the well-known metaphor of an iceberg (Picture 1), will hopefully provide a clear summary of the previous theoretical discussion. It may also help to link it with the next chapter which describes a small-scale research project aimed at assessing professional competence in a group of teacher trainees. For this purpose it was necessary to:

- operationalise a holistic concept in such a way that we may focus on both observable and 'hidden' dimensions of competence
- assess change rather than status quo
- select appropriate methodology (and tools)

Ongoing social changes



Picture 1: Teacher iceberg (adapted from Malderez, Bodóczy, 1999, p. 15)

II. Assessing professional competence

The conclusions drawn from the previous theoretical discussion clearly indicate that the most suitable methodology for assessing professional competence and its development is a case study. Yin (1994, in Merriam, 2001, p. 27 and elsewhere) provided one of its most frequently cited definitions: “Case study is an empirical method which investigates a contemporary phenomenon in its real context, specifically when the border between the phenomenon and the context is not obvious.” A case study typically uses multiple sources of information and a combination of qualitative and quantitative research techniques according to the strategic purpose of research. Such specification closely corresponds to the aim of our study – if we perceive teacher professional competence as a holistic concept, we may, with regard to a multiparadigmatic character of pedagogy, deploy techniques typically offered exclusively by different schools of thought in order to address different aspects of the concept (cf. *principle of disciplined eclecticism*, Shulman, 1986, p. 33). This attitude also serves the purpose of data triangulation through use of multiple sources of information (external and self-evaluation), combination of data collection instruments (evaluation sheets; a collection of questionnaires which included various types of questions: closed, scaled questions, diagrams, etc.; indirect non-participant observation; content analyses) and combination of research targets, i.e. focus on the development in 3 areas of professional competence:

- selected (observable) performance criteria
- indirect professional development indicators
- professional thinking (reflection)

The research sample consisted of 15 students (12 female and 3 male students) of a pre-graduate teacher education programme (TEFL) at the University of Pardubice. The research took one year as the students were closely followed during their assistantship at schools, the so-called Clinical Year (for detailed description of the Clinical Year see Brebera, Černá, Píšová, 2005) that is an obligatory component of their study programme.

II.1 Selected (observable) performance criteria

The first investigation into the development of professional competence in our trainees was based on student evaluation by mentor, i.e. school-based facilitator of their professional learning. Evaluation by mentor is obligatory for the students; it is conducted twice a year, at the end of each phase of the Clinical Year (January, June). The data collection instrument, evaluation sheet, included mainly observable (performance-related) aspects of professional competence, or rather their representative collection (total number of issues included was 17). The areas of professional performance covered both the professional socialisation aspects, i.e. how the students functioned in the culture of their educational institution, and their achievement in the teaching / learning processes in the classroom. In formulation of criteria the principle of user-friendliness was acknowledged:

- A. "IN THE STAFFROOM"
- on-the job discipline

- commitment to teaching
- co-operation with the mentor
- co-operation with other colleagues
- independence and personal initiative

B. "IN THE CLASSROOM"

PLANNING AND PREPARATION

ORGANISATION OF THE TEACHING / LEARNING PROCESSES

- effective management of the lesson phases
- appropriate choice of teaching strategies and techniques
- working with textbook, appropriate choice and use of a teaching aids
- communication with pupils
- supporting pupils' initiative and developing their autonomy

CLASS MANAGEMENT

- positive and open relationship with pupils, mutual respect, motivating and activating pupils
- maintaining discipline

ASSESSMENT OF PUPILS' PROGRESS

- monitoring pupils' work in the class
- effective use of various assessment techniques
- testing and interviewing

PROFESSIONAL KNOWLEDGE

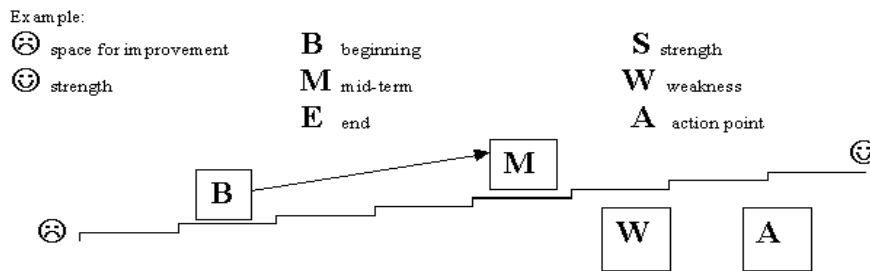
- subject matter knowledge (English language and culture) and ability to mediate it to pupils
- good grounding in educational sciences

The evaluation procedure consisted of two phases. In the first phase both the student and the mentor received and separately (independently) filled in the evaluation sheet. The second phase then provided an opportunity to compare and discuss the results of mentor evaluation and student self-evaluation. The outcome of the discussion – and of the whole procedure – was not only the assessment of the current state of professional development of the student, but at the same time identification of his / her strengths and of spaces for improvement, for setting specific action points. These final data served for quantitative analysis in our investigation.

The format of the evaluation sheet was dictated by maximum effort to make its use transparent and simple, but simultaneously preserve optimal informative potential. A sample of the instructions and the first task is provided in Picture 2.

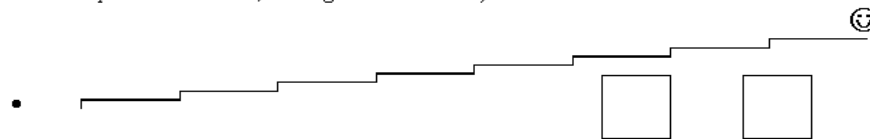
A graphical format enables the users - assessors to capture student's development in the given areas as a movement on a "professional staircase", which may mean either climbing up, stagnation, or even regression. The usual measures to ensure standardisation were taken; for the purpose of our investigation, however, the important data to be considered were the distinctions between the entry and the final value, not the values themselves. For the purpose of statistical analysis the above graphical format was translated into numerical. Data yielded by the

statistical analysis as provided in Appendix 1; here we will briefly comment on them.



A. "In the staffroom"

on-the-job discipline (*presence at workplace, being on time, credible apologies for possible absences provided on time, willingness to do tasks*)



Picture 2: Evaluation sheet

The first five issues represent a relatively separate part of evaluation for the area of professional socialisation of students - assistants. The data prove statistically significant positive change in respondents' professional behaviour ($p < 0,05$) including co-operation with colleagues, development of their independence and growth of initiative ($p < 0,01$). In issue No. 2., commitment to teaching, no statistically significant change was detected, which is by no means surprising and corresponds to other data from research into professional induction processes (e.g. Tickle, 1994). As regards co-operation with mentor, lack of statistically significant positive change could be expected, as the most demanding period in terms of need of support is the very beginning of the school year; in addition to that, this result correlates with the students' growth in independence documented in issue No. 5.

Further issues under investigation, i.e. points No. 6-17 in the evaluation sheet, deal with observable aspects of teaching / learning processes in the classroom. To sum it up, in all these areas a statistically significant growth ($p < 0,01$) was proved. This statement relates to the Clinical year as a whole, to the period from September to June. A closer look at the results, however, reveals that a result of the same statistical weight was in most of the criteria (with the exception of issues No. 11, 12 and 16) achieved already in January, after half a year spent by the students - assistants at schools, while in only two areas (issues No. 8 and 14) any significant change can be observed in the second half of the year. Though we may be tempted to make a relatively simple straightforward interpretation of this fact, it is important at this point to keep in mind our own working definition of professional

competence and at the same time the fact that the investigation only aimed at observable performance criteria, which therefore can hardly be considered representative for a holistic concept of competence.

II.2 (Indirect) professional development indicators

The second investigation focused on different partial aspects of professional competence, this time aspects that are not directly observable. Theoretical grounding for this part of our case study was found in the research into teacher professional development, predominantly in Berliner's (1988, in 1995, p. 47-48) stage model of teacher development. Berliner's descriptors of the separate stages of development suggest that specific *indicators of professional development* may be derived. The following table defines them as a movement:


FROM		TO
sticking to plan		flexibility, improvisation
focus on content		focus on learner and his / her needs
short-term planning		mid- and long-term planning
conscious concentration on professional action		“intuitive“ grasp of a pedagogical situation
reaction to events		anticipation of events

Table 1: Professional development indicators

The character of these indicators does not allow for external assessment. Consequently, subjective perceptions of students - assistants were explored shortly after they completed their Clinical year (actually also in order to develop their reflective skills, as a useful reflection-on-action exercise). The instrument designed for students' self-evaluation again effectively exploited a graphical “shortcut” – the students were asked to fill in developmental lines into empty graphs. In this way, the values for each of the indicators throughout the Clinical Year could be not only seen, but also translated into numerical data and analysed. The analyses brought up the following outcomes:

Indicator 1 – *development from sticking to plan to flexibility, improvisation*

According to Berliner's model a teacher in the initial phases of his / her professional life cycle is neither sufficiently self-confident nor able to 'read' educational context, therefore he / she firmly proceeds according to a previously set plan. A lesson is typically evaluated on the basis of completing the plan, not of pupils' learning. Flexibility, ability to modify the plan and improvise, takes a long time to develop. It is displayed only to a considerable level by the so-called competent teachers, i.e. in the third stage of development. The results of our investigation are shown in the following graph (Figure 1); statistical analysis of quantified data proved considerable development (t-test 1:10 - 4,98**).

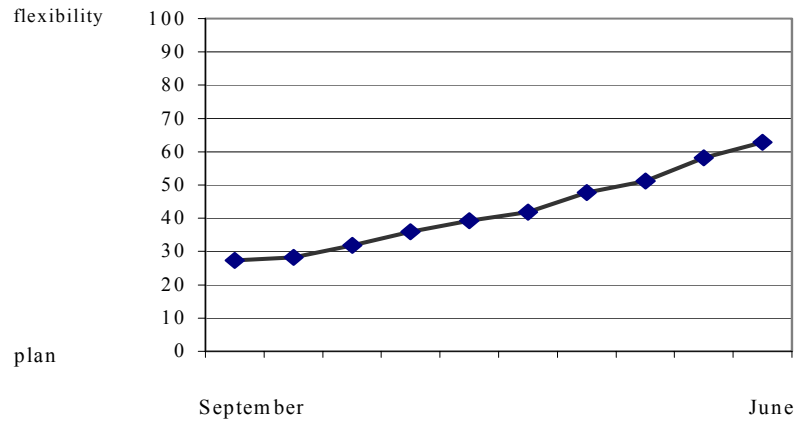


Figure 1: Development from sticking to a plan to flexibility

Indicator 2 – development from focus on content to focus on learner

The second indicator is closely linked to the previous one; for a novice in the profession the planning and teaching processes are directed by the content, i.e. by the subject matter of his / her specialisation. Pupils' learning processes and their needs, individual learning styles and strategies, are typically fully reflected only in the third stage of teacher development. Thus, the correlation of results in indicators 1 and 2 also served the triangulation purposes. A desirable development of our respondents was again statistically proved on a 1% level of significance (t-test 1:10 - 5,16**) and is illustrated by graph in Figure 2.

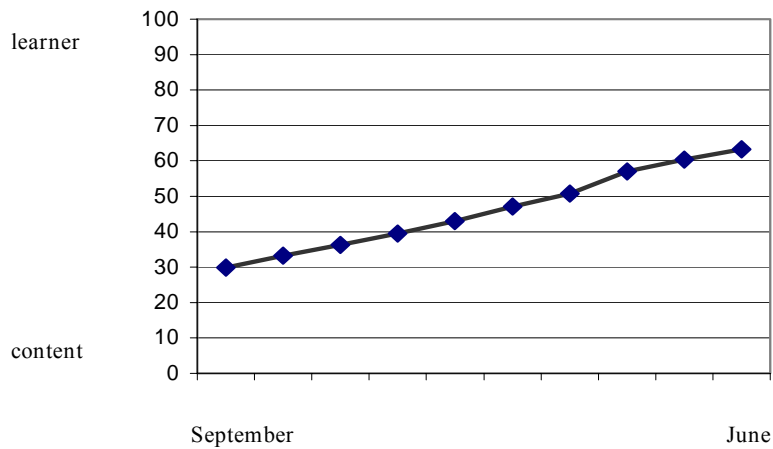


Figure 2: Development from focus on content to focus on learner

Indicator 3 – development from short- to long-term planning

A professional novice typically displays features of a 'here and now' approach; he / she concentrates on immediate survival, is unable to set priorities, and perceives both the aims and content of education in the horizon of lessons. According to Berliner's model, he / she begins to discover similarities and see more complex wholes only in the second stage of development and longer-term planning skills are still being developed in the third stage. The results concerning this indicator showed that no statistically significant shift could be observed during the Clinical year (t-test 1:10 – 1,97; see also graph in Figure 3).

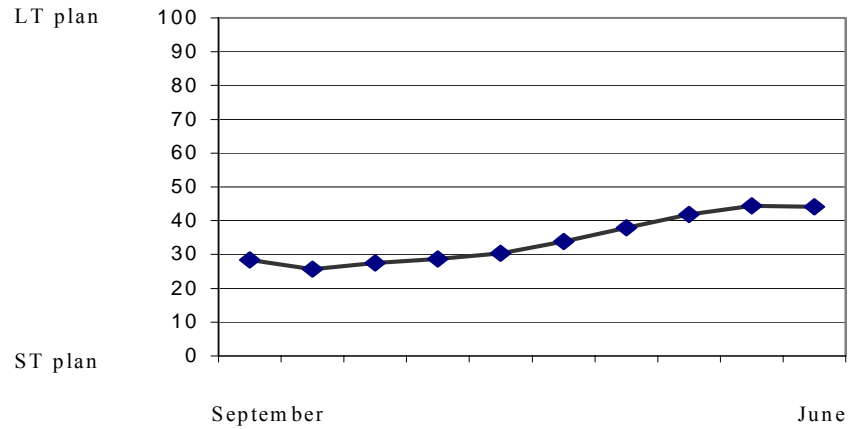


Figure 3: Development from short- to long-term planning

Indicator 4 – development from conscious concentration on professional action to “intuitive” grasp of a pedagogical situation

The need to consciously concentrate on the immediate educational context makes it hardly possible for

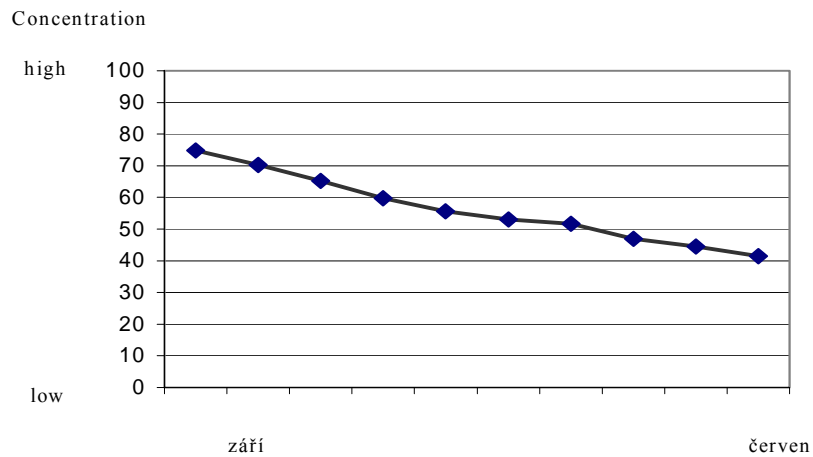


Figure 4: Development from conscious concentration on professional action to “intuitive” grasp of a pedagogical situation

novices to see the relationships, to perceive educational processes in their complexity. Theory notes that a seemingly “intuitive” grasp of the situation is typical only of teachers – experts, i.e. for the highest rank of the professional development scale. However, certain similarities and patterns should begin to emerge already in the developmental second stage. And how did our respondents view their own situation? The resulting graph illustrates – and the analysis of quantified data confirms the development of intuition in the desirable way (t-test 1:10 – 7,09**).

Indicator 5 – development from reaction to events towards anticipation of events

While a beginner teacher is usually driven by events and solves the problems only when they occur (and that often on the basis of imitation or advice), the development of professional competence is connected with the ability to anticipate events and become gradually a creator of events, make

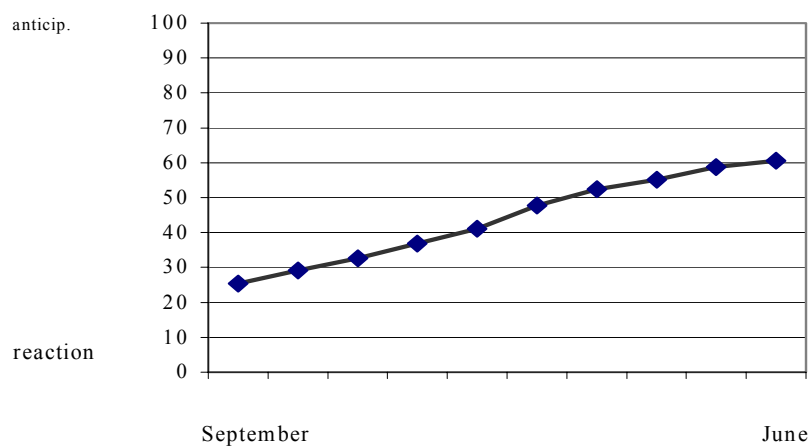


Figure 5: Development from reaction to events towards anticipation of events

conscious decisions concerning procedures and be able to take preventive actions. The model views this as a long-term process, which slowly begins in the second stage by posing causal questions, but does not fully develop until the expert stage. The links to the previous indicator and the triangulation purpose are again obvious. The result obtained in this area in our investigation was pleasingly positive (t-test 1:10 - 6,29**, i.e. $p < 0,01$; graph in Figure 5).

In order to briefly summarise the outcomes of the second investigation into the development of professional competence, which focused on different (unobservable) aspects of the phenomenon, it may be noted that in four out of five so-called areas under investigation positive development was clearly documented. However, in comparison with the previous part of our case study, i.e. the

evaluation of teacher observable performance, the development this time was gradual and consistent throughout the whole Clinical Year. In addition to that, the final values achieved (see the graphs) support the credibility of the results as they provide sufficient space for the necessary further development. It was only in issue No 3 – development from short- to long-term planning - that no significant development was perceived by the respondents. We may but hypothesise that a longer time would probably be necessary for development in this particular aspect of professional competence.

II.3 Professional thinking (reflection)

The third step in our case study was to explore possible change/s in the 'professional thinking' of our trainees during the Clinical Year; or, to put it more precisely, the development of the demonstrated quality of reflection. In correspondence with the discussion in the first chapter of this text, the theoretical standpoint we adopted for assessing this phenomenon was the cognitive perception of reflection and its phases: in other words, we looked at the level of mental operations displayed by students – assistants in two key moments of the Clinical Year – in January and June (the schedule as in the first study).

At those points, our students' teaching performances were video-recorded (always an approximately 20 minutes' sequence of a lesson selected according to their own decisions) and the actors were subsequently asked to work on a written analysis of the recordings. The analyses served as the basic material for the researchers. In the content analysis of the materials the following categories (i.e. mental operations) were sought:

1. *description*;
2. *analysis* – i.e. demonstrated ability 'to see', realise success and failure in the recorded teaching / learning processes;
3. *evaluation* – ability or at least attempts to explain the causes of the above problems or achievements;
4. *suggestion of alternatives* for action;
5. *generalisation* – formulation of general rules that guide the respondents' own professional action, rules of practice for their professional philosophy;
6. *metacognition* – as 'thinking about their own professional thinking'.

It is obvious that we found inspiration for the choice of the above categories in various classifications of phases of reflection, namely in the probably up till now most influential classification by Smyth (1989, e.g. in Villar, 1995, p. 181, or Williams and Burden, 1997, p. 55, and elsewhere; compare also revised version of Bloom's taxonomy - Anderson, Krathwohl, Airasian et al., 2001).

In short, then, in the third investigation we aimed to find out how the professional performances were reflected by our students – assistants. (See Appendix 2 for examples of students' comments). The result of the content analyses of their materials for the first phase, i.e. for January, is graphically summarised in Table 2. It is obvious that at this stage only 53,3% students were able to 'see' their own strengths and weaknesses (Analysis); out of them only six trainees (40% of the total number) asked about the causes of the above, and only four (26,7%)

considered any alternative actions. The two highest categories were represented only marginally (one, resp. two asistents, i.e. 6,7% resp. 13,3%)

Student	DESCRIPTION	EVALUATION	ANALYSIS	ALTERNATIVES	GENERALISATION	METACOGNITION
S1	X					
S2	X	X	X	X		X
S3	X	X				
S4	X	X				
S5	X	X	X	X	X	
S6	X	X	X			
S7	X	X	X	X		
S8	X	X	X			X
S9	X					
S10	X					
S11	X	X	X	X		
S12	X					
S13	X					
S14	X					
S15	X					
TOTAL	15	8	6	4	1	2

Table 2: Quality of reflection - January

If we read the table in a vertical direction, we may conclude that only five trainees (33,3%) demonstrated their reflective qualities in four or more of our categories; if we go one level down (three categories), we may only add one further trainee to this number (40% respondents).

In the second exploration in June, in the very end of the Clinical Year, the same procedure was followed. The data obtained are displayed in Table 3:

Student	DESCRIPTION	EVALUATION	ANALYSIS	ALTERNATIVES	GENERALISATION	METACOGNITION
S1	X	X	X		X	
S2	X	X	X		X	X
S3	X				X	
S4	X	X	X	X		
S5	X	X	X	X	X	
S6	X	X		X		
S7	X	X	X	X	X	X
S8	X	X	X			
S9	X	X	X	X	X	X
S10	X	X	X		X	
S11	X	X		X	X	
S12	X	X	X	X		
S13	X	X	X	X	X	
S14	X	X				
S15	X	X	X		X	
TOTAL	15	14	11	8	10	3

Table 3: Quality of reflection - June

This time almost all the trainees (with one exception, i.e. 93,3%) demonstrated the ability not only to describe the events but also to analyse it, almost three quarters of the sample (11 respondents, i.e. 73,3%) attempted to explain the causes of events. In more than half of these (8 respondents, 53,3%), alternatives for action were proposed. Ten assistants (66,7%) included some 'rule of practice', a general principle they believe in and that guides their professional actions; it was interesting to see that they supported these principles by the literature or other authorities (mentor, significant others, etc.). It was only in the highest category, in metacognition, that the representation remained relatively low (3 assistants, i.e. 20,6%).

Vertical interpretation of the results, a look at individual respondents, shows that only two of them manifested a very low range of reflective thinking (2 categories); in other words, thirteen trainees 'scored' in at least three levels, eleven in four of them, five respondents reached five or more levels and two reflected in the full range of our categories.

The comparison of the data obtained, namely the newly emerged categories, can be seen in Table 4:

Student	DESCRIPTION	EVALUATION	ANALYSIS	ALTERNATIVES	GENERALISATION	METACOGNITION
S1		P VI	P VI		P VI	
S2					P VI	
S3					P VI	
S4			P VI	P VI		
S5						
S6				P VI		
S7					P VI	P VI
S8						
S9		P VI	P VI	P VI	P VI	P VI
S10		P VI	P VI		P VI	
S11					P VI	
S12		P VI	P VI	P VI		
S13		P VI	P VI	P VI	P VI	
S14		P VI				
S15		P VI	P VI		P VI	
TOTAL		0	7	7	5	9

Table 4: *Quality of reflection: growth in reflection from January to June*

Building on that, we may attempt to interpret the results firstly in relation to individual respondents. The table (Table 4) graphically documents the development achieved in the aspects of professional thinking under investigation: the development – reflecting in a wider range of our categories - could be proved in ten assistants (66,7%; shift between 1 to 5 levels). Three assistants (20% of the total number) did not manifest reflection in more categories, but increased the level of their mental operations. Only one assistant did not achieve any increase, however, in this case the reflective potential was relatively high already in the first phase (S5). It means that no significant improvement was only displayed by one of the respondents (S8). The data confirm the assumption that though the reflective potential differs in individuals, it is possible to develop it over time.

The last graph (Figure 6) is included in order to provide a view of the positive trend of development in the categories (obviously with the exception of the first level of reflection, description, which was fully achieved already in the first stage by the respondents):

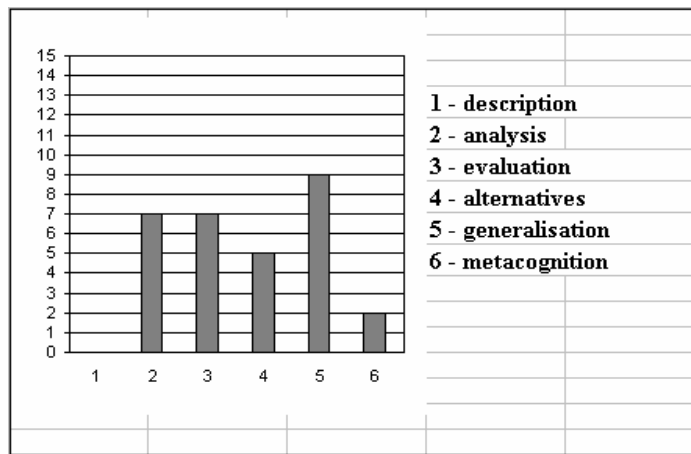


Figure 6: Developing reflection

To conclude, the third part of our case study, the exploration of the development of professional thinking in the students – assistants during the Clinical Year, proved positive change in the categories under investigation. It is, however, of major importance to note, that the time scale of this development differs considerably from the results in the first investigation, evaluation by mentor. While observable performance criteria documented major growth in the first half of the Clinical Year, professional thinking in respondents took much longer to develop – the process was actually initiated in January and gradually progressed in the second half of the Clinical Year. This fact clearly indicates how dangerous it may be to draw conclusions concerning professional competence as a whole just by assessing its partial aspect.

III. Conclusion

The paper offered a discussion of an attempt to promote and assess the level professional competence in teacher trainees. Professional competence is perceived as a holistic concept; this fact was reflected by the methodology chosen to capture its development. A case study was considered to be an optimal frame as it enabled us to apply multiple tools in order to assess specific partial aspects of the phenomenon as well as to gain data from multiple evaluators (self-evaluation plus different external evaluators: mentors and university teachers). While reflecting on the exercise we may conclude that our case study and its outcomes support the assumption that complex and multidimensional concepts such as professional competence can hardly be addressed by single and relatively simplistic procedures and instruments. In order to gain a deeper and clearer insight into professional competence and its state / growth, the measures to be taken require careful consideration.

IV. Epilogue

The above presented exercise was carried out in a specific context which is defined both by current European trends in pre-service teacher education and simultaneously, by a specific legislation of a particular country – in our case the Czech Republic. Although the issues of political nature have not been mentioned here so far it should be pointed out that their role in the processes of the development and research of the evaluative instruments on teacher professional competence is very important. Let us, therefore, dedicate a few - perhaps controversial - final comments to some contextual factors that seem to be rather unfavourable to the intentions presented above.

As the desirable use of the multiple evaluators represents a demanding process focused on the development over time rather than the state here-and-now, it seems to be considerably limited especially in the conditions of two-cycle structure of the programmes of pre-service teacher education which is currently being broadly implemented according to one of the principles of the Bologna Declaration (1999). In Czech educational context - and elsewhere - the pressure on re-structuring the teacher training programmes brings about as an unfavourable by-product a trend to prioritise so called consecutive models, thus reducing the amount of time for the purposes of the student teacher professional graduation. The process of implementation of this particular principle of the Bologna Declaration into the area of pre-service teacher education therefore to a large extent neglects the specifics of the teaching profession, apparently lacks the expert basis (especially empirical) and is being pushed forward purely by the arguments of proclamative nature. A need of a broad, preferably international, debate on this particular topic seems to be a must.

Let us therefore conclude that the attempt presented above to evaluate the teacher professional competence might be also perceived as a particular bottom-up way of contributing to the ongoing educational reform. In our opinion, similar exercises – if taken into account by decision-making bodies, and provided that these authorities will be capable of establishing the development-friendly environment - have the potential of reducing the overall costs of the reform as a whole. We feel that in the field of teacher education, the most desirable way of applying the kind of top-down approach in Czech educational context would be the standardisation of the teaching profession (that has been in process for the past 15 years, however without a definite outcome so far) so that the evaluative tools might be broadly used and directed towards a specific goal represented by the standard of teaching profession. Unfortunately, the main efforts in the area of teacher education are currently focused on implementation of structured study programmes which finally seems to bring a number of constraints rather than benefits, and thus sharply contrasts with another pillar of the Bologna Process – the quality assurance.

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Appendix 1

(Note: in all tables t-test scores should be read: * $p < 0,05$; ** $p < 0,01$)

A. "IN THE STAFFROOM"

(1) on-the job discipline

	SEPTEMBER	JANUARY	JUNE
average	6,266667	6,866667	7,266667
standard deviation	1,388844	1,024153	1,062492
modus	7	7	8
median	7	7	8
t-test Sept. - June	2,25*		

Table 1

(2) commitment to teaching

	SEPTEMBER	JANUARY	JUNE
average	5,533333	5,2	5,666667
standard deviation	1,359739	1,42361	1,299573
modus	6	5	5
median	6	5	5
t-test Sept. - June	0,26		

Table 2

(3) co-operation with mentor

	SEPTEMBER	JANUARY	JUNE
average	6,8	7,133333	7,266667
standard deviation	1,16619	1,024153	1,339983
modus	7	7	8

median	7	7	8
t-test Sept. - June	1		

Table 3

(4) co-operation with other colleagues

	SEPTEMBER	JANUARY	JUNE
average	4,266667	5,933333	6,466667
standard deviation	2,112397	1,388844	1,203698
modus	5	7	7
median	5	7	7
t-test Sept. - June	3,51**		

Table 4

(5) independence and personal initiative

	SEPTEMBER	JANUARY	JUNE
average	4,533333	6,733333	7,266667
standard deviation	1,7075	0,85375	0,771722
modus	4	7	8
median	4	7	7
t-test Sept. - June	5,66**		

Table 5

B. "IN THE CLASSROOM"

(6) planning and preparation

	SEPTEMBER	JANUARY	JUNE
average	4,466667	6,4	7,133333
standard deviation	1,927578	1,143095	0,884433
modus	3	6	8
median	4	6	7
t-test Sept. - June	4,89**		
t-test Sept. - Jan.	3,36**		
t-test Jan. - June	1,96		

Table 6

- *organisation of learning / teaching processes*

(7) effective management of the lesson phases

	SEPTEMBER	JANUARY	JUNE
average	4,066667	6,266667	6,8
standard deviation	1,651935	0,85375	0,909212
modus	3	6	7
median	4	6	7
t-test Sept. - June	5,64**		
t-test Sept. – Jan.	4,59**		
t-test Jan.- June	1,68		

Table 7

(8) appropriate choice of teaching strategies and techniques

	SEPTEMBER	JANUARY	JUNE
average	4,066667	6,2	7,066667
standard deviation	1,611073	1,045626	0,771722
modus	3	6	7
median	4	6	7
t-test Sept. - June	6,51**		
t-test Sept. – Jan.	4,32**		
t-test Jan.- June	2,57*		

Table 8

(9) working with textbook, appropriate choice and use of a teaching aids

	SEPTEMBER	JANUARY	JUNE
average	4,6	6,666667	7,266667
standard deviation	1,74356	1,19257	0,928559
modus	6	8	8
median	5	7	8
t-test Sept. - June	6,84**		
t-test Sept. – Jan.	4,74**		
t-test Jan.- June	1,54		

Table 9

(10) communication with pupils

	SEPTEMBER	JANUARY	JUNE
average	4,333333	6,466667	6,733333
standard deviation	1,738454	1,0873	0,997775
modus	6	6	6
median	4	6	6
t-test Sept. - June	4,66**		
t-test Sept. – Jan.	4,04**		
t-test Jan.- June	0,71		

Table 10

(11) supporting pupils' initiative and developing their autonomy

	SEPTEMBER	JANUARY	JUNE
average	4,466667	6,2	6,933333
standard deviation	2,156128	1,681269	0,928559
modus	6	8	8
median	5	7	7
t-test Sept. - June	4,99**		
t-test Sept. – Jan.	2,46*		
t-test Jan.- June	1,47		

Table 11

- class management

(12) positive and open relationship with pupils, mutual respect, motivating and activating pupils

	SEPTEMBER	JANUARY	JUNE
average	4,666667	6,4	7,133333
standard deviation	2,1187	1,254326	0,718022
modus	3	8	7
median	4	6	7
t-test Sept. - June	4,29**		
t-test Sept. – Jan.	2,74*		
t-test Jan.- June	1,96		

Table 12

(13) maintaining discipline

	SEPTEMBER	JANUARY	JUNE
average	3,733333	5,466667	6,2
standard deviation	1,236482	1,146977	1,10755
modus	4	5	7
median	4	5	6
t-test Sept. - June	5,79**		
t-test Sept. – Jan.	3,99**		
t-test Jan.- June	1,8		

Table 13

- assessment of pupils' progress

(14) monitor monitoring pupils' work in the class

	SEPTEMBER	JANUARY	JUNE
average	3,866667	5,866667	6,8
standard deviation	1,024153	1,024153	0,832666
modus	3	6	6
median	4	6	7
t-test Sept. - June	8,65**		
t-test Sept. – Jan.	5,36**		
t-test Jan.- June	2,9**		

Table 14

(15) effective use of various assessment techniques, testing and interviewing

	SEPTEMBER	JANUARY	JUNE
average	3,666667	5,466667	6,466667
standard deviation	1,619328	1,359739	0,884433
modus	6	7	6
median	3	5	6
t-test Sept. - June	5,91**		
t-test Sept. – Jan.	3,31**		
t-test Jan.- June	2,4*		

Table 15

- professional knowledge

(16) subject matter knowledge (English language and culture) and ability to mediate it to pupils

	SEPTEMBER	JANUARY	JUNE
average	5,266667	6,533333	7,133333
standard deviation	2,143725	1,309792	0,884433
modus	6	6	8
median	6	7	7
t-test Sept. - June	3,13**		
t-test Sept. – Jan.	1,66		
t-test Jan.- June	1,48		

Table 16

(17) good grounding in educational sciences

	SEPTEMBER	JANUARY	JUNE
average	4,133333	5,866667	6,533333
standard deviation	1,7075	1,309792	1,203698
modus	4	6	7
median	4	6	7
t-test Sept. - June	4,46**		
t-test Sept. – Jan.	3,13**		
t-test Jan.- June	1,46		

Table 17

Appendix 2

Video-recorded performance analyses: typical examples of statements representing the assessed mental processes:

Note:

The language of original statements has not been corrected.

1. Description

“I prepared an activity entitled “What am I doing right now?” for my pupils. I prepared the aids – numbers, strips of paper with short sentences. There was also

the blackboard and chalk. The whole class was involved in the game – it was divided into three groups which were supposed to compete with one another. Each group chose one pupil whose task was to mime something for the rest of the class. The vocabulary concerned everyday activities, the aim in terms of grammar was present continuous. First of all, I myself performed a mime – the children were laughing at my performance and the atmosphere became relaxed. I was constantly encouraging them so that they would not be afraid to shout aloud any of their ideas. The first team that provided the right guess got a point...”(S7)

2. Analysis

“I could improve my communication – I repeated very often O.K. I also sometimes didn’t know what was going on in the classroom – I should improve with-it-ness.”(S 7)

“To be honest, communication in English was my main problem – simplified modified grammar and vocabulary. I very often used complex constructions which the pupils did not understand and I used gestures and miming to help myself. But most often I just switched into Czech.” (S 14)

“Thanks to the video I realised that there was actually no feedback in my lesson, just a few phrases like “well done”, “very good”...” (S 14)

“I think I can be satisfied with the pacing of the activities and their transitions; time-management is very important for me – therefore I used my watch for orientation.” (S 15)

“I tried to use English all the time – even for the instructions – although I was not completely sure whether it would be suitable. Finally, I made a decision and I think it worked well – the pupils were answering in English too and without any bigger hesitation, which was quite a success.” (S 9)

3. Evaluation

“I thought I had planned my lesson well enough but it turned out how unpredictable the lessons might be. As regards my plan, it was really detailed – I knew what the pupils were supposed to learn during the lesson, I had the individual activities well thought out, ie their sequence, time, duration. I was aware of the fact that the content was a little bit above the level of current language competence of the pupils but I was absolutely sure that they would manage it successfully. However, I forgot about possible problems and that is why I didn’t plan any contingencies or alternatives in case of necessity. I should have taken into account the fact that the conditions in this lesson were not standard – there was another person who was recording the lesson. This certainly was one of the factors which influenced the course of the lesson, but not the only one...” (S 8)

“This time I was satisfied with the way I gave the instructions. I think that one of the reasons why the pupils understood me was the appropriate level of language supported by gestures, miming, etc. (S 5)

4. Alternatives

“Another weakness appeared during the activity focused on listening comprehension, to be more specific at its beginning when the listening context was being introduced. This part could – and should – have been used in such a way so

that the pupils would have answered some other questions. Instead of that, the context was simply described and that was it.” (S 6)

“One pair performed a dialogue and I left them sit at the desk. It would have been much better if they had performed it in front of the blackboard. The others would have paid more attention to them.” (S11)

5. Generalisation

“I consider the use of music and songs during the lesson as very motivating, especially for young children whose inner drive is supported by the character of music - relaxing and entertaining at the same time.” (S 14)

“I have come to the conclusion that to insist on the use of English in any situation can be time-demanding and also counter-productive. Sometimes it is better to use Czech for a while so that the pupils would understand, and then to go on in English. In this way, I avoid many misunderstandings and discipline problems that result from unclear or too complicated instructions.” (S 11)

Note:

In the following analyses of the video-recordings in Project 6 the assistants very often used other sources of information to support their viewpoints, especially the topic-relevant literature:

*“Individual activities in the lesson were relatively short; what really matters is the variety so that the lesson would not be monotoneous. For instance, Z. Dörney in his book *Motivational Strategies in the Language Classrooms* says that ... the teachers should vary the tasks and change other aspects of the processes of teaching, such as materials, the level of pupil involvement, organisation of the processes etc.” (S 12)*

“I like to use the real objects and therefore in this activity I used the aids such as oranges, a doll, toy-cars, cassettes, etc. Visual aids attract the attention of the pupils, the pupils can touch them – thus more senses are involved in learning. V.F.Allen (1983, p. 24) in her book also says that the real objects are better than pictures whenever it is possible to bring them into the classroom.” (S 12)

6. Metacognition

“I found the activity in the book “Teaching Grammar through Songs”. Generally speaking, I think that I rely more on the opinion of those who – I am convinced – are professionally more educated than I am. I take their suggestions for granted, as something proved, and I am not critical and selective enough, I don’t consider whether it is suitable for my particular class.” (S 8)

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8

Trust, Respect and Fun

Bill Goddard

Introduction

Although the title of this presentation is Trust, Respect and Fun I think it is important to say at the outset that the context of my comments is one of the future. We are in our network project talking about the future teacher and the future teacher's learning needs. Apart from the potential and obvious learning needs which traditionally relate to curriculum knowledge I think it is also important for us to think about the potential future needs which may relate to future possible scenarios. Within those future possible scenarios, however, I believe that those common human aspects of trust, respect, and fun remain a key element of the successful learning and teaching process.

This article discusses some elements of the professional role which relate to interpersonal skills. It is neither exhaustive nor exclusive but merely provides a beginning to debate. To some extent here we are talking about emotional intelligence. Trust, respect and fun are not words commonly seen in official documents related to the role of the teacher, until recently, but I contend that they are at the heart of effective educational activity. There will be an exploration of these aspects of the educational process which relate to key values. I believe that they have been neglected components of the past, and should not have been, and should be essential components of the future learning process.

Trust

What is trust? According to my Oxford English Dictionary it is a firm belief in someone or something, or the acceptance of the truth of a statement without

evidence or investigation. Furthermore good relationships are built on trust confidence, belief, faith, certainty, assurance, conviction, credence, and reliance.

In terms of The Learning Teacher I will explore these definitions with particular reference to learning and teaching, the teacher, and the future learning needs of teachers.

To begin there are several different interactions where trust could be seen to be an important element. There needs to be trust between headteachers and their teachers, between the whole school staff and pupils and parents, between schools and external bodies and schools and politicians, between schools and the range of paraprofessionals who now work increasingly within schools, and between teachers themselves.

Teachers need to establish a mutual respect between themselves and their competencies but they also need self-trust in order to transmit their competence to their pupils and other agencies. A key relationship is between a headteacher and his or her teachers and the establishment of trust between them is a key requirement of any potential development or change of the curriculum or practice. Without such trust it is unlikely that reforms would effectively take place. In this context, therefore, trust is an essential component of effective leadership.

In the day-to-day activity of teaching it is essential that teachers maintain a relationship of trust with their pupils. As before, without a sense of trust it is less likely that effective learning will take place. Pupils are likely to doubt a teacher's knowledge and/or competence if trust is not an established factor in the relationship.

Teachers also have relationships with external bodies, such as examination boards and Universities. These public interfaces are at the level of professional competence which are about the outcomes from the teacher's activities with their pupils. Examination boards and Universities see the output from the pupils and need to trust the professionalism of the teachers in upholding professional standards in their work, their assessments, and their conduct of examinations. We live in an age of accountability and inspection and with respect to assessment and examination we all know as teachers that our professional judgements are subject to critical analysis.

In recent years we are all aware that governments have taken a close interest in education systems and politicians in general take account of what is happening in schools. It is governments and politicians who have instigated inspection systems, league tables, performance management indicators, and appraisal systems and on the face of it it seems reasonable for politicians to seek accountability for the spending of large amounts of public money. It seems that these developments have been brought about by serious questioning of the output from schools and all governments have an interest in maintaining their society, their standards of living, and preparing the young for the employment of tomorrow. It is unfortunate, however, that schools and teachers are criticised for their work when they have

been working within a system laid down and funded by politicians. As in other examples above it is important for trust to exist between politicians, and their civil servants, and teachers and schools, if effective development and learning is to take place. I do not believe that by alienating teachers from politicians, or politicians from teachers, that trust can exist or as a consequence of that lack of trust that effective development and learning can necessarily take place.

The corollary of this of course is that many schools and teachers will be seen to be doing an excellent job with their pupils, as evidenced by the accountability measures in place, and the teachers are likely to feel particularly proud of their achievements. In this context there may be a strong feeling of trust between teachers and their political masters. Politicians may feel that their will is being done and therefore trust teachers. Teachers may trust politicians in this context because they see that they are being provided with a working context which is effective, perhaps well resourced.

Trust relationships are challenged by changes in the organisation of education, which may bring uncertainty; in the regulation and performance requirements of education; and in public attitudes to education. In the specific educational context there are at least three characteristics of trust which can be noted. First, vulnerability, the strong affective component which relates the interpersonal relationships between all parties. Second, altruism, which reflects the reality that teachers are working in the best interests of the pupil/student; and third, competence, which requires to be exhibited in both the social and technical spheres. Teachers are in a people business and a communications business and these effective social and technical pedagogical competencies are a key element of the successful teacher. We really require that teachers are still knowledgeable, maybe similar to ourselves as pupils/students, honest and transparent, generating interpersonal trust, social trust and role-based trust.

In role-based trust there is a whole list of possible characteristics, from care and competence, through to reliability and sympathy. Good relationships are built on trust confidence, belief, faith, certainty, assurance, conviction, credence and reliance.

As indicated earlier these trust relationships are wide-ranging. I have mentioned connections between teachers themselves, and with headteachers, parents, politicians, and external bodies. There are also, especially in respect of the future and future developments, relationships which need to be nurtured between teachers and a range of paraprofessionals.

Trust relationships of course undergo change from time to time. In the immediate context the drivers of change which affect teachers perceptions of trust include top-down policy initiatives, where compliance is valued more than criticality, wider social and cultural changes which includes a decline in deference to authority, and, negative media coverage of education issues, such as school performance.

Teachers' beliefs and behaviours are informed through a number of aspects which define particular approaches to the role. There are behaviours which are embodied in the role, such as the scenario where advice is accepted unquestioningly. There are behaviours which are informed, such as those where teachers play a more equal role in decision making. There is also peer and earned trust, one of which reflects a teacher's position in the educational hierarchy, the other involving careful monitoring of performance targets. Status and performance trust also feature, the former being evident where a teacher's authority relates to their position and role and the latter including a willingness to engage with information on teaching activity in addition to engaging with managerial agendas. These examples are only a snapshot of the range of characteristics which could be identified in relation to teacher behaviours but they indicate that beliefs and behaviours are an important aspect of a teacher's self image and provide some insights into the interpersonal connections and relationships which teacher's need to develop and sustain in a forward-looking and developmental role.

In the UK we have lived through recent times where teachers have worked in a low trust behaviour context. UK teachers will all recognise the constant monitoring, the detailed and prescriptive regulations, the intense supervision and little delegation of authority situation which has been risk averse, in a context where information is withheld so that they do not know the big picture, where there is constant questioning, maybe from sceptical observers, and the need for a second opinion about the performance in schools. The alternative, where high trust behaviour could be evident is manifested in behaviour which requires minimal checking, informal written rules, significant professional autonomy, a willingness to take risks, take on a passive deferent role and have advice accepted unquestioningly.

Clearly we live in a democratic society. Politicians who sometimes seem so remote from the action in schools nevertheless reflect a range of views of the voting public in compiling their manifestos and their actions. There was an obvious need identified in the 1970's, in the UK, for schools to be more accountable since there was a belief that schools were not providing the output expected by industry in particular. There were also only 5% of school leavers going on to university. That was the time when the range of initiatives and developments in the UK schools started, all with the requirement that standards of pupil performance should be raised overall. Teachers were in the front line and through various activities, including industrial action, ceded much of the trust that they had hitherto had with the general public. With all the changes which have taken place over the past thirty years maybe we are on the cusp of a new age where the synthesis of technology with lifelong learning will generate new attitudes and a greater trust in those teachers at the cutting edge of change.

Respect

Dictionary definitions of the word respect talk about such characteristics as admiration, courtesy and high opinion. There are others but in respect of teachers and schools a recent Secretary of State for Education and Skills (in the UK) said that:

“I know from my time in education that teachers know more about giving and getting respect than almost anyone else, and how important this is for them if they are to do their job effectively. The majority of children and young people know what respect for others means – they have learnt this from their families and this message is reinforced in schools by teachers and school staff who show respect for their pupils and embed it within the values of the school’s community”(Clarke, 2006)

He also went on to say:

“But many of you will also be familiar with individuals who are not learning these values or choose to disregard them. Where that happens, their sense of what behaviour is acceptable or unacceptable disappears.”(Clarke, 2006)

These comments by Charles Clarke were made in relation to the Respect Action Plan which was brought about by concerns over such activity as truanting. He notes:

“The Respect Action Plan sets out a framework of powers and approaches to promote respect positively, both in the home and classroom. Proposals to increase support for parents will help to stop problem behaviour before it starts, and empower teachers and schools with new legislation to tackle problems and demand that parents take responsibility for their children’s behaviour, both in school and if they are excluded.”(Clarke, 2006)

So, in this context the UK Government set out to do something about respect in order to improve the standards of performance amongst all pupils/students. In this context the discussion was about teachers and their pupils, with parents an added dimension. As we saw earlier the interactions are more extensive than that. In addition to the teacher/pupil/parent interaction we can reinforce again the fact that respect is an element which needs consideration in interactions between school managers and leaders, paraprofessionals, teacher colleagues, the community at large, accountability agencies, and other schools, colleges and universities.

Developing respect requires social maturity, a recognition and awareness of similarities and differences, awareness of personal space, and of the feelings and ideas of others.

In terms of the current activities within the curriculum where respect is recognised as an issue it is likely to be discussed in moral education lessons, or lessons concerned with personal, social and health education.

Fun

With regard to fun are we talking here about telling jokes? Or looking at cartoons? Are we talking about practical jokes? Or are we talking about enjoying the learning process? This can relate to the way that learning takes place in the future.

Will we embrace more technology? Will learners become more isolated or is there an important socialisation and acculturation role that a school, or learning centre, can perform in bringing young people together? Does the teacher have to be funny?

No. What I am talking about is a healthy learning experience where learners enjoy their experience – and part of that experience is about interacting with other learners. Even in the new future I believe that there will still be a need for learners to interact in interpersonal relationships and learning is so much more remembered if the learners have fun doing it. Enjoyment involves active participation and as teachers we are aware that the most effective forms of learning involve participation, rather than passive learning. Of course adding fun components to a serious subject must be handled carefully and integrated well, otherwise the learner can feel that his or her intelligence is insulted or that he or she is just switching gears between serious learning and irrelevant activities.

Neal notes that:

“What is the definition of fun? It encompasses pleasure and enjoyment. However, there is a distinction between pleasure and enjoyment: enjoyment involves active participation. What appeals to one person may not motivate another. Fun for adults involves different concepts than that for children, and fun for learning similarly involves different concepts than fun for gaming since the objectives are different. Tom Malone and Mark Lepper in the 1980s characterized video games as highly motivating because they encouraged engagement in repetitive practice, learning through exploration, and striving for mastery through more difficult goals. The classic approach in e-learning is to add a bit of fun later, rather than designing learning experiences to facilitate a joy of learning, where the learning process itself is fun.” (Neal, 2006)

Clearly this quotation relates specifically to e-learning or on-line learning but learning in the future is likely to increasingly embrace this form of learning. Neal’s statement is worth reflection.

In the different phases of schooling we might clearly identify that primary phase schooling involves activities which are visual, auditory, and kinaesthetic and primary teachers generally seem to have an armoury of learning activities which embrace these different approaches to learning. This does seem to dissipate somewhat when we get into secondary schooling but I do have an example of a current project where we are working with two schools on a cross-curricular project which brings together teachers from across the range of secondary subjects, to work together with a linking theme, and also use software and professional external inputs. Apart from the teaching and learning activities which are taking place we are also interested in the pupils and teachers having fun being involved in this project. Hopefully it may be a model for future action which brings together teachers and newer elements of learning, such as on-line learning, professional external inputs, and commercial software.

What makes learning no fun is passivity, the quality of poor presentation, no activity or communication, poorly designed courses, or no purpose to the activity or material. On the other hand a learner's positive attitude can be embraced through a good teacher, meaningful peer reaction, storytelling – especially of experience, and through project collaboration.

There are different notions of fun between the learner population, the teaching population, and the various other categories of professional that I have previously mentioned. Fun can relate to the topic or the environment and humour can be related to cultural difference or within a technology-based environment. Humour in education can be the catalyst which promotes the love of learning.

Conclusion

All of the aspects of trust, respect and fun which have been discussed here are important elements of the interpersonal relationships between people, both now and in the future. Technology and the environment may change the way schooling takes place in the future and within the Learning Teacher Network we have devoted much time to discussing the future of both learning and teaching. It is apt to finish with a quote from a recent values project where, in relation to honesty, trust, fairness, respect and responsibility the following statement was made:

“to be most rewarding, teaching and learning demand active engagement and mutual respect. Students and faculty must respect themselves and each other as individuals, not just as a means to an end. They must also respect themselves and each other ...[to extend] their boundaries of knowledge, [to test] new skills, [to build] upon success, and [to learn] from failure.”

(Fundamental Values Project)

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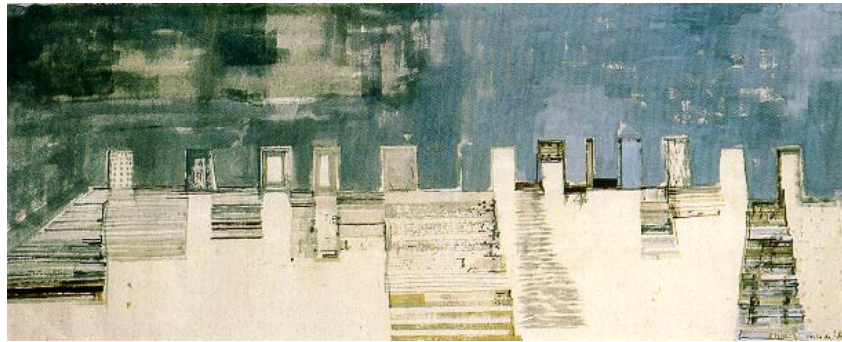
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9

Europe – School – Citizenship

13 doors to a European Citizenship Education

Alfredo Gomes Dias



Vieira da Silva, Les trèzes portes

In the present communication we intend to reflect on the role of Education towards the building of the European Citizenship as well as to define some guidelines to make it possible.

There are 13 doors which allow the access to the Education for the European Citizenship.

Door 1

Recognising Europa as the new continent

When Europe is recognised as a great nation, the common homeland of its peoples, a new chapter of the world history will start, as it has happened after the discovery of America.

Conde Richard Coudenhove-Kalergi (1939)

The last sixty years of the political and economic European life allow us to believe that we can be in the process of building up the “New Continent”.

The “New Europe” is born every day with the process of the European Union, and that contributes not only to the success of this journey but also to the difficulties being exposed.

The economic unification – markets, currency, and free circulation of products ... - has approached the countries in an effort of shared development.

The political unification, with the gradual cession of the national sovereignties, offers to the present generation the possibility of watching a historical movement which is rather original in the History of Nations.

But the “New Europe” is neither the result of political or institutional movements, nor economic arrangements. The “New Europe” is built everyday by the circulation of people that move in the European space: Europeans that immigrate to European Countries; immigrants from other continents (Asia, Africa...) looking for a new life in the new Europe.

These migrant realities that are part of the European life today speed up the pluricultural dimension of Europe, offering new contributions to the European culture.

After the World War II the ancient European countries, feeling the need to preserve peace, started the building of a “New Continent”.

Their peoples, in their diversity and due to the migrant phenomena, renew the European Culture, stressing its pluricultural aspect.

Door 2

Recognising the European History specificities

The space and the people in Europe escape, throughout the centuries who is willing to define them...Europe has never been the same in its long history.

Fernand Braudel (1982)

The Europe of the Roman Empire, of the Renaissance, of the Century of the Lights, of the 20th Century, are some of the most evident examples that show us (i) European external borders have been changing by force of History, (ii) the borders of the European countries have been submitted to constant changes (iii)

the political, economic and cultural influence of Europe has not always been the same.

From the geographic point of view, Europe is a space of differences and contrasts – weather, rivers, vegetation... – but within its diversity it has got the conditions to shelter a growing population able to produce richness, culture and ways of being and feeling.

Always by the sea, Europe with the Mediterranean Sea in the south, has kept a permanent contact with two other continents – Africa and Asia – and has received from them important civilisation influences: religion, philosophy, mathematics, agricultural techniques, languages...

A new world of specificities was born in the European time and space and it originated from one of the richest heritages.

Door 3

Assuming Europe as an Inter cultural space

We can be happy or worried with the new complexity introduced by emigration in our societies.

We can fear some of its consequences but the only chance is to act in favour of the success of the new society.

Council of Europe (1987)

Its history, wealth, the diversity of its geographic spaces, the different nuances of its culture, the internal migrations and the migrant pressures from other continents stresses the pluricultural aspect of the European societies.

However, today's reality, either in the European Union space or due to globalization, makes us think about this reality in another way.

The concept of pluriculturality only helps us to describe the reality, and must be replaced by the interculturality concept where the reconciliation, valorisation and reciprocity of influences among the several cultures which are present in all the European societies, both at local, regional and national level are accepted.

Assuming Europe as an intercultural space is an apparent contradiction, there is a need to reaffirm the cultural values that Europe has been building during its history in order to understand that the culture is a dynamic dimension of human societies and so subject to slow mutations.

Nowadays we observe new cultural phenomena deeply influenced by the different cultures, but these are part of the European cultural heritage.

An intercultural Europe is an interactive space that should exclude phenomena of separation and assimilation.

Door 4

Identifying the values of European Citizenship

We urge the peoples (...) so that they actively participate in the construction of a democratic, tolerant and cohesive European society, based in common values.

Council of Europe (1993)

Even before the adoption of the Human Rights Declaration the Congress of Europe, held in Haia (does this mean The Hague?), from 7 to 10 May 1948, it had included in its Compromise a letter and a ruling about Human Rights.

On the 4th November 1950, in Rome, the Council of Europe signed the European Convention on the Human Rights.

The building of European Unity is related from the beginning to the defence of human rights. These are seen as reference points for all the nations that have accept to take part in the process of unifying Europe and for all the societies that wish to assure an active participation for their citizens in the building of their common future.

As a guarantee of this framework of values defined by the Human Rights Convention, Europe was able to constitute in 1959 a European Court of Human Rights which the European Commission, the States, the non-governmental agencies, the organizations of citizens or individuals can appeal to. The possibility of appealing to the European Court represents a true revolution, therefore it means that each European citizen is subject to and protected by International law.

The building of the European Citizenship implies the daily affirmation of the Human Rights that are built upon three essential values: democracy, tolerance and solidarity.

Door 5

Assuming the right to education as a basis of the European Citizen Rights

1. Everyone has the right to education. (...) 2. Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance and friendship among all nations, racial or religious groups, and shall further the activities of the United Nations for the maintenance of peace.

Universal Declaration of Human Rights, Article 26.
1948/12/10

To think about the need of increasing the participation levels of all the European citizens in the building process of a united Europe implies the development of a set of social competences in everybody so that the participation becomes a conscientious act.

If we face this task as a priority, bearing in mind the increasing participation of citizens means an added value to European unification, then we must enhance the

right to education. Since only through this right is the development of those social competences possible. The Right to Education must be complemented by the development of cultural and cooperative politics in Europe. This has been a priority since 1954, with the signature of the European Cultural Convention and whose main concerns were clearly defined in the European Council in 1995:

- To promote the democratic values and the human rights, according a common cultural approach;
- To establish the confidence and mutual respect between the nations and the communities;
- To develop the consciousness of the New European Cultural Community in the wealth of its diversity.

Through Education it is possible to develop the capacity of using the other rights and respecting the rights of the others.

Door 6

Stimulating new educational politics of Inclusion

It is important to recognise that the cultural changes needed to enable schools to listen to the hidden voices and to answer them are, in many cases, deep changes.

Mel Ainscow (1995)

In face of the cultural, religious, ethnic, linguistic and social diversity which enhance more and more the European societies, School has got the responsibility of assuming its function – in an implicit and explicit way – of preparing all the children and youngsters for the life in society.

Taking in account that exercising the right to education each community is able to prepare their citizens for the future, the role of each educational system is to welcome children and youngsters with all their diversity. To ensure a basic scholarship and to create the required conditions so everyone has access to life-long learning is the way for every European citizen to be able to adapt himself to the new demands of a permanently changing society.

A Europe of diversity must find answers in its educational politics so that those diversities are assumed as a wealth to be preserved and not an obstacle to put down.

Door 7

Recognising the Limitations of school in the civic training of the European

When a society stops teaching that means it stops to be taught and is ashamed to teach itself

Charles Péguy (1904)

We all recognize that our societies are far from perfect. In spite of that perfection is required from School. We are constantly facing situations where individualism, scruples, competition and social inequality are dominant. We live in a world more

and more divided between rich and poor countries and in each of them the social inequalities do not stop increasing. We live in democratic social systems in which the citizens' levels of participation are decreasing while mass media disseminates all the kinds of violence that promote alienation.

This is the society, these are the political elites that after all this, demand School to develop children and youngsters for exercising a conscious citizenship, guided by values such as democracy, tolerance and solidarity, the same values which children and youngsters see to be jeopardized at home, in the streets, at the schools, in the media...We cannot demand that School should sail constantly against the wind.

We know School is crossed by the same contradictions that affect society. But all this does not prevent it assuming an active role in the promotion of the civic values in the attempt to build with clear pedagogic intentions the European citizens of tomorrow.

The School cannot solve the problems of the whole society. But it must reflect on the kind of society it wants for the future, to decide on the citizen's profile it wants to build and on what pedagogical strategies to adopt.

Door 8

Promoting new ways of Participation

New knowledge and nice speeches are not enough. If ten to twenty years are spent in initial training and at the end we haven't any democratic practice what is the use of speaking about citizenship education?

Philippe Perrenoud (2002)

The reflection on Education for Citizenship takes us to the need to clarify a truth that must be evident to everyone: citizenship is the essential praxis and education for citizenship must work out the preparation for that same praxis. The School that assumes education for European citizenship – based upon the values of democracy, tolerance and solidarity – must be a place that enables the exercise of those same values, increasing the levels of participation of the whole school community.

Teachers, students, parents and other institutional partners of the school community (health centres, local authorities, cultural associations...) should have the possibility of taking part in the building of the school educational project.

This participation is based on a set of values which must be respected:

- Inform and being informed
- Listen and to be listened
- Take part in the decisions
- Share the tasks
- Cooperate in the evaluation

- Have access to the results

The school that promotes education for citizenship must also promote everyone's participation in its daily life: in the decisions, in the conception of its educational projects, in the organisation of its space and in the pedagogical relationship in the classroom.

Door 9

Enhancing the importance of the Political Education

Europe has not been united at any time in the past.. Europe's reality is, on the contrary, made of several divisions of different kinds. The idea of Europe has the goal of overcoming these divisions; it is a political project.

Gérard Soulier (1994)

Politics has been absent from the education of our children and young people. The fact that democracy itself is out of school is, of course, a consequence of this. In the context of an education for citizenship, the political education has being supported by international studies, namely in the frame of UNESCO.

It is time to include the dimension of the political education in the European schools, as a way of promoting the exercise of the rights and civic duties of each European citizen, aiming at three great objectives:

- reflecting on the kind of powers acting through the institutions;
- raising the political awareness of the exercise of democracy;
- education for understanding the world.

The civic education of the European Citizens is developed at school which is a privileged place for exercising democracy, contributing to the promotion of one of the essential values in the building of Europe's concept

Door 10

Offering an ECONOMICAL EDUCATION able to promote the social integration

At school and by all extra school means, the economic education must be assumed as one of the essential elements of the conscience and of the mass culture

Aprender a Ser, UNESCO (1999)

The citizens' participation in the collective life of their communities cannot be restricted the formal political activity. The citizen must be given the opportunity of an education which allows him to fulfil his duties to the society and to have the rights to which he is entitled.

On one side, the development of an economic education enables the level of a professional's performance to rise, when they start their professional career. On the other side, it enables them to raise the awareness of their own social

development, being an informed consumer, knowing the laws that govern them, and thereby identifying the mechanism of the economic life of their enterprise, their community, nation and that of the European arena.

It must be recognized that this task does not belong exclusively to school. Everybody is aware of the role played by the media in this issue. On the other hand, the school must recognize that other institutions should complement this work: professional associations, unions, political parties and cooperatives of production and consumption.

The economic education of a European Citizen is an important point to allow him an active participation in all the fields of his social life, in order to reach his complete social integration.

Door 11

Reassuring the role of the school in the building of the collective identity

One of the touchstones in Education for Human Rights still is the construction of one's identity. In fact, the respect for the other depends on the self respect and vice-versa.

Council of Europe (1993)

The education for European citizenship must contribute to the building process of an identity consciousness of the citizens and therefore to be able to strengthen the building of the European Union itself.

Education has always performed an important role in the building of the Nation-State by reinforcing the mechanism of collective identification.

School is mostly responsible for the building of the feeling of belonging to the local, regional and national community.

Therefore, whenever we think about the importance of the education for European citizenship, we must reflect upon the contribution of the school in order to reinforce the feeling of belonging to a wider community such as Europe. It is important to stress that Social Sciences have been under estimated, and subjects such as Mathematics, Science, and Information and Communication Technology are in the centre of the general concerns. But more knowledge does not mean more culture: the teaching of History, Geography, Sociology... can definitely contribute to the development of self-knowledge and the awareness of belonging to evolving communities.

Education for European Citizenship is related to the promotion of self-knowledge, the knowledge about the others and the feeling of belonging to the nearest community, to the national community and to the European community.

Door 12

Reassuring a MULTINATIONAL EUROPEAN EDUCATION

Europe is a historical unit that, like all the other historical units, is made of diversity, pieces, pulled out portions of ancient units.

Lucien Febvre (1944)

Every European country that has decided to take part in the process of European unification cannot go on looking at its historical reality without integrating it into a European arena. National histories, for new reasons, must be set in context and above all be placed in European and world scale dimension.

The development of the European citizenship values requires a new approach in the teaching of national History. Regarded as fundamental in the process of building collective identities, they must be faced with three clear intentions:

- to promote peace;
- to facilitate tolerance;
- to strengthen friendship and cooperation among peoples.

Education must help us to see “the other” as someone who, just like us, has his own reasons, his sadness and moments of joy, his desires and expectations.

The education of a European citizen results from the search of what is common in the richness of our diversity.

Door 13

Identifying the essential elements of the European Education for the Citizenship

The school plays a central role in the development of the social competences of children and youngsters in Europe, since it can educate to the exercise of an active and demanding citizenship. This work requires input from the different National Educational Systems and the adoption of some basic guidelines for the accomplishment of that task from the schools.

Building the structures for a continuous education means allowing access to education for people of different ages and recognizing that education is a long life continuous process.

Promoting curricular, extra curricular and intercultural educational centred practices.

As a strategy to promote a successful school for everyone.

Changing school in cultural promoting spaces.

Making it richer by means of the diversity and believing that everyone is able to learn with everyone.

Stimulating teachers to a pedagogical practice in order to develop the critical sense.

A possible option in all the different fields of knowledge that is required for the education of citizens in order to make them able to choose in a conscientious way.

- **Organising school as a democratic town**, from the classroom to the boarding committee, allowing moments of debate, reflection and exchange of ideas, in the process of decision taking of the school community (teachers, students, parents...).
- **Assuring the use of the local language** for immigrants' children, recognizing it as a basic condition for school success.
- **Stressing the importance of Social Sciences in the school curricula aiming at the acquisition of knowledge and at the reflection of essential behaviours** for an expected active citizen regarding the society where he belongs, bearing in mind:
 - *The main categories of rights and duties of a European citizen (from his local community to the Europe);*
 - *The several kinds of injustice, inequality and discrimination (including sexism and racism);*
 - *The personalities and historical movements that have been relevant in the fight for the human rights*
 - *The main declarations and international conventions on human rights.*

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10

Why Internationalism in Education?

Mary Stiasny

In July 2005 a two day international education conference; Wales and the World, was held in and around the Llangollen International Musical Eisteddfod. On the second day, the 7th July, one of the keynote speakers was the Chair of the Eisteddfod, Terry Waite, who some years ago spent almost five years in captivity in Lebanon where he had travelled as the Archbishop of Canterbury's envoy, attempting to negotiate a deal for the release of hostages held there at the time. He himself was captured, and he spoke at the international conference about the importance of internationalism in education, and his own experiences of his captors. They were all young men, and their alienation from the society in which they lived had led them to join the terrorist organisation where they found an identity and a sense of "belonging". He highlighted the importance of teaching young people about the importance of global issues, a message which became starkly significant to the audience as we slowly discovered that at that very moment, London was suffering the impact of the terrorist bombs. The message that internationalism in education is important became even more important at that moment.

Traditionally internationalism in education has been expressed through the recruitment and exchange agenda. Countries have recruited students from other countries and exchanged students in universities. The impetus has largely been economic; the "business" of student recruitment has been rewarding for the leading countries, the USA and UK at first, and more recently this market has expanded to include Australia, New Zealand and Canada, and as France,

Germany, and the Netherlands have begun to offer courses taught through the medium of English, these countries have joined the market. Most recently the market is seen to be expanding and diversifying, with China, Malaysia, Singapore and several others all joining the global exchange of university students and marketing of education. What is clear is that education is an export good just as much as other goods and services are, and what is also clear is that this is becoming much more important as a world-wide phenomenon. While originally the exchange was typically one way, with students coming from the developing countries to the so-called developed to study, there is now an interchange which brings with it a much more mutually beneficial culture and climate in universities.

At the British Council the Education and Training Team manages programmes which demonstrate other forms of internationalism in education, all of which are gaining in popularity and importance. Our exchange and twinning programmes enable teachers and students to share views and resources within the context of school and college partnerships; the staff development programmes provide staff exchanges and study tours; developmental partnerships, based on mutually beneficial relationships aim to enable education reform.

Traditionally these were all based on one-way benefit, but it is evident that in recent years these partnerships have brought benefits to both partners, with each side finding learning and understanding. It is not a one-way traffic, but rather a mutuality of learning which enriches all partners and contributes to the growth of international understanding and experience.

The massive expansion in the variety of programmes and the interest and involvement in these programmes is supported by policy development. In the UK the Department for Education and Skills launched an international education strategy in November 2004; "Putting the World into World Class Education" with three main goals;

- Equipping our children, young people and adults for life in a global society and work in a global economy;
- Engaging with our international partners to achieve their goals and ours;
- Maximising the contribution of our education and training sector, and university research to overseas trade and inward investment.

(UK DfES 2004)

And furthermore this is UK-wide, with the Scottish Parliament having its own international strategy and Northern Ireland and Wales also developing work in internationalism. This commitment to and interest in internationalism underpins a much more rigorous approach to expressions of internationalism, and leads us to explore how far the programmes we offer benefit schools, colleges and universities – and how far society as a whole benefits.

A view of ourselves as living in a global world, and a commitment to teach children and young people that they are themselves global citizens is increasingly on the education agenda. Technological development means that we now live in a

twenty-four hour world, we have instant access to news from every corner of the world and we share knowledge through technology in a way which makes all knowledge international. No longer can individuals believe they are in a small isolated society insulated from all others. And in our educational establishments we need to make our students understand this.

The UK's government Department for International Development (DfID) defines the importance of global citizenship:

“Education plays a vital role in helping children and young people recognise their responsibilities as citizens of the global community, it equips them with the skills required to make informed decisions and take responsible actions. By including the global dimension in teaching, links can easily be made between local and global issues and young people are given the opportunity to:

- Critically examine their own values and attitudes;
- Appreciate the similarities between peoples everywhere, and learn to value diversity;
- Understand the global context of their local lives;
- Develop skills that will enable them to combat injustice, prejudice and discrimination.

Such knowledge, skills and understanding enable young people to make informed decisions about how they can play an active role in the global community.”

(UK DfID)

This approach to global citizenship is one which underpins much of the work in internationalism in education which schools and colleges undertake, and universities are developing an international focus which is not simply about bringing overseas students to study in our universities but also about making our university campuses international contexts in which all students, whether from overseas or from home can study and develop a wider awareness of what it is to belong to, and operate in the world community. Increasingly organisations and educational institutions are developing their own international policies and strategies, and internationalism is a focus for a major part of educational development work.

The work we are doing in exchange and twinning projects, in staff development and in developmental partnerships is seen as exciting and beneficial to all the participants, and to have benefit for their institutions and their organisations. Schools involved in forming partnerships for curriculum development claim that the focus and whole school approach brings definite improvement to institutional morale, to school standards and to pupil achievement. Where there are staff development programmes with teachers and lecturers taking part in exchanges and in study tours their institutions report improvement in professional energy, interest, knowledge and understanding and in the retention of those very staff who have participated. Developmental partnerships are said to improve morale, a sense of purpose and an improvement in capacity and the very education reform and modernisation they are designed to achieve. The current need is for us to develop

a measure of the actual impact the participants are reporting to us. With this, it will be possible to measure the outcomes and effects, and to demonstrate the real value of this work to the individual, and also to the institution. What is also important is that we begin to develop a measure of the value to international relations as a whole. The agenda for those of us involved in international programmes in education is to find a way of producing objective measures of impact so that we can understand what the value and benefit of internationalism in education is to society.

The recent growth in internationalism in schools, colleges and universities is leading to a new understanding and definition of education. Education is no longer context specific; it is no longer an isolated national agenda. There is a definite blurring of boundaries and a trans-nationalism underpinning the approaches to study. Researchers in higher education share and collaborate across boundaries; university students travel abroad to study, study locally at university campuses which are parts of overseas institutions, or follow courses by distance learning methods which, underpinned by technological bridges, cross all boundaries. Vocational college students and school pupils develop their experiences through exchange programmes, language immersion courses, or through institutional partnership programmes. Teachers and lecturers learn from the experiences of others by developing their institutional partnerships and follow study programmes to work on areas of interest and concern. Leadership programmes at different levels develop leadership skills across boundaries; in young sports leaders, in school principals and in university rectors and vice chancellors. The learning is mutual; the benefits we see are enormous and have the potential to be even greater.

If the impact is, as we argue, for educational improvement and for mutual benefit and learning through knowledge exchange, then we are building global citizens and international understanding. It is to be hoped that through this we must surely be able to reduce alienation? The diversity of students in our classrooms and on our campuses will be enhanced by their realisation that the society in which they live and study values the learning experiences from all other societies, and has a mutual respect for those other societies.

Through this mutual understanding we must be able to create international understanding for a more inclusive world.

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11

Exploring values in Teacher Education

- Strategies from a European Partnership

Bernd Hainmüller

"We become just by the practice of just actions, self-controlled by exercising self-control and courageous by performing acts of courage. Hence, it is no small matter whether one habit or another is inculcated in us from early childhood; on the contrary, it makes...all the difference"⁴

A public outcry

Readers of *Süddeutsche Zeitung*, a leading German broadsheet, wondered if it was not some kind of newspaper hoax, albeit a rather unlikely one in such a serious publication. The headline on March 31st 2006 read: "Zum ersten Mal geben Lehrer ihre Schule auf" ("For the first time teachers give up their school"). What had happened? The day before, for the first time in Germany's educational history, the staff of the Rütli-Hauptschule in the capital of Berlin revealed to the media:

"We are helpless, we don't know what to do. We are at the end of a one-way streetThere are no values, which guide our school community. There are no role models to guide us, both teachers and pupils. We are isolated and desperate. We are drowning in violence, disrespect and ignorance – the Minister of Education has to secure police protection for our school".

⁴ Aristotle (trans. 1962). *Nicomachean ethics*. New York.

The political reaction after this declaration was quite obvious: Berlin's Federal State Education Minister and some other high ranking persons visited the site of the "crime", demanded quick solutions and brought policemen to the school. Since then, a public debate on values in education in schools has started and the media presented students from The Rütli School, posing in front of the cameras saying: "We have beaten them, the dammed teachers – we have won the battle!" It smacked of Pink Floyd's "Teacher! Leave those kids alone!" And what of the teachers of the Rütli-School? As state civil servants they were not allowed to give interviews and were compelled to remain silent on the issue.

Some days later, some details about the situation in this school *before* the crisis, found their way to the media: The school had had no headmaster for quite a long time; the deputy headmaster had been ill for months; the absentee rate for both teachers and students was quite high. Up to 83% of the pupils at the Rütli School are of a non-German ethnic identity: many of them Muslims from the Near East, most of them living in the largely immigrant area of nearby Neukölln. Increasing tensions in this socially deprived area have increased over the years and education authorities have been slow to take measures to deal with the attendance difficulties in the schools. It became increasingly obvious that the situation in the Rütli School was just the tip of the iceberg.

Growing up absurd

In 1962 the American sociologist Paul Goodman⁵ published a book with the title: *Growing Up Absurd: Problems of Youth in the Organized Society*. He was among the first to describe a predictable problem of modern societies: what happens, when young people lose their orientation in society and in their future? What happens when things become "absurd" for them, because the basis of shared political, social and cultural values is vanishing and insecure? The French author Jean Baudrillard gave an answer: one result of this scenario can be "the development of singularities". Globalised complex systems are shaped by young people into such singularities, - in other words: simplistic solutions to complex situations. Baudrillard asserts that "Caught in their autonomous and exponential logic, all these parallel worlds are like time bombs".⁶ Some of the "time bombs", that he describes, were also evident in the media a few months prior to the Berlin school crisis: disaffected young people in the banlieues of the big French cities used simple tactics as their response to youth unemployment, social exclusion and marginalisation: Torch your neighbours' cars and property (More than 7.000 cars were burned in three weeks!). The French sociologist Pierre Bourdieu had predicted this "Firing Back"⁷ in most of his publications⁸.

² Paul Goodman (1962) *Growing Up Absurd. Problems of Youth in the Organized Society*, Vintage

⁶ Jean Baudrillard (1992): "Global Debt and Parallel Universe" - an essay. See: <http://www.uta.edu/english/apt/collab/baudweb.html>

⁷ Pierre Bourdieu (2003) : *Firing Back - Against the Tyranny of the Market*, translated by Loic Wacquant, New Press

Background to the Comenius 2. 1. Project: “Appraisal of Potential for Teaching” - APT

The strategic goal for the EU up to 2010 is to become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth, with more and better jobs as well as greater social cohesion. The Work Programme for Common Objectives in Education and Training (2001) defines 3 strategic objectives: promotion of active citizenship, social inclusion and employability- areas which deal directly with the value problem in schools. Key competences like personal fulfilment and development through life (cultural capital), active citizenship and inclusion (social capital) and employability (human capital) are not achievable without a personal “dive” into the background of both learners and teachers. Learners and teachers depend on the knowledge or the inside view of each other’s personal value belief system, the deep roots of the personal inventory of each human being, its history, its social context, its family pattern, its role models, its behaviour patterns inside classrooms. Not knowing each other’s moral, ethical, social and cultural roots (there may be some more areas which are also influential) will almost inevitably lead to a “clash of values” between learner and teacher in the future - but how to prepare for and handle this scenario? Two steps seem to be necessary: a) a teacher, who is unaware of his own values and beliefs cannot deal with different value beliefs in his students. He risks, short of becoming a zealot, in transmitting his or her own beliefs to the students and tries to indoctrinate the students. At the end of such a dead end lays the possible clash of values, a road which must lead to an irreversible exhaustion of both teachers and learners (see the Berlin example). b) The second possible step would be a clarification of the prevailing value systems in the classroom.

We concentrate on the latter dialogical issue, although knowing only too well that there are more value belief systems which play a crucial role in schooling namely those of parents, other teachers, peers, national or curricular values –to name but a few. However, an examination of such values is beyond the scope of the current article.

Indicators of problems with values in most European countries formed the starting point of our application to the European Commission for a Comenius 2. 1. Project in 2003. Our “Appraisal of Potential for Teaching” (APT) project aimed to support the training of student teachers by developing together with six other European institutions of teacher education⁹ the tools to help them to identify and explore fundamental attitudes towards the teaching profession. From 2003 onwards exercises and activities were developed and were piloted with student

⁸ Pierre Bourdieu (2000): *The Weight of the World - Social Suffering in Contemporary Society*, Translated by Priscilla Parkhurst Ferguson, Stanford University Press, Original: *La misere du Monde* (1993!)

⁹ Estonia (Tallinna Kaülikool); Sweden (Luleå tekniska universitet), Spain (Facultad de Ciencias de la education – Universidad de Granada); UK (Edge Hill College of Higher Education, Ormskirk, Lancashire); Belgium (Provinciale Hogeschool Limburg) and as coordinating unit Germany (Staatliches Seminar für Lehrerbildung und Didaktik Offenburg)

teachers during short-term intensive training programmes in 2004 and are now being implemented in the seven partner institutes. These instruments, it was hoped, would provide the student teacher with the opportunity to increase self-awareness through reflection and critical questioning as a starting point for further professional development and as an “agent of change” in the school.

The proposal simultaneously addressed the needs of two target groups: namely, teacher educators and student teachers. The so-called ‘process learning’ central to the work we undertook by using these instruments, affected both groups: if teacher educators know where the learning fields of their students teachers lie they can change the curriculum and offer individualized training units to bring out the potential of the student in a holistic manner. This approach also allows for the creation of templates for a ‘learning organization’, because the work involved implies both reflection and reflection into action to be implemented by both sides of the teaching and learning dynamic.

From the beginning it was clear for all partners, that a deeper understanding of personal motivations entering the teaching profession lies far beyond knowledge of one’s teaching subject. In addition to highlighting the multi-faceted nature of the teaching profession, the exercises developed in the project assist teacher educators in distinguishing the different skills and competencies on the part of the student teachers with whom they work. They can provide the student teachers with a more objective, professional diagnosis of their present potential **before** they enter this complex profession by bringing it to the surface and helping the students to pinpoint their strengths and learning fields.

The project aimed also to gain a wider impact at a European level. The aim of deepening a mutual understanding of the wider European teacher-training environment can lead to a future scenario, where agreed European profiles of identifiable attitudes for teaching are available and shared. One could also argue, that all these efforts are not necessary. As teacher educators our experience runs counter to this myth: while certain dispositions may be conducive to good teaching, we hold that certain skills and competencies can be developed through well-thought through, reflective processes. We are pleased to report that the European Commission’s support for this view resulted in funding of close to half a million euro.

Value Education is not teachable as a subject – it can only be seen through real and spontaneous classroom interaction.

Value education is becoming an increasingly popular topic in the fields of psychology and education but there is no evidence to show that it has made an impact in teacher education. Media reports increases in violent juvenile crime Rates of teenage pregnancy and suicide have caused many commentators to declare a “value crisis” in the western society. While not all of these social concerns are value related in nature and mostly have complex origins, there is a growing trend towards linking the solution of these problems to the teaching of “moral”, “ethical” or “philosophical” subjects. This seems to be something of a step back to the old “character” education, which dominated schools in the 19th

century. However, considerations of the role schools can and should play in the value related development of youth are necessary. Unfortunately, results of systematic research on value related development is not very well known to teachers. The following overview provides a short introduction to the main perspectives guiding current work on value related development and education.

a) Jean Piaget

Jean Piaget is among the first psychologists whose work remains directly relevant to contemporary theories of value related development. In his early writing, he focused specifically on (what he called) the “moral” lives of children, studying, as he did, the way children play games in order to learn more about children's beliefs about right and wrong¹⁰. According to Piaget, all development emerges from action; that is to say, individuals construct and reconstruct their knowledge of the world as a result of interactions with the environment. The second major contributor to moral thinking in young children is their relative social relationship with adults. In the natural authority relationship between adults and children, power is handed down from above. The relative powerlessness of young children, coupled with childhood egocentrism feeds into a heteronymous moral orientation. Piaget concluded from this work that schools should emphasize cooperative decision-making and problem solving, nurturing moral development by requiring students to work out common rules based on fairness. This is a direct rejection of sociologists Emile Durkheim's view of proper moral education¹¹. Durkheim, similarly to Piaget, believed that morality resulted from social interaction or immersion in a group. However, Durkheim believed moral development was a *natural* result of attachment to the group, an attachment which manifests itself in a respect for the symbols, rules, and authority of that group. Piaget rejected this belief that children simply learn and internalize the norms for a group; he believed individuals define morality individually through their struggles to arrive at fair solutions. Given this view, Piaget suggested that a classroom teacher perform the somewhat challenging task of providing students with opportunities for personal discovery through problem solving, rather than indoctrinating students with norms¹².

b) Kohlberg's Theory of Moral Development and Education

Lawrence Kohlberg (1969) modified and elaborated Piaget's work, and laid the groundwork for the current debate within psychology on value related

¹⁰ For example: Piaget, Jean (1954) *Das moralische Urteil beim Kinde*, Zürich.

Piaget, J. (1965). *The moral judgement of the child*. New York: Free Press.

¹¹ Durkheim, Emile: *Moral Education. A study in the theory and application of the sociology of education*. New York, Free Press 1973. Origin: Émile Durkheim: *Erziehung, Moral und Gesellschaft. Vorlesung an der Sorbonne 1902/ 1903*. Frankfurt/Main 1984, S. 37-55. Hier zit.n.: Franzjörg Baumgart (Hg.): *Theorien der Sozialisation*. Bad Heilbrunn 1997, S. 44-55.

¹² An excellent contemporary adaptation of Piaget's theory for moral development of young children may be found in De Vries, R. & Zan, B. (1994). "Moral Children: Constructing a Constructivist Atmosphere in Early Education." New York: Teachers College Press.

development. Consistent with Piaget, he proposed that children form ways of thinking through their experiences which include understandings of moral concepts such as justice, rights, equality and human welfare. Kohlberg followed the development of moral judgment beyond the ages studied by Piaget and determined that the process of attaining moral maturity took longer and was more gradual than Piaget had proposed. On the basis of his research, Kohlberg identified six stages of moral reasoning grouped into three major levels. Each level represented a fundamental shift in the social-moral perspective of the individual. Kohlberg used these findings to reject traditional "character" education practices. These approaches are premised in the idea that virtues and vices are the basis to moral behaviour, or that moral character is comprised of a "bag of virtues". According to the traditional approach, teachers are to teach these virtues through example and direct communication of convictions, by giving students an opportunity to practice these virtues, and by rewarding their expression. However, critiques of the traditional approach find flaws inherent in this model. This approach provides no guiding principle for defining what virtues are worthy of espousal, and wrongly assumes a community *consensus* on what are considered "positive values". In fact, teachers often end up arbitrarily imposing certain values depending upon their societal, cultural, and personal beliefs. In order to address this issue of ethical relativity, some have adopted the values-clarification approach to moral education. This teaching practice is based on the assumption that there are no single, correct answers to ethical dilemmas, but that there is value in holding clear views and acting accordingly. In addition, there is a value of toleration of divergent views. It follows, then, that the teacher's role is one of discussion moderator, with the goal of teaching merely that people hold different values; the teacher does not attempt to present his or her views as the "right" ones. Kohlberg rejected the focus on values and virtues, not only due to the lack of consensus on what virtues are to be taught, but also because of the complex nature of practicing such virtues. For example, people often make different decisions yet hold the same basic moral values. Kohlberg believed a better approach to affecting moral behaviour should focus on stages of moral development. The goal of moral education, it then follows, is to encourage individuals to develop to the next stage of moral reasoning. This process is called *equilibration*, and it is through equilibration that development occurs. Early moral development approaches to education, therefore, sought to force students to ponder on the contradiction inherent in their present level of moral reasoning. The most common tool for doing this was to present a "moral dilemma" and require students to determine and justify what course the actor in the dilemma should take. Through discussion, students should then be forced to face the contradictions present in any course of action not based on principles of justice or fairness. This idea of Kohlberg was the opening gate for our project, because we considered it could give us a better insight on teacher trainees' value belief systems. In order to provide students with an optimal context within which to grow morally, Kohlberg and his colleagues developed the "Just Community" schools approach towards promoting moral development¹³. The basic premise of these schools is to enhance students' moral

¹³ Power, C./Higgins, A./Kohlberg, L. (1989): *Lawrence Kohlberg's approach to moral education*.

development by offering them the chance to participate in a democratic community. Here, democracy refers to more than simply casting a vote. It entails full participation of community members in arriving at consensual decision-making rather than "majority rules". "Just Communities" are the extreme contrary to "The shopping mall high school", where the focus is laid on consumerism¹⁴. In the context of "Just Communities" it is believed that by placing the responsibility of determining and enforcing rules on students, they will take pro-social behaviour more seriously - a very old approach from John Dewey's Laboratory School in Chicago from 1911. Implementing the Just Community approach¹⁵ is not easy for a teacher trainee, because the teacher must listen closely and understand a student's reasoning, in order to help that student to the next level of reasoning. This requires a delicate balance between letting the students make decisions, and advocating in a way which shows them the limits in their reasoning¹⁶.

c) Carol Gilligan and the Morality of Care

A major critique of Kohlberg's work was put forth by Carol Gilligan¹⁷. She suggested that Kohlberg's theories were biased against women, as only males were used in his studies. By listening to women's experiences, Gilligan offered that a *morality of care* can serve in the place of the morality of justice and rights espoused by Kohlberg. In her view, the morality of caring and responsibility is premised in non-violence, while the morality of justice and rights is based on equality. Another way to look at these differences is to view these two moralities as providing two distinct injunctions - the injunction not to treat others unfairly (justice) and the injunction not to turn away from someone in need (care). She presents these moralities as distinct, although potentially connected. While this gender debate remains unresolved, Gilligan's work has contributed to an increased awareness that care is an integral component of moral reasoning. Educational approaches based on Gilligan's work have emphasized efforts to foster empathy and care responses in students. Perhaps the most comprehensive treatment of these issues may be found in Nel Noddings' book¹⁸. All three approaches from Piaget, Kohlberg or Gilligan have one thing in common: values are not teachable through a single subject - which we find in some European countries under the label of "philosophy", "ethics", "moral education" or "Values". This seems to be a thin ice

¹⁴ See: Oser, Fritz/Althof Wolfgang (2001) *Die gerechte Schulgemeinschaft: Lernen durch Gestaltung des Schullebens*, in: Edelstein, Wolfgang/Oser, Fritz/Schuster, Peter (eds): *Moralische Erziehung in der Schule*, 2001

¹⁵ Fritz Oser describes some efforts for Just Communities in Switzerland, but it looks like that the approach is more common in primary than in secondary schools.

¹⁶ See: Nucci, L. & Weber, E. (1991) "The domain approach to values education: From theory to practice" In W. Kurtines & J. Gewirtz (Eds.) "Handbook of Moral Behavior and Development (Volume 3: Applications)pp. 251 - 266). and also in: Nucci, L. (1989) "Challenging Conventional Wisdom About Morality: The Domain Approach to Values Education." In L. Nucci (Ed.) "Moral Development and Character Education: A Dialogue" Berkeley: Mc Cutchan.

¹⁷ Carol Gilligan(1982): "In a Different Voice: Psychological Theory and Women's Development".

¹⁸ Nel Noddings (1992): "The challenge to care in schools" New York: Teachers College Press

of teaching, because moral behaviour cannot be learnt, but must be lived by both teachers and students as a part of cultural agreement for learning. And here we come to the crucial question: where and how teacher trainees can “learn” this behaviour in a true sense?

Value Education in Future Teacher Education – Findings of the APT - Project

The distribution of “skills” of the teaching profession depends to a large extent on initial and in-service teacher education. As might be expected, research shows that good teachers need a sound conceptual and practical understanding of the subjects they are teaching (naturally!) as well as the pedagogical knowledge and skills to present material in a well-structured way, to motivate students, assess their progress and continually adjust their teaching to individual student needs. But what about the teacher trainees taking a tough stance on minority rights, on religious beliefs, on racist declarations and attitudes on the likes and dislikes of students? Can he or she pretend to be neutral in a society which battles all day long about values? How can all teachers – and not just the most motivated – be encouraged to challenge such questions, which arise daily in each classroom – far from subject-matter content? Teacher education is under a challenge as a result of the changing role of the teacher. The range of tasks teachers are expected to have responsibility for has widened significantly, for example: teaching in multi-cultural classrooms; developing civic and social skills; integrating students with special needs; providing professional advice to parents etc. And so the list goes on, but can we concentrate on the basic problems? The Finnish teacher educator and theorist, Pertti Kansanen¹⁹, focuses on four main important values related dilemmas in the class room, which occur for every teacher in today’s classrooms:

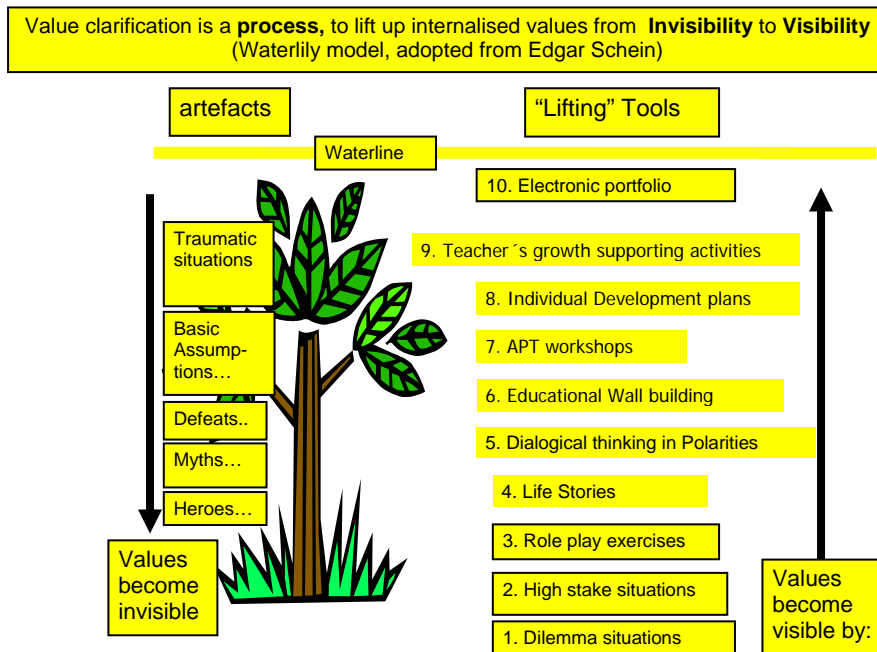
- Teachers’ work;
- Pupils’ behaviour;
- Minority rights;
- Offending rules in schools.

Finnish educationalists are well known for their straightforward and reflective thinking in pragmatic ways of dealing with issues. Indeed teacher educators dealing with the new roles of teachers cannot or should not saddle student teachers with the burden of new roles, which cannot be accomplished in one single teacher generation. But the underlying demand is still: Where is the preparation for future teachers to deal with this multiple-shift of paradigms in at least four important fields of teaching?

The APT project partners experienced different training strategies which can lead to enhancing moral sensitivity or value clarification of future teachers. Value Education requires individuals to act on their value related convictions. But how

¹⁹ Kansanen, P., Tirri, K., Meri, M., Krokfors, L., Husu, J., & Jyrhämä, R. (1999). *Moral perspectives in teachers’ thinking*. In M. Lang, J. Olson, H. Hansen, & W. Bünder (Eds.), *Changing Schools/Changing Practices: Perspectives on Educational Reform and Teacher Professionalism* (pp. 109-116)

can you find out about someone's value related convictions? In social psychology several models exist, which deal with the "iceberg" or "water-lily" problem. Our project took the following one.



The model describes the dialectics of value clarification in two ways: like a waterlily, which has its roots deep down in the ground, every person has their own roots on moral convictions. These roots have been developed in early socialisation, through experiences, traumatic situations, basic assumptions, defeats or disappointments, myths, heroes and maybe many more factors. What people show upon the surface – at the water line - are artefacts of these inner beliefs. In other words: *I show you what I want you to see*. The process of lifting up these deep roots is shown on the right hand side of the model: Value clarification by using several diagnostic tools, which the APT project has developed and piloted in the last three years with student teachers in the participating European countries:

1. Creating dilemma situations from the classroom and discuss them. (Kohlberg's idea and Kansanen's focus on four main patterns). This is one of the contributions of the Irish partner of APT.

2. Creating high stake situations of action in a group, where communication skills are only one vital part of possible solutions – the other parts are value

related behaviour (e. g. Project Adventure exercises²⁰ or Potential Assessments. As the German APT partner, who has developed and implemented such workshops in their teacher education curriculum, points out, a lot of extra qualification is necessary for these exercises in risk-taking and chance).

3. Creating role-playing exercises to sensitise student teachers to professional dilemmas and related strategies to make professionals aware that their actions affect others – one of the exercises developed by our UK Partner.

4. Narrative “Life stories”, where early experiences with value questions are linked with actual problems in the class rooms - bringing to the fore the students’ own voices. The Spanish partner developed three different approaches to life story analysis:

- a) External analysis (the interpretation is conducted by an evaluator/teacher, etc.);
- b) Self-analysis (carried out by individual) and
- c) A dialogical model as a cooperative approach (the philosophy behind this is to make the implicit explicit as a collaborative task).

The analysis requires the collaboration of the teacher to elicit the sense and coherence. It enables the student (writer) to distance him/herself from their own life, while allowing the teacher to get a close look at it²¹.

²⁰ See: <http://www.pa.org/>

²¹ Pineau & Le Grand (1993) *Les Histoires de vie*: p. 100-2

5. **Creating exercises of thinking in polarities** – in three steps: Firstly individual marking, where someone personally locates themselves on the line, secondly the same task in pairs, thirdly in the peer group



6. Creating Educational wall building

The Belgian partner experienced this with the following 20 declarations:

1. *A teacher must always be at the disposition of parents and the pupils.*
2. *A teacher must prepare the pupils for their exams.*
3. *A teacher must focus on the pupils' study method.*
4. *A teacher must pay attention to the pupils' social skills.*
5. *Pupils must trust their teacher.*
6. *My teaching should reflect the various cultures and nationalities in my class.*
7. *A teacher must care for the pupils' emotional well-being.*
8. *A teacher must be acquainted with the fashion and trends of young people.*
9. *A teacher is always a good methodologist.*
10. *A teacher should focus on the process rather than the product.*
11. *A teacher must regularly take in service training.*
12. *A teacher must "radiate" authority.*
13. *Dealing with bullying issues is more important than teaching a subject.*
14. *The teacher must make sure the pupils like his classes.*
15. *A teacher must meet the needs of boys and girls.*
16. *A teacher has communicative skills (active listening, I- message)*
17. *A teacher organises all kinds of activities that relate to his subject.*
18. *A teacher is environment- minded (sorts out garbage, has a lunchbox)*

19. *A teacher must be fair minded to his pupils*

20. *A teacher must be comical to his pupils*

21. -----

22. -----

- Task: Individually build a wall with the bricks by ranking these declarations:
- 6 bricks as foundation
 - 5 bricks for the second layer
 - 4 for the third
 - 3 bricks for the fourth layer
 - Do not use the two bricks that are left.
 - Two empty bricks for values you personally think highly of!

7. Assessment centres idea used for potential analysis

In Germany the teacher training College in Offenburg has so far developed four different types of tools. These are offered to the students as options at the start of the final probationary period (i.e. 18 months' prior to them entering the teaching profession).²² The first tool is a standardized Entrance Interview I, where we have constructed a set of questions, which deal with knowledge, skills and abilities that the students have acquired during their university studies. Entrance Interview II, held one year later should demonstrate a learning curve when we revisit the answers from Entrance Interview I and compare them with Entrance Interview II. Our early attempts revealed some flaws to our approach: for example discrepancies occurred between the meaning the students took from certain questions in the interviews and the meaning we had intended. We subsequently developed a face-to-face interview to tease out the meanings and understandings of either side. With the help of a question sheet, we interviewed the students face to face. We asked the students about their school career, learning biography, visions and missions, etc. The answers were written down by the interviewer, signed by the interviewee and then taken to his own portfolio. This instrument was a partial success – many students appreciated the personal contact – while others may have felt intimidated by the tutor/student power dynamic and may therefore have kept their answers vague as a result. The third instrument is the APT workshop, which is still offered on a voluntary basis. For one and a half days - mostly Friday afternoons and Saturdays - a group of six student teachers are guided to a room we refer to as the “backstage area” where a so-called “backstage” person, a tutor or another student supervises. The students are given exercises, which they can prepare within a certain timeframe. They are then called on to present the results in another room to six observers from the college staff, but tutors that they do not know. The observers are specially trained for their observation, especially regarding the distinction between “observing” and “judging” and the technique of “observing” and the somewhat challenging task of simultaneously observing and taking notes. The three or four exercises range from individual work (e. g. present yourself for 5 minutes to your new teacher

²² *An overview on the different teacher education systems in the APT partner countries is also on the APT homepage.*

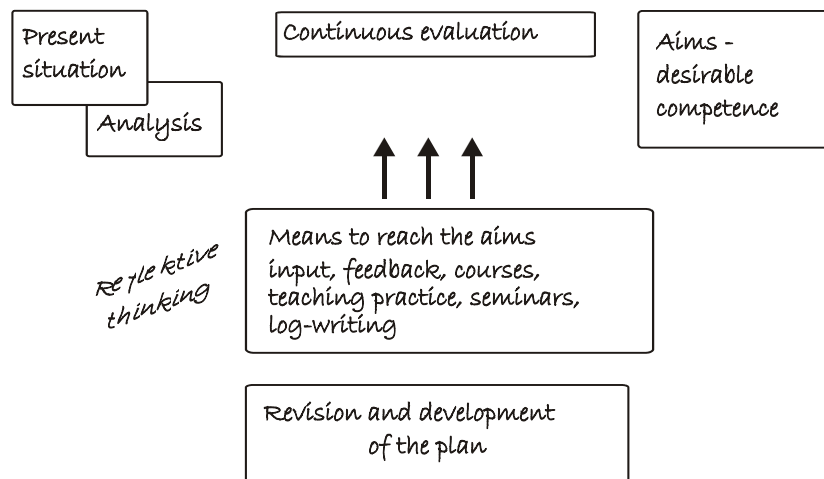
colleagues) working with a partner (e. g. present to the department your plans for an outdoor stay of 5 days) and group work (e. g. plan and present to your colleagues your ideas for an Open Day in the school). The exercises are watched by the observers for their preparation and their presentation and are always derived from a possible educational context the student teachers would experience. After these exercises, the students being observed are given the chance to de-brief. They arrange a date (ideally allowing for a delay of a couple of days) for an individual feedback from the tutor/observer. The real work then starts for the observers group. In the follow up the observers group session comprises of three sections:

- a) an immediate “gut-reaction” response which is noted and put aside,
- b) discussion of the student’s strengths
- c) discussion of the student’s learning fields

Only b) and c) are later reported to the person as the statement of the observer group.

8. Creating individual plans for the development of teacher competence. This was the Swedish APT approach. Students had an opportunity to apply for participation in the project. 10 students with different profiles from the middle of the program were recruited. During 1.5 years seven seminars of 1.5 hours each were offered and certificated. An overview highlights the very Swedish approach:

Individual plan for development of teacher competence



The possibility to international exchanges and contacts to other European Teacher Training Institutes was also embedded in this approach. The development of the individual development plan had to be documented in individual logs.

9. Creating examples of teacher growth supporting activities

The Estonian approach included similar questions like the Swedish. It focuses on the new role of teacher and teacher education by implementing structural features, which include initial training, induction year and in-service training. The main aims were:

- Continuous self-reflection, development of skills
- Being an agent of change
- Fellowship and cooperation with different associated groups
- Innovation
- Ability of integration
- Ethical responsibility

The Estonian tools can be seen as a mixture of tools which were adopted from our own findings, other partners and fit into the Estonian teacher training system. The German Entrance Interviews and the Face to Face Interviews were used in the selection of teacher trainees, to reflect upon the choice of candidates for the future profession. A development portfolio for supporting teacher training was based on the Swedish approach. The implementation of an 'electronic portfolio' – based on another approach from Belgium - will extend the teacher growth supporting activities.

These are only some examples of the developed diagnostic tools. Further details of each are available on the APT homepage²³.

Conclusions

Changes in society: globalisation and consumerism are variously blamed for the “loss” of values at both an individual level and societal level. The APT project takes the view that such an answer is too simplistic. Values cannot “get lost”, but they can change and “old” values can disappear and be replaced by others. To act as change agents in schools teachers need to adopt new roles, which vary widely from the old roles as information providers to learning moderators. One of the new roles needed is value clarity in dealing with diversity in today’s classrooms. The precondition of understanding values and belief systems of students from different social, cultural or religious backgrounds is the reflection of ones own value and belief system. Every new teacher entering the profession nowadays should be provided with tools that create a deeper understanding of their personal motivations entering the profession, in addition to a deep reflection about one’s own personal belief system. These aspects of good teaching, especially issues like attitudes, behaviour and value clarity are competences that lie far beyond the knowledge of subjects. They cannot be “downsized” to ethical subjects in the school curriculum. They form part of a process, which can deeply influence the future of young students. The only way of implementing the training of these competences in different European teacher training systems is the acceptance of a variety of approaches. The APT project shows that tools for value education cannot be “exported” or “imported”. They must be adjusted to the political, social

²³ www.ltu.se/aptproject

and cultural background of the given school system and the teacher education system. We have experienced diversities, not singularities and by doing this widespread scenery of possible approaches has been found, piloted and implemented. Everyone one of us as a practitioner of teaching has from his old school days kept in mind one or two persons, who were “good teachers” (or “bad teachers”) in the true sense of a value relation towards us as students. No one can dare to say, what exactly were the “good” or the “bad” things of these individual teachers – their behaviour in the classroom, their attitudes towards the students, their inner beliefs or their ethical background. In the past, value education in the classroom took place with a whip, which could hardly be described as a very trustful approach. The African adage "It takes a whole village to raise a child" brings us to the crucial point: The educational “village” or “community” for values education can be parents, teachers, headmasters, school assistants, teacher educators, social workers, caretakers, school nurses, if they are guided by child-centred values, attitudes and competences – because: “The first sensation, which an infant gets, is the universe”.²⁴ Value education is ‘taking care’ of you and of the students. The ‘ethics of mindfulness’ leads to the bottom of the heart – to heart communication.

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²⁴ William James, *Talks to teachers*, 1890

12

Metaphors of Teachers' Belief Systems

Gyöngyi Fábán

Abstract

In this paper we investigate the application of the technique called modified metaphor analysis for exploring teachers' beliefs related to the language teacher role. The technique was piloted in Hungarian context among EFL teachers. The results of the pilot test suggest that the technique developed by the author might serve as efficient and reliable means of identifying the fundamental elements of the belief systems of teachers as well as of promoting their awareness of their professional self.

Introduction

Experience suggests that whatever the professional expectations of the environment towards teachers are their classroom behaviour is highly influenced by their values, beliefs and attitudes towards the expectations, which is also supported by evidence of recent research (Williams and Burden 1997; Atkinson et al. 2001).

However, the intention of professionals (including teachers themselves) to gain reliable knowledge of the structure and the functioning of the belief system which determines the way a teacher deals with external expectations faces a number of difficulties. Among others, the complexity of the research area and the lack of reliable research instrument hinder the explorations in the area.

On one hand, the belief system is claimed to be a complex construct of cognitive and affective components, and as such, is complicated to be investigated with the

existing techniques. The application of a complex, systematic approach to reveal the contents and the structure of the system, and furthermore, the relationship of the components is vital.

On the other hand some current research instruments, such as questionnaires or interviews are feared to provide less reliable results. When the possibility of losing face emerges during the research, highly educated subjects, like teachers, tend to respond in a way that reflects the expectations of the environment towards the ideal model, instead of revealing the real situation. They often do so under the influence of subconscious psychological processes in their minds, not on purpose (Atkinson et al. 2001).

The paper claims that the application of a technique called modified metaphor analysis, developed by the author of the current article, might serve as efficient means of exploring belief systems. The instrument was developed as the outcome of theoretical research carried out in the area of language teacher role. The study intends to describe the technique and, in addition, to present an example of its application in the area of teacher's beliefs related to language teacher role concept in the Hungarian context.

Background

Using metaphors for research purposes is not a novel idea.

According to cognitive linguistics the metaphor is a phenomenon bridging the entities of two conceptual domains (Kövecses 1998:54). The phenomenon, which is born in the mind, depicts the meanings or experiences we are unable to conceptualise, this creates the possibility to reveal the concepts otherwise hidden at the back of the unconscious mind. The research technique of cognitive linguistics origin lends itself to the investigation of metacognitive knowledge and experiences (Flavell 1981, in: Tarkó 1999:176), and furthermore, of the representations of complex concepts of pedagogy, especially of ones which change with time (Vámos 2001a) or of those which show individual differences (E. Szabó 1996; Tarkó 1999).

In this paper we will apply metaphor analysis for the investigation of language teacher role.

Language teacher role

An interdisciplinary study of the role of the language teacher (Fábián 2006) defines the concept as follows.

Language teacher role is a complex compartmental system comprising a complex of expectations of biological and cultural origin. Its main function is the realisation of the role that is role behaviour. Its two basic components are the expected role and the perceived role. The expected role is the complex of expectations which derive from the whole of the pedagogical environment and which is directed towards the language teacher. The reflected imagery of the expected role, present in the mind of the language teacher, acts as an internal system of expectations. The component, called perceived role in the present research, is a componential system in itself, which, together with the expected role, form the complete componential system of language teacher role.

Metaphor analysis enables us to investigate the internal system of expectations, that is the 'percieved role', in other words, the imagery in the mind of the language teacher.

The application of modified metaphor analysis

In the following the procedure of data collection and analysis will be described through the research carried out by the author as a pilot test of the technique. Piloting was carried out among 10 EFL teachers of Hungarian origin while completing a post-graduate course in language pedagogy at Pannon University, Veszprém, Hungary.

Collecting data

The technique of metaphor analysis allows several methods of application. As the first step of our research we applied a well-known version of the technique that is we asked the participants to create their own metaphors through completing the sentence below.

The language teacher is

They they were asked to provide 2-3 arguments to support their statement.

Analysing data

To increase the efficiency of the analysis, we employed a new method of processing the data, which was completed in the following steps.

1. We introduced the concept of proposition.
2. The teachers' arguments were divided into propositions.
3. The propositions were rearranged into new groups and, in addition, new concepts (metaphors) were created to label the groups.
4. The groups of propositions were further investigated by content according to specific principles.

In order to clarify the data processing method of the technique, some further information related to the concept of the proposition is provided below.

The proposition

In our terminology the proposition is the smallest meaningful unit of the argument supporting the metaphor. For instance, the following part of an argument

'... who is naïve to think that it is at least the students who appreciate her...'

can further be subdivided into the following propositions.

1. The language teacher is naïve.
2. The language teacher is not appreciated by the students.
3. The language teacher is not appreciated by others.

During data analysis each proposition is dealt with as a separate item representing a specific meaning.

Results of the analysis of data

The analysis of the cognitive components of the propositions provide a clearer picture of the components of the language teacher role concept within the group.

Cognitive components of the role concept

The analysis of the propositions resulted in setting up five main categories of the cognitive components of the teachers' metaphors, which are the following: source, link, model, creator and servant. Figure 1. shows the structure of the language teacher role concept within the group and the relationship of the components.

Components of language teacher role

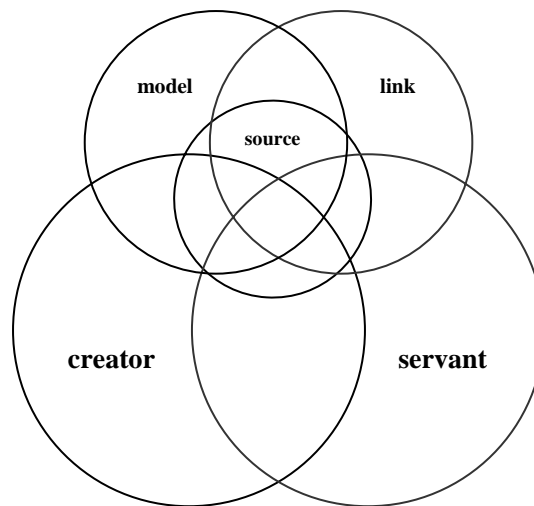


Figure 1.

The contents of each component based on the contents of the proposals are briefly described below.

1. The creator builds knowledge through passing on information to the new generation along with organising the process of learning. She motivates students, plans and creates materials, while building and organising a system of knowledge in the students' minds. She introduces changes in the learning process through continuous challenge..
2. The source represents a place where knowledge is available for students.
3. She is as perfect as a goddess, providing models of values, behaviour, knowledge and skills.
4. On one hand she acts as a link between the student and the immediate socio-cultural environment of the classroom and the institution, as well as between the student and the wider community of foreign language cultures. On the other hand she works with the student in the present for future purposes.

5. The servant, a victim of the immediate and wider environment, is expected to obey without receiving appreciation.

The number of the propositions within each category was also counted, which resulted in a difference in the amount of emphasis each category gained within the role concept. Figure 1. also shows the amount of importance each category has as a component within the structure of the language teacher role concept. The differences are suggested by the size of the circles in the figure.

A further analysis of the cognitive contents of the language teacher role concept of the group leads to other interesting results. The propositions addressing the teacher herself are mostly found within the domain of the creator and the model, which suggests that the teachers' expectations towards themselves are dominated by these areas of ELT. Furthermore, the activities of the creator are directed towards the students and the future as the main aim of teaching. This area of ELT is further strengthened by the activities of the source.

In contrast, the language teacher is forced into the role of the servant by the expectations of the immediate environment inside the institution as well as the expectations of the wider community in the environment of the school and the national language teaching policy.

The link has a double role. She establishes a connection between the student and his environment on one hand, and between the institution and its social and educational environment on the other.

Affective components of the role concept

A further analysis of the contents of the propositions provides information on the affective features of the language teacher role concept within the group as well. The investigation reveals the teachers' attitudes towards their roles. In the research the attitudes were studied in the following three dimensions.

1. The active and passive features of the role.
2. The role inside and outside the teacher–student interaction.
3. The relationship of present and past.

**Relationship of the affective role components
to the environment inside and outside the classroom**

Figure 2.

Positive	
<p>„megismerteti” „bemutatja” „közelebb hozza” „összekötő kapocs” „kérés intézhető hozzá” „mindenre képes” a tanulókhöz igazodik ad magából „egyre fényesebben ragyog” „eltűnik ... de megmarad” „példának kell lennie” „a jövő dönti el”</p> <p>Inside the classroom</p>	<p>„kapcsolatokat létesít” „kimagasló PR munkát végez” szponzort keres „ahol tud szolgál”</p> <p>Outside the classroom</p>
<p>„naívan azt hiszi legalább a diákok”</p>	<p>„kapcsolatok utáni kutakodás” „hazaviszi iskolai problémáit” „elhanyagolja családját” „áthárítják” „vállára veszi” „akiben bízni lehet, hogy nem ...” nem hiányzik nem mehet szabadságra nem sztrájkol „akitől elvárják” „bárki visszaélhet” „megrongálhatja” új tanmenetek NAT új érettségi megváltozott társadalmi értékrend globalizáció nem becsülik meg „igazgatók sincsenek tisztában” „Európa nyelvkutatási normái” „nyelvtanári munka nem is fontos” 'manager' Oktatási minisztérium szülők</p>
Negative	

In this paper some more information is provided on the findings of the analysis of the teachers' attitudes concerning their role outside and inside the teacher – student interaction, that is the internal and external environment of the classroom.

The propositions were analysed in their contextual beddings according to their affective value and, as a result, were placed in a system of co-ordinates. Figure 2. shows the number of propositions with positive and negative values and their relationships to the internal and external environment of the classroom. Although in the figure the fragments of the propositions are provided in the teachers' mother tongue only, the number of quotations listed in each part of the figure have implications for the internal structure of the system of the attitudes in this dimension.

The role inside the classroom is realised within the domains of the creator, the source and the model. A great number of propositions are connected to the expectations of the students within the interaction between the teacher and the student as well as the reactive role behaviour of the teacher. The majority of these propositions express positive attitudes and are placed in the top left part of the system of co-ordinates. To a smaller extent the domain of the link is represented in this part of the figure as well. However, most propositions discussing the domain of the link are found outside the classroom, and appear together with the expectations of the environment inside the institution, and in addition, of the socio-cultural and pedagogical environment surrounding the institution, which is the domain of the servant. The link and the servant are mostly featured with negative attitudes and appear in the bottom right part of the figure. From the whole of the figure it becomes clear that the walls of the classroom serve as borderlines between the positive and the negative aspects of the role concept of the language teacher among the teachers involved.

Conclusions of the research

In the research reported we investigated the beliefs of teachers related to their role within a group of Hungarian EFL teachers. Based on the results of the research we can claim that a variety of expectations present in the expected role of the environment are reflected in the minds of the language teachers and create the system of expectations which we named perceived role. The perceived role reflects the variety and the structural complexity of the components of the expected role, as well as their relationships to each other. Furthermore, the results suggest the presence of a high number of conflicts, which derive from the incompatibility of some components of the expected role. A further conclusion of the research is that the negative attitude of the language teachers towards some expectations of the environment might also act as the source of conflicts.

Implications for the application of the technique of modified metaphor analysis

The research presented in the paper served as a means of piloting a research technique, which is the modified version of metaphor analysis, for investigating belief systems. We find that the technique with the modification introduced in the method of data analysis can serve as efficient and reliable tool for investigating teachers beliefs related to complex concepts of the profession, which was further supported by the teachers' reflections during the follow-up discussion. Revealing teachers' values, beliefs and attitudes might lead to a better understanding of the state of the art of classroom practices. Besides acting as a tool of informing external professionals, a further development of the technique allows the participant to explore her own beliefs in a rather objective manner, due to the fact that its application can provide insight into one's own beliefs and attitudes. Thus we claim that the technique of modified metaphor analysis also allows application for self-awareness purposes among teachers. At present the development of the new method of application is under way.

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13

Hidden Curriculum

Katja Zalar

1. What is the hidden curriculum?

1.1 Introduction: hidden, formal, actual curriculum

I have chosen this topic because I think that the essence of hidden curriculum lies in the manner of communication, and above all in the relationship between the teacher and children. These two determine children's social learning, assigning meanings to events and things, and the introduction of children into their immediate and broader societies. The teacher is the direct factor behind the hidden curriculum; i.e. everything not defined in the formal curriculum; co-creates the microclimate within an institution. I think that a positive hidden curriculum prevails in kindergartens at its actualisation level, and a positive aspect of hidden curriculum, depending on the personal qualities of an individual teacher. I am convinced that children can co-operatively decide and define rules within the actual curriculum, diminishing the possibility of impacts of negative hidden curricula that is merely reproducing the social structure as a whole, while enabling a symbolic identification with these rules, and thus internalisation of moral principles and laws, which is the principal goal of preschool education. Anything that is not defined in the formal curriculum belongs to the scope of hidden curriculum; and to the relation between the formal and hidden curricula reflected in the actual curriculum.

1.2 Hidden curriculum

The hidden curriculum includes relations, ways of communication (verbal and non-verbal), defines values, expectations, requirements, unwritten rules, and assigns meanings to things and events, introducing individuals into the immediate system, such as, for example a kindergarten group, and into the broader system, the society. The hidden curriculum can be positively represented for instance by

the educational ethos and self-imposed authority, or negatively represented by prejudice and requirements for accepting pre-determined roles.

By determining values and expectations, assigning meanings, and introducing the individual into the immediate and broader social environments, the hidden curriculum interferes, perhaps to the greatest extent with privacy, i.e. the family. A family is an informal environment, and as such has little chance of influencing the formal curriculum, while it is given ample opportunity through formal and informal ways of co-operation with the kindergarten to affect the actual curriculum.

The hidden curriculum, positive and negative, is determined by the formal curriculum, since it comprises all that is not defined in the actual curriculum.

Within the society the hidden curriculum is everything that is not structured in the formal curriculum: the leading social class determines and adopts a formal curriculum defining which types of knowledge are legitimate. This act is indicative of the relations of power in the society, or who is in power. By determining the formal (legitimate) knowledge all other knowledge is characterised as inferior. This means that by adopting the formal curriculum the hidden curriculum is already predetermined, enforced and legitimised by social relations. Rather than leaning towards change they tend to preserve the relations of power, and thus to preserve the relations between social classes.

Kroflič says that determining the formal curriculum is nonetheless necessary, because it prevents manipulation and intrusions of ideological pressure (2001: 11). In addition, the definition of the process of education in the form of goals evokes contemplation on subconscious factors that direct our actions and behaviours.

Hidden curricula in kindergartens are thus defined not only by formal curricula, but above all by actions and behaviours of adults in relation to children. They are primarily hidden expectations that are more binding for children than those expressed in words. If the social and psychological components of a message are inconsistent a child will respond almost without exception to the psychological component, which is why the way how the teacher communicates is one of the prime indicators of democracy and consideration of the child's rights, and their implementation.

Apple says that both verbal and nonverbal forms of communication between adults and children or among children assign meaning to each individual event, object or occurrence, giving it a value assessment, evaluating it. At the same time we represent role-models to children, based on which they will build their own hierarchy of values that is increasingly difficult to change over time (1992: 53).

Therefore, the most important factors and conductors of hidden curricula are adults working with children on a daily basis. This means that our knowledge must consist not only of knowing theories of education, but must also inevitably include issues of ethics. This binds us and enables us to act in accordance with moral principles, which we have internalised, so that they direct our actions.

The basic act of recognition and evaluation according to Gogala (summarised after Kroflič, 2000 b: 63) is personal experience. It is a mesh of the rational and emotions. It is a teacher's (as well as an educator's) duty to create an educational ethos in order to enable a child to get in touch with reality and moral values. The teacher's authority cannot be based on an external source of power therefore, but on an internal one. It is the power of personality based on a positive, active attitude towards cultural values and the educational calling, on education founded in the teacher's (educator's) need to give, and in the child's need to receive, as well as in the requirement to consider the laws of development.

So the hidden curriculum, be it positive or negative, formal or actual, is actualised through authority. The internal drive of authority is made of personality features that determine an individual: mental balance and harmony, self-reflectivity, inclination towards ethical and moral values, and tranquility.

Personality features of the educator and communication are important components of hidden curricula. They are reflected in the relations with children, while they determine the microclimate in a class through these relations, and what is even more important, the grade of democracy enabling children to make independent decisions, and promote independent activity. This enables children to take responsibility for their actions and consequences of these actions, to co-decide in making rules with which they can identify symbolically, accept and internalise them, establishing moral laws they will follow.

Hidden curriculum is above all personal contact between the child and the educator that occurs owing to the educator's personal authority and educational ethos. The educator's authority is therefore based on internal strength, while formal and hidden curricula connect with the authority at the execution level, the level of actual curriculum or the reality lived: the educator who possesses authority must follow a formally prescribed curriculum.

Psychological components of messages brought over during the process of execution are more binding for preschool children than social or material components, and a preschool child will try to meet the psychological part of a message and expectations of the teacher. If these are in accordance with the formal curriculum, and the educator's attitude towards its content is positive, then there are positive aspects to the hidden curriculum, and a positive transfer will occur between the child and the teacher. If the teacher's personal attitude conflicts the formal curriculum, however aspects of the hidden curriculum are negative: the child will still want to meet hidden requirement of the teacher, even if they are in disaccord with or even opposed to the formal curriculum.

The actual curriculum is the relation between the officially prescribed or formal curriculum and the personal approach which determines hidden curricula. Taking into account democratisation, this means active participation of children in the process of education that consequently promotes open communication and the solving of conflicts in a democratic way. Children participate in the formulating and assigning meanings to things and events, and in placing themselves and others

into immediate and broader systems. They gain in this way experience in principles of democratic negotiation and reaching consensus, but since they are active subjects in these processes, rather than being mere objects of submission and indiscriminate acceptance of rules and demands, possibilities of identification with moral norms and the internalisation of universal moral law increase. This decreases the possibility of hidden curricula's negative aspects to take effect, and this is a process leading towards developing autonomous moral personalities, which is the goal of education ultimately. It is crucial to know (in order to surpass negative aspects of hidden curricula) that any process of improvement requires evaluation and self-evaluation, the two essential processes enabling the recognition of failure. They prevent us from "resting on laurels", possibly standardising promising democratisation processes and so prematurely preventing further change. This momentarily kills the process, making it rigid, and development is checked.

2. Parent participation

The Kindergarten Curriculum and White Book on Education stress the importance of co-operation between kindergartens and families. Institutional education and family upbringing must complement each other: a kindergarten provides services to a family without interfering with its privacy, while parents may not interfere with the professional work of a kindergarten as an institution.

Parents must be orally informed of and have access to material in writing on different programmes at a kindergarten, and be provided current communication with the two professionals in their child's group and with the consulting service. Parents have the right to take part in the life and work at a kindergarten, and participate in education, provided that they respect the kindergarten's autonomy, of course. Another parents' right is to gradually introduce their child to a kindergarten, which means that they spend an amount of time with the group.

Formal forms of co-operation include interviews, meetings, billboards, written materials, events for parents, classes for parents, and the board of parents. Informal forms of co-operation involve communication with parents bringing children to kindergarten and taking them home, unplanned talks, workshops for parents or parent/child workshops, picnics, trips, and participation of other family members in kindergarten activities.

Communication between a kindergarten and parents only becomes interesting when conditions are met where parents can truly affect changes. Affecting changes means that a kindergarten has lost its authoritative power, and accepted a relationship of equal partners with parents.

Communication with parents depends on conditions and rules of the society at large and its values. They are affected by the grade of democracy, respect of human rights and the culture of dialogue in the society. Like in any other institution, a kindergarten cannot be better than the society, of which it is a part. Open kindergartens are not without problems, on the contrary, they observe problems, experience conflicts, lapses, but also endless possibilities of solving

those, and improvement. Conversation and trust between the teacher and parents should constitute an ongoing process or relation as a part of behaviour learning models. They are essential when a child has serious problems. Strojic thinks that good communication in this case is like a therapeutic process for the child (1992:36). Communication between the teacher and parents acts as a continuously developing preventive mechanism of improving conditions, so that problems are rare.

If the parents sense that the teacher knows their child well, communication between the teacher and parents will be easier and better, so it is crucial that the teacher keeps consistent record of the child's progress and development (e.g. a portfolio). In communicating with the parents, the teacher can thus provide material that promotes conversation on both sides, and represents a more objective assessment of the child's development.

Stritar defines a child's portfolio as a collection of records on the child's development and progress over a certain period of time. The comprehensive portfolio is the child's property. The teacher, assistant and parents participate in systematic and occasional entries, collecting works and making comments. An older preschool child also takes part in three-party meetings and interviews surrounding the portfolio. Critical judgment of all participants about the work and relations is expanded in this way, learning is encouraged in children, and the portfolio provides concrete insight into the child's development and progress, thus affecting professional growth and progress of the teacher and assistant. (2003: 2).

Strojic says that the fundamental tendency of parents and teachers is the wish to reach consensus. By trying to reach it they concentrate on the child, while at the same time experiencing a relationship. If the teacher has a favourable opinion of the child, the attitude towards the parents is positive, and vice versa, if the teacher has negative experience with the child, negative expectations of the parents arise. The same is true of the parents: Their child is the object of utmost value to them, so they experience an unbalanced relationship with the teacher, if their child does not represent a positive value to him or her. In the process of finding consensus teachers and parents experience their own orientations, self-evaluation and self-orientation, while assigning these to the other party (projection). Prejudices that parents have about teachers (and educators), and vice versa, are thus more easily understandable. (1992: 43). Because both sides have vitally important views: the parents about their children and themselves as good or bad parents, and the teacher about the child who determines the teacher's destiny, and about his or her own being successful or unsuccessful, a minor conflict of views can jeopardise consensus. This can cause a breakdown of communication between teachers and parents.

3. Interaction

Milivojević describes the communication field as a situation where two people notice each other. As soon as the communication field is established, people must communicate. When two people begin communicating, a communication relationship occurs. (2004).

Communication relations, therefore that necessarily occur among children, between children and adults, and among adults at a kindergarten or in an individual kindergarten group, are agents of hidden curricula. Communication in a group defines mutual relations and assigns meanings to objects, occurrences and events, and determines their value to children (as well as adults).

3.1 Defining personal relations at a kindergarten

Interaction is a relationship between two or more people where one person affects the behaviour of others. Communication is a form of interaction where it is important how a person reacts to signs emitted by another person. Within interaction, other relations and activities besides communication occur: emotional reactions and various forms of interpersonal relations and activities (1982). Milivojević claims that the psychological message will have a conclusive effect on the reaction of the person challenged (in this case, the child), rather than the social and material messages (2004), so it is inasmuch more important that children's rights are respected and enforced consistently without adding superfluous psychological messages.

The quality of a child's stay at a kindergarten is determined by the microclimate that can stimulate or inhibit individual areas of the child's development (for instance independence, exploration, etc.). This means that the relations established between employees, with the children and their parents represent the major aspect of a kindergarten, because the employees transfer communication models to the children in a group in this way, as role-models, and determine ways of communication with adults. Mutual relations are mostly defined by the non-verbal accompaniment of what is said; concrete results of communication are affected by the way and context of what is said, rather than the content.

I think that the way in which a teacher communicates is one of the key indicators of democratisation and consideration of children's rights. How often the educator guides the children, how she listens to them, how often she asks their opinions, and how often she takes account of their opinions or suggestions, whether she listens to their answers, how often and in what way she encourages them, and how frequently she takes part in common activities are factors that create the microclimate of a group, while the microclimate determines the value and self-image of children through mechanisms of hidden curricula.

3.2 Referring meanings to a kindergarten

Apple says, "Referring meanings in a kindergarten group is the critical period of children's socialisation. Meanings of objects and events within the group are not internalised with them, but are created in social interaction". (1992:35) Relations between children and teachers represent the most important part of life at a kindergarten. Both verbal and non-verbal communication between children and adults give meaning to an individual event or object evaluating it.

Children will take our reactions, words and knowledge (behaviours) as an example. Based on this they will build their own hierarchy of values that is increasingly difficult to change over time. Children must therefore, for instance be

given a choice, their independent decisions must be supported, because the choice of a playing activity today means the choice of a person's own direction and the right moral decisions in the future.

Interpersonal communication is the principal agent of hidden curriculum's meanings, because it necessarily goes on in society, every day, throughout the process of education: the use of objects and events in practice, interpersonal relations, fleeting remarks, spontaneous reactions determine a child's place in the group and society at large. This means that we must be aware of the hidden curriculum: learning rules, values and tendencies, which accompanies a child's stay in an institution for a considerable number of years, we must consider ideological and perception impacts made by educators, for instance social labelling, behavioural modifying, etc.

3.3 Psychological component of an individual message

Agents of hidden curricula that especially preschool children will comply with because of their need for being accepted and safe are educators and teachers. If they do not respect and implement rights, guaranteed to children by international and national legal acts, then they do not recognise children as persons with their own rights. This means that they deny children rights. Šelih claims that children are denied the right to express his or her will. "... an individual is formed in interaction with other people; a child by "seeing" him- or herself in relation to other, "important" adult – interacting with others they learn assuming certain roles and certain activities. Because a person is formed by assuming and playing certain roles interacting in the society the development of a rich personality requires a child to assume as many such roles as possible, and to assume them to such extent that his or her personal abilities still allow". (1992: 24). Šelih goes on to say that such recognition and consideration of a child and his or her place in the society also means that he or she is recognised as an individual with rights. (ibid.: 24) I think that this should guide educators and teachers in their work, taking into account the age and abilities of each child, of course, but in no event should it justify disqualifying rights or discriminating individuals or groups of children.

In order to democratise relations constant training of educators and teachers is required, for changes in routine and an individual's broadmindedness can only be affected by the quality of information and experience.

4. Ways of Communication

4.1 Communication: Messages we pass to children

The principal criterion in analysing messages is the reality of a message. Messages are real and unrealistic, positive and negative, and they refer to a person as such or the person's behaviour (Milivojević, 2004). Most importantly, a person must be separated from what the person does (thinks, feels, wants, engages in).

Inability to separate personality from behaviour is a normal developmental step which occurs at the beginning of a child's second year of age. A child then thinks prohibiting a behaviour means that we do not love him or her. The child is unable to understand that we do love him or her, although we do not fulfil his or her

wishes, and criticism is directed at the behaviour (in order to change it) (Žorž, 2002). If educators separate the person from the behaviour showing it verbally and non-verbally, the child will be able, based on experience with them (and the parents) to separate him- or herself from his or her thoughts, emotions and actions, too. At the same time, separating the person from the behaviour makes it easier for the educators to establish a positive attitude towards the child's personality.

One of the fundamental differences between messages directed at a person (unconditional messages) and messages on behaviour (conditional messages) lies in acceptability and unacceptability (Gordon, 1996). Messages directed at a person define the person as such, and as a rule discard any possibility of change (*You're lazy!* or *You lazy bugger!*), while messages concerning behaviour allow change (*Stop lazing about!* or *Stop avoiding your chores!*). With the former message the child can do nothing about changing except denying the claim. The latter does not necessarily imply that the child is lazy, because even the most hardworking people do nothing sometimes, they "laze about". The appropriate message would be: *It was wrong not to clean up your mess; because you can do it I expect you to do it.* Of course the message is adapted to the child's age and ability to understand messages.

4.1.1 Real praise and criticism of a child

Real praise is a positive label defining the child's personality, e.g. *pretty, smart, responsible, good, valiant, talented, able*. The basic message is You are valuable. Such messages build up the child's identity, self-image, they build up the child's reference framework (RF).

A small child has no RF, and can accept anything as reality. If we repeat real praise long enough, the child will include them in his or her RF; they will become the child's reality (Milivojević, 2004; Goleman, 1997). These are messages that will make the child feel well, safe, satisfied, the child will know he or she is loved and important to people who care about him or her, the child will strengthen good opinion of him- or herself. All this can be communicated to the child non-verbally or through behaviour: by listening closely, through horizontal communication, facial expressions and body language.

Real criticism of a child achieves the opposite: the child's RF is strengthened that says the child is bad and unable, the child will even feel that he or she has no value and is unimportant, if ignored. If we say to a child, for instance *My chubby*, we actually communicate that this is a fact that cannot be changed, and the child had better accept it and identify with the fact, i.e. include it in his or her RF. We promote the conviction in this way that the state is unchangeable. Real criticism may not be used, especially not by professionals.

4.1.2 Unrealistic praise and criticism of a child

When praise directed at a person is unrealistic, exaggerated self-image of the child is invoked. Steiner (et al., 2004) states that such child, when in contact with children in a new environment, must accept that he or she is not the smartest,

prettiest, most important ... which calls for a change in the RF, and can dangerously damage the child's identity.

Unrealistic criticism directed at a person is especially dangerous in harmful, if used in education. A child absorbs unrealistic criticisms directed at the person building them into his or her self-image, identity and RF, into his or her reality. Based on these messages the child concludes he or she is useless, the child's right to exist is denied (*Idiot! Jerk! You're stupid! Stupid ass! Stupid cow! Are you mad?*). These labels often dehumanise, as their content deprives the person of humanity. They are very harmful to a child's self-image, and must never be used.

4.1.3 Real praise and criticism of behaviour

Real conditional praise is praise of activity, its chief purpose to enhance certain behaviours (*Good job! You were very particular cleaning up! What a great idea!*). As soon as the child behaves as desired these messages encourage certain types of behaviour, because the child feels pleasure when praised. At the same time these messages reduce unpleasant emotions in the process of activity, such as lack of confidence and fear (Shapiro, 1999).

Real conditional criticism in criticism of activity. This message is often the most successful way to change a child's behaviour. The unpleasant feeling evoked by criticism is the reason to change behaviour. The behaviour criticised must be clearly defined and communicated, so that the child can understand it. The most efficient are *I* messages (Gordon, 1996). As little time as possible should pass from undesired behaviour to criticism. The criticism of behaviour must be so strong that the child is motivated to change it.

4.1.4 Unrealistic praise and criticism of behaviour

Unrealistic praise of behaviour is not used working with children. Because they are unreal, they soon lose the value of praise, while distorting truth and misleading (*Your drawing/dancing is the most beautiful in the world*).

Unrealistic criticisms of behaviour are generalised and exaggerated, they hurt a child considerably. They usually disqualify or devalue behaviour (*You never clean up! You always get messed up at dinner!*).

5. Reference framework

Ways of communication have a strong impact on children, their reference frameworks, self-images and identities. They encompass all factors of hidden curriculum and influence a great deal the quality of children's stay at kindergartens and the quality of kindergartens as such. Differentiating a child's reference framework refers to the process level of quality at kindergartens, because it covers the area of a child in the process of implementing the curriculum. Marjanovič Umek et al. state that it encompasses "... emotional and social development (social interaction, responding to the child's needs and wishes, co-operation, competition, solving of conflicts, the child's mood, emotional security, expressing emotions, regulating behaviour)" (2002: 51).

The reference framework (RF) is the internal map of reality in each individual. It is an internal structure made of perceptions, conceptions, feelings and actions that individuals use to define themselves, others and the world.

In each of the tree field there are different perceptions or definitions. For instance, in the "I" field there are different perceptions of oneself, one's body, personality features, behaviours and reactions to different situations. Because our RF defines reality, it contains only the perceptions we believe are realistic and true.

A small child with no definition of reality can adopt any definition of an individual aspect of reality. Once the child internalises it, it can hardly be changed. It is about the law of consistency. People want to retain the established order and internal stability. But the internal consistency of RF is damaged:

- when beliefs from the RF are in disagreement with information an individual receives from the reality,
- when in the RF itself mutually excluding or conflicting beliefs occur (Milivojević, 2004).

5.1 Differentiating or redefining reference framework

In the stage when the internal structure has been established a child has difficulty rejecting what he or she has adopted (the forming of the hierarchy of values takes place in the same way) (Apple, 1992).

Once faced with a reality that conflicts the reference framework (RF) an internal conflict occurs. In such situation the child will as a rule favour is or her beliefs: He or she tries to redefine reality in order to include it into the RF. Elements of reality are correctly noticed, but assigned meanings that correspond the RF. A child is better at noticing those elements of reality that justify his or her beliefs, especially if an individual event is assigned great importance. Most often he or she will prove to him- or herself (or others) that reality is what he or she thinks it is (example: a boy has ample motoric skills, but refuses to do a backward roll, because he is convinced that he cannot do it).

Thus they build their own realities around themselves. People sharing the same views (groups, subcultures) award social confirmation to the construct of reality (McLaren, 1994).

If a child feels that his or her value is jeopardised, unpleasant feelings occur. They are signs that his or her concept of reality and reality as such are not in accordance. Anger and aggressiveness can follow (the child wants the world to adapt to his or her concept or wish), fear (the child runs away, he or she is passive, and avoids making contacts), or sadness (the child again runs away and is passive, but gradually adapts his or her concept of reality to the reality) (Milivojević, 2004).

5.2 Reference framework and communication

Language (system of characters) belongs to the most sophisticated ways of transferring information (Brajša, 1993): the least misunderstandings occur in

verbal communication. In contrast to language the RF works in non-verbal communication, too, however only a small part of non-verbal signals (gestures) is socially encoded in the sense of standard and generally known meaning (for instance nodding and shaking the head) A major part of non-verbal behaviour belongs to the scope of individual expression, which is why there is more misunderstanding in non-verbal communication, incomprehension and assigning meanings to behaviour whose purpose is different.

6. Self-limited authority

Self-limited authority is the ideal model of authority. It is derived from conclusions that authority cannot be cancelled, because it occurs in its hidden form, even more binding, and that we are obliged to seek a form of authority which provides the most freedom in education, and supports the development of individuality and autonomous morality.

Authoritativeness and educational influence according to Gogala are not pre-prepared, but are incalculable results of many aspects of human psyche and their mutual influences, and important aspects of hidden curricula. Rather than blindly recognising authority, children accept it only when they feel that it is realistically founded, that there is a reason behind each demand. In addition, children ask for *internal* or *personal* authority, while positively denying external authority. This means that they do not recognise authority with an external (physical) source of power. The success of upbringing depends on the richness and originality of the teacher's cultural spirit (spiritual richness in general culture, not only in matters of school). The transfer or interpersonal contact between the teacher and child can only be established if the teacher possesses personal authority, if he or she can establish interpersonal contact, and if he or she carries within the educational eros, it will build trust and emotional closeness between the teacher and the pupil (educator and child), and a personal-emotional relationship later "reflected in the pupil's love for the teacher, and through the teacher for subjects he or she presents, or in the educational eros of the teacher for the pupil". (1933, quote after Kroflič, 2000 a: 35).

In educational relations transfer occurs accidentally and independent of our will. A child establishes strong emotional contact with an adult person or resentment which either enables or prevents educational work. This situation requires professional conduct: The teacher must be able to recognise transfer or counter-transfer resentment in order to avoid harmful impacts of the former or the latter. He or she must alleviate too strong a transfer attachment, and thus help the child reach autonomy, while neutralising counter-transfer or resentment by being especially attentive to a just treatment of such child.

6.1 Education for autonomy

General principles of a child's development should be seen as guidelines in working with preschool children. We must recognise that heredity, physical and social environments affect a child's development that qualitative and quantitative changes intertwine throughout development, where new aspects of development include earlier ones and build upon those. All areas of a child's development, the

perceptive, emotional, social and motoric are interlinked, as the development in one area influences the development in another, and vice versa (e.g. the development of a child's speech affects the establishing of social contacts). Of great importance in a child's development are a positively oriented social environment and encouragements. Since extensive individual differences occur between children age can only be a rough indicator of maturity, however certain periods in the cycle of life are more appropriate for learning than others (e.g. the first three years of a child's development are the most appropriate for the development of speech and communication skills). Certain deficits derived from the environment can be made up for later, but it requires substantial efforts. Important for a child's development are challenges to the child's current abilities, because conflict causes a shift to a higher quality level, but it only occurs when the lapse between the current level of development and the desired one is not too great.

The goal of work with preschool children is to bring up an autonomous individual. In educating for autonomy it is necessary to know education theory, as the educator must understand education and plan it, taking account of fundamental scientific conclusions, because hidden expectations may cause ideological interference, manipulation and pressure on educational institutions. Another just as important reason is the right of parents to choose education that corresponds to their beliefs.

Hidden curriculum is therefore marked by personal relations between students and teacher or preschool children and educators. These relations are necessary because they enable the process of intertwining emotions and intellect that leads towards the development of responsible, autonomous morality.

7. Conclusion (Positive Hidden Curriculum)

Within the society the hidden curriculum represents all that which is not structured in the formal curriculum, but it is nonetheless defined not only by the formal curriculum, but above all by actions and behaviours of adults in relations with children. They are primarily hidden expectations that are more binding for children than those expressed in words. If the social and psychological components of a message are inconsistent a child will respond almost without exception to the psychological component, which is why the way how the teacher communicates is one of the prime indicators of democracy and consideration of the child's rights, and their implementation. If the expectations are in accordance with the formal curriculum and the teacher's attitude towards the content is positively oriented, we can talk about positive aspects of the hidden curriculum: The child will always try to meet the teacher's hidden requirements, even if they are in disaccord with or opposed to the formal curriculum.

The hidden curriculum is actualised through authority; it is determined by interpersonal relations between the child and teacher. The internal strength of authority is determined by personality features of the individual, above all orientation towards ethical and moral values. The teacher's or educator's authority must primarily serve the child's becoming independent. (Kroflič, 2000b). this

means that children take part in the process of education as active participants, that they take part in formulating and assigning meanings to objects and events, and in introducing themselves and others to the immediate and broader systems. In this way children gain direct experience in principles of democratic negotiation and reaching consensus, but since they are active subjects in these processes, rather than mere objects of submission and indiscriminate acceptance of rules and demands, possibilities of identification with moral norms and internalisation of the universal moral law are greater. This diminishes the possibility of the negative hidden curriculum's impact, while it is at the same time a process leading towards the development of an autonomous moral personality, which is ultimately the goal of the process of education.

I believe that institutional education necessarily involves formal and hidden curricula, since the formal curriculum cannot be structured unless there is a hidden one, and even if this was possible, it is almost impossible to disregard the human factor, the personal approach, which personifies the hidden curriculum. On the other hand this is unnecessary. Positive aspects of hidden curricula, such as the educational eros, authority of personality, and positive transfer, as described by Gogala and Kroflič, evaluation, self-evaluation and ongoing education are mostly reflected in relations and ways of communication. They are irreplaceable factors in building democracy and social capital that is mutual and common trust, on which the process of education is ultimately based.

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14

Relationship Building through games, trips and school outdoor courses

Zuzana Strejčková, Marketa Melicharová, Helena Babaková

J. Werich:

“Friendship is a part of human happiness.”

Background

Introduction

Masaryk’s Basic School is a village school. There are 315 pupils at 15 classes, 24 teachers and

3 special teachers for after school activities.

There is a primary school for children 6-11 years old and a higher basic school for children 12-15 years old. Our children commute from neighbouring villages from about 10 kilometres distance.

There is a leisure centre and after school activities for all-aged children in the same building. The children can visit clubs: Art, ICT, Music, Ceramic, Gymnastic, Floorball, Dances.

There is a centre for sport with the support of AŠSK ČR /the Association of School Sport Clubs the Czech Republic.

Curriculum

The government of the Czech Republic approved “the National Programme of Development of the Education in the Czech Republic “White Book”, which formed new curriculum documents at two levels:

a state level-The National Programme of Education which outlines the compulsory frameworks for specific periods of pre-school, primary, and secondary education
a school level-The School Educational Programmes.

The School Educational Programme supports the educational autonomy of schools and professional responsibility of teachers for educational outcome. The SEP are made for:

1. schools – for head teachers, teachers and other pedagogues and for schools, which educate pupils before and after
2. parents and pupils of the school
3. other institutions such as the Ministry of Education, administrative and control institutions.

Concept and aims of the primary education

The primary education continues the process of the family and pre-school education. It is the only phase of the education, which is obligatory for the whole population of pupils. There are two grades connected in content, organisation and methodology.

The concept of the 1st grade of the primary education, 6-11 years, helps the transition of pupils between the family and pre-school education to compulsory, regular and systematic education. It is based on learning, respecting and developing the individual needs, abilities and interests of each pupil, including children with special education needs. The education is motivating for lifelong learning as it encourages creative thinking, active learning and problem solving.

The primary education during the 2nd grade of the education, 12-15 years, helps pupils to acquire knowledge, skills and routines which encourage the development of active learning, a sense of responsibility and respect for the rights and duties of the citizenship of our country and the European Union too.

The concept of education is based on the development of the wide range of pupils' interests, on their learning abilities and on the connection between education and real life. This is an area for using more difficult and effective methods and approaches; new ways of acquiring knowledge, preparing more complex tasks and projects and teaching pupils to be responsible for their own education.

Key competences

Key competences are the most important category of educational programmes. It is necessary to emphasize communication skills, toleration, solidarity, practical problem solving, knowledge of how to maintain good health for oneself and one's family, to protect nature, to gain cultural knowledge, to respect other cultures, to educate a democratic and active European citizen and a responsible employee.

Learning must be an instrument to develop key competences. It is necessary to create a dignified and healthy environment where teachers and pupils are partners and participants in education.

School programme

We would like to inform you about our school programme. We concentrated on developing interpersonal, intercultural and social competences in this programme.

We have been trying to build and improve relationships at our school. At present literacy doesn't mean only the ability to read, write or count. We have to prepare our pupils to be good staff and active citizens and they have to be able to establish contacts and relationships.

We have to develop the relationships, which support positive interaction and positive attitudes. Our pupils must be able to communicate constructively and cooperate in private and professional life, in various social situations. They must be able to explain their opinions, to tolerate the views and behaviour of others, to show interest and respect for others and to be able to help.

During their time at school the children must feel their sense of belonging to the community of the class and the community of the school. We have developed relationships among pupils and adults, among pupils in a class and among groups of children. We have to develop relationships which are important for children; this means, which are interesting for them. We have to choose the ways, which are acceptable for them like games, humour and amusement. So we try to help them experience human feelings like happiness, sadness, wrath and anxiety. We prepared situations in which children can understand each other or their friends better.

Through leisure, classroom or outdoor activities we try to develop and support verbal social skills, self-awareness, self-esteem, self-confidence, sense of belonging, nonverbal communication, team working and cooperation, friendship, problem solving and other skills and abilities.

We build relationships in these steps:

1. Building relationships in class communities
2. Building and promoting relationships with younger schoolmates
3. Intense relationships in class groups
4. Building relationships with handicapped people

1. Building relationships in a class group

At the beginning of the school year teachers have to prepare a plan of activities. These are the favourite items:

- 1.1 sleeping at school
- 1.2 birthday parties
- 1.3 cooking together
- 1.4 Christmas meetings with parents
- 1.5 Christmas customs
- 1.6 Witches' Day
- 1.7 meeting new pupils
- 1.8 school trips

These activities help to support

- getting acquainted with new pupils
- creating a team
- sense of belonging to

- friendship
- cooperation
- communication



Photo 1: Cooking together

1.1 Children come to school in the afternoon, they play games, prepare dinner, chat and read fairy tales. In the morning they make breakfast altogether.

1.2 Teachers prepare a list of the birthdays of all children. Children make presents for other schoolmates, they write or draw wishes. They have to learn how to communicate, make eye contact and how to acquire correct habits.

1.3 During this activity children learn how to set the table and good manners.

1.4 We prepare performances for parents. Younger pupils sing carols, older pupils prepare musicals or concerts. We invite not only parents but children from the kindergarten. We prepare some refreshments too.

1.5 This is the special and the favourite day because we meet and spend a short time together. Children prepare small presents.

1.6 We celebrate this holiday on 30 April each year. This is a very old tradition in our country. We wear costumes and burn fires.

1.7 Pupils from neighbouring villages join us at the 6 grade, 11-12 years, so we try to help them. We invite them to our school before they start so that they can try to work and cooperate with us and they can get to know our school.

1.8 In spring or autumn we go on trips. We help children to know about the history and the nature of our country. We take buses or trains so children learn how to travel on public transport, how to use a schedule etc.

2. Building and promoting relationships with younger schoolmates

2.1 registration to the 1 grade

2.2 pre-school day

2.3 the first school day

2.4 Saint Nicolas

2.5 Children's Day

These activities help older pupils

- to acquire the ability to protect somebody
- to encourage somebody
- to be kind and tolerant
- to solve problems
- to respect others
- to communicate



Photo 2: Pre-school Day

2.1 Registration

Teachers try to find whether children are mature to start to go to school. They prepare special topics like fairy tales and older pupils help them to coordinate this day and help children to do tasks.

2.2 Pre-school day

Future pupils with their parents visit our school the last day of summer holiday. They meet with teachers and older pupils show them around the school.

2.3 The first school day

Older pupils visit their new schoolmates and bring them a talisman for good luck.

2.4 Saint Nicolas

Older pupils wear costumes of devils, Saint Nicolas and angels and they bring present for younger children. They sing and say rhymes together.

2.5 Children's day

On 1 June we celebrate Children's Day. Older pupils prepare for their friends a special fairy tale journey with tasks.

3. Promoting relationships during more-day trips

3.1 Outdoor schools

3.2 Skiing courses

3.3 Waterman's courses

All these activities are

- one-week trip outdoors
- with a teacher and a pedagogue
- chosen by the teacher, the place and the term
- paid for by parents

We try to develop:

- team building
- sense of belonging
- cooperation
- responsibility
- reliability
- communication

3.1 Outdoor schools

At the beginning of the school year the teacher starts preparing an outdoor school. He/she speaks to parents and explains reasons why this activity is important for their children.

- children learn to look after themselves, mostly it is their first opportunity to spend one week without their parents
- children get to know each other and can help each other
- they have to respect each other
- they have to be tolerant
- they acquire the ability to protect somebody
- they learn to communicate
- it is a good opportunity to build relationships between a teacher and pupils

Teachers work with a pedagogue who works at our school or sometimes with a student of the Pedagogical faculty. After choosing a place and a term the teacher

prepares a programme for children. This programme starts in the morning after waking up. Children do exercises and clean their rooms. During breakfast they play games like “Feed your friend”. Then children learn in the natural environment, they read books, use encyclopaedias and work. After lunch they have a rest and in the afternoon we go on trips or play games outside. Children visit interesting places in our country so they can get to know it better. Some days are “Project days” for example “Primeval ages”. Children like playing games like “Theatre festival”, “Miss” and “Superstar” in the evening. Before sleep, teachers introduce children to literature. They read stories and fairy tales. At night children participate in a fight game and a journey of courage. The last day of the week is a special day. The children prepare carnival masks and choose music for a disco. We relax and judge all the competitions.



Photo 3: Skiing courses.

3.2 Skiing courses

Teachers have to have special training for these courses. Children practise downhill or cross- country skiing during the week. In the evening they play games, compete and prepare a carnival.

Teachers try to promote and support

- team building-children spend 24 hours together, they have to respect the rules of the skiing course
- sense of belonging – the group of 8-12 children practise together, they must be active during evening activities

- responsibility-they have to prepare equipment, they are on services
- friendship - they have to help and respect each other
- cooperation and communication – they prepare evening programmes /games and competitions/, they have to manage and evaluate them.

3.3 Waterman's courses

The pupils stay in tents for a number of days, concentrating on waterman training. During these days children go on trips, do sport, practise special camp skills and they have to cook for themselves.

We try to create class teams, to build relationships among pupils and between pupils and teachers.

It helps to improve the class climate. There is space for better communication and confidence.

These activities develop physical ability and sport skills. Children get to know each other better; they have to be responsible and reliable. We try to motivate children to spend their leisure time more actively.

4. Building relationships with handicapped people

4.1 Integration of handicapped children into a classroom

4.2 Meetings

Through these activities children learn the

- ability to accept equality as a basis of solidarity
- ability to tolerate differences
- ability to help, encourage

4.1 Integration of handicapped children into a classroom

There are disabled children at our school who need a special assistant. At the beginning this role can play the mother to the child. Later the assistant is a professional person who has experience in this kind of work. The teacher prepares a special educational plan for the child. Teachers try to involve the child into all activities not only at school but into outdoor and leisure activities too.

4.2 Meetings

We try to break barriers between us so we prepare common meetings and have a lot of fun together.

Our school cooperates with the Special school in Podebrady. We visit this school regularly. Our children take part in lessons.

Every year we visit the Charity organisation in the town Caslav. Children visit us too; we play games together and prepare refreshments.



Photo 4: Meetings

Conclusion

There are good relationships in classes. There are good relationships among teachers and pupils and with parents. We don't have many problems with bullying. Pupils are able to accept differences. Parents and pupils are interested in more-day trips. Older pupils like organising activities and events for younger pupils, they like spending time together.

Students like coming back and visiting our school during special events like school exhibitions or graduate days. Adults organise meetings of former classmates.

Cicero Marcus Tullius:

"Friendship can only exist among good people."

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Games of personal and social development

Drama education has its roots in USA and its beginning is connected with two names: Winifred Ward and John Dewey (1859 – 1952). Winifred Ward wrote in her book “Playmaking with Children (“New York 1952, 2.edition the first edition 1947): “What children do, is more important for them, than what they see and hear“. She established these objectives for drama education:

1. Give an opportunity for controlled emotional outlet.
2. Provide every child with the space for self-expression in art.
3. Encourage and guide the creative imagination of the child.
4. Give young people the opportunity to develop in social understanding and cooperation.
5. Provide children with experience of autonomous thinking and expressing own thoughts without fear.

A **drama situation** provides an opportunity for mutual interaction of people in their roles, for experimentation and obtaining experience in interpersonal contact. It gives an opportunity for obtaining practical social skills, experiencing tolerant and free behaviour and for getting to know ones personal qualities through mirroring others.

The product of drama education is not as important as the process itself. Children are active, creative and spontaneous, they can enforce their personality, they can experiment, they take part emotionally and they can explore new experiences.

Eva Machková, one of the main personalities engaged in drama education in the Czech Republic, determined in her book “Drama education methodology” (“Metodika dramatické výchovy”) three main domains of process in drama education:

1. **Personal /individual/ development.** Relaxation and concentration are developed in games. Inhibitions and self-awareness are eliminated. Perception and discovery of the environment and oneself become more sensitive. Drama develops motion skills, the ability to express ideas through movement, fluency and spoken eloquence, imagination, creativity and rhythmical feeling.
2. **Social development** can be nurtured through games and activities using contact with others, social communication (both verbal and non-verbal) group sensitivity and dynamics. There are many barriers created by our style of life in this domain. We tend not to perceive the others, not to listen to the meaning of our speech, but only to the words. And sometimes there are also problems with physical contact and its one-sided understanding.
3. **Dramatic game.** It is the game, with the topic based on interpersonal contact and communication, which facilitates meeting various people in differing situations, who influence each other, solve a conflict about their values and needs, wishes and directions and create an action. In **Simulation** children act, as they would behave themselves in various

circumstances. In **Role playing** children have different social roles other than their own.

Eva Machková also outlined these aims of drama education in her book:

1. Develop and enrich imagination
2. Emotional education
3. Relationship building
4. Independent and individual thinking

We implement the games of personal and social development into our lessons with the aim to encourage:

1. Getting to know each other and themselves
2. Development of self-esteem and self-confidence
3. Sense of belonging to
4. Development of social skills
5. Development of verbal and non verbal communication

Activities and games that can be practised

Games can be incorporated into the following subjects:

- Mother tongue (games of verbal and non-verbal communication, etc.)
- Literature (personal experience of various characters, acting the stories, motivation for the games and thematic base for the games, etc.)
- Sciences (personal experience of various actions which happen in nature but also in the environment, development of senses, games based on the sounds of nature, motivation for the games and a thematic base for the games, etc.)
- Music (games based on rhythm, sounds, movement connected with music, perception of the environment, etc.)
- Physical education (games based on physical contact, physical cooperation, movement, perception, etc.)

Parts of lesson games can be used in

We often use the games as warmers at the beginning of the lesson. They can also be used at the end of the lesson, at the beginning or at the end of the school day and also at the beginning of the week or before the weekend. Sometimes we use them as relaxation between more difficult activities in the lesson. They can be also used as a tool to demonstrate the aim of the lesson and then they form the main part of the lesson.

Environment, conditions and organization

The most appropriate number of pupils is from 10 to 20.

It is necessary to establish certain rules for these activities, for example how to stop noise.

It can be some word or sound (drumming, clapping) after which pupils are focused and silent.

It is a good idea to have a carpet in the corner of the classroom where all the pupils can sit in a circle. If you don't have a carpet it is sufficient to make a circle from the chairs with enough space to move.

It is also helpful to have a drum, not only to lead the lesson but also to develop parallel rhythmical feeling. CD players, pianos, guitars and recorders are also useful. Other helpful props are colourful pieces of textile. Materials suitable for character roles will awaken children's fantasy. These could include old hats, caps, shoes and costumes and other useful items.

Role of the teacher

Teachers should create a good atmosphere for the development of creativity and spontaneity. This is very important, but makes the role of teacher more difficult.

Pupils shouldn't be afraid of being ridiculous, or being interrupted and criticized. Although pupils shouldn't react like this between themselves. Mistakes shouldn't be mentioned but the teacher should devise new tasks with more interesting or insightful solutions.

It is important to encourage building the web of relationship in the group, so pupils should change partners during the games.

The teacher should be really emphatic and sensitive in order to avoid unpleasant feelings during the games.

Games and activities

There are a few games we use with children in the age 6-11. These are games you can start with, simple but popular. Some of them have many versions and they can be motivating in various ways. Some of them are just repeated without change, but pupils love them.

Walking between others

All variations of this activity are good as a warming activity at the beginning of the lesson. As a background for this activity play calm music.

Children are asked to walk slowly between others without speaking. They should not touch each other.

1. The first step is eye contact. Say hello to your friends without words.
2. Ask children to walk in a bad mood between each other. Discuss position of their body after the activity. Try the same in a good mood. Discuss again the position of their body.
3. Begin with walking, and then children are asked to shake hands with each other.
4. The shaking hands game is developed further. Children should stay longer with one friend and try to communicate by using their hands.

With more advanced children you can try the same with their eyes shut. These variations of the activity are often used for dividing into pairs for other games.

Mirrors

Children are asked to stand in pairs face to face. One of the pair very slowly leads the movement. The other is the mirror and tries to do the same as the first one. After a few minutes the roles are changed. The aim is to achieve a state when the observer can't see who is leading the movement and who is following. Also the children should become less aware of their roles as leader or mirror.

Leading the movement

This is very similar to the mirrors activity. A group of children stand in a circle and one child leads the movement. Another child, who doesn't know who the leader is, tries to guess which child is initiating the movement.

Rain

Children are sitting in a circle. The teacher starts to move palms of the hands to make a silent sound. Children join in, one by one, around the circle. The second step is knocking two fingers into palm. And the third step is clapping hands on legs. This is the strongest rain. After this moment clapping again changes into knocking fingers and moving palms. The end of the activity is total silence after rain.

Common things

This is an acquainting activity. Children work in pairs and try to find four things which are common in their lives (number of sisters, favourite food, favourite colour, etc.). After a few minutes they should share what they found with others.

Place on my right side

Children sit in a circle and one place is free. The child who has the free place on his or her right side starts to say: "The place on my right side is free and I would like Jane to sit here". Jane has to move. The child who has got the free place on the right side now continues.

You can make this game little more difficult by saying: 'Why do you want that person on your right side?'

Reference

Our source of games and activities has been already mentioned – the Czech book of Eva Machková, but we do not doubt you will find the source in your own language.

Machková, E., (1992), *Metodika dramatické výchovy* (Drama education methodology), ARTAMA, Prague

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15

Girls Don't Fight; Boys Don't Cry

Gender Equality Work in Upper Secondary School

Linnar Holgersson and Gunvor Sand Edwall

"But don't you think we *have* gender equality here at our school?"

"Yes, in principle I am *for* equality, as long as it doesn't go too far."

"So, now we're all going to become feminists.."

These are the types of comments we heard in 2003 when we told our colleagues we were accepted into a gender education programme which would lead to a special certification as a gender educator. No, we did not think that we had equality at our school. There can never be too much equality, can there? Either we are equal or we are not equal. And... what is feminism in reality? A general definition of feminism is the desire for equality. So, since we thought the subject was important, we took the challenge and enrolled in the course.

The Swedish government gave two universities, Umeå and Göteborg, a mandate to establish a gender education program for teachers working at all levels in the Swedish school system, including pre-school. The goal was that every municipality would have at least one gender educator within a few years. We were among the seven upper-secondary teachers from Karlstad who started in the gender studies program at Göteborg University in the spring, 2003. What began as a 1½ year project became a regular part of our school programme and was given high priority. The schools had different approaches for studying the course. At our school, Tingvallagymnasiet, we were pleased that we could study half-time and

continue to teach half-time. With the help of strong support from our superiors – everyone from our headmaster to the municipal politicians, we finished our studies last summer (2005).

Our school is a municipal upper-secondary school with around 1300 students from 16-19 years old, who study different programs. When the school year started in August 2003, we had already planned in the first activities for our gender work, which makes up 10 % of our job. We had decided to work with three different groups:

- staff
- students
- gender educators

Staff

The primary goal for our work with both staff and students was to raise the level of awareness. It is often difficult to see how the lack of equality manifests itself, because we are so used to unequal structures that we do not even see them, and all of us are involved in reproducing them. But through education we can be made aware. We started the school year 2003-2004 with two in-service days, and during the following two school years we have had gender equality issues as themes for additional in-service days. After the first year's work we have expanded our goals to not only increase awareness, but also to provide the teachers with tools for working actively with gender problems in the classroom. The program for these in-service days is as follows:

August, 2003: Berit Ås gave a presentation on her political work and on the master suppression techniques. (1 day)

Lena Sievers, Jämo²⁵: Gender equality in the school and on sexual harassment. (1 day)

August, 2004: Margot Granvik: Gender evaluation of teaching material.

February, 2005: Gunvor Sand Edwall and Patrik Ekholm: Gender in the classroom. (half day)

August, 2005: Eva Wikström Hallonstén and Eva Eriksson: Gender Theories. Linnar Holgersson: Presentation of a survey of student stress. Klas Hyllander, Male network²⁶: Men in gender equality work. (1 day)

We have also involved individual teachers during these three years by having them be discussion leaders when students have had theme days. We have produced discussion material, met with the teachers and presented the material to them. The teachers who have been asked to be discussion leaders are usually homeroom teachers or teachers who are considered appropriate because of the subjects they teach, for example, Swedish or Social Studies.

²⁵ *Jämo is a governmental agency which sees that women and men are treated equally in the workplace and in universities and also that girls and boys are treated equally in the schools.*

²⁶ *The Man's Network is a non-profit, politically independent organisation that works for equality and against male violence and sexual assault.*

Additionally, we have made a gender equality plan for the school staff, and everyone had the possibility to give feedback before it was approved. During the last school year, we have also asked the staff to report the needs they believe we have concerning gender and equality, since we are part of an EU project to educate staff in upper-secondary school in gender and equality issues. Presently, the gender educators in the municipality (there are even more of us!) together with two school leaders, had an in-service day in August for all upper-secondary staff in Karlstad as an introduction to the new school year.

Students

As we said earlier, the overall goal of the work is to increase awareness among students and staff of how the gender system works, and at the same time, to begin active gender equality work with the students. The work from the beginning was in the form of a project, and we chose to concentrate our resources on the students who were in the first year of upper-secondary school

First Year Students:

Continuity in the work is important, and after discussions with school leaders we developed a way to work with theme days which would be spread out over the entire school year. These theme days are planned to increase the degree of equality step-by-step. At the first meeting, general questions about values are brought up, where the importance of respectful treatment of others is prioritized. The goal is that a consensus will be reached through discussions in each class. A very important part of the work is to eliminate inappropriate jargon – often using humour – which affects mostly girls. This is done with the help of values exercises followed by discussions about drawing the line between acceptable and unacceptable ways of speaking to each other. As part of this we even take up legislation concerning sexual harassment and the students take positions on different situations.²⁷

During the second meeting, we discuss Berit Ås' master suppression techniques. It is important to bring these up in order to make the students aware that a hidden game is taking place. The master suppression techniques are examples of the methods people with power can use to keep and strengthened their position. Making invisible, ridiculing, withholding information, damned if you do, damned if you don't, and heaping blame and putting to shame, are the original five techniques. Afterwards, objectification as well as violence and threat of violence were added to the list.

At the last meeting – the goal is to have it on International Women's Day, 8 March – the main focus, is of course on the equality perspective. Speakers, theatre groups, and organisations present a varied programme with theoretical and practical exercises.

²⁷ *Material used in our workshops: "Girls Don't Fight, Boys Don't Cry"*

Second Year Students:

We have also done a stress survey of the students in their second year of upper-secondary school.²⁸ The purpose of the study was to examine the attitude towards stress that is experienced in relation to gender, among other things. The students who participated in the study were second year students at Tingvallagymnasiet, 2004-2005. The results of the study showed a statistically significant difference between girls and boys in all situations. In general, the girls experience a higher degree of stress than the boys. The school situation where the greatest difference in stress is experienced is group work.

In continuation, it is important to examine the reasons why girls experience classroom situations more stressful than boys do. The next step is to think about which measures can be taken to reduce the differences in perceived stress. Should measures concentrate on the girls to support them, or should they include all students? There are advantages and disadvantages with both of these approaches. One example is group work, where the girls experienced stress to a much higher degree than boys did. When asked, the girls claimed that group work is stressful because they have to take responsibility for the group's activities. So, should resources be put in to support the girls in their situation, or should the resources be used for the whole group so that the boys learn to take greater responsibility?

Third Year Students:

The students also have the opportunity to deepen their study of gender and equality by choosing it as a theme for their project work in the third and last year of school, and a number of students have taken advantage of this. These projects have led to the arrangement of theme days, exhibitions and reports.

There have even been activities with external speakers. For example, Amnesty International's group from Karlstad University, have held an education day for students in their last year at school.

All students

Continuity is also promoted in the student activities that deal with equality. A gender equality group has been started by school students. We contributed with our support in the start up phase and provided education for the group members, both internally and externally. Some of the students have taken advantage of the education offer and have taken part in a course. The students in the equality group have also been offered a chance to deepen their knowledge by taking a local course in equality with a gender educator as an advisor. The course included help from an advisor to arrange one of the theme days for first year students. The intention is to create a domino effect, where efforts lead to increased involvement by students, who in turn, inspire other students.

Genus Educators

In addition to planning and arranging in-service programs and giving presentations at some of them, we have drawn up an equality plan, arranged theme days for

²⁸ See also under the heading "Staff" and In-Service Days, p.2.

students and produced discussion material. Our work has also included cooperation with other gender educators in the municipality. We meet regularly and share our experiences, inspire and support each other, and plan activities together. This cooperation has grown to include all gender educators in the province of Värmland. We have met twice during the past year. Also, we have regular meetings with school leaders, where we go through our plans and draw up guidelines for the future. We have a free hand to shape our work, which is both positive and negative. The positive side is that we can test our ideas without any great restrictions and that we feel that we are competent. The negative side is that we sometimes feel alone in our work, that *we* take care of the equality work while the school administration can lean back and leave everything to us.

There have been occasions where we have been invited along with other gender educators to give a lecture about our work at the gender education program at Göteborg University, the same programme that we studied in 2003. In January, 2006 we planned and carried out a gender evaluation of different teaching material with a number of teachers. Finally, we have taken part in a number of courses and seminars and at some of these we have held workshops.

So, have we reached our goal? That is a difficult question to answer, since we did not measure attitudes or the level of knowledge among our colleagues before we started our equality work. But we believe that there has been an increased awareness among the staff. For example, it is natural to discuss Berit Ås' master suppression techniques, or how we define sexual harassment. Changed attitudes among students are even more difficult to measure when there are new students arriving all the time who replace the old ones. But it is rewarding if we have succeeded in making some students start to reflect on masculinity and femininity and why we make a big deal emphasizing the differences between the sexes. We are convinced that we must focus more on the staff. Our task is to both *teach* gender and equality and *promote* gender equality. The day that everybody acts equally, without thinking, is the day when it will have an effect on our students.

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16

Gender Based Work

- the most important thing for success at school?

Eva W Hallonsten

Gender equality and schoolwork is very important for schools, for society and for the future. The present text is based on a lecture held in Ljubljana on the experiences from work with gender equality in upper secondary school in Karlstad, a medium-sized city in central Sweden.

The synergistic effects of steering documents, working plans and quality work are described, and the concrete work that results from these sources. The second part gives the results from an investigation, which allowed us to improve our concrete work at school among pupils, teachers and school leaders. Finally we give our view on boys' and girls' different situations in school, the differences between boys' and girls' results, and how gender equality can be applied.

Background

What is the situation like in Sweden and in Karlstad? In Sweden men and women are formally gender equal. But in reality men, as a group, are richer, have better opportunities and have better resources than women as a group. Individually a woman of course can have better opportunities than a man.

The experience from our work with gender equality comes from two projects: one of them started in 2003 and the other, an ESF-project, in 2005. Both projects concerned gender equality and fundamental values.

It is important to realize that this kind of project implies personal and professional changes, as questions and concepts regarding gender equality are strongly linked

to the individual's own identity and personality. It is therefore important to give the project participants opportunities to actively discuss and reflect together. The main aim of the project is about attitude changes and acquiring new ways of acting in different situations; this cannot be obtained simply by participating in lectures or by reading course material alone.

Gender equality has been a formal goal for national education in Sweden for a long time –but very little has happened. A government report, “Jämt och ständigt” - which translated means “Always the same” - showed that teachers and school leaders are not sufficiently aware of the mechanisms that maintain inequality. As a result, a 10-week university course for teachers was created, in order to make them “Gender educators”. Every municipality was supposed to have one gender educator. In Karlstad the upper secondary school sent seven pedagogues on this course; they were subsequently employed as gender educators. That means that they are both teachers and also have a special mission to promote issues on gender equality in their schools. This is of course a very good foundation towards the goal of achieving gender equality.

Other steering documents also stress the importance of knowledge. The steering document in Karlstad states that knowledge is crucial, and that a gender equality perspective should be applied to the planning of official matters. Thus we have a steering document from the municipality to which we can refer.

The projects

When starting the gender educator work we set a goal for our project:

“The goal is to educate staff on all issues of gender equality to make them treat all people equally, irrespectively of sex, ethnicity or sexual orientation, and work actively in the classroom to promote open discussion and challenge students’ experiences, standpoints and attitudes.”

We wanted to achieve a new way of working and it was necessary to access new knowledge. We also realized that to achieve success, we would have to give the participants opportunities to internalise their new knowledge. Therefore we had to give vent to attitudes and feelings. Discussions and value exercises were important ‘cornerstones’ of the project.

Target groups were teachers, students, and school leaders. As we are an upper secondary school, with students in the age range 16 – 19, we did not involve parents. If, however, the project had taken place in a primary school, parents would have had to have been informed and involved in the work.

Knowledge

With regard to the field of knowledge, we started by referring to the steering documents; as mentioned above, they are very clear about the school's duty to work with gender equality:

- Swedish law states that the school has to promote gender equality.
- This is repeated in the curriculum itself, together with the requirement that the school has to develop students' interests, regardless of what is traditionally considered as male or female. The municipal school plan of Karlstad, as well as the budget plan requires attention to gender equality, with particular emphasis on the need to break traditional gender roles.

In Karlstad, as in the whole of Sweden, boys and girls make very traditional choices about education. We find mainly boys in some programmes and girls in others. This disequilibrium was identified as the most important problem to tackle. It is of the utmost importance, not the least from the perspective of trade and industry that each individual is allowed to develop his or her skills and potential without being hampered by the traditional choices of the sexes.

Concretely a “common knowledge base” was established, that every teacher in our schools had to become familiar with:

- **The gender system.** (Yvonne Hirdman).

Gender inequality is a **system**. It is about men as a group and women as a group. These groups are arranged in a **power hierarchy**, where men have more power and are higher valued than women. The **man is the norm** and the woman is different. Studying language use helps clarifying this: The word mankind tells us who is human: it is the man. We speak about football and ladies' football. This hierarchical organisation makes it acceptable for women to participate in male pursuits but for men it is a bad choice to participate in female ones.

The most important thing is that it is the **dichotomy** that maintains inequality. So when men and women work in the same profession and when boys and girls study the same programme in the same class this will in itself promote equality. And in the other way, if men and women and boys and girls are separated in different duties, inequality will remain.

- **The meaning of Equality and Equal**

This means that gender equality is crucial. In society we know the word equal from the French revolution – égalité; the same opportunities between different social groups. But gender equality means the same opportunities for men and women in these social groups and we can see that in every such group women have less power, less opportunities and less available resources than men. So gender equality is a pre-requisite which underpins equality and values at work.

- **The definition of gender equality**

Men and women should have the same opportunities, the same rights and the same duties in all areas of life, such as education, the labour market, in politics and in family life. We also speak about freedom from violence.

- **Gender socialisation**

This means that the way boys and girls are treated when growing up is a more important factor than the biological sex for determining a given individual's

behaviour. What is considered male or female changes over time and is different in different cultures.

- **How inequality is manifested, what maintains inequality and how it is re-created.**

The purpose of the work is part of knowledge.

Men and women normally react in different ways when faced with these theories. A man can feel accused of being a perpetrator whereas a woman can feel like a weak victim. It must be made clear that both sexes maintain, create and re-create inequality in their daily lives. This system can only be changed if both men and women learn to see and recognise inequality - how it is manifested and re-created.

Teachers also get the opportunity to reflect on common opinions like “Men have more power and status in certain areas. Women have more power and status in others”, in particular in connection with the misconception that these areas are valued equally and that power is evenly divided between men and women. We know that men deal with economically important decisions and women with housework, cooking, and family. The official arena belongs to the men and the unofficial arena to the women. And - the privileged group finds it more difficult to see the facts.

A common objection is posed by the questions: ‘Can’t women be women anymore?’ and ‘Can’t men be men any more?’ And of course we are still men and women but this cannot mean that the female’s main characteristic is beauty whereas that of the male is size and strength. Finally, the fundamental purpose of the discussion, namely to **open up** and **expand** what every individual can become and do, must never be lost from sight.

It was important for the teachers to discuss these points and pictures are helpful resources to support discussion and debate. Pictures from the school’s own prospectus were used for this purpose; sad to say, these pictures would fail to make girls feel welcome in the technical subjects or boys in subjects in which the girls dominate:



The investigation

The investigation was an inquiry, and the survey shows that the lack of equality is reflected among students. Both male and female students concluded that the sexes are equally treated in the classroom, in spite of their experiences of different conditions for male and female students during school activities.

In one of the questions the students were asked how they wanted a teacher to react if someone in the classroom was treated badly, for instance if they were the victim of bad language. Among both boys and girls, 98 % wanted the teacher to handle this and absolutely not to diminish the situation.

Girls, as the less privileged group, experience greater differences than boys, as the privileged group. Girls answered that boys' opinions had a higher value among teachers. Boys instead answered that it is a good thing to differentiate between boys and girls. They actively wanted dichotomy, which will recreate gender inequality. Boys are also more optimistic about equality in the future working place and they answered that the fact that women do not have high positions in work is a result of their own choice.

An interesting piece of information and an important answer in the investigation is that boys are more likely to have been victims of abusive language in upper secondary school.

Girls' better results in school and gender equality

Mats Björnsson, researcher in the field of gender theory, made an investigation 2005 on Gender and Success in School. He found that boys have less good results than girls. Girls are more successful. This proves that gender equality work is something that regards both genders.

Often when such results have been discussed, they have been looked upon as a matter of social group or other circumstances. Mats Björnsson shows us another reality:

He compared boys and girls of Swedish and foreign origin. Boys without final grades are more numerous than girls in all groups.

He correlated the results with the student's fathers' education and he found that there were more girls with final grades in all groups, regardless of whether the father had a primary school or a university background. The result was the same if the mothers' education was taken into account.

Even in traditional areas as mathematics, where boys usually are more successful, girls now obtain the same results. He compared boys and girls from four different social groups, and found that gender was the only significant factor that explained the different results.

As for the detailed findings:

“Reading ability and social background”: Girls had better results.

“Final grades from high school”. Women are over-represented.

“Number of university degrees”. Women are over-represented, and will generally have higher exams than men.

How can gender research be applied to this disequilibrium?

Kimmel, a well-known researcher, writes about manliness in the western world. He claims that maleness is negatively defined. To be a man is above all not to be a woman! And not to show feelings! The hegemonic masculinity is a problem for the modern man. The hegemonic masculinity is the masculinity we find in magazines, describing the man as a big, strong, silent and lonesome hero but not a real person with weaknesses and need of communication and close friendship. As female behaviour in school implies to follow lessons, to take schoolwork seriously and to be polite, a boy trying to assert his masculinity will attempt to behave differently.

Connell, who is also a famous male-researcher, tells us that men that do not respect the hegemonic masculinity are considered inferior by other men. The result from our investigation in upper secondary school, where a majority of those who answered that they had experienced being exposed of bad language, were boys, will be important for us in our work. This is a question for us!

Connell concludes that boys need to discuss masculinity, and need positive male role models. School has an important role to play in these matters.

If teachers and other school staff do not discuss masculine behaviour and how to develop a modern man we will fail. This is a challenge for the teachers in school, and a very important question for society.

Today it is easier for a girl to enter a traditional male area; this is encouraged as it is considered to have a higher value. To boys, however, this path is a lot more difficult, as the female area is judged to have a lower value.

Researchers in a Swedish nursery school have found that staff treats boys and girls in very different ways, and that this is not a conscious choice. When a boy does something that is not acceptable, he will get a short command, whereas a girl will generally get a motivated instruction and will often be invited to help rectifying the problem. Girls are more often included as help for teachers in the system. What boys really learn is that they don't fit in school.

From all this, Mats Björnsson challenges schoolteachers and school leaders by proposing that school has not seriously challenged the content of masculinity. The girls are supposed to break away from the earlier feminine ideal, to be open to new possibilities and enter areas dominated by boys. On the other hand, there has not been a similar discussion on challenging – or even identifying – the boys' world and ideal.

Ongoing activities

What happens in Karlstad now? In 2005 a project was launched with support from the European Social Fund. This project is scheduled to continue until 2007 and aims at improving gender knowledge among teachers, school leaders and career guidance counsellors. This project also involves cooperation with university teacher programs.

ESF project



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Gender equality issues have also been introduced in pre-schools and primary schools.

Recapitulation

The project has been set up on the following basic assumptions.

- Equality work is long term and systematic.
- Full support from school leaders gives results.
- Equality work must include both men and women, both boys and girls.
- Working with equality is a success factor for schools which might lead to an improvement in boys' academic performance.
- Knowledge of gender equality issues is crucial. A gender equality perspective shall be found in the steering documents, evaluated in quality work and be observed in the planning.

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17

Your Own Mistake Can Be Your Best Teacher

Marjeta Zabukovec

“We cannot teach another person directly;
we can only facilitate his learning.”
Carl Rogers

Introduction

Neither teachers nor pupils usually like mistakes, even more, teachers often blame pupils' for their mistakes. But in life holds true that our own mistakes can be the best teacher. Of course we should learn something out of them. And it can be the same in school.

All teachers are aware of the importance of motivation for successful learning. To know how to learn, to know all the learning strategies is not enough for successful learning. The most important thing is to be prepared to direct our knowledge and energy towards learning and to be motivated enough to persist in doing that. The quality of learning, its profoundness, which is important for a long lasting, useful and profound knowledge, is determined by the kind of motivation and the level of motivation. The lack of motivation with pupils is often the cause for lack of success which I as a teacher confront every day, and because I am motivated to solve this problem I think a lot about it.

Theories of motivation

Each kind of behaviour is accompanied by motivation and stimulated and directed by motives. Our behaviour is activated by needs which can be described as an

imbalance in an organism. This imbalance urges us to reach an aim. The aim of our motivated actions are those acts by which we satisfy our needs. The motivation is closely connected with our feelings. By satisfying our needs and reaching the aims of our motivation there appear positive feelings like satisfaction, happiness, pride. Learning motivation is a collective conception for all kinds of motivation in the learning situation, which gives stimulation for learning, as intrinsic like extrinsic, gives direction to it, defines its intensity, lasting and quality.

Intrinsic sources and corresponding theories can be further sub-categorized as either body/physical, mind/mental (i.e., cognitive, affective, conative) or transpersonal/spiritual.

Motivation to Learn	Extrinsic	Operant Conditioning Social Cognition
	Intrinsic	Social Cognition Cognition Biology Affect Spiritual Conation

We can be motivated by intrinsic or extrinsic stimulations, so we talk about intrinsic and extrinsic motivation. Throughout history teachers have concentrated more or less on extrinsic motivation; they have believed in its success. Also today it is difficult to do without extrinsic motivation. Nevertheless teachers are trying more and more to increase the intrinsic motivation.

Behaviouristic approach to learning and its approach to motivation were developed by Eward Thorndike and Burrhus F. Skinner who believed in positive (a reward, praise) and negative stimulations. Skinner especially believed in positive stimulations. Such an approach to motivation is still very apparent in schools today.

Freud made a note that motivation rises in an important amount from our not self-conscious needs. His psychoanalytical view on motivation says that libido is the most important source of motivational energy. Cognitive theory has directed itself towards the importance of the self-conscious choosing and deciding. Aims, expectations, explanations, presuppositions have become important for an individual. In the cognitive view a pupil himself decides what the reward means to him. A Constructivist view on motivation stresses that each person is motivated in a different way, whereas social constructivism stresses the importance of a group for motivation.

Humanistic directed psychologists (Fromm, Maslow, Rogers) stress that motivation is activated and regulated by intrinsic forces, which can be supported

or not by the others. The task of a teacher is to provide a model of non-directive lessons where the relations base on accepting and trust. In such an environment a child tends towards creativity and self-actualisation. The theory of choice developed by William Glasser says something similar. His idea is to teach children to take the control over their lives and by doing this, we would solve the problem of constraint in learning and working in school.

Motivation

There are a variety of specific actions that teachers can take to increase motivation classroom tasks. In general, these fall into the two categories discussed above: intrinsic motivation and extrinsic motivation.

Intrinsic	Extrinsic
Explain or show why learning a particular content or skill is important	Provide clear expectations
Create and/or maintain curiosity	Give corrective feedback
Provide a variety of activities and sensory stimulations	Provide valuable rewards
Provide games and simulations	Make rewards available
Set goals for learning	
Relate learning to student needs	
Help student develop a plan of action	

As a general rule, teachers need to use as many of the intrinsic suggestions as possible while recognizing that not all students will be appropriately motivated by them. The extrinsic suggestions will work, but it must be remembered that they do so only as long as the student is under the control of the teacher. When outside of that control, unless the desired goals and behaviours have been internalized, the learner will cease the desired behaviour and operate according to his or her internal standards or to other external factors.

This article describes in which way I used motivation in dealing with and consolidating subject matter in Mathematics (power), how together with pupils we looked upon mistakes present in learning itself, and how we checked the veracity of the theory of evolution. During the learning I was encouraging communication in the group and searching for new solutions to the problem.

We want to create an environment in class that would encourage the children to find their own ways to solve the problem. That’s why its important for children to

make mistakes, which encourage them to think of the way of solving them. Pupils are very highly motivated when they are finding their own way to solve problems.

Theory of evolution

A new theory that emerged from evolutionary principles and information-processing model assumes learning to be run by two basic mechanisms: variability and selection. The theory is based on the underlying assumption that intra-individual variability of strategies that children use to solve a problem, is a core mechanism of learning change.

Evolutionary theory of learning is based on three assumptions: a certain problem is not solved equally by a child (assumption of variability), the solving strategies compete with each other (assumption of competition), the most effective strategy survives (assumption of selection). All the time new strategies arise (assumption of variability), we stimulate pupils to think about new strategies and use them. The assumption of variability claims that children use different strategies to solve the problem. Children should be taught that different life situations have different kinds of problems and also different ways of solving those problems.

Sample and methodology

In the research were included 11 years old pupils (22 pupils). By the quantitative analysis we used descriptive analysis and ANOVA.

Work proceeding

Types of exercises for checking

$3 \cdot 3 \cdot 3 =$	a) 3^2	b) 3^3	c) 2^3			
$3^2 =$	a) $3 \cdot 3$	b) $3 + 3$	c) $2 \cdot 2 \cdot 2$	d) $2 + 2 + 2$	e) $2 \cdot 2 + 2$	
$2^3 =$	a) 6	b) 8	c) 9	d) 5		
9^3	□	$9 + 9 + 9$				

1st hour

We carried out the first checking of the knowledge before the first dealing with the theme on power. Pupils got instructions to do the exercise as they thought it was appropriate. Then it followed individual work with the school book. The pupils had 30 minutes to find out, with the help of the school book, what are the rules for power. After that we did the second checking.

2nd hour

We frontally analysed the first and the second checking paper. By analyzing we discussed the rules of calculating. Later on the pupils discussed about their knowledge in a group. Followed the questions of pupils and my answers to them. For practice, we did some more exercises in the workbook. At the end of the hour we did the third checking of knowledge.

3rd hour

At the beginning of the hour we did the analysis of the third checking and we discussed the problems. For practice we did some more exercises in the workbook. At the end of the hour we did the fourth checking, the analysis, and then followed consolidating.

4th hour

Consolidation and repetition, then we wrote the 5th checking test. Analysis of the 5th checking.

5th hour

Without announcement or consolidating pupils wrote the 6th checking test. Analysis of the 6th checking.

We did not talk about the power at Mathematic lessons any more.

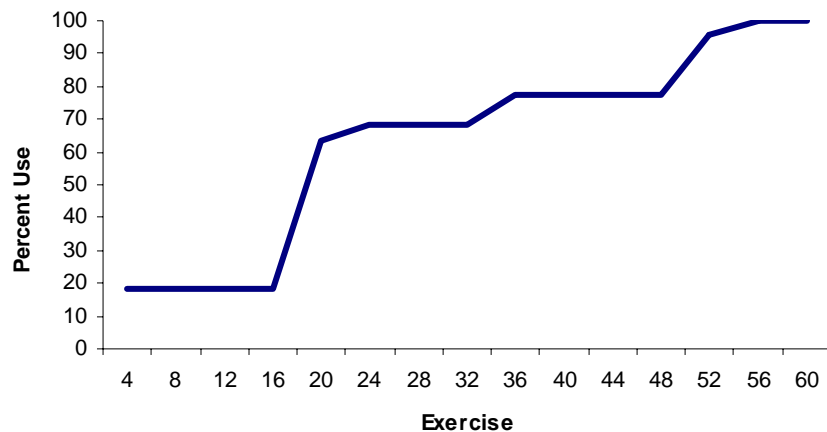
6th hour

After two months pupils without knowing or repeating the matter wrote the 7th checking test. Analysis of the 7th checking and analysis of all checking about knowledge on power. Each pupil had to think about his results.

Results and Discussion

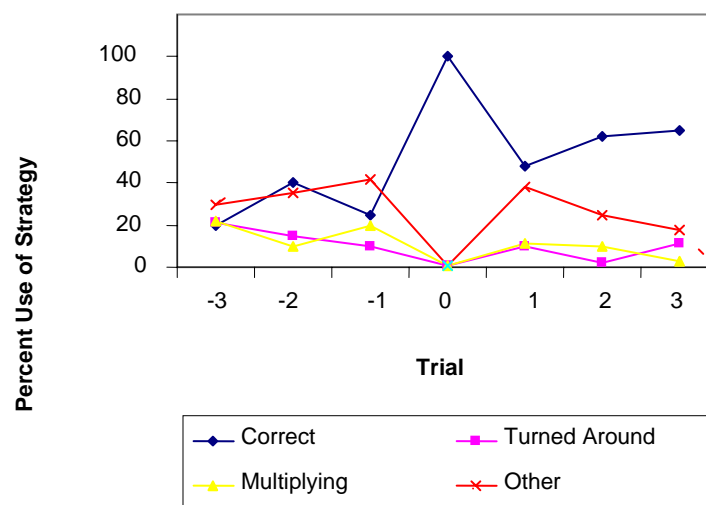
The pupils did approximately from the 1st to the 5th checking 87, 84, 85 and 92 % of exercises correctly. ANOVA showed that those changes were important, $F(4, 156) = 11,41; p = .00$

All the pupils who did 50 exercises on power understood the matter (all 22 children). The pupils understood the exercises quite fast. The diagram below shows by which exercise they came to the insight. As a criterion for understanding we took five consecutive answers. When pupils answered correctly on five consecutive questions they obviously understood the matter (on five consecutive questions they could not answer correctly by accident) and this threshold achieved 1/5 of the pupils right at the beginning. After 20 answers (approximately in the middle of the testing, in each there were 16 exercises), the matter understood more than half of the pupils, from the second to the last testing the amount of pupils who started to understand the matter was growing more or less linearly.



The analysis showed that 4 pupils already before starting to learn understood the matter. During the first hour the pupils were learning but there was no real success. The same was during the 2nd hour. At the beginning of the second hour they knew exactly the same as at the end of the first one. Somewhere in the middle of the second hour, after approximately 10 exercises, more than a half of pupils started to understand where the problem was. Other pupils (5 of 22) needed some more exercises to understand the core of the problem and to solve it.

The pupils made different mistakes, some mixed the base and the power, some multiplied both numbers, some did other kinds of mistakes. The second diagram shows what was going on in their heads just before and right after finding out what was the problem. I did not tell them where they did mistakes nor what kind of mistake they did, they had to find out by their own what the problem was and also solve it.



Axis x shows exercises just before and right after the pupils understood the matter, axis y shows the amount of answers for each category. There are 4 lines in the picture, each for one strategy. One shows the amount of correct answers, the other the amount of turned around answers, one wrong multiplying and one all other kinds of mistakes (for example that they summed up both numbers, or that they rewrote the base). Value 0 on axis x means the point at which each individual pupil started to understand the matter (when he understood what the problem was, criterion was 5 successive answers). From the picture we can understand that pupils approximately 30 answers before understanding the matter used all strategies in same amount (by accident). Then the process of understanding started

(even though invisible). Pupils still answered incorrectly but the structure of their mistakes changed. They were not turning around or multiplying powers (obviously they had found out that that had been wrong), and they started to answer “just something”. That is a usual process before understanding: before understanding there appears regression: pupils abandon strategies which do not lead to appropriate results and they start to use strategies which are even more simple (and also do not lead to the correct result). All of a sudden (at the point 0) the pupils got an insight into the matter.

The understanding of the matter right after the insight is not very stable, pupils still do some mistakes, but the number of mistakes decreases rapidly after they have understood it and come to the right strategy. For example 30 answers after the insight almost 80 % of them were correct (this is quite a lot if we take into consideration the fact that some exercises were difficult).

Conclusion

Empirical results show that pupils who know how to solve the problem still make some mistakes, and pupils who do not know how to deal with the problem make different kind of mistakes. That means that a pupil who was solving the problem several times gave different answers, which is usually called intra-individual variability and it is in classical measurement considered as a mistake of measurement. In evolutionary theory this intra-individual variability is not considered as a mistake of measurement, but as a basic characteristic in solving problems which makes learning and development possible at all. Pupils are motivated as by searching correct results as by searching for different ways. Teacher becomes at such work really only moderator and stimulator for using different strategies.

The research showed that pupils who made many mistakes in the beginning and use their own strategies to correct them had more stable and permanent knowledge in the long run.

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18

Are We There Yet?

A project designed for teaching with
learning and understanding

John Greenacre and Bill Goddard

An account of the first phase of an on-going teacher-led, cross curriculum, action research project for pupils aged 12 – 13 years in two different Secondary age range schools, introducing Astronomy as the learning base for staff as well as pupils.

Based purely on our observation over many years it seemed to us that children in Primary school usually enjoy the experience of their schooling. They have fun and laughter with their teachers far more than is usual at Secondary level. They have time to explore and wonder at what they find and they work cooperatively with their teachers and their peers to discover and understand what they are finding.

Friendly competition exists and whilst there are times when didactic methods are used they are approached in a much more gentle way than is the case at Secondary level.

Of course, like all generalisations, there will be examples galore that confound this opening statement of ours. We acknowledge that and accept at once that it is a generalisation. Yet, it is not hard to find a consensus of opinion that supports this view from parents and children alike, as well as teaching colleagues.

One of the authors has a daughter currently in Primary school and a son who is in his second year at Secondary level so some recent and relevant first hand experience has also been brought to bear in formulating this statement.

The situation changes rapidly and radically when the transition to Secondary school occurs (in England). No longer do children have one teacher who works with them covering many subject areas. Subject areas are defined as separate entities and taught discretely, very often without any connections with other subject areas being made explicit.

It would be foolish to suggest that there is no pressure to attain at Primary level but the pressure to attain is focussed with one main teacher and maybe one or two other teachers. At Secondary level there are anywhere between six and eleven subject teachers all bringing their own pressures to bear on each individual child.

We might move from here to reflect on the prevailing pressures on teachers of target driven Secondary schooling, as formulated by the government Department for Education and Skills (DfES), or perhaps the way teachers are being trained on both initial teacher training programmes and in continuing professional development.

Our intention was to put in place an alternative approach that could be field tested in Secondary schools to see whether the prevailing pattern of teaching in discrete areas could be changed without any of the anticipated outcomes by way of expected pupil attainment being lost. Indeed whether some gains might be made which might not otherwise have been made.

We wanted teachers to work together, to see each other in action and to share in the planning of outcomes for a piece of work that would, in all probability, be as new to them as to their pupils yet which had a clear link to their own subject specialism.

We hoped to set the conditions for the development of collegiality between teachers and between teachers and pupils as well as the pupils themselves in pursuit of a common programme of learning and understanding.

We also hoped to find that the pupils would respond to the fact that they, as well as their teachers, were on a journey where each of them was learning and where their contributions were as valued as their teachers. We agree with David Perkins that learning should be a consequence of thinking and not be capable of being claimed to have been achieved simply by a repetition of information that is handed down even if that information is accurately repeated. The teaching model we believe is worth striving to achieve is one where “rather than acting as though students were empty vessels to be filled, teachers act as though students were active and interesting thinkers” (Perkins, 1992).

As Perkins notes “Students must, of course, learn many finished products of these practices, but they do so while working as apprentice historians, mathematicians and biologists rather than learning the finished product in isolation” (Perkins, 1992). This approach changes the classroom situation that is often seen at Secondary level. Instead of photocopied material and texts from books to be

learned lessons will open up discourse so that “authority is diffused from teachers and texts to anyone who makes a persuasive argument. Students assume much larger instructional roles and responsibilities. The social organisation of classrooms grows much more lively and rich, but teachers’ intellectual and managerial responsibilities grow as well.” (Cohen, 1993)

Some years ago one of the authors was able to spend time with Bruce Campbell and Dee Dickinson at New Horizons for Learning in Seattle and also with Howard Gardner and Mara Krechevsky at Project Zero at Harvard. The work that these educators were implementing was directly related to Howard Gardner’s theory of Multiple Intelligences as contained in the book of that title.

Gardner and Krechevsky in a chapter entitled ‘Approaching School Intelligently’ write “Schools do provide some group activities but students are usually judged on their individual work. By contrast, in many social and occupational settings, one’s ability to communicate effectively and work productively with others is critical to a successful outcome” (Gardner, 1993). The project that we planned with two Secondary schools required that the teachers should plan their work collaboratively and that the pupils should also work collaboratively and present their end products in teams.

In one of a series of different papers commissioned by the New York State Department of Education to help communities redesign their schools in response to the demands of the 21st. century Kornhaber and Gardner write, “To help young people excel, schools need to create conditions that foster sustained engagement and encourage reflection, on one’s own and others’ efforts” (Kornhaber et al, 1993)

This was an important point that occupied our thoughts as we set about considering how best we might offer a project that might create suitable conditions for these approaches to flourish. We think that we have done this and, although the project is only at the half way stage at the time of writing, we consider that there is already sufficient evidence to encourage us to believe that what is happening is what we had hoped would happen.

Two writers in The Times newspapers (London) of 30th May (Broadbent) and 1st June 2006 (Midgley) referred to there not being much by way of fun any more in students’ school experience at Secondary level. We wanted enjoyment and fun to feature in our project and at this half way stage this also seems to be evident.

The Learning Teacher Network published ‘Towards the Teacher as Learner’ (2004) and ‘Learning for the Future’ (2005) as two products of the Learning Teacher Network. After consideration of the views and accounts of work in progress, as detailed in both volumes, we decided that there was a need to try to bring together some of the ideas expressed in these publications in a form which field tested them in real time in schools.

The initial discussions between the authors and colleagues in the University of Greenwich and elsewhere took place in October 2005. By mid-November of that year we had decided to put our idea to two different Secondary schools. Our intention was to see if the schools felt that the idea had enough merit to warrant staff and pupil commitment. We had in mind a project that would require a time commitment over and above the already demanding workloads that staff and pupils have in term time.

The two schools that we approached are schools where there is a prevailing culture of enquiry and development at all levels. The schools are quite different in composition. One is a Boys' Grammar school where pupils are only admitted after successfully passing a common entrance examination known as the eleven plus examination. The other school is a City Technology College for boys and girls with admission requiring a comprehensive intake and an aptitude for Technology at age eleven. Both schools work with pupils aged between 11 and 16/18 years of age.

In the light of how this project, now called the Greenwich Astronomy Project (GAP), has developed it might be useful for non U.K readers to have a brief outline of the system that operates in Secondary schools in England.

In England the state maintained system of Education is almost exclusively separated into two elements called Primary and Secondary schooling. Primary schooling is for pupils/students of 5 to 11 years of age. At 11 years of age children normally progress to Secondary schooling which continues up to the age of 16 years of age. A further period of study between the ages of 16 to 18 years of age is not statutorily required but nowadays is the choice for a large number of pupils/students who may wish to proceed to Higher Education after leaving school but not necessarily immediately after leaving school.

The state examination system which operates nationally does so through different examination boards which emphasise and design slightly different approaches to the National Curriculum set by the government department – The Department for Education and Skills (DfES).

The two schools in this project work with different examination boards. However, whichever board a school works with at secondary level it is usual for pupils to be entered for their first major public examination called the General Certificate of Secondary Education (GCSE) in year eleven when the pupils are aged between 15/16 yrs of age. Some subjects can be taken earlier than this. For example, Information Communication and Technology (ICT) can be taken as early as Year 9 and this is the case in our participating Grammar School.

Both examination boards used by the schools in this project have a component in their Science curriculum that offers Astronomy as part of the GCSE examination but it is not necessary to take this in order to pass in Science.

A/S (Advanced Supplementary) and A2 (Advanced Level) levels are the examinations that determine routes into higher education and are for those pupils who wish to continue their studies after their GCSE examinations. These examinations occur in years 12 and 13 when the pupils are aged between 16 /18 years of age.

An important factor in our thinking was that children at Primary level are often taught by the same teacher covering several different subject areas. This is a considerable help to pupils in acquiring a connected sense to their learning which we believe leads to a better understanding. This can be lost at Secondary level where subjects are taught as separate entities. Additionally, at Primary level, it is quite usual for the staff to work together to achieve coherence. When expertise is necessary which requires that a specialist teacher is involved with a class that teacher is often brought into an understanding of where the class is in its progress prior to working with the children.

Collegiality and a shared unity of purpose is evident at Primary level in a way that is not altogether mirrored at Secondary level where staff may not even know one another.

Our feeling was that the Primary approach to teaching and learning with understanding has much to commend it. It is in our view a better model. Pupils/students seem more contented and motivated to learn. We further think that the understanding that is evident springs from the cross-curricular connectedness that is demonstrated through a single teacher working through a variety of subject areas with the same class.

We recognise that it is not possible or even desirable for one teacher to teach more than their own subject area at Secondary level simply because of the depth of knowledge and expertise that is needed adequately to deliver in-depth studies for each subject domain. However, what we do think is possible and desirable is that it can only be helpful to the pupils for subject teachers to be more aware of the connectedness of their own subject domain to other subject domains and to take positive steps in helping their pupils to make the connections. This can only be helpful to the pupils/students broader understanding. We believe that this is an argument for cross-curricular work particularly in the lower secondary school when children are still in the transitional stage from their Primary schooling.

It was for this reason that the GAP project was planned to be offered to year 8 pupils i.e. pupils aged between 12/13 years of age with very recent memories of their Primary schooling. Also, at this point in their schooling they have already experienced eighteen months in Secondary school. They know how it is organised and which staff teach which subjects as well as the general set-up. They have begun to establish their friendship groups and, as a year group as a whole they have not yet started on their demanding studies for the General Certificate in Secondary Education (GCSE). That begins when they move up into the next year group.

Contact and consultation with staff at the Royal Observatory in Greenwich enabled us to set down on paper what we had in mind. We originally referred to it as a case study but that was changed by the participating teachers to a project which was given the title of the Greenwich Astronomy Project (GAP). The teachers at the two schools quickly took on a shared 'ownership' in the planning and methods of delivery of the project work.

The original very simple proposal that was then discussed and further developed by the teachers together with the Royal Observatory is set out below. The Education Officer at the Royal Observatory pointed out that it was possible to match the work that they were going to do with the pupils to the Astronomy component of the science curriculum that each school was following. This was a real breakthrough, immediately recognised by the teachers. As a consequence Astronomy was no longer just the vehicle carrying cross-curricular work. It still enabled that function but from this point now increased in importance and value in terms of outcomes for the pupils and the importance of this cannot be stressed enough.

Proposal

The intention is for a designated year group to undertake a hands-on telescopic study of space utilising the Royal Observatory staff at Greenwich and their telescopes. Teacher and parent support in pre-planning delivery and follow up work is to be encouraged.

Rationale

The notion of the heavens, our planetary system, our galaxy and beyond can, when grasped, be both awesome and thought provoking; awakening an intellectual curiosity which could lead to imaginative back-at-school work in just about every subject.

Objectives

The objectives would be to use the experience as a means to achieving a cross subject set of projects back at school to aid coherent learning and understanding related to previously identified requirements of the national curriculum as well as the obvious value added benefit

Aims

The aims are to:

- ★ have a thoroughly enjoyable experience
- ★ acquire new knowledge and understanding
- ★ enable pupils to develop, in conjunction with staff and parents, a display that establishes where the experience has impacted on national curriculum requirements for them in a selection of subject domains.

This was the simple proposal that went to the two schools in mid November 2005. By mid December of that year each school had set in place a meeting which established a momentum and a commitment that was quite astonishing. It was at this meeting that the Education Officer from the Royal Observatory expressed what was possible in terms of the Observatory's input. The teachers who chose to become involved were entirely self motivated and took hold of the project in a manner that made it virtually organic and developmental.

Friday, December 13th 2005 was the day of this meeting and it was a significant day in the development of this project. It was just ahead of the two schools breaking for the winter holiday. It was the end of a tiring term and the end of a tiring week. The authors, together with the Education Officer from the Royal Observatory in Greenwich attended meetings at both schools a little unsure as to what to expect.

The morning meeting was at the City Technology College. The Vice Principal responsible for this project at the CTC distributed an advance paper to staff in which he stated that he saw the project as "offering an opportunity to pilot our ideas about cross-curricular project based learning as we prepare for (our transition to) an Academy..." and went on to say "staff will be able to contribute to the new role of the 21st century teacher (being) actively a part of the change process".

There were two Vice Principals and a representative from the Specialist Schools and Academies Trust present at the CTC meeting as well as twelve subject teachers from Arts subjects as well as Science subjects

In the afternoon, at the Grammar School, the Deputy Headteacher with responsibility for this project had set up the meeting and provided staff with details as to what was envisaged. He had been suddenly called away on urgent business and so could not be with us. Even so, we met after the school day had ended with eight subject staff with both Arts and Sciences being represented.

This meeting was as lively as the morning meeting and did not end until the teachers had thoroughly explored what the project was about and what it would mean in terms of their pupils and their own time commitments. There was no doubt that the Astronomy element was a strongly motivating factor. Every subject teacher present could see useful linkages with their own subject. It is not overstating the case to say that there was an enthusiastic response which was clearly evident.

The outcomes from these two initial meetings were that before the term ended in the following week both schools had committed to developing the project with us with the full support of the observatory. It was to be in two parts.

The detailed planning for the implementation of the first part of the project began immediately on return from the winter holiday. The staff of the two schools, together with the authors, teased out programmes which we thought would best

suit each individual school's approach and preferences. The parents of all Year 8 pupils received information concerning the start of this project and were asked to give their approval for their children to attend an out-of-school day at the Royal Observatory Greenwich. All Year 8 pupils in each school were given this opportunity and accepted. Within each school a number of pupils/students had shown a particular enthusiasm and these pupils/students were to form the core of a group who would move into the second phase of the programme in the Summer Term 2006.

It was decided that the second phase would begin from after the half term holiday at the end of May. It would continue through the summer term with some work in the summer vacation via laptops and/or home computers linked to the Observatory. This is intended to keep the momentum going so as to allow for a rapid connection with the work on returning in the Autumn term. In the Autumn Term 2006 the pupils/students will prepare their own exhibition of work to be shown to peers, parents and staff at the Observatory in November 2006. At this time each pupil/student will have the opportunity (weather permitting!) for a hands-on use of the 28" (70cm) telescope with a professional astronomer in attendance to advise and explain what is being observed.

The work in school is taking place as an after school club for pupils/students and staff at the CTC and through lunch time and after school clubs at the Grammar School.

The first phase of this project was completed just ahead of the half term holiday at the end of May 2006 and was reported with some details of the project itself to the Learning Teacher Network Conference in Ljubljana by one of the authors.

The fact that this project is developmental is well illustrated by the fact that we now have the services of a post-graduate astronomer who is funded by a Particle Physics and Astronomy Research Council grant. As part of his 'outreach' work, which is a condition of his grant, he has allied himself with this project. He has met the staff at both schools and made useful suggestions which have been accepted and acted upon and he has also produced learning materials and provided an on-line demonstration of some useful software. In addition he has offered to work with the staff at both schools in determining a not too demanding link-up via computer for the pupils during their summer vacation.

It is intended that this summer vacation work should be planned in more detail together with the pupils, their teachers and the astronomers. It is intended that it should be interesting and informative work which is not too demanding. The maintaining of the momentum is what is important over this six-week holiday so that on their return the pupils are ready to move into the second phase without delay.

The immediate intention now is to continue the work with the two schools as already indicated and to evaluate the progress during a conference in July 2006. From this we intend to learn and make whatever adjustments may prove necessary

for the continued development of the project drawing on staff experience and expertise to date.

There will be some display of pupils work at the conference. The Grammar School pupils have made a video of their first introductory session which is entirely their own effort. Both schools also have some pupil work already completed which it may be possible to have on display in July. The major display of pupil/student work will be in November 2006 but for visitors attending the day conference only in July and who may be contemplating a partnership role this will present an opportunity to talk freely with staff connected with the project.

Partner schools are being looked for and there is no reason why this should be confined to the U.K. Interest has already been expressed in this from schools in the Netherlands and Slovenia.

For the July meeting we would anticipate meeting with potential local partners of our two project schools with whom they might like to work as partners in a widening local network. Through this opportunity they could heighten the profile of Astronomy as well as working with 12/13 year old pupils in a cross-curricular way, assisting them in finding the connections between subjects, and to extending the processes of thinking and debating with their peers as well as their teachers, in order to help the process of teaching and learning with understanding to flourish.

The astronomers who already work with us are male and they have already identified women astronomers who would also be prepared to work alongside us as part of their own outreach projects with effect from the start of the Autumn Term 2006.

Both schools have indicated that they do not wish to see this as a one year only initiative but a continuing one for their following on year eight pupils and the Grammar school is, in addition bringing some year nine work in Astronomy into the year eight curriculum.

There is the possibility that at the Grammar School it may become possible in the future for pupils to take the Astronomy component of the GCSE examination in Year 9, as is already done with ICT. The implications of this are being considered.

At the City Technology College certification is in hand through the Specialist Schools and Academies Trust. This will be for the pupils who will continue with this project to the end of November 2006.

One issue to consider here concerns the provision of resources. Palmer (2006) notes in a recent article that “students are not being encouraged to read more widely”. However the Greenwich Astronomy Project draws on acknowledged high quality expertise from a range of sources. With electronic availability to access material across a wide spectrum the project is likely to more than meet the requirements of any Examinations Board for schoolchildren working towards their

GCSE examination in Astronomy. We want to encourage a shift away from the treadmill of solely set text driven study. Text driven work and nothing else can be dispiriting and de-motivating for staff as well as pupils/students. The excitement of enquiry and discovery and teaching for learning with understanding would run the risk of being seriously impaired. Pupils/students can emerge with passes and schools with good results figures but the love of learning and the skills and joy of enquiry and debate can be lost. The schools then become little more than factories processing pupils/students through work sheets and the study of set texts that have little or no meaning for them since they are not involved with the process other than as fairly passive recipients of handed down information.

It is not just the pupils/students who are gaining from this project. The staff are learning as well. It has offered staff the opportunity to discuss professional issues across traditional subject boundaries and especially in working together on a single unifying project with outcomes agreed between them all.

Emerging collegiality is evident in each school and also to a lesser extent between the two schools who are already sharing ideas and materials.

Consequent upon the teacher development within this project The University of Greenwich is able to consider the award of credits towards a Masters degree in Education for those staff who wish to further their personal professional development. They would prepare a portfolio of their work following guidelines provided by the university. There is interest in this proposal from teachers at both schools.

The title of this article posed a question that parents will know is often heard from children on a journey. The children that are involved in this project are certainly on a journey both practically as well as imaginatively as indeed are their teachers.

The answer to the question in our title is No! We are not there yet but we are getting there.

Cross curricular work is taking place and we can say that there has been a raising of the profile of Astronomy in each school. This was not one of our original objectives but it is now an important objective which indicates the developmental nature of the project. Its shape is being determined by its participants.

What has this to do with the Learning Teacher? As expressed by our Vice-Principal colleague "staff will be able to contribute to the new role of the 21st century teacher (being) actively a part of the change process".

Mention has been made of parental involvement as a feature of this project. Parents have been aware of the project and have agreed to their child's participation. Some of them accompanied the students on their May visits to the Royal Greenwich Observatory. They have also been encouraged to take a supportive role with the summer vacation work and will be invited to the November 2006 event at the Royal Observatory. In addition they will be invited

to express their views about the impact and value of the project as a whole at that time.

The publication of this article will come just one month before the conclusion of the second phase of the project. At the time of writing (June 2006) we have just begun the second phase of the project and we would expect to produce a written account of the project as a whole some time in 2007.

In the meantime readers who wish to follow up on anything connected with this project can do so via e-mail at the addresses noted below, heading up the enquiry with the title The Greenwich Astronomy Project.

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What is Life Like for Struggling Readers?

- and what steps have been taken in the UK to ensure effective teaching of Reading?

Charlie Russell and Frances Bradford

The aim of our work is 'to provide a support service and information to schools, pupils and parents, specifically in the areas of language, literacy and communication, thereby securing inclusion and high achievements for pupils with learning difficulties in these areas'. This focus is entirely in line with the aims of the 'Learning Teacher Network', particularly the creation of 'learning communities'. Children and adults who have not developed skills in these areas often feel alienated from their peers, unable to understand what is going on around them and lacking in confidence to contribute their ideas and talents to share with others. An alarmingly high proportion of such people have a poor quality of life and even end up in prisons. Certainly the creation of 'learning communities' can only be a meaningful concept if every effort is made to overcome the difficulties which many people experience with language, learning and communication, and to make all kinds of allowances and adjustments to learning environments to ensure that maximum access to life and leisure opportunities, as well as 'learning communities' is achieved.

In this article we focus on literacy difficulties. To understand what this can be like, please read the following passage:

↖ ↗ ↘ ↙ ↚ ↛ ↜ ↝ ↞ ↠ ↡ ↢ ↣ ↤ ↥ ↦ ↧ ↨ ↩ ↪ ↫ ↬ ↭ ↮ ↯ ↰ ↱ ↲ ↳ ↴ ↵ ↶ ↷ ↸ ↹ ↺ ↻ ↼ ↽ ↾ ↿ ⇀ ⇁ ⇂ ⇃ ⇄ ⇅ ⇆ ⇇ ⇈ ⇉ ⇊ ⇋ ⇌ ⇍ ⇎ ⇏ ⇐ ⇑ ⇒ ⇓ ⇔ ⇕ ⇖ ⇗ ⇘ ⇙ ⇚ ⇛ ⇜ ⇝ ⇞ ⇟ ⇠ ⇡ ⇢ ⇣ ⇤ ⇥ ⇦ ⇧ ⇨ ⇩ ⇪ ⇫ ⇬ ⇭ ⇮ ⇯ ⇰ ⇱ ⇲ ⇳ ⇴ ⇵ ⇶ ⇷ ⇸ ⇹ ⇺ ⇻ ⇼ ⇽ ⇾ ⇿ ⤀ ⤁ ⤂ ⤃ ⤄ ⤅ ⤆ ⤇ ⤈ ⤉ ⤊ ⤋ ⤌ ⤍ ⤎ ⤏ ⤐ ⤑ ⤒ ⤓ ⤔ ⤕ ⤖ ⤗ ⤘ ⤙ ⤚ ⤛ ⤜ ⤝ ⤞ ⤟ ⤠ ⤡ ⤢ ⤣ ⤤ ⤥ ⤦ ⤧ ⤨ ⤩ ⤪ ⤫ ⤬ ⤭ ⤮ ⤯ ⤰ ⤱ ⤲ ⤳ ⤴ ⤵ ⤶ ⤷ ⤸ ⤹ ⤺ ⤻ ⤼ ⤽ ⤾ ⤿ ⥀ ⥁ ⥂ ⥃ ⥄ ⥅ ⥆ ⥇ ⥈ ⥉ ⥊ ⥋ ⥌ ⥍ ⥎ ⥏ ⥐ ⥑ ⥒ ⥓ ⥔ ⥕ ⥖ ⥗ ⥘ ⥙ ⥚ ⥛ ⥜ ⥝ ⥞ ⥟ ⥠ ⥡ ⥢ ⥣ ⥤ ⥥ ⥦ ⥧ ⥨ ⥩ ⥪ ⥫ ⥬ ⥭ ⥮ ⥯ ⥰ ⥱ ⥲ ⥳ ⥴ ⥵ ⥶ ⥷ ⥸ ⥹ ⥺ ⥻ ⥼ ⥽ ⥾ ⥿ ⦀ ⦁ ⦂ ⦃ ⦄ ⦅ ⦆ ⦇ ⦈ ⦉ ⦊ ⦋ ⦌ ⦍ ⦎ ⦏ ⦐ ⦑ ⦒ ⦓ ⦔ ⦕ ⦖ ⦗ ⦘ ⦙ ⦚ ⦛ ⦜ ⦝ ⦞ ⦟ ⦠ ⦡ ⦢ ⦣ ⦤ ⦥ ⦦ ⦧ ⦨ ⦩ ⦪ ⦫ ⦬ ⦭ ⦮ ⦯ ⦰ ⦱ ⦲ ⦳ ⦴ ⦵ ⦶ ⦷ ⦸ ⦹ ⦺ ⦻ ⦼ ⦽ ⦾ ⦿ ⧀ ⧁ ⧂ ⧃ ⧄ ⧅ ⧆ ⧇ ⧈ ⧉ ⧊ ⧋ ⧌ ⧍ ⧎ ⧏ ⧐ ⧑ ⧒ ⧓ ⧔ ⧕ ⧖ ⧗ ⧘ ⧙ ⧚ ⧛ ⧜ ⧝ ⧞ ⧟ ⧠ ⧡ ⧢ ⧣ ⧤ ⧥ ⧦ ⧧ ⧨ ⧩ ⧪ ⧫ ⧬ ⧭ ⧮ ⧯ ⧰ ⧱ ⧲ ⧳ ⧴ ⧵ ⧶ ⧷ ⧸ ⧹ ⧺ ⧻ ⧼ ⧽ ⧾ ⧿ ⨀ ⨁ ⨂ ⨃ ⨄ ⨅ ⨆ ⨇ ⨈ ⨉ ⨊ ⨋ ⨌ ⨍ ⨎ ⨏ ⨐ ⨑ ⨒ ⨓ ⨔ ⨕ ⨖ ⨗ ⨘ ⨙ ⨚ ⨛ ⨜ ⨝ ⨞ ⨟ ⨠ ⨡ ⨢ ⨣ ⨤ ⨥ ⨦ ⨧ ⨨ ⨩ ⨪ ⨫ ⨬ ⨭ ⨮ ⨯ ⨰ ⨱ ⨲ ⨳ ⨴ ⨵ ⨶ ⨷ ⨸ ⨹ ⨺ ⨻ ⨼ ⨽ ⨾ ⨿ ⩀ ⩁ ⩂ ⩃ ⩄ ⩅ ⩆ ⩇ ⩈ ⩉ ⩊ ⩋ ⩌ ⩍ ⩎ ⩏ ⩐ ⩑ ⩒ ⩓ ⩔ ⩕ ⩖ ⩗ ⩘ ⩙ ⩚ ⩛ ⩜ ⩝ ⩞ ⩟ ⩠ ⩡ ⩢ ⩣ ⩤ ⩥ ⩦ ⩧ ⩨ ⩩ ⩪ ⩫ ⩬ ⩭ ⩮ ⩯ ⩰ ⩱ ⩲ ⩳ ⩴ ⩵ ⩶ ⩷ ⩸ ⩹ ⩺ ⩻ ⩼ ⩽ ⩾ ⩿ ⪀ ⪁ ⪂ ⪃ ⪄ ⪅ ⪆ ⪇ ⪈ ⪉ ⪊ ⪋ ⪌ ⪍ ⪎ ⪏ ⪐ ⪑ ⪒ ⪓ ⪔ ⪕ ⪖ ⪗ ⪘ ⪙ ⪚ ⪛ ⪜ ⪝ ⪞ ⪟ ⪠ ⪡ ⪢ ⪣ ⪤ ⪥ ⪦ ⪧ ⪨ ⪩ ⪪ ⪫ ⪬ ⪭ ⪮ ⪯ ⪰ ⪱ ⪲ ⪳ ⪴ ⪵ ⪶ ⪷ ⪸ ⪹ ⪺ ⪻ ⪼ ⪽ ⪾ ⪿ ⫀ ⫁ ⫂ ⫃ ⫄ ⫅ ⫆ ⫇ ⫈ ⫉ ⫊ ⫋ ⫌ ⫍ ⫎ ⫏ ⫐ ⫑ ⫒ ⫓ ⫔ ⫕ ⫖ ⫗ ⫘ ⫙ ⫚ ⫛ ⫝̸ ⫝ ⫞ ⫟ ⫠ ⫡ ⫢ ⫣ ⫤ ⫥ ⫦ ⫧ ⫨ ⫩ ⫪ ⫫ ⫬ ⫭ ⫮ ⫯ ⫰ ⫱ ⫲ ⫳ ⫴ ⫵ ⫶ ⫷ ⫸ ⫹ ⫺ ⫻ ⫼ ⫽ ⫾ ⫿ ⬀ ⬁ ⬂ ⬃ ⬄ ⬅ ⬆ ⬇ ⬈ ⬉ ⬊ ⬋ ⬌ ⬍ ⬎ ⬏ ⬐ ⬑ ⬒ ⬓ ⬔ ⬕ ⬖ ⬗ ⬘ ⬙ ⬚ ⬛ ⬜ ⬝ ⬞ ⬟ ⬠ ⬡ ⬢ ⬣ ⬤ ⬥ ⬦ ⬧ ⬨ ⬩ ⬪ ⬫ ⬬ ⬭ ⬮ ⬯ ⬰ ⬱ ⬲ ⬳ ⬴ ⬵ ⬶ ⬷ ⬸ ⬹ ⬺ ⬻ ⬼ ⬽ ⬾ ⬿ ⭀ ⭁ ⭂ ⭃ ⭄ ⭅ ⭆ ⭇ ⭈ ⭉ ⭊ ⭋ ⭌ ⭍ ⭎ ⭏ ⭐ ⭑ ⭒ ⭓ ⭔ ⭕ ⭖ ⭗ ⭘ ⭙ ⭚ ⭛ ⭜ ⭝ ⭞ ⭟ ⭠ ⭡ ⭢ ⭣ ⭤ ⭥ ⭦ ⭧ ⭨ ⭩ ⭪ ⭫ ⭬ ⭭ ⭮ ⭯ ⭰ ⭱ ⭲ ⭳ ⭴ ⭵ ⭶ ⭷ ⭸ ⭹ ⭺ ⭻ ⭼ ⭽ ⭾ ⭿ ⮀ ⮁ ⮂ ⮃ ⮄ ⮅ ⮆ ⮇ ⮈ ⮉ ⮊ ⮋ ⮌ ⮍ ⮎ ⮏ ⮐ ⮑ ⮒ ⮓ ⮔ ⮕ ⮖ ⮗ ⮘ ⮙ ⮚ ⮛ ⮜ ⮝ ⮞ ⮟ ⮠ ⮡ ⮢ ⮣ ⮤ ⮥ ⮦ ⮧ ⮨ ⮩ ⮪ ⮫ ⮬ ⮭ ⮮ ⮯ ⮰ ⮱ ⮲ ⮳ ⮴ ⮵ ⮶ ⮷ ⮸ ⮹ ⮺ ⮻ ⮼ ⮽ ⮾ ⮿ ⯀ ⯁ ⯂ ⯃ ⯄ ⯅ ⯆ ⯇ ⯈ ⯉ ⯊ ⯋ ⯌ ⯍ ⯎ ⯏ ⯐ ⯑ ⯒ ⯓ ⯔ ⯕ ⯖ ⯗ ⯘ ⯙ ⯚ ⯛ ⯜ ⯝ ⯞ ⯟ ⯠ ⯡ ⯢ ⯣ ⯤ ⯥ ⯦ ⯧ ⯨ ⯩ ⯪ ⯫ ⯬ ⯭ ⯮ ⯯ ⯰ ⯱ ⯲ ⯳ ⯴ ⯵ ⯶ ⯷ ⯸ ⯹ ⯺ ⯻ ⯼ ⯽ ⯾ ⯿ Ⰰ Ⰱ Ⰲ Ⰳ Ⰴ Ⰵ Ⰶ Ⰷ Ⰸ Ⰹ Ⰺ Ⰻ Ⰼ Ⰽ Ⰾ Ⰿ Ⱀ Ⱁ Ⱂ Ⱃ Ⱄ Ⱅ Ⱆ Ⱇ Ⱈ Ⱉ Ⱊ Ⱋ Ⱌ Ⱍ Ⱎ Ⱏ Ⱐ Ⱑ Ⱒ Ⱓ Ⱔ Ⱕ Ⱖ Ⱗ Ⱘ Ⱙ Ⱚ Ⱛ Ⱜ Ⱝ Ⱞ Ⱟ ⰰ ⰱ ⰲ ⰳ ⰴ ⰵ ⰶ ⰷ ⰸ ⰹ ⰺ ⰻ ⰼ ⰽ ⰾ ⰿ ⱀ ⱁ ⱂ ⱃ ⱄ ⱅ ⱆ ⱇ ⱈ ⱉ ⱊ ⱋ ⱌ ⱍ ⱎ ⱏ ⱐ ⱑ ⱒ ⱓ ⱔ ⱕ ⱖ ⱗ ⱘ ⱙ ⱚ ⱛ ⱜ ⱝ ⱞ ⱟ Ⱡ ⱡ Ɫ Ᵽ Ɽ ⱥ ⱦ Ⱨ ⱨ Ⱪ ⱪ Ⱬ ⱬ Ɑ Ɱ Ɐ Ɒ ⱱ Ⱳ ⱳ ⱴ Ⱶ ⱶ ⱷ ⱸ ⱹ ⱺ ⱻ ⱼ ⱽ Ȿ Ɀ Ⲁ ⲁ Ⲃ ⲃ Ⲅ ⲅ Ⲇ ⲇ Ⲉ ⲉ Ⲋ ⲋ Ⲍ ⲍ Ⲏ ⲏ Ⲑ ⲑ Ⲓ ⲓ Ⲕ ⲕ Ⲗ ⲗ Ⲙ ⲙ Ⲛ ⲛ Ⲝ ⲝ Ⲟ ⲟ Ⲡ ⲡ Ⲣ ⲣ Ⲥ ⲥ Ⲧ ⲧ Ⲩ ⲩ Ⲫ ⲫ Ⲭ ⲭ Ⲯ ⲯ Ⲱ ⲱ Ⲳ ⲳ Ⲵ ⲵ Ⲷ ⲷ Ⲹ ⲹ Ⲻ ⲻ Ⲽ ⲽ Ⲿ ⲿ Ⳁ ⳁ Ⳃ ⳃ Ⳅ ⳅ Ⳇ ⳇ Ⳉ ⳉ Ⳋ ⳋ Ⳍ ⳍ Ⳏ ⳏ Ⳑ ⳑ Ⳓ ⳓ Ⳕ ⳕ Ⳗ ⳗ Ⳙ ⳙ Ⳛ ⳛ Ⳝ ⳝ Ⳟ ⳟ Ⳡ ⳡ Ⳣ ⳣ ⳤ ⳥ ⳦ ⳧ ⳨ ⳩ ⳪ Ⳬ ⳬ Ⳮ ⳮ ⳯ ⳰ ⳱ Ⳳ ⳳ ⳴ ⳵ ⳶ ⳷ ⳸ ⳹ ⳺ ⳻ ⳼ ⳽ ⳾ ⳿ ⴀ ⴁ ⴂ ⴃ ⴄ ⴅ ⴆ ⴇ ⴈ ⴉ ⴊ ⴋ ⴌ ⴍ ⴎ ⴏ ⴐ ⴑ ⴒ ⴓ ⴔ ⴕ ⴖ ⴗ ⴘ ⴙ ⴚ ⴛ ⴜ ⴝ ⴞ ⴟ ⴠ ⴡ ⴢ ⴣ ⴤ ⴥ ⴦ ⴧ ⴨ ⴩ ⴪ ⴫ ⴬ ⴭ ⴮ ⴯ ⴰ ⴱ ⴲ ⴳ ⴴ ⴵ ⴶ ⴷ ⴸ ⴹ ⴺ ⴻ ⴼ ⴽ ⴾ ⴿ ⵀ ⵁ ⵂ ⵃ ⵄ ⵅ ⵆ ⵇ ⵈ ⵉ ⵊ ⵋ ⵌ ⵍ ⵎ ⵏ ⵐ ⵑ ⵒ ⵓ ⵔ ⵕ ⵖ ⵗ ⵘ ⵙ ⵚ ⵛ ⵜ ⵝ ⵞ ⵟ ⵠ ⵡ ⵢ ⵣ ⵤ ⵥ ⵦ ⵧ ⵨ ⵩ ⵪ ⵫ ⵬ ⵭ ⵮ ⵯ ⵰ ⵱ ⵲ ⵳ ⵴ ⵵ ⵶ ⵷ ⵸ ⵹ ⵺ ⵻ ⵼ ⵽ ⵾ ⵿ ⶀ ⶁ ⶂ ⶃ ⶄ ⶅ ⶆ ⶇ ⶈ ⶉ ⶊ ⶋ ⶌ ⶍ ⶎ ⶏ ⶐ ⶑ ⶒ ⶓ ⶔ ⶕ ⶖ ⶗ ⶘ ⶙ ⶚ ⶛ ⶜ ⶝ ⶞ ⶟ ⶠ ⶡ ⶢ ⶣ ⶤ ⶥ ⶦ ⶧ ⶨ ⶩ ⶪ ⶫ ⶬ ⶭ ⶮ ⶯ ⶰ ⶱ ⶲ ⶳ ⶴ ⶵ ⶶ ⶷ ⶸ ⶹ ⶺ ⶻ ⶼ ⶽ ⶾ ⶿ ⷀ ⷁ ⷂ ⷃ ⷄ ⷅ ⷆ ⷇ ⷈ ⷉ ⷊ ⷋ ⷌ ⷍ ⷎ ⷏ ⷐ ⷑ ⷒ ⷓ ⷔ ⷕ ⷖ ⷗ ⷘ ⷙ ⷚ ⷛ ⷜ ⷝ ⷞ ⷟ ⷠ ⷡ ⷢ ⷣ ⷤ ⷥ ⷦ ⷧ ⷨ ⷩ ⷪ ⷫ ⷬ ⷭ ⷮ ⷯ ⷰ ⷱ ⷲ ⷳ ⷴ ⷵ ⷶ ⷷ ⷸ ⷹ ⷺ ⷻ ⷼ ⷽ ⷾ ⷿ ⸀ ⸁ ⸂ ⸃ ⸄ ⸅ ⸆ ⸇ ⸈ ⸉ ⸊ ⸋ ⸌ ⸍ ⸎ ⸏ ⸐ ⸑ ⸒ ⸓ ⸔ ⸕ ⸖ ⸗ ⸘ ⸙ ⸚ ⸛ ⸜ ⸝ ⸞ ⸟ ⸠ ⸡ ⸢ ⸣ ⸤ ⸥ ⸦ ⸧ ⸨ ⸩ ⸪ ⸫ ⸬ ⸭ ⸮ ⸯ ⸰ ⸱ ⸲ ⸳ ⸴ ⸵ ⸶ ⸷ ⸸ ⸹ ⸺ ⸻ ⸼ ⸽ ⸾ ⸿ ⹀ ⹁ ⹂ ⹃ ⹄ ⹅ ⹆ ⹇ ⹈ ⹉ ⹊ ⹋ ⹌ ⹍ ⹎ ⹏ ⹐ ⹑ ⹒ ⹓ ⹔ ⹕ ⹖ ⹗ ⹘ ⹙ ⹚ ⹛ ⹜ ⹝ ⹞ ⹟ ⹠ ⹡ ⹢ ⹣ ⹤ ⹥ ⹦ ⹧ ⹨ ⹩ ⹪ ⹫ ⹬ ⹭ ⹮ ⹯ ⹰ ⹱ ⹲ ⹳ ⹴ ⹵ ⹶ ⹷ ⹸ ⹹ ⹺ ⹻ ⹼ ⹽ ⹾ ⹿ ⺀ ⺁ ⺂ ⺃ ⺄ ⺅ ⺆ ⺇ ⺈ ⺉ ⺊ ⺋ ⺌ ⺍ ⺎ ⺏ ⺐ ⺑ ⺒ ⺓ ⺔ ⺕ ⺖ ⺗ ⺘ ⺙ ⺚ ⺛ ⺜ ⺝ ⺞ ⺟ ⺠ ⺡ ⺢ ⺣ ⺤ ⺥ ⺦ ⺧ ⺨ ⺩ ⺪ ⺫ ⺬ ⺭ ⺮ ⺯ ⺰ ⺱ ⺲ ⺳ ⺴ ⺵ ⺶ ⺷ ⺸ ⺹ ⺺ ⺻ ⺼ ⺽ ⺾ ⺿ ⻀ ⻁ ⻂ ⻃ ⻄ ⻅ ⻆ ⻇ ⻈ ⻉ ⻊ ⻋ ⻌ ⻍ ⻎ ⻏ ⻐ ⻑ ⻒ ⻓ ⻔ ⻕ ⻖ ⻗ ⻘ ⻙ ⻚ ⻛ ⻜ ⻝ ⻞ ⻟ ⻠ ⻡ ⻢ ⻣ ⻤ ⻥ ⻦ ⻧ ⻨ ⻩ ⻪ ⻫ ⻬ ⻭ ⻮ ⻯ ⻰ ⻱ ⻲ ⻳ ⻴ ⻵ ⻶ ⻷ ⻸ ⻹ ⻺ ⻻ ⻼ ⻽ ⻾ ⻿ ⼀ ⼁ ⼂ ⼃ ⼄ ⼅ ⼆ ⼇ ⼈ ⼉ ⼊ ⼋ ⼌ ⼍ ⼎ ⼏ ⼐ ⼑ ⼒ ⼓ ⼔ ⼕ ⼖ ⼗ ⼘ ⼙ ⼚ ⼛ ⼜ ⼝ ⼞ ⼟ ⼠ ⼡ ⼢ ⼣ ⼤ ⼥ ⼦ ⼧ ⼨ ⼩ ⼪ ⼫ ⼬ ⼭ ⼮ ⼯ ⼰ ⼱ ⼲ ⼳ ⼴ ⼵ ⼶ ⼷ ⼸ ⼹ ⼺ ⼻ ⼼ ⼽ ⼾ ⼿ ⽀ ⽁ ⽂ ⽃ ⽄ ⽅ ⽆ ⽇ ⽈ ⽉ ⽊ ⽋ ⽌ ⽍ ⽎ ⽏ ⽐ ⽑ ⽒ ⽓ ⽔ ⽕ ⽖ ⽗ ⽘ ⽙ ⽚ ⽛ ⽜ ⽝ ⽞ ⽟ ⽠ ⽡ ⽢ ⽣ ⽤ ⽥ ⽦ ⽧ ⽨ ⽩ ⽪ ⽫ ⽬ ⽭ ⽮ ⽯ ⽰ ⽱ ⽲ ⽳ ⽴ ⽵ ⽶ ⽷ ⽸ ⽹ ⽺ ⽻ ⽼ ⽽ ⽾ ⽿ ⿀ ⿁ ⿂ ⿃ ⿄ ⿅ ⿆ ⿇ ⿈ ⿉ ⿊ ⿋ ⿌ ⿍ ⿎ ⿏ ⿐ ⿑ ⿒ ⿓ ⿔ ⿕ ⿖ ⿗ ⿘ ⿙ ⿚ ⿛ ⿜ ⿝ ⿞ ⿟ ⿠ ⿡ ⿢ ⿣ ⿤ ⿥ ⿦ ⿧ ⿨ ⿩ ⿪ ⿫ ⿬ ⿭ ⿮ ⿯ ⿰ ⿱ ⿲ ⿳ ⿴ ⿵ ⿶ ⿷ ⿸ ⿹ ⿺ ⿻ ⿼ ⿽ ⿾ ⿿

A ‘translation’ of this is provided in the appendix, but we would like to ask the reader to first attempt to ‘read’ this without help. The font is actually a perfectly regular alphabetic code, but it can soon be seen that this does not help very much unless one ‘understands’ the code. This is in fact the kind of problem faced by struggling readers on a regular basis, and it is easy to imagine the feelings of frustration, anger and inadequacy which can be aroused by such experiences, especially when one’s worth seems to be constantly judged and tested by how well one understands this ‘code’. It is also worth reflecting on what would best help the reader to get meaning from this passage – expecting the reader to work out the rules for him/herself; looking for shapes that are like each other; lots of picture clues; having the passage read to him/her; or just a careful explanation of what the symbols stand for before being expected to attempt the task.

In this article we wish to present an outline of recent developments in the UK with regard to the teaching of literacy, and to ask for comments and information from partners throughout Europe as to which methods and practices are most prevalent, and which seem to be most effective in effectively developing literacy skills amongst all children, resulting in the fewest possible number of pupils developing into ‘struggling readers’ with all the negative self-images and attitudes which can then ensue.

In the UK, prior to 1989 schools and teachers had a great deal of freedom in deciding how to teach reading. There had been a continual debate throughout the 20th century on whether the teaching of ‘whole words’ or ‘phonics’ was more effective, and there was also much debate about ‘real books’ versus ‘reading schemes’. Advocates of ‘whole language’ models of reading argued that literacy was essentially an extension of language development (Smith, 1973, Goodman and Goodman, 1977). According to this model, the most important skill which was essential for the development of reading fluency was language fluency in all its aspects, combined with motivation for and opportunities to engage meaningfully with the fullest possible variety of literacy texts. This model lacks credibility today, in spite of continuing acknowledgement of the importance of these skills, because of the large number of children who seem to have all these skills but still have difficulties with learning to read.

However, although there was much valuable work done in the teaching of reading, and lots of experimentation, there was no nationally agreed consensus on how to

teach reading until the advent of the National Curriculum in 1989. This specified *what* schools should teach but not *how*.

Although phonic work was a statutory component of the National Curriculum from its initial implementation in 1989, HMI reports showed that it was often a weak or neglected feature of teaching, and over the first nine years of the national Curriculum ‘very little impact was made on raising standards of reading’ (Rose report, 2006, part 2 paragraph 18). Such concerns then led to the introduction of the National Literacy Strategy in 1997.

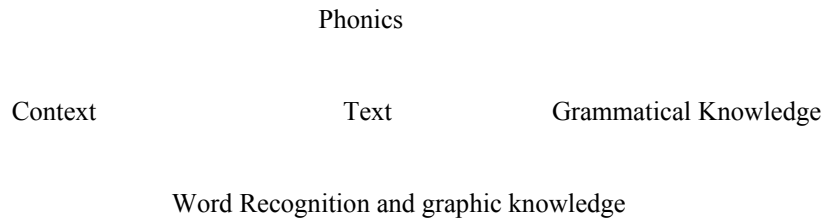
The National Literacy Strategy was an attempt to address the *how* to teach as well as *what* to teach in terms of reading, writing and spelling. It also introduced uniformity throughout the country as all state schools were strongly recommended to follow a prescribed curriculum. There was a clearly defined structure as well as content to each lesson. Pupils up to the age of eleven would have a daily Literacy hour. In the first part of the lesson the class studied a text, and all aspects of literacy, including spelling, syntax, semantics, writing, reading, phonetics and composition, were taught through the medium of this text. For the middle part of the lesson, pupils worked in small groups, where they had the opportunity to practise writing, spelling and reading through individual or shared activities. A particular feature of this part of the lesson was ‘guided reading’, where pupils read quietly to themselves, perhaps with a particular focus, with the support of an adult. The lesson ended with a ‘plenary’, when the teacher would summarise the learning objectives, pupils would talk about what they had learned, and links would be made to future work or other areas of the curriculum. Some later changes to the NLS included more emphasis on speaking and listening. Some schools have recently moved away from this very structured teaching, and now apply a cross-curricula approach.

Although many pupils benefited from the NLS, some still failed to make the expected progress, so in order to address the needs of all pupils a three-tiered strategy was introduced. ‘Wave 1’ was quality delivery of the teaching of literacy as described above. ‘Wave 2’, for pupils who were not making progress at the required rate, came in the form of three packages – ‘Early Literacy Support’ for six year old pupils, ‘Additional Literacy Support’, for eight year olds, and ‘Further Literacy Support’ for ten year olds. These programmes lasted twelve weeks, and followed a very structured syllabus that included phonic training, sight vocabulary, handwriting, spelling, sentence structure and reading strategies. They were mainly taught by trained teaching assistants rather than fully qualified teachers and, particularly for the ten-year olds, chose topics selected to be of particular interest for boys.

Although the work in these programmes had been modified to take into account the needs of pupils, learners were still expected to keep up with the syllabus. Because many pupils with significant needs were struggling to do this, a further intervention called ‘Wave 3’ is now being piloted to try to address the needs of these pupils. Our own service was selected to trial the new materials as part of national research, focusing on seven-year old pupils who have not mastered the

basic skills required for reading and writing. Unlike the previous approaches, the pace of these lessons is at the pace of the pupil rather than the handbook. The focus is on a balanced approach to reading, based on the 'searchlights' model (see below), using easy reading books selected for their appeal to struggling readers. Pupils are made aware of their own learning and are involved in setting realistic targets. Initial informal feedback has been very positive, with schools commenting on real progress being made by pupils who had previously faced huge struggles to learn any literacy skills. Learners have been enthused and motivated by the sessions.

The theoretical basis of the NLS was the 'searchlights' model of reading, which is as follows:



This model was heavily influenced by the work of Marie Clay (Clay, 1972, 1979, 1985). She found wide support for her view that readers have to use four sources of information, which she calls cueing systems, in order to read texts.

However, concerns that the standards of literacy amongst the most vulnerable groups of children were still not showing significant levels of improvement have led to calls for a review both into the practice and theory of the teaching of reading. One major research project which was particularly influential was the 2003 report by Johnston and Watson into the highly effective teaching of synthetic phonics (the same as 'systematic phonics') to 300 5-year old Scottish children. In this seven year longitudinal study, the crucial phonological skills of blending and segmentation were taught to all these 5-year old children using a group of letters at a time until all phoneme/grapheme associations were explicitly and directly taught to the children before any independent reading was expected of them, and before the teaching of 'whole words'. Interactive activities focusing on these skills were undertaken in daily sessions of at least 15 minutes, and the Literacy attainments of all children, particularly the boys, were significantly higher than similar children who were just being exposed to general NLS experiences. The findings of this study have also been supported by further research projects both in the UK and the United States (Ehri, 2000) which claim to demonstrate the superior effectiveness of systematic (or 'synthetic') phonics instruction over all other methods of teaching reading. Consequently, the UK government in 2005 commissioned an independent review into the teaching of reading, which made its report (Rose, 2006) and recommendations in March 2006.

This report challenged the implication of the 'searchlights' model that the four different 'cueing systems' were potentially of equal usefulness to the reader, and that in some way higher levels of ability in one area might compensate for lower levels in another. Although the searchlights model acknowledges that both accurate word recognition and good language comprehension are necessary if readers are to understand texts, it does not specify the effect(s) which each of the cueing systems has on the complex process of reading texts with understanding (Rose report, 2006)

A further criticism of the searchlights model is that although it is a good representation of what constitutes a skilled reader, 'it does not best reflect *how* a *beginner* reader progresses to become a *skilled* reader.' (Rose report, 2006) The Rose report is concerned that 'a model of reading which encourages switching between various searchlight strategies, particularly when phonic work is regarded as only one such strategy, all of equal worth, risks paying insufficient attention to the critical skills of word recognition which must first be secured by beginner readers.'

Therefore the Rose report recommends that the teaching of reading should instead be based on a new conceptual framework, a 'simple' view of reading which was first proposed by Gough and Tunmer(1986). They propose that 'reading is the product of decoding and comprehension'. By 'decoding', they mean the ability to recognise single words regardless of context, and by 'comprehension' they mean a general understanding of language, as a common set of linguistic processes is held to underlie comprehension of both oral and written language. The model is set out below, with 'word recognition' replacing 'decoding', although the Rose report makes it clear that 'Word Recognition is the process of using phonics to recognise words.' This in turn reinforces the findings of the 1999 report of the British Psychological Society that 'research demonstrates that skilled readers are not reading words or letters as pictures but, rapidly and automatically, they are processing the elements within them. (Adams, 1990, Besner and Humphries,1991, Willows, Kruk and Corcos,1993)

The 'Simple' model of reading

Language Comprehension Processes

Word Recognition Processes

Word Recognition Processes

Language Comprehension Processes

Some 'teaching packages' are now available in the UK which focus on direct teaching of the above dimensions. As yet we know of no comprehensive packages and/or training schemes for teachers to engage in a thorough teaching of

‘Language Comprehension Processes’, and our own service may well play a leading role in developing or recommending such a scheme of work. However, there are two particular packages for the teaching of ‘Word Recognition’ processes which we would like to clarify.

‘Playing with Sounds’ (2004) is the most recent DfES set of materials and suggestions which are recommended for use in all Primary schools. It sets out seven clear steps for the teaching of phonic knowledge and skills. The first of these is to develop an understanding that words are composed of sounds, and to hear and discriminate general sounds, speech sounds and patterns, and the Step 7 skills include the making of correct grapheme choices for long vowel phonemes, plus the reading and spelling of two-syllable and sometimes multi-syllable words containing a variety of phoneme-grapheme correspondences. Steps 2 – 6 constitute the carefully graded in-between stages, in which the development of blending and segmenting skills at a one-word level is seen to be of paramount importance. One crucial difference between ‘Playing with Sounds’ and previous advice is that when letters are introduced to children they are done so gradually, in groups, and the skills of segmentation and blending are practised first with just one group of letters which is gradually extended, so that very young children can experience success with using these skills with a few letters in order to increase their motivation to extend this practice to other letters and graphemes, rather than waiting until all letter sounds are known before developing these key skills (of blending and segmentation)

Extensive programmes of training for teachers in Reception and Year 1 years have been undertaken in how to use these materials, which in addition to the above contain lots of cards containing materials and strategies for developing the key skills in each of the steps. The DfES recommendation is that all teachers in Reception and Year 1 should undertake daily sessions of at least 15 minutes focusing on these highly structured activities, and the Rose report comments favourably on the practice in some schools of having, in addition to this, regular ‘catch-up’ sessions with children who require more time to develop these essential skills.

Anyone who wishes to look at these materials with a view perhaps to adapting them to their own country and situation, can obtain a CD by e-mailing <http://www.standards.dfes.gov.uk/primary/publications/literacy/948809/>

Another successful teaching package, also aimed to develop ‘Word Recognition’ processes, which has been developed by our own service, is called ‘Bullseye’. This is a ‘Wave 3’ teaching package designed to teach high frequency words, progressing through very small steps, as sight vocabulary, without specifically paying any attention to phonics. The words are taught in groups of six at a time, using interactive games as well as word cards and charts, and also using extra visual symbols to aid children’s memory of the words. Small booklets are provided so the children have practice in reading the words in context as well as out of context, and daily records are kept of how many words each child can read. ‘Bullseye’ is only used with children who have failed to develop their reading

skills, and it has proved extremely effective particularly in raising pupils' self-esteem, and involving pupils in their own target-setting in which they can easily recognise their own success.

We feel there is no 'one way' of teaching reading which works for all children. We have reviewed current trends so that other partners have a context in which they can view their own current practices. We hope this information is useful, and we would also very much like to hear from other partners how reading is taught in different countries, and how successful this teaching seems to be. We have already started to exchange information with our partners, and have been intrigued, for example, that methods being used in Slovenia seem to be very similar to those being advocated by the 'Rose' report but with a very important difference that the children are not expected to acquire the crucial phonological skills at such an early age as in the UK. We would like to have a constant dialogue and exchange of ideas with as many people as possible on these matters, because we view the reduction of difficulties faced by 'struggling readers' to be a matter of top priority and essential for the development of truly inclusive 'learning communities' which are a key aim of the Learning Teacher Network .

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Appendix 1 ‘Translation’ : *A long time ago, in Verona, there were two families called the Montagues and the Capulets. The Montagues had a son called Romeo. The Capulets had a daughter called Julie. These two families did not like each other, and they were always arguing. Romeo and Juliet fell in love and they secretly got married.*

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20

The Teacher as a Creator of Knowledge

Francia Kinchington and Bill Goddard

This paper examines the role of the future teacher as a creator of knowledge, exploring how knowledge can be created through research, creativity, innovation, reflection and dissemination. It enables teachers to challenge current competence models to identify the pre-requisites and training needed in order to create effective educators for the 21st century.

Introduction

The traditional view of the teacher was as a font of all knowledge. Schools were held by local society to be the repository of knowledge and teachers were the professionals who held that knowledge and transmitted it to the young. For most of the history of schools this has been the acknowledged view and it is only within the last twenty years that we have seen a real shift in this position. Fast developing technologies such as the Internet have enabled students to access knowledge at any time and from a range of locations. This potential free access to knowledge has implications for the role of the traditional teacher both in terms of them as an educator and as creators of knowledge. The evolving view of educationalists is that the teacher's role will change and develop to embrace the skills of mentoring, facilitation and coaching and to act as managers of personalised learning so extending their traditional role of transmitter of knowledge. Trends such as Learning Styles, Multiple Intelligences, and Accelerated Learning have been turned into powerful industries that the teacher must view with an analytical discretion, as seductive as they are in their claims.

The future role will embrace the teacher as a learning broker, as a social-entrepreneur, and as an advocate of a child's learning. In all of these potential roles a certain freedom is required in order to create the future. For teachers to act as learning brokers, social entrepreneurs and learning advocates they must have the opportunity to exercise their professional judgement. There is no place for this in a compliance culture that emphasises competences and an external or political control of the process of educating teachers. Compliance cultures dampen creativity and innovation, as teachers are required to meet targets and tick the right boxes.

The teacher as an education professional will need to extend their knowledge and pedagogical expertise together with their analytical and research skills in general, to enable them to be responsive to trends and developments in education. Teachers are more likely to direct learning, sharing with students where and how to find out information. Having an innovative approach to identifying learning and teaching activities and opportunities, is an aspect of teachers' work that helps create new routes into understanding and creating knowledge.

Research skills are important tools in the empowerment of teachers enabling them to have control over their own profession and the knowledge, curricula and pedagogy they are expected to share with their students. There are those who consider that only professional researchers and University researchers are able to carry out valid research. It is our contention that teachers are able to carry out their own research, given the right skills and support, and through so doing create new knowledge, particularly in terms of pedagogy. Small-scale research in local contexts is important; contributing insight and deep understanding to practice in contrast with large-scale research usually carried out by professional groups, which is more likely to have wider policy ramifications.

The teacher as a Reflective Practitioner

Another important aspect of the future teacher's role is the ability to act as a reflective practitioner (Schön, 1983). Reflection enables educators whether acting in coaching, mentoring, teaching or facilitating roles to consider epistemology and what counts as knowledge, facts, or information. A teacher can consider whether or not they are able to make a difference or have an impact on learning. These considerations in themselves are part of the process that supports knowledge of oneself and one's performance and the creation of new knowledge.

In order to meet the needs of the 21st century, teachers and teacher educators should feel empowered in their role rather than be complacent or compliant. The future teacher will need to create new knowledge in terms of their professional role as a communicator, as an enabler, and as a visionary with the skills to record and disseminate this knowledge. In order to do this effectively, the teacher needs to be involved in a methodology and process which allows them to examine both their own learning and that of their students, and to explore the central question of 'How do I improve what I am doing?' Following from this is the acknowledgement that to share knowledge, understanding and insight that has resulted from classroom and school based research carried out by practitioners, is

invaluable. It provides a resource for the profession enabling teachers to learn, develop and bring about change and improvement to meet the needs of an evolving society.

The Teacher as a Researcher

An aspect that causes many teachers concern is whether they as practitioners have 'permission' to carry out research and to disseminate that research to colleagues at conferences and in research journals. Do I as a teacher have the 'right' to carry out research and publish - to be a creator of knowledge that is used by academics and professionals?

Common concerns are:

I am a practitioner - what can I research?
Where do I start?
How do I disseminate my research?
What if I can't write in an academic style?
Can I publish in a Journal?

In response to this:

If you are a classroom practitioner – you can investigate and write about anything that you are interested in and which you feel has made a difference to your students and their achievement. This can include curriculum, pedagogy, enhancing student learning, giving students a voice; translating your philosophy into practice; strategies for enhancing the learning and achievement of gifted and talented students; portfolios; enquiry based science; developing metacognition and critical thinking skills; the use of phonics in reading; understanding and managing the behaviour of boys with emotional and behavioural problems; children as researchers; the importance of play in the early years curriculum; whether 'learning to learn' raises achievement; problem based learning in the primary school; eLearning; learning styles.... the list is endless.

If you are a manager – you can research anything which you feel has made a difference to your staff and your school. This can include anything from enhancing leadership and management, managing change, modifying systems and structures, changing the culture of the school, creating a healthy school; strategies for school improvement; developing a data rich school; remodelling your workforce, through to strategies for recruitment and retention of staff.

Remember you might take what you do for granted - but your observations and findings could be of real interest to other colleagues helping to give them insight and understanding and importantly will share good practice

How do I turn my investigation into proper research?

Often 'Case studies' and 'Action Research' are used as the framework or methodology for carrying out research. Each sets out specific protocols for carrying out research which help to ensure that data is collected ethically and correctly so that the findings that result from this research are robust and stand up

to scrutiny by peers. Cohen, Manion and Morrison (2000) and Lankshear and Knobel (2004) offer a good grounding in carrying out case studies and action research; issues related to constructing questionnaires; carrying out interviews and observations; analysing and presenting data including content analysis, together with the ethical considerations that need to be taken into account when carrying out research. These ethical codes of conduct cover the conduct of the researcher and all participants whether adult or child and include: seeking and gaining permission to carry out research from the headteacher and from parents of children directly involved (informed consent); transparency of the research; ensuring the anonymity of participants; avoiding coercion or manipulation of participants involved in the research; maintaining confidentiality and honesty in carrying out the research and in gathering and analysing the data and the resultant claims made in the findings (Lankshear and Knobel, 2004:103-113).

Academic Freedom - it is important to retain the right to report your work, provided that those involved are satisfied as to the fairness, accuracy and relevance of the accounts, and those accounts do not necessarily expose or embarrass those involved, then those accounts should not be subject to veto or prohibited on account of confidentiality.

Case Studies or Action Research?

Case Studies

Case Studies focus on 'single' examples (ranging from the child/ children, the classroom, the school, or the local authority).

By examining the individual 'case' in detail and their relationship or interaction between the case and its environment or culture, and relating this to research and theory, we can learn lessons that can be used to inform policy, change curriculum and pedagogy. In education what is learnt from the single case can be generalised to other similar contexts.

Case studies collect data by observations in real contexts, and through the use of multi-methods eg. interviews, focus groups, questionnaires and documentation. When data is analysed through reporting on the words and expressions used by the respondents or interviewees we normally refer to this as 'qualitative' or 'interpretative' (compared to data that is analysed using statistics that is referred to as 'quantitative').

Action Research

Action Research enables teachers to focus on an issue or aspect of development of their own choosing. The Action Research framework allows an issue or problem to be investigated and worked through, so modifying, developing and improving practice. Good teacher research involves systematic enquiry and the Action Research process is often participatory and collaborative, involving groups of people working towards the improvement of their own practices (Cohen, Manion and Morrison (2000:229). It is often termed 'emancipatory' because it allows teachers the freedom to pose questions and develop technical and practical knowledge and expertise whilst working out solutions to problems.

Action Research uses a cyclical framework for development that involves:

- **strategic planning**
- **action - implementing the plan**
- **observation, evaluation and self-evaluation**
- The **critical reflection** that arises from steps 1-3 is used to make decisions for the next cycle of action research

The process of carrying out Action Research empowers teachers - the evidence gathered and the critical reflection provide a developed, tested and critically examined rationale for what is done. Data collection in the form of questionnaires, interviews, focus groups, observations, sampling of work provides the evidence for the research carried out. This is recorded, transcribed, analysed, interpreted and the findings discussed to form the outcomes of the research undertaken.

Carrying out a review of Literature in the field of interest is critical. It helps place the research within a wider context (national, European and international); it enables the teacher to understand the relationship between theory and practice providing a theoretical basis for the research carried out in the classroom or school, and finally, it demonstrates familiarity and knowledge of current ideas and literature.

Making a start on your publication

1. **Decide** – do you want to carry out your research /publish on your own or with a colleague
2. **Identify your topic** - do a mindmap, then check out the literature
3. **Work out your research question**
4. **Work out your timeframe**
5. **Decide** how you will gather data and the form that this will take (eg. questionnaires, focus groups, interviews, observations)
6. **Think through the Ethical considerations**
7. **Re-visit the literature**
8. **Start**
9. **Select the journal, teachers' paper or conference** you feel is the most appropriate place to disseminate your work – look at the format for publication – is it one you or your colleagues would read?

If you have already contributed to the Learning Teacher conference books, the next step is to consider sending an article or paper to a national or international journal.

What does a paper look like?

The usual structure for a paper published in a journal is normally as follows:

Title
Abstract
Keywords
Introduction (which also includes purpose of research and theoretical literature)
Research Design
Results / Findings
Discussion of Findings
Conclusions, which also includes implications for future research and development
Acknowledgements
Note on Contributor
References
Length: 3-5,000 words maximum in Times Roman type face, size 11 font

If you are interested in writing a paper for a journal, it is worth considering the findings of Alton-Lee. The following findings were based on 142 studies researched by Alton-Lee (1998) and identify 7 common problems faced by publishers and referees.

The following problems often result in papers being rejected:

Poorly articulated methodology – not enough detail or information included
Unjustified claims – claims not supported by data evidenced in paper
Format is not as requested by the journal – failed to check the back pages of the journal
Theoretical shortcomings – failed to provide theoretical perspectives or conceptual framework (review of literature inadequate)
Data not properly analysed
Parochial blinkers – have forgotten European and International readers and research
Lack of critical reflection - have just accept or assumed, paper full of implicit assumptions
Quality of writing and expression because the aim is to communicate clearly.

The Research Project Proposal presented below, is a ‘first thoughts’ proforma that can be used to identify focus, sample and ethical considerations and set you on your way.

Proposed Title of Project:

Start date:

Rationale: *Explain background or motivation behind the research*

Aim: *Explain what you hope to achieve by carrying out this research*

Ethical issues to be considered:

Research Methodology: *Will you use Action Research or a Case Study approach? How will you carry out your research: what methods of data collection will be used eg questionnaires, interviews, focus groups? How will you select your participants ie. sample size, gender, purposive sample or randomly selected?*

Timeline for carrying out your research:

Indicative Literature: *Cite 3-5 key texts to indicate the theoretical background to your research*

Remember, who is better placed than a teacher to create knowledge?

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21

Evolving Headship

- Developing from Novice to Expert Practitioner

Francia Kinchington and Tony Hayes

Even when newly appointed to their first Headship, School Leaders are expected to 'hit the ground running'. There is an expectation that they will have the necessary skills, experience and professional judgement to manage their staff and school effectively - leading their institution through change, inspection and delivering ever-higher standards. How does a School Leader at the outset of their career, acquire and develop the high level professional competence required to manage a complex organisation? This paper proposes two strategies that support the professional learning and development of aspiring headteachers, namely the use of Critical Incidents and a school based model for preparing primary deputy heads for successful headship.

Introduction

Training and developing high caliber candidates for headship has been acknowledged as critical by the government in England. The National Professional Qualification for Headship (NPQH), under the auspices of the National College of School Leadership (NCSL), is the benchmark qualification for aspiring headteachers. Although it has been in place since 1997, since April 2005, it has become mandatory for all first-time headteachers to either hold NPQH or be working towards this qualification, in which case it must be gained within four years. It is intended that from April 2009, it becomes a mandatory qualification for any headteacher appointed to their first headship. NPQH is essentially a competence model with standards related to professional knowledge and qualities that develop a strategic perspective covering six key areas:

- Shaping the Future
- Leading Learning and Teaching
- Developing Self and Working with Others
- Managing the Organisation
- Securing Accountability
- Strengthening Community

The NPQH Standards which must be evidenced both in practice within a school context and in a final formal Assessment include aspects related to:

Analysing information

Making judgements

Leading Others

Organising – demonstrating clear plans of action to secure improvement

Relating to Others

In addition to the National Professional Qualification for Headship, many Local Authorities have programmes in place that are aimed at developing aspiring leaders and provide opportunities for discussion and networking.

This paper presents two additional strategies, specifically,

- **The use of Critical Incidents supporting reflective practice and enabling aspiring headteachers make the successful transition from novice to expert practitioner and Headship**
- **A model of preparing aspiring headteachers for successful Headship**

Both strategies provide opportunities for aspiring headteachers to experience and de-construct experiences which enable them to grow towards expert practice. Both encourage the individual to identify strengths and areas for development in terms of their professional knowledge, practice, understanding, and behaviour as a School Leader. Both strategies can be used by those engaged in the training and development of aspiring headteachers to focus development activities and learning.

Developing the Expert Practitioner

Cornford and Athanasou (1995:12) claim that, ‘the attainment of a level of expertise in highly skilled professions will generally not be attained before a minimum of five years in that speciality and there is ample evidence that ten years may be typically the norm’.

Although this sounds rational, it does not make sense where a headteacher appointed to their first Headship is concerned. Failure to function at a sufficiently high enough level from the outset of their appointment may result in loss of confidence by staff, parents, governors and inspectors and may impact adversely on the performance of the school.

Dreyfus and Dreyfus (1986) present a staged model that deconstructs the process of growth from novice to expert practice, showing the move from a localised view to a strategic understanding that is able to take into account complexity and ambiguity. Interestingly one of the key discussions that takes place at interview with the governing body panel concerns the vision for the school and how the new headteacher plans to turn rhetoric into practice, thereby demonstrating a deep understanding of the complexities of the school's context and issues. These skills are clearly at level 5 expert, even though the individual may not have held the post of headship previously.

Dreyfus and Dreyfus (1986): five level model of skills acquisition (in Cheetham and Chivers (2001:264))

Level	Characteristics
1 Novice	Rigid adherence to rules or plans Little situational perception No discretionary judgement
2 Advanced Beginner	Guidelines for action based on attributes or aspects Situational perception still limited All attributes and aspects are treated separately and given equal importance
3 Competent	Coping with overcrowding Sees actions at least partly in terms of longer term goals Conscious, deliberate planning Standardised and routinised procedures
4 Proficient	Sees situations holistically, rather than in terms of aspects Sees what is most important in situation Perceives deviations from the normal pattern Decision making less laboured Uses maxims for guidance whose meanings vary according to the situation
5 Expert	No longer relies on rules, guidelines or maxims Intuitive grasp of situations based on deep, tacit understanding Analytical approaches used only in novel situation Vision of what is possible

It can be seen from the Dreyfus model presented here that when applied to the case of a headteacher it is impossible to move from novice to expert practice within the critical initial year when newly appointed as a first time headteacher. Without prior rehearsal, even with the NPQH qualification under one's belt, it would entail a very steep learning curve to be successful during the first year of appointment, which is what is normally expected of a new headteacher.

Rehearsal or acting as a 'proactive understudy' is a useful metaphor to bear in mind. The metaphor is important because for many deputy-heads engaged in NPQH, they must be prepared to do the very thing that an understudy has to do - which is at a moment's notice, be able to step into the 'starring role' of headship

responsibility. This is evidenced frequently in the Critical Incidents which deputy-heads are required to provide for discussion at their NPQH final assessment. Often these incidents occur when they are standing in for the headteacher. It is possible to gain such experience incidentally, but highly unlikely. Attending courses and discussion forums may provide theory or case studies, but they do not provide the candidate with the real first hand physical and emotional experience. This experience of acting as a 'proactive understudy' enables the individual to contextualise their knowledge (theoretical and practical) and gives them the understanding to know what to do when. Having the flexibility to know what to do when things go wrong is fundamental to being able to contextualise and an attribute that many deputy heads and headteachers would claim as part and parcel of their job. Again this has been evidenced in the reflections accompanying the critical incidents examined. It is proposed that with appropriate preparation, as demonstrated by Hayes (2006), aspiring headteachers can go into their first post at least at Dreyfus' level 3, Competent, rather than beginning at the Novice level that places them and potentially their school in a vulnerable position.

The initial piece of research presented takes the form of a survey of critical incidents and aims to identify whether the outcomes could be used to inform the training and development of aspiring headteachers.

1. Research into Critical Incidents: Articulating Learning that arises from Experience and Reflection

The survey undertaken examined 100 self-reported Critical Incidents presented by deputy-heads as part of their NPQH Final Assessment. The proportions of male and female, primary and secondary phases shown here are representative of the population of candidates engaged in the National Professional Qualification for Headship in the case study region.

Individuals were asked to present the Critical Incident in a synoptic form but to include:

- The background and what happened
- The key issues that they thought the incident raised
- What the individual did and why
- How effective they thought their contribution was
- The main outcomes for the school and any issues that remained to be resolved
- Reflection on what was learnt from the incident

The Critical Incidents which are in Schön's terms 'reflection on action' (rather than 'reflection in action') (Schön, 1983), were analysed to identify the underlying themes. Each incident was examined, the themes identified and assigned to a category. Nine categories emerged which are presented in rank order in Table 1.

Table 1.

Rank Order of Incidents: All groups together (total 100)

<i>Category of Incident</i>	Nos.
Staffing incidents	26
Parents aggressively coming into school to complain	26
Disturbed children – violent to others	11
Accidents to children involving health and safety	9
Stress related staffing incidents	8
Incidents involving whole school or whole school closure	7
Children that were badly behaved	6
Child protection issues	5
Disturbed children – violent to self (self-harm)	2

Tables 2-5 show the differences between the gender and phase groups in relation to all categories of reported incidents, together with the relative positions of the top three categories that were identified in Table 1.

Table 2.

Female secondary: No in group 18	Nos.	%
Disturbed children – violent to others	4	22%
Staffing incidents	3	16%
Stress related Staffing incidents	3	16%
Accidents to Children – Health and Safety	3	
Disturbed children – violent to self (self-harm)	2	
<i>Parents aggressively coming into school to complain</i>	1	5.5%
Children that were badly behaved	1	
Child protection issues	1	
<i>Incidents requiring whole school closure were reported</i>	0	

Table 3.

Male secondary: No in group 28	Nos.	%
Parents aggressively coming into school to complain	7	25%
Staffing incidents	6	21%
Disturbed children – violent to others	4	14%
Children that were badly behaved	4	
Accidents to Children – Health and Safety	4	
Stress related Staffing incidents	3	11%
Child protection issues	1	
Situations involving whole school closure	1	
<i>Incidents involving disturbed children who were violent to themselves (self harm) were reported</i>	0	

Table 4.

Female primary: No in group 40	Nos. %
Parents coming into school to complain	15 37%
Staffing incidents	11 27.5%
Situations involving whole school closure	5
<i>Disturbed children – violent to others</i>	3
Child protection issues	3
Children that were badly behaved	1
Accidents to Children – Health and Safety	1
Stress related Staffing incidents	1 2.5%
<i>Incidents reported for Disturbed children – violent to self (self-harm)</i>	0

Table 5.

Male primary: No in group 12	Nos. %
<i>Staffing issues</i>	6 50%
Parents aggressively coming into school to complain	3 25%
Stress related Staffing incidents	1
Accidents to Children – Health and Safety	1
Situations involving whole school closure	1
<i>Incidents reported for: Children that were badly behaved Disturbed children who were violent towards themselves; Child protection issues; Disturbed children who were violent towards others</i>	0 0%

Tables 6-9 compare the top three ranked categories listed in the combined group shown in Table 1. (Staffing issues; Parents aggressively coming into the school to complain and Disturbed children- violent to others), across gender and phase groups. The results show interesting differences.

Table 6.

Staffing issues: All groups together	26%
Female secondary	16%
Male secondary	21%
Female primary	27%
Male primary	50%

Table 7.

Parents aggressively coming into school to complain: All groups together	26%
Female secondary	5.5%
Male secondary	25%
Female primary	37%
Male primary	25%

Table 8.

Disturbed children- violent to others: All groups together	11%
Female secondary	22%
Male secondary	14%
Female primary	12.5%
Male primary	0%

Table 9.

Stress related staffing incidents: All groups together	8%
Female secondary	16%
Male secondary	11%
Female primary	2.5%
Male primary	8.3%

Observations

Managing staffing incidents appears to be a key issue for all groups, but particularly so for male primary deputy-heads who report almost double the number of staffing related critical incidents. Female primary deputy-heads in contrast record fewer incidents related to staffing issues and dealing with stress related staffing incidents compared to the other groups, but clearly have an issue with aggressive parents confronting staff. The female secondary phase group have the lowest number of critical incidents related to parents aggressively confronting staff, however this is not to say that these secondary schools are not difficult places in which to teach. This is evidenced by double the number of incidents dealing with disturbed children who were violent towards others and double the number of stress related staffing incidents that had to be dealt with.

Although contextual information is not presented here which would enable one to have a detailed understanding of the data and emergent patterns, the findings presented here nevertheless enable headteachers and others to consider and plan for more differentiation in the training of aspiring school leaders. The range of Critical Incidents and the variation contained within each category provide ideal opportunities for problem based or scenario based learning. These when followed with opportunities to deconstruct both the experience and the learning outcome using Schön (1983) ‘reflection on action’ and ‘reflection in action’ ensure that reflection is integrated into learning and both personal and professional development.

2. A School Based model for preparing primary deputy heads for successful Headship

The research presented by Hayes (2006) in his thesis examining the need for effective school-based preparation for primary headship seeks to examine the detailed and thorough rehearsal and preparation of ‘the understudy’.

The research was carried out during the period 2003-2006 and presents a picture of deputy headship in one London Borough examining how some of its schools prepare their deputies for headship. It examines how headteachers influence their deputies to encourage them into headship and the role and value of a school-based preparation for headship. It was set in the context of poor headteacher recruitment, a shortage of individuals coming forward and a large number of existing headteacher due to retire in the next ten years.

When interviewed, deputy heads gave the following reasons for not wanting headship, citing

- A negative perception of headship
- That headship was stressful
- Initiative overload
- Pay
- Impending retirement
- Family commitments
- Illness
- Just not interested

Only 25% of deputies and assistant heads interviewed wanted to be headteachers. What was apparent was that in a time of headteacher shortage, career deputies were not only a loss to headship but as 'sitting tenants' they blocked the route to headship of other aspiring individuals Hayes (2005).

The study found that a successful experience that effectively prepared a deputy for headship was dependent on:

- the relationship between the head and the deputy;
- the experiences and opportunities given to the deputy, and
- an ambitious deputy who would take advantage of the above.

Model: How is the aspiring headteacher inducted into headship?

The ideal model for the school-based development of any deputy headteacher is a symbiotic one. This relationship will be one in which the headteacher sees his deputy as an equal in the school. Head teachers should give their deputy real responsibility, involving them in all decision making, large and small. It was acknowledged that the headteacher's time, though valuable, should be freely given to discuss issues and solutions with the deputy as they are mentored from appointment to headship and beyond. This is no way seen as a one way process since the headteacher and the school will particularly benefit from an ambitious deputy who will be anxious to learn all aspects of the job.

In the best of practice, many headteachers form close working relationships with their deputies, and for some headteachers it is an opportunity to find a professional equal who is able and willing to debate educational issues. Sharing the thought processes that guide a headteacher's decision making is important in modelling process. In understanding and discussing the headteacher's educational theory, the deputy is able to begin to form their own philosophy and vision of education

which will in turn influence the way they will run their own school once they become a headteacher.

It is important that the deputy head has the opportunity to experience the management of the whole school. Hayes suggests that this should be planned for by ensuring that the headteacher engages in outside responsibilities whether at meetings, working with the Local Authority, working at home for a day or taking pupils on a school journey for a week. This then ensures that the deputy head has the responsibility for running the school and dealing with issues as they arise. One of the headteachers interviewed by Hayes (2006) reported that he was able to gain valuable experience as a deputy head because his headteacher at the time was asked to help run another school that was experiencing difficulties and needed an experienced head to manage that school for a term. The two and a half days each week that the headteacher was involved in working with the new school gave the deputy head a role and responsibility that was acknowledged by the staff and offered an opportunity to grow into the headship experience.

Three clear themes were identified from the interviews as providing difficulties in early headship, specifically

- Responsibility
- Financial Management
- Staffing Issues

School based experience was reported as being invaluable. The examples presented here illustrate how the experience was gained, the degree of 'hands on' involvement resulting in confidence in these difficult areas.

'I did have very good preparation by being in a small primary school, being at a small primary, you can't help but be involved in every aspect of the school...Everybody does everything, so I knew about headship, I knew about finances, I knew about governors...I was on every committee...I could see the direct correlation between finance and the school'.

'I had the opportunity to sit on the finance subcommittee of the governing body. You know, I had the spreadsheets and everything, I knew what the budget was and I could look at the budget and work and see where we wantedwhat priorities we wanted for the school'.

'As a deputy, I was responsible for monitoring the curriculum on a day to day basis and was able to lead the development of a whole school curriculum overview. I went on an Ofsted training course and was able then able to observe teachers teaching and give them useful feedback'.

In order to ensure that their deputy had a thorough understanding of personnel management and staffing, one of the headteachers interviewed reported giving his deputy a number of contracts and requesting her to,

‘read them, word for word, read every single word in those contracts, make yourself familiar because they can come back to haunt you’ urging her to familiarise herself with holiday entitlements and the detail of pay and changes in conditions for different personnel’.

The best example of how a deputy should be seen in school was described by a very experienced and successful headteacher who clearly saw the need to both give his deputy the experiences she needed to become a successful headteacher and at the same time, to ensure that others in the school understood his vision of the role of the deputy in his school. He reported that,

‘the first thing I say to any deputy I have is, as far as I am concerned, they are the headteacher in all respects, because I tell them I am going to treat them as a headteacher, I am going to tell the governing body they have to treat them as the headteacher ...so that governs everything I do with them...it involves dealing with confidential issues ...if I am not here, the deputy-head has got to know what is going on ... so, there is hardly anything frankly that my deputies do not know’.

It is only through hands-on experiences such as these that aspiring school leaders can develop the skills and attributes to evolve from novice to the Dreyfus level 3 ‘competence’ or even level 4 ‘proficiency’ in preparation for their first appointment. This then would enable them to be able to ‘hit the ground running’.

Questions to explore

- Can a regular review of critical incidents enable aspiring headteachers to monitor their strengths/weaknesses and identify areas for professional development?
- How can schools and Local Authorities support school leaders to develop skills and confidence in dealing with issues raised by critical incidents – should there be greater differentiation?
- What strategies are used to develop leadership capacity in your school?
- How are aspiring or potential School Leaders developed in your school or Local Authority?
- Should there be a European model for the preparation of school leaders?
- Are there opportunities for experienced School Leaders to share their experience and contribute to the training and development of aspiring School Leaders?

Recommendations

- Headteachers should be offered guidance on how to prepare deputies for headship.
- Deputy headship could be considered a training position;
- Local authorities need to monitor the development of deputy headteachers from their appointment to their move into headship;

- Local Authorities might facilitate the movement of ambitious deputies between schools to develop their skills;
- The Government and NCSL must continue to raise the positive profile of headteachers within the profession, and within society more generally.

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22

The Question-Making Strategy

Nevenka Lamut

The most important instrument of communication is language. With help of a structured system of symbols, we transport thoughts and emotions. With the aid of language we reveal ourselves and we establish and maintain contact between people. We also build the world around us with many different words; we communicate and let people know our knowledge, our beliefs, opinions and experiences. Through language we inform others what we want and what our intentions are. We also get to know others, their knowledge, opinions, beliefs, experiences and intentions. We change the world and our thoughts about it. We use language to develop our imagination and show emotions. (Bešter, 1999, str.8).

Setting questions is a very old method of teaching. As we know, the use of conversation as a teaching method came from antiquity. Socrates developed this method. He started the use of conversation with a theme, which was the closest to the system of co-spokesman. This was a skillful way to bring the co-speaker to the truth. His philosophy is important in his method, because it forces a person to be critical of themselves and has a remarkable educational effect. According to Socrates, the main way to conduct a discussion is analytical and inductive, and this ends up with a definition. Socrates led his students in conversation from concrete appearances to common notions. He wanted to show his students that all cognitions were already in them and that he was the one who just helped students to become aware of them. His successor Plato established an academy and there he taught and bred his own philosophy in the shape of dialogue, however Plato preferred an analytical way of teaching. The word »erotema« comes from the

Greek language in it means question and from here also exists a conversation method (Vorlander, 1977).

Questions are undoubtedly one of the most important components in class, having a remarkable impact on the learning process, that is questions asked by teachers and questions asked by pupils, as well as questions between pupils. The teachers' questions definitely have an important influence on both the pupils' mental processes and the formation of personality. They are connected with the educational concept of the school.

In our present practice the old pedagogy still has a very strong influence. In lessons questions from the teachers have the ascendancy over everything else. Questions demand from the students repetition of what has been studied. Most questions also require an exact answer. There are very few higher level questions, which demand higher mental processes from students. Students ask very few questions.

Conversation as a method is the closest process to life and also the most natural way of studying work. Conversation in class has some specific specialities, because it includes teaching as well as learning. Conversation, used as a method of teaching, should develop learning motivation, thinking, especially creative thinking and also a speaking culture. All appearances suggest that the conversation method gives us opportunities not just to achieve the educational goals, but also brings about suitable behaviour in students. The priority of the conversation method is adapting and connecting all other methodoloies. However it is known that a lesson is more effective, when different methods are used. A special place for the dialogue method is in a problem solving lesson and learning through discovery.

The question-making strategy

In order to form separate questions it is important to develop a question-making strategy.

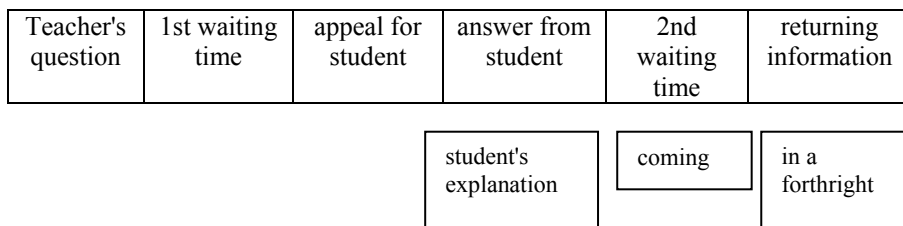
We must take into consideration some elements:

- questions must be divided equitably between all the students,
- consideration of sequence:
 - o question
 - o break
 - o appeal to student
 - o break
 - o answer from student
 - o reaction to answer (returning information)
 - o correctly shaping the questions
 - o define knowledge and experiences from students
 - o developed communication skills
 - o comfort psycho-social atmosphere in the class
 - o arrangement of tables in the classroom

Average waiting time of teachers by raising questions is around one second. That is why the quality of deliberation is limited. Positive results can be reached, if the waiting time is extended at least to 3 seconds. We noticed, that:

- students are forming longer answers, 'contributions' from slower students are extended,
- students are shaping more suitable answers and they are questioning more questions,
- students are giving a greater number of different explanations,
- students are discovering better connections between observations and consequences.

The behaviour of the teacher is also changed. Returning information becomes more diverse. The teacher is expecting more from slower students, because he has a better opportunity to know their abilities (Tomić, 1999).



Scheme: Question-making strategy

The teacher's question

When using the question-making strategy is very important that the teacher is careful to ask the question only once and not to repeat it. This is because this strategy supports inattentive students. The teacher must ask the question to the whole class, and only then can he call on one student to answer the question. If, alternatively, the student was named before the question was asked, other students would not be interested; they would have felt that the question was meant only for that particular student.

First waiting time

After the teacher asks the question, students need time to think and shape the answer. The length of break depends on the kind of questions, because memory questions need less time than questions for which students must think a little bit harder before answering.

Appeal for student

Demands from didacticians are that the teacher should allow sufficient time when waiting for the answer, especially for questions which require students to think harder. Impatient and anxious teachers usually ask the student who responds first and then they are very satisfied when the student answers. However pedagogues, who are experienced, wait until students finish their

mental operation, and they never ask students who call out first. They wait until the majority of students are ready to answer. With this way of teaching all students have an opportunity to collaborate, not just the best and the fastest. Between waiting for the answer teachers can direct impatient students to write down their responses. Later on teachers can examine answers or they could organise interacting information between students.

Teachers must consider all the students, because students quickly find out which system of appealing the teacher uses. The teacher should use the method which captures the attention of most students. It is necessary to address all the students on the same way that is using the first name or a surname. We must never point to a person or even call, 'You should tell!' Usually in primary school, and in class, we call students by their first names. If there are two children with the same name, we must add the surname as well.

Second waiting time

If the student's explanation or deliberate answer is coming in a rush the teacher should not be impatient. The teacher must let the student take time. He can also say to the student,

'Take time to think.' The teacher's prompting before the pupil's response increases the probability that the child explains the answer or that the other students can add something.

Answer from student

When a student is answering, we should not interrupt him. With interruptions we would break his thinking and verbalisation of thoughts. Student must tell his thoughts to the end. If the answer is deficient or wrong, the teacher should give another question. If a student does not answer or answers wrong, we do not ask another questions, indeed we challenge other students. It is very important that the teacher's reaction is positive. We do not repeat the answer from the student. With this method we accustom students to listen and follow the conversation.

Returning information

After the teacher has listened very carefully to the student's answer, he provides feedback about the correctness of student's answer (for example: 'It is true', 'Good, That's right'). Information in the response can be also a new question, which is repeatedly added to all the students or it can just be additional information to the students. It is important that each question demands a response with information from the teacher. This information lets the student know if his answer is suitable or it must be completed.

Research has shown that the readiness of the teacher to give the student time to think before answering has a high degree of influence over the quality of the answers. When a child is composing an answer, he needs a time to think (1.waiting time). The answer usually comes in a rush. The teacher's intervention before this reaction will increase the probability of a good answer. It has been

found that the average waiting time of teachers is around one second. If a teacher extends the waiting time to least on three seconds, positive results can be reached. Children are forming longer answers and contributions from 'slower' children are increasing; they are forming more suitable answers and they are questioning more questions; they are giving a greater range of different explanations and they are discovering more and better connection between observations and consequences. The behavior of teachers is also changed. Teachers' answers and questions for children become more diverse. Teachers are expecting more even from 'slower' students, because they are starting to know their abilities.

Piaget was also one of the men concerned with the methodology of teaching. He was similarly occupied with the role of questions. He found that the quantity of waiting time, which is assured to a child, contributes most to a mitigation of a child's thinking (Labinowicz, 1989). One of the researches (Luzar, Vršič, 1978), showed that four percent of teachers included a break between question and appeal of students and in less than one percent of cases they included a break before the student answers. Instead of that, teachers were repeating their questions or asking new ones, just to prevent the silence. In five percent of cases teachers were answering their own questions. Students were in a third of cases answering at the same time, in eight percent of cases student had a stimulation. If they did not answer in a moment, only in two percent of cases was there a mental stimulation. Among the most common responses from the students' answers, was asking a new question. Only four percent of answers were praised, and seven percent were criticised, many answers were ignored by teachers.

This research shows, that setting questions is a very important part of teachers' work that is the way we must focus teaching. All the research mentioned above shows how important it is to apply these statements to class practice.

The reason for the unsuitable question-making strategy is often fear by the teacher, that he would waste too much time, or belief that he must talk all time in the class. Time that is lost with creative breaks pays interest as it is substituted with children who think about what they are saying. That is why they actively collaborate in lessons. A waste of time is therefore just apparent, because students gain a lot in the sense of developing thinking and qualifying skills in a creative and active lesson. Belief that there must be permanent speech in the class is the consequence of a didactical system, where the teacher is speaking and students are listening and trying to remember as much as possible. The first named student who answers the teacher is in a valued position. If a student does not know how to answer or teacher has run short of the words required for an explanation, only than silence arises. That kind of didactical system is surely a survival and does not suit the contemporary demands of lessons, when students should be the subject of a lesson.

There is a Latin saying that goes: 'Nature gave us one tongue and two ears, only to remind us that we should talk less and listen instead.'

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23

Exciting Electrics and Creativity

An Examination of the Starting Point Approach to Design and Technology

Keith W. Good

Abstract

This study examines the starting point approach (spa) to design and technology. This is intended to maximize creativity while being manageable for the teacher. The purpose of the study was to examine whether the children could do what the approach requires and in particular whether it promoted their innovative thinking. Data were collected during teaching sessions with Year 6 children in London. The theoretical framework of the study is qualitative in nature.

The participant researcher videoed a session run to pre-planned 'script'. This included guided brainstorming chaired by the researcher. Children were introduced to some technology and explored its use in the wider world. They were then shown how to make their own working example that was the starting point for their designing. After brainstorming, children went on to develop a wide variety of different projects of their choice.

In the UK all children in a class are usually required to design products with the same purpose. In the study the spa allowed the children to design products with many different purposes within one class. They developed the starting point to fit with their own experience and interests or the needs of others around them. A major advantage of the spa is that it seems to reconcile the often conflicting demands of teaching specific skills and knowledge with encouraging individuals

to be as creative as possible. The common starting point was crucial to making this feasible.

Introduction

The importance of creativity in education has been highlighted in the UK by the National Advisory Committee on Creative and Cultural Education (NACCCE) report (1999). Numerous papers on creativity in design and technology have followed (Kimbell, 2001; Spendlove, 2003). The DATA International Research conference 2004, focused on creativity and innovation. Creativity is sometimes associated with genius or exceptional achievement but there are other interpretations. The NACCCE report (1999, p.30) call the highest category of creativity 'historic originality'. The levels of creativity available to most children are nonetheless still worthy of development. The study described in this paper was based on the premise that all children are capable of a degree of creativity in identifying design problems and generating 'original' solutions to these.

Technology has been described as human innovation and problem solving in action (ITEA, 2000; McCormick et al., 1996). Problem solving should relate to children's real life environment, allowing them to make appropriate and meaningful connections (Schwarz, 1996). Children should be encouraged to identify problems and deficiencies in their everyday environment and given opportunities to apply technological knowledge and skills they have acquired in previous problem-solving situations (Adams, 1991).

This study arose out of the researcher's experience as a technology educator. This experience indicated that the starting point approach (spa) was an effective way of promoting creativity in a manner that would be manageable to teachers. The spa had been used increasingly in his work with children, students and serving teachers in the UK and other countries. The spa model has been used by Good (1988) and developed further within his Design Challenge series of books (1999-2000), extending the scope and range of exemplar material. Most primary schools in England follow the Qualifications and Curriculum Authority (QCA) (1998) scheme where the outcomes in a class are directed to have the same purpose, for example the children are told to 'design a photograph frame'.

The spa, used in this study, is based on the model of technological problem solving processes mentioned above. However, it has some specific features which distinguish it from other approaches which are characterised by outcomes with a common purpose (Suvillan, 2005). In the spa children are first introduced to specific technology and encouraged to explore the context in which it is used, its relevance to them and its application in the wider world. They are then guided in making their own working example of the starting point that they were initially introduced to and in the process gaining knowledge, skills, understanding. This would include what English teachers would recognize as focused practical tasks and in the spa, provides the starting point for their designing. Helped by brainstorming led by the teacher, children then develop a wide variety of different projects of their choice. Unlike the usual approaches in the UK, in the spa children can, within reason, design 'what they like'. The starting point can be

developed out of a need identified by the children themselves reflecting their own experience and interests or the needs of others around them. The spa seems to reconcile the often conflicting demands of teaching specific skills and knowledge with encouraging individuals to be as creative as possible. The common starting point is intended to make this feasible.

Purpose of the Study

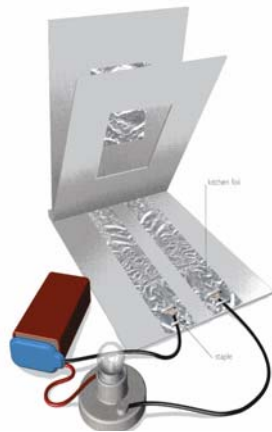
The purpose of the study was to examine whether the children could do what the approach required, in particular whether it promoted their innovative thinking in technology education. The research also had the potential to identify ways to maximize the effectiveness of the spa and give an insight into what happens when children generate ideas in this way.

Essentially, the author asked whether the children could do what the approach asked of them and if it helped them to develop projects with different purposes within the group.

Methods of Inquiry

The study employed an open search for children's emerging ideas for ways to turn a pressure pad on. Even more importantly, the researcher wanted to see whether the children could apply this starting point in innovative and creative ways in their own living environment.

The children were from urban schools taking part in the Children's University at the University of Greenwich, Avery Hill Campus. There were 16 children in the group. The exemplar starting point for designing was a pressure pad switch, made from card and foil. Before starting, the children were given an overview of the session. It was seen as important that they knew from the outset that they would be asked for ideas for using the pressure pad. This was so that subsequent activities could be used as stimulus and to give maximum time for ideas to emerge.



*Figure 1.
Pressure pad switch*

Phase 1 - The basic concept of a switch was discussed. This was revision for the children who had covered this as part of the National Curriculum Science. The children were told that they would be shown a kind of switch called a pressure pad and shown how to make their own working one.

Phase 2- The children were shown a large pressure pad and how it worked. This was big enough for the whole class to see. The characteristics of pressure pads were discussed, for example that they are thin, take up little room and are tough. It was hoped that focusing on the special qualities might lead to ideas that were provoked by them. Every child then followed instructions to make their own pressure pads. The children were given a copy of the basic pressure pad pages from Keith Good's

book Exciting Electrics (pp.12-13). All the materials needed to make a working pp and a circuit for it to control were provided.

Phase 3- The children were asked to think of where pressure pads were used in everyday life and their ideas were recorded on a flip chart. This was intended to consolidate the concept of a pressure pad and allow one idea to provoke others. The teacher researcher then encouraged the children to brainstorm as many ways as possible to make the pressure pad switch on (i.e. complete the circuit).

Phase 4 – During the final brainstorming, children were encouraged to generate lots of new ideas for using a pressure pad. Again, the flipchart used for recording purposes. These ideas were intended to lead them to design and make projects of their choice.

The research was focused on the following questions:

- 1) Could children identify the existing uses of pressure pad in the world around them?
- 2) Could children generate ways to turn pressure pad on in different ways?
- 3) Could children find possible uses for their pressure pads?

The researcher assumed the role of participant observer. Data were collected by various ways. Brainstorming recorded on flipchart, video recordings, the children's written notes and drawings, photographs of the children's final outcomes. The children's responses were documented on a flipchart (in black pen). The researcher's input to the discussion was documented in green pen (to distinguish it from the pupil's input). Video recordings from the brainstorming sessions can be regarded as a primary data source. Secondary data sources such as the children's notes and drawings, photographs of the children's final outcomes also provided valuable information. To ensure validity and credibility of the research, multiple data collecting sources and strategies were employed, applying the concept of triangulation (Miles & Hubermann, 1994: 266).

Analysis and Results

Verbatim transcriptions were derived from the video recordings. During the analysis process, irrelevant data were excluded. Care was taken to ensure that individual children could not be identified, thus all names in transcriptions were pseudonyms. Parental and carers agreement was also secured. All the collected data, both primary and secondary data sources, formulated a data corpus, which was submitted to analysis. During the first round of analysis, the researcher began to form an idea of the emergent phenomena relative to the theme of this study. In subsequent analysis rounds, the data indicated that the children were creating ideas for their own projects. This prompted the researcher to carry out further viewing of the data in order to specify those emerging features. Finally, the researcher reached the stage where they considered that they had investigated the whole data corpus sufficiently from the viewpoint of the research problem

Empirical Assertion 1

The children are able to find existing uses for pressure pads in world around them

The children came up with:

1. cash machines
2. light switch
3. mobile phone
4. TV remote

Commentary

The children demonstrated that they were able to find existing uses for pressure pads in the world around them. These children are obviously familiar with these 'user interfaces' which have become common in our everyday lives. They were able to transfer the concept and function of a cardboard pressure pad to real world pressure pad applications. This suggests that the basic idea of pressure pad was understood.

Empirical Assertion 2

The children are able to generate a wide range of ideas for turning the pressure pad on in different ways.

The children came up with the following ideas:

1. step on it
2. sit on it
3. squeeze it
4. pinch it
5. head butt it
6. put some weight on it
7. belly flop on it
8. elbow it
9. punch it
10. touch it with your tongue
11. fart on it
12. flick it
13. kneel on it
14. kick it
15. throw the pressure pad against the wall
16. blow on it
17. stamp on it
18. drop something on it
19. put some water on it (meaning squirt water on it)
20. slap it
21. run over it
22. tiptoe on it
23. close the window on it
24. lay on it

These were added to the flipchart and acted out by the teacher researcher to repeat

and reinforce the suggestions.

Commentary

The rich variety of ways generated to turn pressure pad on suggests that the children felt relaxed and free to brainstorm in these sessions. These ideas did not rely on previous knowledge or experience since this was a new situation for the children. They were already being creative as they came up with plenty of ways to close the circuit with the pressure pad. This is important as it gives a fertile basis for generating ideas for using the pressure pad later. Through this brainstorming session the children were establishing a basis for a wide variety of uses of pressure pad, including possibly novel and innovative ones. The child's idea of throwing the actual pressure pad against the wall, shows an interesting reversal of the normal pressing or throwing things onto the switch. This child seems to have stumbled across a recognised strategy for generating innovative ideas. Michalko (2001) devotes a whole chapter to reversal in his text on idea generation.

Empirical Assertion 3

The children are able to find possible uses for the pressure pad switch in their own environment.

Due to the large amount of transcribed data from videotaped brainstorming session, Empirical Assertion 3 is not supported by presenting the whole data, but rather by using exemplars from the transcripts.

When asked to think of as many uses as possible for the pp switch, the children came up with the following ideas:

1. control a remote control car
2. under the door mat to turn on a tape recorder to scare people at a Halloween
3. stand a glass on the pp to keep a night light on if you're scared in the dark. You could easily find your drink and you could use it as a light to help you read
4. an automatic door bell that no one would need to ring it and you'd know people were there... hide it under the mat
5. put a weight on it and it'd give you light to work in the garden at night ...use the light as a signal, they used it in the war and out at sea
6. a car goes over it and the bulb come on instead of speed cameras
7. use it to tell which model car has won as they roll down a slope
8. a game for children... like a play mat
9. when they stop a lorry, they might want the light on. When the car goes quiet.
10. if the driver was really tired there could be a buzzer to wake him when he drops off
11. a different burglar alarm so that if he comes in the window and the window shuts the buzzer would go on
12. when burglars put their hand in the letter box and try and push the door then when the letter box shut the thing would go off
13. detecting when a dog gets out of its basket when it has been told to stay in

Commentary

Importantly, the children's ideas can be regarded as innovative and novel applications of pressure pad concept. It is important to notice also that many of the children's ideas are, in practice feasible and could be a basis for their actual projects in design and technology education. This was the purpose of the spa from the start. It must be realised that each idea listed could be the starting point for very many different designs. The children went on to explore these through drawings, modelling and discussion and resulted in some being made into finished artefacts.

Significantly, most of the above ideas seem to occur as a response to the children's own needs, interests and purposes, true to the nature of design and technology as it should be. It is of course is also valid for the children to design products that may be needed by others. Indeed the English National Curriculum for Design and Technology (Key Stage 2, 7-11 year olds) requires that they 'generate ideas for products after thinking about who will use them'. When examining existing products, they have to think about 'the views of the people who use them', not just themselves.

We may sometimes need to get children to explain the context for their ideas if we are to appreciate them. Ideas could otherwise be dismissed.



*Figure 2. Outcomes with different purposes from the same starting point
Top left- picture with eyes that light up
Top centre- board game*

Top right- welcome mat/alarm
Bottom left- machine with tongue stud that lights up
Bottom centre- night light activated by weight of a drink
Bottom right- home for a pet rock with interior light

Discussion

In this study an effort was made to add to the children's understanding of the made environment i.e. pressure pad technology. This is close philosophically to the goals of most school subjects in teaching knowledge and understanding about the world at large. The data indicated that some of the children were able to make meaningful connections to pressure pad by identifying existing uses of it in the human made world around us. This in itself has value, demystifying the technology by having the children build their own example. When they were making the pressure pads, the children acquired information and skills on basic issues in electricity.

Moreover the study aimed to give children opportunities to apply their new knowledge in designing projects based on their own ideas. It was evident from the data that some of the children were able, at least to some extent, to apply the pressure pads in a creative and innovative manner as a response to the problems they identified in their own living environment. Here it is important to notice that it was not known beforehand what applications of pressure pads would emerge from the children's creative minds. This can be seen as being in line with the philosophy of technology as well (Niiniluoto, 1984). In this way the technological process did not aim just at discovery (as in science), but rather and more essentially, at children's innovations in action. In this regard, many of the children who took part in the study acted in accordance with the idea put forward by Adams (1993: 87):

Successful inventors that I know are extremely problem-sensitive. They are tuned to the little inconveniences or hardships in life that can be addressed by the technology they know.

Ingenuity, innovation and problem solving are part of the basic essence of technology (e.g. Sparkes, 1993). Consequently, teaching technology should not be mere study of how technology works, as children need to be given opportunities for creative and innovative action. This is why the researcher wanted to focus the study on the innovative use of pressure pads in applications arising from the pupils' own ideas. This relates also to the concept of situated learning (Lave, 1988).

The spa facilitates children's creativity in technology education to a greater extent than the approach where the purpose of the project is specified by teacher. However it is not so open that children have to search for a need or problem to solve without any support. The making stage of the spa is close to focused practical tasks in the English National Curriculum but these usually lead to projects with the same purpose within a class.

The author does not claim that using the spa is the only manageable approach to technology teaching. Neither does the author claim that the applied method is the only way to foster children's innovativeness. It seems to the researcher that the spa offers a compromise between what the teacher and student can manage, what needs to be done and what the student would choose to do. By maximising opportunities for students to create their own ideas, the spa seems likely to increase their perception of technology education as relevant to them. This approach is primarily aimed at maximizing creativity but it may well also help motivation and behavior in technology lessons as well. Another study would be needed to examine this. Working from the teacher's starting point students can still end up with a project with a different purpose from their peers, one of which they have ownership. However, less experienced teachers may feel more secure if they know the purpose of the children's projects in advance.

The spa seems to offer a way of allowing individual children to identify their own design problems and for outcomes with different purposes to be designed and made within a class. All this while maintaining the sanity of the teacher.

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Action and Reflection

- nuclear strategies of teacher training for ICT use

Fernando Albuquerque Costa and Sofia Viseu

Introduction

The technological development of recent years and the huge spread of information and communication technologies (ICT) throughout modern-day society, are two fundamental aspects of our times and deserve particular attention, namely by all those who, directly or indirectly, have responsibility in Education.

Indeed, microcomputers, and the digital technologies associated with them, have become an integral part of contemporary society's daily life. There have been substantial changes in the way we work, how we communicate with each other, how we produce, in other words, how we live. In the most diverse sectors of human activity, not only is its enormous potential acknowledged, but there is also a general idea that it can be a powerful problem-solving tool, which is accessible to everyone.

On this level, the fundamental question resides with how the school fits into this environment of change and technological development and how effective it has been in doing so.

Since the results can not be considered satisfactory (ACE, 2002; Costa, 2004; Cuban, 2001; OCDE, 2006; Paiva, 2002; Salomon, 2002), naturally safeguarding the diversity of situations and variations from context to context, it seems particularly pertinent. Therefore there is a need for us to question why there is no glimpse of optimistic settings as far as a generalised and effective pedagogical use of information and communication technologies is concerned. This is even the case in countries with greater economic resources and teacher-training systems especially structured for this

purpose, such as, for example, in European terms, Switzerland (Wallin, 2005) or Finland (Franssila & Pehkonen, 2005), but also countries like the USA.

The main issues of the work we have been developing and intend to share with the reader are based on questioning the role teachers can play in this process and, more specifically, the type of preparation they need to acquire in order to use technologies regularly in their teaching practices.

With this aim, the structure of a teacher-training model especially conceived to encourage teachers to use ICT in the curricular activity of their students will be presented, as well as some results regarding the application of the afore-mentioned model in a specific situation. As a preceding framework, we will begin by presenting some brief ideas on the importance of the teacher's role and training systems for the aim of generalizing ICT use in schools.

The importance of teachers and their training

As is only natural, one of the main issues concerning the integration of ICT in an educational context is directly related to what teachers are capable of doing in their classes with their students. This is not solely dependent on factors of a personal nature, but also on motivation and the more or less favourable attitude towards using computers in learning. However, it is primarily dependent on the knowledge and competences the teacher possesses in relation to the ways of integrating in specific teaching and learning contexts.

On the other hand, and unlike the technologies that have aimed, above all, to support the teacher in the process of knowledge transmission, the new information and communication resources, potentially strong learning back-ups, such as the internet, present teachers with extra challenges. This means that nowadays, teachers have to play the role of a learning guide, a role that allows them to focus less on themselves, so that an effective profit is gained from the most recent technological advances.

Therefore, whatever the case, it is an issue which is directly related to the training opportunities they have (or haven't) had, the aims of the training course, the way it was structured, the strategies developed and the learning opportunities experienced by the teachers, similarities between the way they learned how to use technologies and the way they expect to do so with their students (isomorphism). There are endless aspects which must be taken into account.

If, in idealistic terms, the idea of only introducing computers into schools after staff had been duly prepared and trained could be defended, in effect, reality has shown the opposite. Even though the situation has evolved considerably since the eighties and there is a wide variety of different situations within Europe and from country to country, different studies show that either teachers have not had specific professional training for computer use or, when they have, it has been through their own initiative after leaving their initial training institution (ITRC, 1998; Makrakis, 1997; Ponte, 2001; Ponte & Serrazina, 1998; Willis & Mehlinger, 1996).

The situation is far from being a satisfactory one, especially as there are still doubts regarding the type of preparation teachers should be given and how it should be acquired (Costa, 1999)²⁹.

On this level, and since we believe that the integration of the computer in regular classroom activities is more dependent on a significant change in the teacher's behaviour rather than the actual sophistication of technology, our proposal is based on a concentration of efforts on a generally ignored aspect which is connected with the representation teachers have of technologies. In other words, we are of the opinion that the training course should be structured so that teachers will be encouraged to recognize the benefits computer use can bring to learning and be made aware of its importance as a work tool, as a condition of a change in their practices.

Indeed, in addition to a basic framework of technical knowledge³⁰, it is important to verify the extent to which the teacher training is structured around a strategy which allows and aims for the modification of teachers' attitudes towards new technologies and which motivates them through making them aware of the relevance, usefulness and potentialities these powerful resources can bring to the educational process, particularly to learning.

Accepting, on the other hand, an isomorphism (Costa, 2003; Costa & Pereira, 2003) between the students' learning of technology – mainly the responsibility of the teachers-, and the way teachers should be trained, it is also particularly important for such training to focus not only on the acquisition of technical knowledge, but primarily on the *way* of acquiring such knowledge.

In other words, we believe that the way by which they are provided with access and familiarization with the available technologies is particularly relevant, and also the way reflection of the educational potential is stimulated. The way they are involved in the creation of stimulating learning environments, as part of real curricular projects, which are authentic and important to the students, giving them specific experiences for the manipulation of technologies, social interaction and collaborative learning is also extremely important

Placing emphasis on the teachers and on the role they may play as educational agents in an environment of change, to sum up, we believe that the organisation of the training course should focus on the analysis of the responses to some of the main issues such as the following which, directly or indirectly are the basis for the following proposal: a) How much importance is attributed to ICT by teachers and

²⁹ *This was the statement that led us to develop the model of teacher training for ICT which is later referred to (f@r Model: training – action – reflection).*

³⁰ *Even working in a well-equipped school it would, indeed, be difficult, if not impossible, for a teacher without the slightest knowledge of computer functioning or one who did not acknowledge the potential benefits of the internet to come to use this resource in the learning activities of his/her students. We must not forget either that learning progression takes longer for someone who is unfamiliar with computers, as is still the case of many teachers.*

what kind of benefits do they think its use can bring to the teaching and learning process? b) What kind of information did they have and under what circumstances did they receive it? c) What experience do they have of technologies and what type of effective use do they make of them? d) In the case of using them in curricular activities, how are they introduced, what are the aims and what type of work are the students required to develop? e) What type of changes did its use bring about in the teaching strategies and how is the process of learning with technologies handled (for example, in terms of management of time, space and the autonomy of the students? f) How do they usually reflect on the teaching and learning process, namely as far as the use of ICT is concerned and how were the difficulties overcome?

A proposal for teacher training for the use of ICT

"It is truly a revolutionary technology that, if properly used, could change education significantly."... "It is the pedagogical way in which it is used that makes the difference." (Salomon, 2002)

Starting point

In Portugal, teacher-training practices for the use of ICT have relied, almost exclusively, on the traditional models and practices of teacher preparation in general (Barroso & Canário, 1999). The specificities resulting from computer use are often thought to be excessive, leading mainly to a type of training that focuses on technology and the learning of tools, while forgetting or giving less priority to its effective integration in the curricular activity.

Based on this setting and the fact that computers are rarely used in teaching practices, as already mentioned in the Introduction (ACE, 2002; Costa, 2004; Cuban, 2001; OCDE, 2006; Paiva, 2002; Salomon, 2002), we will now go on to present the assumptions and the structure of a training model especially designed to encourage the integration of technologies in the students' daily work (f@r Model: training – action – reflection).

The proposal is to help teachers construct a vision of the potential of computers for learning, leading them to apply some "powerful ideas" with their students and stimulating reflection on this process. In this model, action and reflection are crucial strategies in the preparation of teachers for the regular and effective use of ICT for curriculum and learning.

Some facts that justify the proposal

Even when teachers are motivated to use technologies, the results of some studies lead us to conclude that their use is quite rare in school life on a day-to-day basis. This is clearly demonstrated in the results of the comparative study developed in the framework of the IPETCCO project³¹ in which we participated (Costa & Peralta, 2006):

³¹ *IPETCCO Project - Investigation in Primary Education Teachers Confidence and Competence* (<http://hermes.iacm.forth.gr/ipetcco/default.html> | <http://www.fpce.ul.pt/pessoal/ulfpcosti/ipetcco>)

- Little knowledge on how to use ICT for learning;
- Use of ICT without a clear link to solid learning principles;
- Knowledge on how to use computers but not in class, with the students.
- ICT has not altered attitudes, roles or ways of teaching to any great extent.

Also, and even more of a concern, ICT is used as an ambitionless use from an actual learning perspective. Technologies, when used, continue to serve mainly as a support for the teacher's work or for daily duties by the students, without any other additional demand in cognitive terms. As several authors point out, the most common situation is precisely the one which does not profit at all from the "potential" the computer and the new information and communication technologies contain in terms of stimulation and learning support (Cuban, 2001; Jonassen, 2002; OCDE, 2005b; Papert, 1997, 2000; Salomon, 2002).

The reasons indicated by the teachers in the same study also deserve our attention, since they reinforce some of the dimensions already identified by other authors, which is the case of the importance of attitudes ("lack of confidence...", a "negative emotional connotation on the relation to technology"..., "not feeling competent enough to cope with the changes ICT compels them to..."), but also other aspects directly related to training ("the inappropriate or insufficient training", "lack of support...") or with the specific context in which they are working ("organisational constraints at school", "too little time and too much to do..." (Costa & Peralta, 2006).

Finally, it is about separating, at least from a practical perspective, the affective factors (Affective Dimension) from the factors of a more cognitive nature (Cognitive Dimension), as presented in the following table (Table 1), so as to facilitate the work to be done with teachers in training. The idea, as already mentioned, is that training does not only take into consideration the factors of a cognitive nature, but rather it gives particular attention to the affective dimension as a condition for teachers to overcome psychological barriers regarding technologies.

Table 1: Important factors in the training process

<p>AFFECTIVE DIMENSION <i>Factors related, in general, with teachers' perception of ICT, and, in particular, with its utility and effectiveness for learning</i></p>	<p>COGNITIVE DIMENSION <i>Factors related with the effective mastering of a set of knowledge and skills considered necessary to the pedagogical use and exploitation of ICT</i></p>
<ul style="list-style-type: none"> - General attitude to ICT - Expectations on its use in educational contexts - Value attributed to the ICT while facilitators of learning - Satisfaction with the results - Feeling well prepared 	<ul style="list-style-type: none"> - Knowledge of different technological solutions (programs, applications...) - Technical mastery of these technological solutions - Knowledge of modes of scanning of the ICT for educative purposes - Experience of use of ICT in educative settings - Relation to professional development - Capacity to work collaboratively and to take the initiative - Awareness of the learning theory, the teaching philosophy and the didactical model underlying the pedagogical use of ICT

Structure and Assumptions

For the structure of a training proposal that could address these issues, we used some theoretical assumptions in which we believed as our starting point and the conclusions of previous studies in which we had participated, such as those developed within the PEDACTION Project³², in which it is suggested that teacher training should:

- a) Focus primarily on the teachers' change of attitude towards information and communication technologies and their potential use in an educational context;
- b) Concentrate on the knowledge of technology but especially the way of acquiring this knowledge;
- c) Develop the ability to use the new tools for learning;
- d) Allow direct familiarization with the products and respective potentialities of pedagogical exploration.

³² PEDACTION Project - Educational Multimedia In Compulsory School: From Pedagogical Assessment To Product Assessment (EMTF, 1998-2000) (<http://www.vordingsem.dk/pedaction/> | <http://www.fpce.ul.pt/projectos/pedaction/>)

a) *Focus on the teachers' change of attitude towards ICT for use in an educational context*

As already mentioned, we are convinced that “teacher training should focus primarily on the teachers’ change of attitude towards information and communication technologies and their potential use in an educational context” (Costa, 2005). Indeed, this seems to be one of the most important factors in the personal /professional decision for the use, or omission, of the technologies available to the teacher today (Brett *et al.*, 1997; Pinto, 1998; Williams *et al.*, 1999; Willis & Mehlinger, 1996). On this level, we feel that the training course should be structured on a strategy, which, among others, will allow for the change in teachers’ attitude towards the “pedagogical potential” of the new available resources. This will be accomplished through the growing awareness of the importance, usefulness and benefits that these materials, used as learning tools, may bring to the teaching and learning process.

b) *Focus on the way of acquiring knowledge on ICT*

By accepting an isomorphism (Mialaret, 1977) between the technological training of the students, which is, to a large extent, mainly the responsibility of the teachers (even when absent), and the way teachers should be trained (OCDE, 2005a), we are of the opinion that teacher-training should be structured not only around the acquisition of knowledge regarding available technologies, but also around the way of acquiring such knowledge. The teachers’ opportunities to explore, preferably with the students, in specific situations with the possibility of pedagogical support as the new ideas are applied to practice, are particularly relevant (Showers, Joyce e Bennett, 1992)

c) *Focus on the use of tools for profound and meaningful learning*

In addition to the professional competences, which are normally the object of teacher training, and knowledge of the available technologies, it seems pertinent to give special attention to the development of the ability to manipulate the new technologies as learning tools. This should be achieved along with reflection on the new roles of the teacher and the aim of trying to help the students to be their own curriculum constructors, and to reflect on what they are learning, to develop strategies for autonomous learning, in other words to learn from technologies (Jonassen, 2000, 2002; UNESCO, 2002).

d) *Focus on the direct familiarisation with the products and reflection on their pedagogical potential*

In order to make familiarisation with the products and respective potentialities of the pedagogical exploration possible, the training course had to directly involve the teachers in the analysis of the available software. Instead of emphasising an evaluation that focused on the production of quantitative analyses, of a summative nature and generally reduced to very reductive classification systems, we wish to stress the importance of the involvement of the teachers, themselves, in the process of analysis and formulation of qualitative and descriptive evaluations. Thus, this process became the privileged training strategy for a larger and pedagogically more appropriate use of software in curricular activities. Therefore, we suggest that, among other measures, the analysis of each product should be

based on reflection, with emphasis on predominantly pedagogical criteria, such as, for example, pertinence, relevance and adequacy to the curricular aims and to the learning process.

As far as the theoretical assumptions are concerned, we used three central aspects as our reference. We will not go into great detail here, nevertheless, they are at the root of our work in terms of teacher-training and they also seem to correspond to the points we wish to present:

- a) Constructivism as the learning theory we pedagogically and ideologically opt for;
- b) A teaching theory which emphasizes teacher professionalism and autonomy, appointing the teacher as curriculum designer (open curricular designs with a humanist focus, learner-centred and process-oriented; teacher education based on observation, action and reflection, etc.);
- c) A theory of "technology based innovation" (legitimacy in view of the formal and the enacted curriculum; confidence level; power of decision; ICT competency in classroom practice; teacher's and learner's autonomy; isomorphism in the training of teachers to work with ICT in the classroom; etc.).

Strategic aims of the training course

In short, and since what teachers think about teaching and learning and, in this case, about technologies for learning, determine, in general, their performance and the type of activities they promote in the classroom, the following aims for the training course were established:

1. To provide a global view of the potentialities of computer use in teaching and learning so that teachers may understand the importance certain tools can have, namely as far as student communication and expression are concerned, giving them the opportunity to develop the competences anticipated in the curriculum.
2. To provide the knowledge of some applications and pedagogical (and technical) support that will stimulate and strengthen confidence and self-esteem for an effective use of technologies and their integration in current teacher practices.
3. To help teachers understand how work with ICT can specifically support the teaching and learning process, thus, contributing to the response to individual student needs, stimulating cooperative work and becoming an innovative curricular factor.
4. To contribute to the selection and organisation of a set of resources and support material for the development of teachers' and students' work (sharing of resources).
5. To contribute to the creation of a collaborative attitude between teachers, through the communication and sharing of practical resources, as well as a collective reflection on the use of ICT in the teaching and learning process.

Some of the f@r Model application results

In this section we will present the f@r Model which took place between September and December 2005, resulting from a need, long recognised by the Portuguese Ministry of Education, to train teachers to use ICT at primary school.

In its early stages, it included a dozen teachers (teacher-trainers) who were meant to receive preparation to go on to train another 150 teachers spread around the country. As far as the actual training was concerned, its aim was to get teachers to use ICT regularly and in a structured manner with their students. In addition, some might even go on to play an active role in the mentoring and preparation of other teachers both within the context of their schools or otherwise. Acceptance of teachers on the training course was, to a certain extent, conditioned by their previous mastery of some technologies, from a technical perspective. This was based on the principle that what these candidates were seeking was, as we had intended, to acquire specific ICT usage competences in the teaching-learning context.

In order to describe this case, we will first present the general training plan, followed by the presentation of the Training Launch Seminar. We will then examine some of the central aspects of on-site development and training, concluding with some indicators of the evaluation of the process.

General Training

The organisation of the training course was based on a structure made up of a Supervision team and a group of Trainers. The coordination team, responsible for the general conception of the training programme, in accordance with the main strands of the f@r Model and for the training of trainers, accompanied and also evaluated the application of the model on-site. The 12 teacher-trainers were promoters of 9 training centres created in different regions of the country. The teachers being trained developed activities involving the use of technologies with their students and interaction and collaboration with their partners.

The training programme was outlined under the form of *blended learning* which includes synchronous and asynchronous sessions with face to face and distance-learning sessions. The face to face sessions took place at the beginning of the training course with a view to presenting the overall aims to the teachers, preparing them for the planning of activities with their students and for the decision on the outputs resulting from their course participation. During the process there were support sessions (face to face) to accompany fieldwork and sessions at the end to discuss and share results. The teachers' actual work (autonomous work sessions) was spread over the 8 week course period and concentrated on the performance of ICT activities with their students and activities related to individual or group preparation and reflection. The distance-learning sessions in real time (synchronous) with peers and /or the respective trainers, took place twice a week and served to provide specific support for the sharing and reflection of each group's work.

As may be observed in Table 2, the training plan was organised in three phases, each corresponding to three central stages of the training process with a view to elaborating specific products. As far as the products the teachers had to develop were concerned, the underlying idea of the training plan was to get teachers to specify three central aspects of their work with their students using ICT, namely a) what they intended to do (Plan); b) description of activities carried out (Report) and c) examination of the process and the results obtained (Reflection).

In Phase I, each trainer tried to adjust the objectives and the type of work development according to the initial diagnosis, namely in terms of the expectations and competences revealed by the group of teachers in general and of the respective curricula class plans or, in other words, what each teacher had planned to do with his/her students at the beginning of the academic year. The follow-up stage involved elaborating individual work plans that functioned as training contracts in which each teacher, after a collective reflection, pointed out the respective learning aims, strategies for developing with students and the products for presentation throughout and at the end of the training period.

In Phase II, based on the effective development and accomplishment of work plans in each class, each teacher promoted the activities which achieved the defined strategy and allowed the elaboration of the outputs that were defined within each training centre.

In Phase III, the teachers were able to present some of the students' more relevant work, sharing results and reflecting collectively on their experiences. Above all, it was a moment of global appreciation of the training process and, naturally, the model being used.

Table 2: Phases, aims and products of the training course

MOMENTS	AIMS	PRODUCTS
<i>Phase I</i> START	Initial Diagnosis (competences of the teacher, competences of the student, learning aims defined in the curricular class plan, available resources, etc.) Selection of strategies Definition of outputs	Individual work plan of each teacher with his/her students
<i>Phase II</i> DEVELOPMENT	Completion of the activities with the students (research, communication and expression activities)	Report of activities developed by each teacher in his/her class
<i>Phase III</i> ANALYSIS	Evaluation of developed activity Display of products	Reflection on the training process Examples of accomplished products

It should be mentioned that this entire process was supported by an online platform, especially structured for the effect, and which functioned as the link between teachers (from the same or different “training centers”), between teachers and trainers and between the latter and the Supervision team. In each of the spaces constructed there, different types of training support resources were shared and themes regarding ICT use in an educational context were also discussed.

The Training of Trainers Seminar

The training process began with the necessary preparation of a team of trainers for the implementation of the f@r Model. This seminar involved the participation of 12 trainers, recruited as a result of their previous experience which was quite extensive in the field of ICT usage in an educational context³³.

The aim was that this seminar should act as the basis of reflection for the pilot process which was in its initial stages, in terms of the adequacy and feasibility of the proposed teacher-training model. On this level, and while trying to approach what these training-teachers were expected to do with the teachers they would be working with, practical activities and more theoretical reflection sessions on pertinent themes were delivered in alternating sessions. It should be stressed that the seminar was the first passage through isomorphism which marked the whole process, since it acted as a “dress rehearsal” for what would be the first session with the presence of the trainers and the teachers in the respective training centers. The evaluation of the seminar by the participants³⁴ was a very positive one and, in general terms, had followed the proposed teacher-training model. Nevertheless, they did acknowledge the possibility of encountering some difficulties. In short, the teachers who participated in the seminar:

- Highlighted the change of the training model’s underlying paradigm, illustrated by one of the participants who stated, in the presence of the teachers that the attitude would be: *“I’m not going to teach you anything; we’re going to learn”*;
 - They acknowledged the importance of the teacher’s work in pedagogical practices and of recording reflections based on this work;
 - They pointed out the usefulness of a *“support team on a national level”* which would make working through a network and community possible;
 - They praised the proposed training model: *“I like the proposal”*; *“it’s a great challenge and opportunity...”*

One of the teacher-trainers summed up very well the general feeling towards the seminar: *“This is not my plan. It is an infinitely better plan than I could ever make. The question is how I fit into this plan. (...) The plan solves the question of fascination for technology and I’m not going to forget what is crucial in teacher-training”*.

³³ *In our view, given the importance of the training of trainers in this specific area, this was a fundamental requirement in order to test the proposed model of teacher training.*

³⁴ *Data collected from questionnaires and evaluation interviews.*

It is also worth adding that a questionnaire was given to all teachers set to participate in the training course. It was possible to conclude that, even with signs of some difficulties among a more restricted group of professionals, the group “believed” in the potential of ICT to learn and presented a highly positive attitude towards computers and their contribution to learning.

The development of the training course

The development of the training course will be described here according to the above-mentioned three phases: start, development and analysis.

Phase I – Start

The first phase of the work accomplished the proposed aims. The work methodology used in the seminar, if not inspiring, had an obvious impact on the trainers’ preparation and development of the first sessions with the teachers. The results showed some diversity in methodologies, but a great consistency in the type of concerns. Indeed, all the aspects defined in the seminar were contemplated.

The diagnoses were conducted through questionnaires or training games that implied interaction between the participants, methodologies which simultaneously functioned as “ice-breakers” and the collection of relevant information on the conceptions and practices of teachers in training.

In addition to the diagnosis, at this stage the teachers’ production of a plan of action was crucial. The work plan was expected to contain the intervention strategies that each teacher or group of teachers would develop with the students; to clearly identify the outputs expected by the teacher and students; finally, to draw up a commitment document (contract) between the trainers and teachers and the teachers and students, resulting from the collective discussion.

As teachers frequently show concern in relation to their mastery of technologies (learning/teaching technologies) and indicate this as one of the reasons for not using ICT in their practices, we set out to analyse the teachers’ plans to see if this was also the situation here. Out of the 115 plans analysed, it is interesting to observe that from the beginning concerns regarding the “technological issues” began to fade and give way to others, more directly related to their specific use in teaching and learning, as can be seen in Table 3.

Table 3: “Concerns” emerging from the teachers’ plans

Dimension		%
Curricular	<i>The plan is directly associated with curricular issues and the teachers are concerned with developing effective work with the students</i>	52,9%
Pedagogical	<i>The plan contributes to an improvement in pedagogical or relational working conditions, such</i>	13,1%

	<i>as, for example, increasing the motivation of students or ability to work in a team</i>	
Organizational	<i>The plan seeks to respond to problems related to the functioning of the school and /or the group or it has an association with other projects or school activities</i>	12,4%
Technological	<i>The plan admits that the absence of ICT in the daily lives of students and schools is a problem. It chooses the school as the project's main entry point</i>	18,3%
Unidentified		3,3%
Total		100,0%

This analysis of the teachers' work plans has highlighted a considerable concern for relating the training course with the students' curricular work. In this way, it responds positively to the challenge presented by the support and supervising team and by the trainers. To exemplify, a variety of projects were conceived, on the environment (with themes such as recycling, human beings, the human body, etc.), on the Portuguese language (with concerns regarding written and oral production, using children's stories, traditional tales, etc.), on mathematics (development of exercises, optical illusions, etc.), etc.

Another interesting aspect is based on the fact that the aim of many of the plans was to try to broaden the curricular purpose of the work, involving other dimensions, which is a strong indicator, as far as the discussion of the *rationale* behind the use of ICT in education is concerned, of its important role in training. As regards the pedagogical dimension, it is important to mention that the references included in the plans focused explicitly on the motivation of the students or the improvement of teacher-student relations. Concern regarding motivation was more noticeable after the development of pedagogical and curricular activities. In the case of relation improvement, the most prominent plans concentrated on the creation of a weblog and themes linked to citizenship.

The use of ICT, especially as a communication means with other schools, was registered in the organizational dimension. Registering the plans of "isolated schools" was particularly interesting. In these cases, there was an attempt to diversify pedagogical practices but, more than anything else, to make a clean break with school isolation through the creation of an inter-school Newspaper.

Phase II – Development

The plans defined by teachers were, in most cases, put into practice with the students in the development phase, and adaptations were made whenever necessary. Although a detailed analysis of the training centres' interactions and management and organization processes was not yet available, all the participants acknowledged the importance and practical use of having a communication platform to support them in the resolution of issues and problems resulting from the prepared activities.

Phase III – Analysis

According to the trainers, it is fair to say that, overall, this training experience was considered to be quite positive: “*extremely rewarding*”; “*an excellent moment of professional promotion*”. However, the effort each participant had to make was also pointed out (“*meaningful experience but exhausting*”; “*rewarding experience, but very difficult*”), both in terms of availability (“*very demanding in terms of time*”) and in terms of appropriation of some of the elements that are part of the proposed Training Model.

The “appropriation” difficulties of the Model are particularly obvious in some of the trainers when they refer to themselves as having had (“*difficulty in internalising the spirit and dynamics of the proposed model*”) and to its transfer to teachers in training, such as the case of the difficulty expressed in “*imposing ICT as a resource and not an aim*” which is, as we already know, one of the differentiating elements of this teacher-training proposal.

Other references expressed by some of the trainers are related to the “*difficulties in the management of the platform*” of communication used, especially at the initial stage and, naturally, owing to a lack of knowledge regarding their training potential. In spite of the fact that the platform was the object of work in the Seminar on the launch of the training course, the amount of time was insufficient for the effective mastery of its potential.

The existence of a supervision team was considered to be quite positive from the trainers’ perspective: “*As mentor and instigator of this process, the supervision and support team was always “present” and it was a real scaffolding team for all of us (!)*.” The sustainability of a new training model also depends on this sentiment of support among the trainers. Nevertheless, some teachers and trainers displayed a certain sense of disappointment in their reaction to the Model, in terms of the collaborative work developed in the training centres. This may, in part, be explained by the fact that the model implies a complete break with the traditional isolation of teachers’ work. Even so, the general feeling in the training centres was described by the trainers: “*the group was always motivated and enthusiastically embraced the proposed challenges*”; “*there was a great interest in working with new programmes and applying these tools in a classroom context*”.

As far as the benefits attributed to the Model are concerned, some trainers referred to the fact that the students “*responded positively to the activities using the computer and participated actively in the project. They began to see the computer in a new light*”.

In the teachers’ case, the benefits are situated, primarily, in three main areas of professional development:

- Acquisitions of methodologies on working with computers;
- Changes in the ways of viewing technologies as a benefit to learning;
- Opportunities to share and collaborate with other teachers.

As regards the difficulties pointed out, they are based on the insufficient time for effective work with the students, but mainly on technological problems and school equipment. Some secondary references focused on the training proposal, in terms of the balance between the work of the teacher and the need to accomplish certain plan requirements (to produce registers, elaborate the plan versus a lack of more precise scripts).

Overall evaluation

To conclude the presentation of the application of the f@r Model, we will comment on the feedback provided by the teachers and trainers who were involved in the process, with reference to the qualitative analysis of their individual evaluation. This analysis was organized in two points: references regarding the assumptions of the Training Model and positive appreciations of the Model.

The following dimensions were highlighted in relation to the assumptions of the training model and the appropriation of its theoretical assumptions:

- The quality of the model's assumptions, using arguments such as , collaborative environment, investment in reflection or the "exchange of knowledge and experiences": *"Through its methodology supported by the network tools, this model allows teachers to make a reflected investment, in a sustainable collaborative setting, in the quality of practices and exchange of knowledge and experiences, since they were so used to the other training model"*;
- Teachers' acceptance of this type of work: *"The underlying principles to the model's philosophy were perfectly accepted by everyone and even the most "technically-minded" recognised that the time had come to make things work for the students."*
- The acknowledgement of a change of paradigm in training: *"we can not carry on "allowing" students to use the computer. It is time to use them for important things. In order for this to happen, we need to move away from the paradigm of teacher-training by which teachers take training courses to learn how to work with the computer..."*
- The adequacy of the model to the reality of ICT teacher training: *"As a model based on the educational reality (school, curriculum, learning) of each teacher (and respective students) which will continue to be treated in a dialectical process (...) its application to the continuous training of teachers in ICT seems to be quite promising."*
- As far as the positive appreciations of the f@r Model are concerned, we stress the following references produced by the team of trainers and teachers:
- Positive appreciation on the part of teachers: *"At the end of the training period, all participants generally considered the training model to have brought them advantages (in comparison with others they had been involved in and which had been based on a mixed format). This was due to their having had the opportunity to reconsider the practices, to reformulate, reflect individually and in group, as well as having created*

new plans and activities using ICT, shared ideas, experiences, material and difficulties with other colleagues and even established projects and partnerships with other schools.”

- Overall positive appreciation of the Model: *“the training model brings considerable advantages to teacher-training since this modality allows us to apply what we are constructing in theory to our teaching practice, while simultaneously stimulating reflection on the practical work. It is this programming – action – evaluation cycle that ensures that what is covered in teacher training is not decontextualised from the reality of the teacher’s practice.”*
- The positive references to the “practical component” and to the “products”: *“Throughout the process “products” emerged which, since they contained a strong practical component, provided our students with periods of acquisition, integration and consolidation of ICT knowledge without taking away their inter and intra-disciplines”.*
- References to the adequacy of the teaching strategy which “creates the need and desire to learn” and *“focuses ICT learning on teaching/learning contexts”.*

To sum up, it may be said that the process was, on the whole, a successful one as the words of a group of trainers suggest: *“Since the contexts and training methodologies play a fundamental role in this process, we believe that the proposed work model for this training course (training – action - reflection) may contribute significantly to this integration. In this framework, all the work developed in this course was geared towards the contextualized and reflected exploration of ICT with the curriculum as a fundamental reference and the central aim being its use by students.”*

Final synthesis

Despite high expectations regarding the use of ICT in educational contexts, the degree of its effective penetration in curricular activities still continues to be very limited.

If at an initial stage this can depend on favourable teacher attitudes towards the use of information and communication technologies in the learning process, the main question now seems to be knowing how to do this in an adequate way and in close connection with the educational practices of those teachers.

We have been able to present a model of teacher training and professional development that leads to the conception and implementation of specific in-service teacher training.

We have presented a working model that we hope could respond to the double challenge of helping teachers to construct a personal vision of the potential use of technology in the learning process (why use technology? for what purposes? how?) and to contribute in an effective way to the change in teachers' attitudes towards this technology. Contributing thus also to the reinforcement of self esteem and confidence in its use in learning contexts.

Not being an innovative teacher-training proposal in itself, it is a contrasting methodology compared with the traditional models of teacher preparation in this area. This we inferred through the evaluations made by trainees and teacher trainers participating in the case we presented in the second part of this text.

A very positive evaluation that makes us believe that this proposal could, in fact, be a good alternative for the preparation of teachers for working with ICT and, eventually, for a change in educational context.

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Designing for Effective Practice

A Method for Professional Development

Simon Walker and Malcolm Ryan

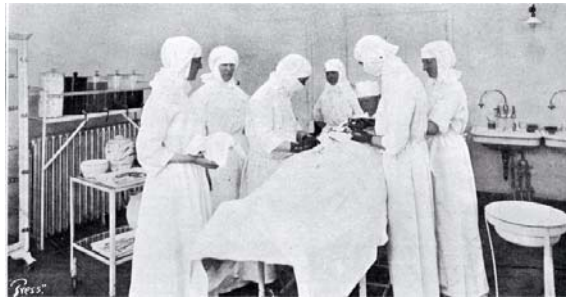
Abstract

In this paper, the authors identify a renewed interest in the potential of pedagogical exploration leading to more effective ways of teaching and learning that incorporate the relatively new dimension of e-learning. They report on a simple professional development method that supports discussion on planning for activity based learning leading to effective practise. They suggest ways in which teachers' identities can be developed through discussion, but acknowledge that learners may already be using a range of technologies that are unfamiliar to teachers.

Introduction

An anecdote related by the keynote speaker, Chris Yapp of Microsoft, at the e-Learning@Greenwich conference in 2004, drew a comparison between two professionals - a surgeon and a teacher. He asked the audience to consider the experience of his grandmother 100 years ago as she was born into the world aided by a surgeon and as a young child commenced her education aided by the teacher. He then asked delegates to consider a scenario whereby the surgeon and the teacher are transported by time machine to the modern world of the early 21st Century. He suggested that the surgeon would not recognise his working environment or tools of the trade and, given the huge transformation of practice, would not know how to operate or carry out even the simplest of tasks. The

teacher, on the other hand, would fit in without a problem, exchanging chalk for marker pen and blackboard for whiteboard, and would continue to ply his/her professional trade despite the passing of a century.



Operating theatre circa 1890



Operating theatre circa 2003

This illustration of practices, technologies and tools employed by another profession evolving over time might help us to understand the change required by our own. Indeed, some writers argue that the change is so significant that it constitutes a paradigm shift in teaching and learning (Reiguluth, 1999; Herrington & Standen, 1999). The move towards student-centred learning and away from a teacher-centred approach is well documented,

but what is relatively new is the technological dimension where learning technologies are integrated within the learning environment, generally referred to as a ‘blended learning’ environment.



Classroom circa 1880

Ostensibly, teachers’ approaches to teaching haven’t changed, yet the environment within which formal and informal education operates has been undergoing dramatic change; society and learners expect different things from education. It has become a lifelong, instrumental and liberalising enterprise, designed to provide flexibility and

personalisation to maintain economic competitiveness within a humanising and democratic culture. The 21st Century is ‘a learning society’ in which knowing “how to” will be more important than knowing “what”.



Classroom circa 2006

To what extent then, are teachers trained mainly in the traditions of the 19th and 20th Century, equipped to meet the educational challenges brought about by globalisation and interconnectedness, the renewal of knowledge, an average of 10.2 jobs per person³⁵ (NLSY, 1979), higher learner expectations and evolving technology-rich environments?

In this paper, the authors discuss a pedagogical practice model for teachers who are working in blended³⁶ learning environments and propose a method that might be used in professional development activities to simulate thinking about active learning.

Defining Effective Practice

Against the backdrop of the information society and increasing awareness of the changing role and skillset of the teacher, is the re-emergent use by the education community of the term 'pedagogy' which had, in the UK, been "*formally restricted to erudite usage*" (JISC 2004:10). In Ancient Greek the literal meaning of *pedagogy* is 'a slave who took a boy to school', but currently it is a generally accepted term indicating the art and science of teaching and learning. The respective 'new' roles of students and teachers in lifelong learning has ignited a re-appraisal of the complex and creative processes which learners and teachers engage in. Effective Practise is judged according to levels of increased participation of learners, their independence, their motivation and the degree to which their knowledge, attitudes and skills are developed. These are dependent on the following factors:

- the ability to differentiate between different learners, levels, and learning styles and preferences
- a suitable instructional strategy that takes context and learner into account
- access to appropriate resources
- the opportunity to personalise learning

³⁵ Data from a "longitudinal" survey that tracks the same respondents over their entire working lives would be required to determine the number of jobs in a lifetime. So far, no longitudinal survey has tracked respondents for that length of time, however the National Longitudinal Survey of Youth 1979 in the USA, has tracked younger baby boomers over a considerable period of their lives between the ages of 18 to 38.

³⁶ The term *blended learning* denotes the mix of learning within physical and virtual environments

- the adoption of positive (new) roles and behaviours that permit mediation of content.

In 2005, the Department for Education and Science (DFES) published the long awaited unified e-learning strategy that recognised the impact that ICT could exert on learning. It considered that the appropriate exploitation of technology has the potential to enhance and transform learning and teaching across the sectors, for formal and informal learners, for learners who were engaged and disaffected and would be “the key to personalised learning” (Kelly, DFES, 2005: 3).

A range of models and approaches informing the use of e-learning to help teachers make decisions about suitable uses of technological tools and media continue to emerge, but the judgements made about effective learning in general can be equally applied to judgements made about effective practice with e-learning. Laurillard (1993) identified the concept that information & communication technologies should be 'fit for purpose' in order to facilitate new and innovative ways of learning. Given the array of environments, tools and approaches available within technology-rich environments, learners and teachers can now make more choices and selections about 'what', 'when' 'how' and indeed 'how much' they learn (Masterman, 2006).

Towards A Model Of Effective Practice With E-Learning

Biggs (1999) argues that good learning design is a critical ingredient for developing and supporting deep learning. It involves a constructive alignment of the intended learning outcomes, the design of learning activities that enable students to achieve the learning outcomes, and the implementation assessment activities that adequately measure the learning outcomes. The aim is simple – to make student learning possible. In her initial review of e-learning models, Beetham (2004 in JISC 2005:15) proposed a model of learning activity design, based on factors that influence the practitioner during the learning design process. These factors involve the learners, the learning environment, and the intended outcomes. As previously suggested (Walker and Ryan, 2005) this model is a useful framework to assist teachers in making informed choices about the design of learning events and can also act as an aid in analysing activities to ascertain their 'fitness for purpose' (Laurillard, 2002).

One method that might be used to simulate learning activity design within an e-learning context is the *Designing for Effective Practice* game that the authors have used in local and European professional development contexts. The game and related documents can be accessed directly from : <http://tinyurl.com/n9gpw> or by following the link to 'Research and Development' from <http://www.gre.ac.uk/celtt>. These resources can be adapted for particular sectors and subjects or, given the potential commonality of practices employed in e-learning, played across sectors and domains. The game uses a set of bespoke playing cards created in a spreadsheet. These are accompanied by further resources:

- a set of scenarios,
- a list of learning styles
- a template for recording the design

Its purpose is to enable participants to think as creatively as possible about their lesson planning within the constraints of a real-life context that allows them access to only limited equipment and resources.

Participants are organised into small collaborative planning groups of about 3-5 people. To each group the facilitator deals a set of 3 or 4 cards from the pack which contains a random selection of *methods* and *resources*. The objective is for each course team to plan one teaching session of approximately 60 - 90 minutes that uses a range of methods to suit different learning styles and includes some or all of the resources cards. The group engages in an activity whereby they choose a different teaching scenario from a list and then discuss ideas for a learning activity that uses the supplied methods and resources. They may negotiate and swap the *resources* cards with each other if they so wish but the *methods* cards should not be exchanged. The players then complete the *Designing for Effective Practice* template and share it with the whole group. In their small groups they then exchange templates. Each group is asked to critique another group's ideas and comment on the extent to which it illustrates effective practice. The session closes with discussion about the activity focusing on such issues as:

- the relevance of learning styles in lesson planning
- implications of using e-learning in the classroom
- the relevance of the 'active learning model'.

The authors have found that all teams manage to employ creative approaches to planning interesting and stimulating lessons despite not having access to every method and resource that they may have liked, and the game provides a good opportunity for participants to reflect on their own teaching practices and the potential use of technologies. Two points that should emerge are that (1) e-learning can still be practiced even with limited access to technology and facilities and (2) learning may be occurring informally by students who may be using a range of technologies unknown to the teacher (see appendix).

Professional Development

The accepted approach applied to Teacher Education in the UK tends to favour a model of small group work allied to professional work-placement. Learning through discussion based around personal experience and reflective practice within the confines of a 'safe' environment appears to be common practice. The convergence of conceptual frameworks such as Situated Learning (Brown et al, 1989) and Communities of Practice (Wenger, 1998) enables the individual to construct their *identity* as a teacher, shaped by the relationships and protocols that exist between students, peers, mentors and tutors. Introducing appropriate learning and teaching technologies, frameworks and models that aid with developing effective practice is necessary in 21st Century teacher education programmes

where the outcome needs to be a practitioner with a different set and blend of skills, roles, and behaviours to those of the last century. On-going professional development is also necessary for existing teachers to help them acquire the new skills and attitudes that will transform their practices, so long as there is recognition that when challenging accepted practices, it is essential to explore and share deeply held conceptions and beliefs and manage feelings associated with change. Vital to the success of the process of transformation is the fostering of relationships that support and stimulate the growth of new identities. Modelling good practice ultimately convinces learners of the benefits of incorporating e-learning into their practice.

The Digital Divide

There are indications that a new generation of learners use technology to learn in ways that are relatively unfamiliar to adults who have encountered traditional schooling before the ubiquity of ICT. The relationship between the teacher and learner naturally involves a generation gap and, during this current period of digital transformation, the gap appears wider when viewed through the looking glass of technology. Mark Prensky (2001) refers to those born into the Information Society and who are familiar with interactive technologies as *digital natives* - people used to hyperlinked information, instant gratification, gaming and the need for rapid reflexes. Those brought up with analogue and broadcast media he refers to as “digital immigrants”, typically people who are used to learning from books and communicating by phone. Prensky suggests that “*our students have changed radically. Today’s students are no longer the people our educational system was designed to teach*”, but many of them are, however, in school at some level being taught by digital immigrants. This suggests a professional dilemma; even if teachers use technologies often provided by their organisation in the form of Virtual Learning Environments (VLE’s), they may well still be out of step with the tools that their learners are using. The use of a VLE is not in itself transforming or enhancing as it simply replicates electronically what educational institutions have traditionally been doing to students i.e delivering content. They are not a ‘disruptive innovation’ and are easily adopted by organisations to support existing classroom and course paradigms (Liber, 2006). Modern students need to use multiple systems that are assembled and controlled by them.

Conclusion

Learning environments are undergoing radical transformations which, as new schools for the future are constructed across Europe, will look very different to the ones that many teachers will have experienced themselves as learners. To remain in partial step with our learners, teachers need not only to become pedagogically competent, but also innovative in their use of teaching and learning methods. This will include designing for learning with technology. It is therefore incumbent on the profession to explore and experiment with a range of institutionally provided tools as well as some of those that our learners may be using to collaborate and learn from and with one another. This entails a transformation of our own identities and roles. In developing a collaborative planning simulation using a game, the authors propose a novel method by which professional development in the use and integration of e-learning into normal practice may be achieved.

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Appendix
The URLs for these may be located via a Google search

Amazon	Flickr	Myspace	TaDaList
AppleMail	Flock	NetNewsWire	Technorati
BaseCamp	Furl	NetVibes	Thunderbird
Blogger	Google	Outlook	WiredReach
Chandler	Google scholar	Quicktopic	Wordpress
Colloquia	Googletalk	Seedwiki	Writely
del.icio.us	Groove	Shrook	Yahoo mail
Drupal	Hotmail	Skype	XJournal
ELGG	www.writeboard.com	Smartgroups	
Eudora	iCal	Sunbird	
eyeOS	iChat	SuprGlu	
Festoon	MSNMessenger	SynchroEdit	

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Learning Counselling Process Supported by a Computer Programme

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The need for creating effective learning methods in the schools has long been underlined. The recognised need is however followed by a delay before the changes are put into practice, and the fact that the official educational politics treats the problem of learning methods as a central question to be solved in Europe and Hungary in the same way. Ildikó Mihály (2002) in her paper summarises the tasks set by the ministers of education of countries wishing to join the EU on conferences between 1998 and 2002. These tasks concerned the necessity for improving the quality of education. She quotes that on the conference held in Uppsala the skills of the pupils, necessary for society, were classified into two dimensions by the ministers. The personal dimension included the basic skills (reading, counting) the basic knowledge in mathematical and technical subjects, entrepreneurial ability, the knowledge and use of information and communication methods. The cultural dimension included skills relating to methods of effective learning, social skills, knowledge of foreign languages and general cultural elements. The national educational politics relying on the results of investigations carried out by the PISA formulates the main tasks in the following: the children are to get usable knowledge more accessibly. At the same time the conditions for equal chances should be improved.

Accordingly the teaching of learning methods and the preparation of students to be able to learn independently became the central problem of the school of the 21st century. Our national educational politics also considers the preparation of students for independent learning an important task to be developed in the future.

In the Eszterházy Károly College since 1999 a research work is taking place in the sphere of learning improvement. In the framework of this research we collected the scientific works relating to the topic and worked out a training programme in the improvement of learning, at the same time we tested the efficiency of this training on college students, and on the basis of these results we started to work out a computer programme with the aim of learning improvement.

In our following publication we summarize the research results and give information about the use of the computer programme.

Theoretical background of development effective and individual independent learning process

From the cognitive point of view the key of learning lies in the capacity of a person to be able to represent some mental relations of the world and carry out operations in this field and not in reality. (Atkinson 1994.)

Psychologists usually use the word knowledge only if information is represented mentally in a concrete form and it has some kind of structure. (Eysenck- Keane, 1997).

This complex organized knowledge (cognitive-scheme) gives a framework for the acceptance of new information, the new information is adapted to the scheme or even modified by it (see: Piaget-1997).

Whenever we acquire new information it is always adjusted into the framework of former system of knowledge which enables us to reorganise our knowledge.

Constructivism contrary to the traditional theory of cognition thinks “knowledge a completed system in every moment or in other words it supposes a cognitive system which is enriched not by contacts with the outside world and inner elaboration but by the transformation of its own structure.”(Nahalka, 2002.41.p)

According to this constructivist viewpoint new knowledge is not a cumulative development as compared to the previous knowledge but it is a restructuring of the whole knowledge.

Cognitive psychology regards not the quantity but the quality of the mental achievement important at the same time. This quality of knowledge is important only if it is relevant and usable. Therefore it is not of vital importance in what way the knowledge is represented, what kind of connection exists between the elements and how much is meaningful (Csapó, 1998). Knowledge is effective only if its eligibility and use is possible in many ways. Erikson and Smith (1991, Csapó, 1998) use the expression competence to indicate a knowledge which is usable and intelligent. The development of cognitive competence has become central in the pedagogical investigations (Csapó, 2001) and the newest school surveys are based on a comprehensive competence test (Schütter- Vári, 2004).

If we want to help the pupils to acquire intelligent, meaningful and useable knowledge we have to take into consideration their previous experiences, and if we strive for providing an intelligent knowledge and if the new knowledge is acquired in many different situations (Csapó 1998).

Special attention should be paid to the meta-cognitive knowledge, which aims at the effectiveness of learning which is characterized as a person's knowledge about his own mental activity and his ability to direct it (Kalmár 1997). Lappint (2000, 53.p) underlines self-reflection consciousness as the two most important characteristic features at meta-cognition. He emphasises that "due to the self-reflection related to learning the individual recognises his own possibilities, inclinations and gifts. He can compare his own learning experiences with the demands of the environment and according to this he may modify his learning methods, habits and learning style. This is already a high level of self-development..."

According to Robert Fischer (2000, 53. p) "proper thinking and learning methods are characterized by meta-cognitive direction." He speaks about "meta-cognitive" pupils who are well aware of the mental process and know themselves and their tasks very well and are capable of directing the thinking process, independent learning, and if needed can direct the learning to new areas. He lays stress on three meta-cognitive elements of meta-cognitive knowledge: the monitoring of the process and its evaluation.

He explicitly speaks about meta-cognitive or in the other words interpersonal intelligence which according to him is the most important part of human intelligence.

"This is the way we can get to our thoughts and feelings in order to understand how we feel and think and to know the reasons for our actions." (Fisher, 2000. 22. p.)

Components of individual independent learning

The next figure shows components of individual independent learning process. (Panchara, 2000),

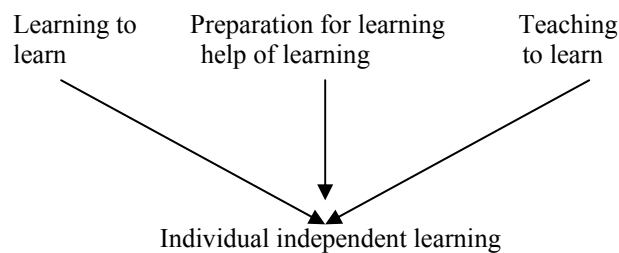


Figure 1: Model of Individual independent learning

This model shows how we systematize the relating scientific works, and the learning improvement computer programme is also based on this model.

The meaning of the fields in the model:

Learning to learn means the student's activity. While the students learn the curricula, they learn to learn too.

Preparation for learning, help for learning means the action of parents and teachers to create a suitable environment for children to learn and develop their learning abilities.

Teaching to learn means to use direct methods to develop student's learning techniques.

Based on this model, we separate four methods of improvement of individual independent learning

Methods of improvement of individual independent learning

- **Methods applied in schools based on children's activity** (cooperative techniques and differentiated development).
- **Indirect development of learning methods** (creation of a suitable learning environment at home and at school, development of basic skills for learning)
- **Direct development of learning methods** (development of effective learning habits, teaching to structure the learning time and material, practising learning techniques and strategies)
- **Learning counselling** (tailor-made solutions of learning problems, development of meta-cognitive functions related to learning, development of direct learning methods for the learning problems)

In the following we go into detail showing the main tasks of direct development of learning methods and learning counselling.

Main tasks of direct development of learning methods are:

a./ Development of effective learning habits

- Creation of a suitable learning environment (tidy learning environment, proper light, proper use of learning equipment).
- Scheduling (daily and weekly schedule of learning time, planning of time required for different subjects)
- Development of learning habits (order of subjects in learning, optimisation of time and frequency of repetitions).

b./ Formation of learning attitude, development of learning motivation

- Optimisation of the learning environment (principles of Rogers)
- Optimisation of the teaching material according to the development of the child
- Creating motivation, using methods supporting learning competency

c. /Practice of effective learning methods and strategies

- **Basic learning techniques** (loud or silent reading, recitation off the material, repetition, pre- or post checking of the material, paraphrasing, asking questions, finding key concepts etc.)
- **Complex learning techniques:** combination and joint use of basic methods (making notes, summaries, tables, drafts, mind maps)
- **Subject specific learning techniques** (eg.: different methods of learning foreign words)
- **Learning strategies:** planning of learning tasks, structuring of learning techniques (eg.: PQRS – method)
- **Development of meta-cognitive function for learning**

For the planning of learning improvement we have to consider the students' characteristics depending on her/his age. As in different age-groups we have to always focus on the improvement of different factors.

Main tasks of learning improvement in different age periods:

a./ Main tasks of learning improvement in primary school period

- Prepare pupils' skills for the basic learning techniques (reading, writing, repetition, preview, discussion with others about the learnt material)
- Prepare an efficient learning habit at home and at school (organization of the place and time for learning, development of habits of the learning process, e.g. order of subjects)
- Prepare pupils for individual work –using methods based on their activity
- Develop basic skills for learning, fill the gaps
- Giving advice to parents how to support their children's individual learning at home

b./ Main tasks of learning improvement in adolescent age

- Emphasis on development of intelligent learning. Importance of highlighting the main topics, development of recognition of the context.
- Teaching complex learning methods (making notes, drafts and figures).
- Practice of subject-based learning techniques.
- Development effective learning strategies by the end of secondary school (eg. PQRS – method)
- Using individual or group counselling since the end of lower secondary school in learning problems.

c./ Main tasks of youth's learning improvement

- In this period of development of a student's life, learning methodology is necessary for those who could not develop effective learning habits, techniques or strategies. This causes them difficulties in learning, they can not adapt to changing learning situations (eg. transformation from the secondary school system to higher education)
- Most effective learning improvement method: individual or group counselling.

In the following we show the research background of the computer programme.

Research background

A longitudinal empirical research was made in Eszteházy Károly College between 1999 and 2002. Under natural conditions we established and carried out training aimed at the development of learning-efficiency with the participation of college students. The participation in it was voluntary as we wanted to provide to make the sample representative. The participants in the research were divided into an experimental and control group. Those in the experimental group took part in a learning-efficiency-developing-training. The training period was 30 hours in one term. The members of the control group took part in the college education in the same way as those in the experimental group without taking part in the training. Our treaties presents efficiency test of the efficiency-development training. The originality of the research comes from the fact that in the development work we used the method of group counselling with the participation of college students. In the research the characteristic features of learning counselling became even more distinct.

In our research, with the help of group counselling in the learning-efficiency training, we directed our students to develop this meta-cognitive direction of learning. The essence of the learning counselling is that in group situations we try to find the solutions for individual problems and the group provides suggestions for the individual to try to find ways to solve his own problem and find out and plan his own learning methods and changes if necessary. The group situation makes it possible to share the experiences, to form relations and the individual can test the new behavioural models without any risk in the protective framework of the group. The advantage of all group methods is that the individual gets feedback from his contacts about his experiences and opinions. He acquires new knowledge which is based on experiences providing it with special significance. This is the most important element of the change. We consider the counselling groups as a social environment which provides appropriate conditions for development and change; where learning is influenced by what it wants to achieve and the needed changes are accomplished with the help of the special effects within the group. Counselling groups differ considerably from other type of groups in their special system of aim.

In group counselling as it is the case in all counselling the members of the group are in some kind of problem –situation and they hope that their participation in the group work will help to solve their own problem.

In our learning-efficiency-developing-training we tried to use the advantages of group counselling and group-work to achieve our aims and to solve the students' learning problems.

The aims of our research

In order to understand the reason for learning problems in college education under normal circumstances we developed, tested and verified a new method; which was aimed at getting over the difficulties that hindered the learning of both young and adult students. The method of group counselling was tested in higher education and characteristic features of this method were pointed out. The practical use of

this research is to work out a counselling method in order to reduce the failure in higher education which significantly contributes to the psychological practice of our day.

Hypotheses

- We assume that learning difficulties occurring in higher education do not primarily originate in intellectual deficits, rather in deficits of learning skills or the students' personality problems.
- We assume that group counselling is an efficient assessment for making higher education learning more efficient and for the treatment of personality problems and learning skills deficits.
- We assumed that members of the group attending learning skills improvement training will perform better during their higher education studies than do members of the control group.

Experimental settings

Pre-test: In the course of the pre-test we chose the students taking part in the experimental group and in the control group and with the research methods we carried out the test.

Learning efficiency training: Those in the research group took part in a 30 hour learning efficiency improvement training.

Efficiency test: We repeated the research with the same methods to register the effect of the training, and traced the students' grades between 1999 and 2004.

Statistical analysis: We analysed the research results with statistical tests mentioned among the methods.

Research sample

Experimental group: N=138

Sex: 77,8% female, 22,2% male

Age: 19-23 years

Grade: first former: 70%, second former: 30%

Studies: 2 specializations: 63%, 1 specialization: 37%

Learning problems indicated: at secondary school: 30%, at the college: 51.85%

Control group: N=114

Sex: 83,3% female, 16,7% male

Age: 19-23 years

Grade: first former: 70.2%, second former 27,2% third former: :2,6%

Studies: 2 specializations: 72.8%, 1 specialisation: 27.2%

Learning problems indicated: at secondary school: 23.7%, at the college: 35.09%

Methods:

We used three methods for the research:

Questionnaire about higher education learning: For the analyses of learning habits we used a questionnaire of the following fields: causes of learning problems, attendance at lectures, learning habits when preparing for an exam, feelings in exam situation and feelings at the college.

Intelligence-test: For the analyses of cognitive abilities we used the Amthauer Intelligence Structure Test “A” version in the case of every student, which measures verbal abilities, mathematical thinking, spatial orientation, and memory.

Personality test: With the Californian Personality Inventory (CPI), this measures emotional stability - emotionality, interpersonal adequacy, efficiency, conventionality and autonomy – originality.

Statistical analysis: The test results were analysed by statistical analyses (paired and independent sample-tests, inter-correlation coefficients, factor-analysis) we compared the results of those taking part in the test group and control group before the training and half year after the training.

Research Results

Statistical analysis of the results of pre-test before and efficiency test after the learning skills improvement training justified our hypotheses.

The results of pre-test

According to the results of our study, we can conclude that scholastic achievements in higher education are determined primarily by the personality of students.

Correlation calculi of GPA and IST scores do not show interference between intellectual abilities and scholastic records. Correlation coefficients show total independence considering both experimental and control groups. Results of factor analysis, too, show that intelligence alone does not go hand in hand with learning efficiency and can not allow of increased learning achievement.

Analysis of inter-correlation relations of variables points to the fact that in higher education grade point average is primarily connected with autonomous independent personality, use of effective learning techniques and the ability to make social contacts. Autonomy of personality shows a strong significant correlation with emotional stability and level of interpersonal adequacy. Thus, in order to have a good achievement in higher education, emotional evenness and social conformity are fundamental. Results coincide with data of Bagdy et al., who, based on analysis of relationship between MMPI and GPA, quoted that “duds are less sociable, impulsive and anxious”.

According to our results, the social presence of students with learning difficulties is less well established. They are not so self-confident, are emotionally more unstable, uneven, and tend to be more anxious than their fellows without learning difficulties. Their intellectual efficiency is weaker, their psychological sense is less mature, and thus they can hardly harmonise with the emotional state of their interaction partners, and are less empathic. Their level of responsibility-taking and reliability is lower; this inhibits their learning in the process of preparing and planning.

Students with learning difficulties did not develop appropriate learning skills that make self-sufficient learning possible, they are worse in setting out relevant matters, they are less likely to make summaries or drafts, to test their knowledge

before exams, they are more anxious when taking exams and this anxiety works by inhibiting their performance. They do not have poorer results in intellectual achievement than do students without learning difficulties.

According to our goals, we worked out and tried out a learning skill improvement training conducted using the method of group counselling.

Results of efficiency test:

Efficiency tests prove the effectiveness of our training.

In the efficiency test significant changes of CPI personality inventory scales indicate improvement of emotional stability and interpersonal effectiveness. As to learning skills, setting out relevant matters improved significantly, and additionally their exam-anxiety decreased too. Efficiency test showed significant change in the experimental group, but not with the control group. The exception was the intelligence-test, where – especially in verbal tasks – members of the control group showed significant improvement, too. Therefore, education itself has a positive influence on verbal intelligence, but did not assist either with the spontaneous personality development of students, or practical problem-solving skills improvement, or development of effective learning habits and techniques. The percentage of students having a GPA improvement of 0.4 or more is more than 10% larger among students in the experimental group. According to these results, we find the efficiency of our training to be proved.

We reached our research goals, our hypotheses have been proved. Learning counselling meets a want in today's psychological practice, and according to our results it is an effective form of training in higher education. We believe it is necessary that learning effectiveness training with the method of group counselling should be an elective subject in higher education.

Characteristics of the computer programme

Relying on theoretical and research results we started to work out a learning improvement computer programme which has not been worked out totally but it can be reached and used on the following website: www.ektf.hu/tanulasfejlesztes

The programme is intended for adolescent and adult people to help them with their learning problems caused by lack of learning methods.

The essence of the whole computer programme is to develop the students' ability to recognise the learning problems they have which are caused by the lack of learning methods. Parallel with this the programme will provide the students with efficient learning methods and tailor-made strategies will help them practise all of these methods. The programme consists of two parts. The first part contains a questionnaire about the students' learning self definition and the second part contains a learning improvement programme. With the help of the questionnaire the students will be able to recognize their own deficiencies in learning. After filling in the questionnaire the computer will make a learning profile and on the basis of this the students can choose from the improvement programmes which

offer efficient learning techniques and practise of them. The programme is in two languages, in Hungarian and in English. Figure 2 shows the starting site.

Figure 2: The starting site of the learning improvement programme

On this site the students can register. After filling in the questionnaire the computer will analyse the results and will work out a rank-list on the basis of which the students will know their strengths (those listed in the beginning of the list) on which they can rely to help their learning, and at the same time the list will show their deficiencies (those listed at the end of the list) which need improvement.

Accordingly the user of the programme can choose from the pictures shown in Figure 3 on top of the website.

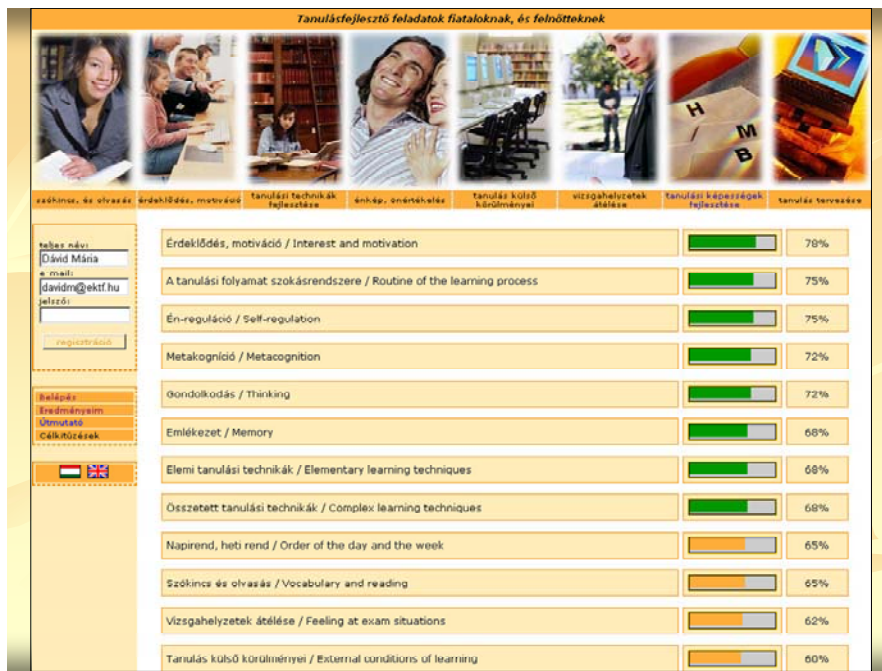


Figure 3: The results of the learning improvement computer programme

This computer programme can be used in secondary schools and higher educational institutions for individual learning improvement, and also recommended for those taking part in distance learning and e-learning, as here the share for individual learning is especially important.

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27

'Get on the Train'

A Technology Line

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Introduction

We would like to take you along on a “trip” with our technology line at Hultsbergsskolan in Sweden. We are all teachers at the school which houses children from one to sixteen years of age. We represent pre-school, primary and secondary school.

Our school is a social and cultural meeting place for all ages. To reach a lasting development we strive for

- Cross-curricular studies, real life learning methods, democratic working methods, and problem based learning.
- We want a school where learners and teachers find pleasure and delight in their work, where care and respect features in our relationships. A school characterized by goodwill and competence. Simply, a school to long for...

But how do we do it?

We believe in cooperation between teachers by supporting and helping each other, giving and taking good ideas. We want to have an open attitude, open mind towards society.

This is our vision of European Teaching and Learning!

Why this issue?

Society is increasingly influenced by the use of technological components and technical knowledge has become a prerequisite for mastering and using the technology around us. In school we have to develop a familiarity with the most important features of the changes of our living conditions and make sure that our learners have a basic competence which is continuously expanded and adapted.

How can we help the learners to develop their learning?

How can we change girls' attitude in these matters?

How can we encourage students to go on to higher educational programs with technological profiles?

The project

We can tell you a little secret...In our school we did not think we were good teachers in this subject. When we asked how many of us were technical people no one put up his/her hand. So we had a big problem !

How do we cope with these new demands?

Teachers' co-operation, exchanging ideas and experiences, improving the competence of teachers and not least increasing the learners' interest in technology might be some answers to the questions.

We think that self confidence for teachers and learners is another possible answer. Therefore we started this project together to solve the problems that we faced in this matter.

The purpose of the work is to create a common understanding and new knowledge in this area. It is all a question of teachers' as well as learners' learning.

To our benefit we have pre-school, primary and secondary school under the same roof with the possibility of the children and adults learning and developing together.

The project is a thematic work along the continuum - from the youngest to the oldest, from pre-school teachers to secondary teachers.

The process

- **Pre-school teachers' learning**

Children from 1 to 5 years old.

Our aim is to create an understanding of the importance of developing technology, science and maths amongst the young learners. Technology is great fun but it is also an everyday life experience. It is a question of making the learners curious and aware of the way things work.

Teachers want to be good models and therefore we need competence to guide our learners in the world of technology.

From a foundation we received 5000 euro to be used for the technology line.

The money was spent on equipment, tools and competence developing.

We have nine teams in our school. The children are 1- 5 years old.

We knew that some pre schools in our city already worked with technology and that it had been successful amongst teachers and learners.

A group of three teachers visited another pre-school to see what they had done.

They came back with a lot of inspiration, ideas, knowledge and energy.

Some of us also had the opportunity to go to another town for some competence building.

Through this course we became more open minded and confident with the subject.

All the activities resulted in buying boxes for experiments for learners and teachers. The boxes contain water, soap- bubbles and different materials for experiments in chemistry, physics, magnetism, electricity and sound.

The boxes are suitable for all ages.



Before we could begin the work with the learners we had to start with ourselves.

We had a day for educating the teachers - to create confidence and have fun together!

With stronger self confidence and higher competence we now started the work with the learners.

At last, have we succeeded in giving the learners inspiration and curiosity for the subject?

We really have because every morning when they come to pre-school they pick up the boxes and go to work.

Today teachers and learners are confident of their own abilities in this area.

Learners' learning in pre-school

“The needs and interests which children themselves express in different ways should provide the foundation for shaping the environment and planning pedagogical activities”. (Lpfö 98)

We want our learners to use all senses when meeting with old technology, handicraft, textile and water and then add their own fantasy to think in new ways. They will find new solutions to old problems.

We started our technology work with the theme of water and decided to do it with the help of “Sally the seal”(a children’s book) and her adventures on the seven seas.

But what is a sea without boats?

The learners and I decided to work on this theme by building our own boats.

Parents contributed materials and our headmaster gave us money to buy some tools.

All the learners had to start with designing their boats. We had fantastic results with some very special boats - a beaver boat, a princess boat and sailing boats. One interesting aspect of this work was to observe the gender perspective. There were no differences between girls' and boys' skills in these matters. One of the girls proudly told us that she often helped her father in his garage.

This way of working, where you start with the learners' wishes, and where they use their imagination and their own experiences when creating, really challenges and awakens their curiosity.

They realize there are several possible ways of solving one problem.



From design to product.

Conclusion

We learnt a lot and created details that made every little boat unique and each invention was appreciated.

• **Primary School.**

Teachers' and learners' learning

In primary school the learners are from six to eleven years old and work in separate classes. Sometimes they are in mixed groups for thematic work. The Technology line is a project that continues for eight months.



The work started in the Spring with an inspirational evening with technical teachers and headmasters from secondary schools. All primary school teachers participated. The subject of this year's theme was agreed and we also decided how the work should be done.

Then we sent out a task for the learners to think about during the summer. This was to develop an 'invention' and tell the other children how it worked and why it had been invented. The learners that would begin their first year in school got their task by mail. The idea with this task was to 'tickle their curiosity'.



every citizen was very smart and clever.

In the autumn when school started, we introduced this year's theme with a performance by the teachers to inspire the learners. We used the character "Crazy Frog" because he is very well known to the children. He acted as a travelling reporter in a newly discovered country called "SolSkroMåronia" where

After that we started our working model in six steps:

1. Learners thought shower.

The children told us what they were interested in and what they wanted to learn more about in this subject. We sorted them into four categories.

2. Lessons.

We held lessons in the four subjects we had decided upon - low level for the younger children and gradually more sophisticated for the older children.

3. Workshops.



We had stations and lessons with practical work, experiment and research.

For example we built a future school, built cars out of junk, made inventions to solve a problem. One example was to protect candy from big sister with the help

of an electrical fence. The older learners also made a research in a subject in the past, present and what they thought it would be in the future. One example here was downhill skis. An old ski is made out of wood and has a simple binding for the ski boot. Today we have the carving ski with modern bindings and composite material. In the future the pupils thought that the skis would be much shorter and wider with an air cushion below to minimize the friction.

4. Presentations.

There were collages and power point presentations to present the results for each other.

5. Evaluation

The learners' own evaluation.

6. Grand opening and exhibition.

Family, relatives and neighbours were welcome to the finale of the theme.



In the middle of the theme we had a 'recap' session both for the teachers and the learners. The teachers went to our university and had a wonderful day with a female university technology teacher. It was a day filled with experiments, lessons and inspiration to build self-confidence in the subject of technology. We learned that even sewing and

baking is technology and we are all good technicians in one way or other.

The learners in our secondary school informed themselves what our young learners were working with and gave a performance with puppies, where the story was built on what they were working with. This performance was a big success.

- **Secondary school**

Technology, aim of the subject and its role in education.

The learners of the secondary school are twelve to sixteen years old and they work in classes - and sometimes in mixed groups when working with themes where different subjects are integrated.

Let' us look into the *syllabus* and see what the aims and goals of *the Technology subject* are.

We can all agree upon the necessity of the technology subject. Today it is hard or even impossible to live through one day without having to deal with some kind of technological activity. One must have knowledge and understanding of how

conditions of production, society and physical environment are constantly changing. In Technology we develop a familiarity with the most important features of the changes of our living conditions.

Citizens in a modern society need a basic competence that is continuously expanded and adapted. An understanding of the role of development from an historical point of view as well as the ability of reflecting on and solving practical problems of a technological nature are essential competences for today and for the future.

The impact of technology on the environment (working-life and housing for instance) is an intricate and highly important issue affecting fundamental values.

There is also the gender aspect to consider and to overcome. Everyone must be given the opportunity to have all-round knowledge in the subject of Technology.

Goals to aim for:

The school should aim to ensure that learners develop

- An insight into how technology in the past and the present influences people, society and nature.
- Develop a familiarity with devices and working methods in the home and workplaces and knowledge of the technology in our surroundings
- Develop the ability to reflect, assess and evaluate the consequences of technological choices that we make
- Develop the ability to incorporate one's technical knowledge into one's personal life
- Develop an interest in technology and one's ability and judgement when handling technical issues

Structure and nature of the subject

The challenge for technology is the set of unsolved practical problems people confront opposed to, for instance, the driving force of natural science which is curiosity in nature. However, the understanding of technology and its importance is tightly linked to one's knowledge from natural as well as social sciences and other areas.

Technology is a meeting place for ideas and knowledge of various origins and it is developed through interaction with other areas such as fine arts.

The development of technology has a number of driving forces; for instance, changes in nature, societal transformations and needs (changes in population structure, politics, environmental requirements). Not only the effort to innovate but also man's curiosity and creativity are vital driving forces for technological development.

There are some fundamental functions that categorise technological problems and solutions:

- Transformation (stone into axes, erection of brick buildings, encoding of secret messages)
- Storing (refrigerator, hard disks for computers)

- Transporting (vehicles, power cables, fibre optics)
- Controlling (locks, pacemakers, thermostats)

Within the subject there are studies of different technologies and their solutions, such as materials and design, electricity and control, and the incorporation of individual components into larger systems, such as power cables into energy and computers into information. The role and importance of technology cannot be understood unless it is linked to the interplay between human needs and technology and the consequences connected to technological applications concerning values, conflicts of interest, changing life conditions and economy.

Goals to be attained at the end of the fifth school year (keywords Syllabus 2000 compulsory school)

Learners should be able to:

- describe familiar areas of technology, their importance and development
- use common devices and technical aids and describe their function
- plan and build simple constructions, with assistance

Goals to be attained at the end of the ninth school year

Learners should be able to:



- describe important technological factors in past and present.
- analyse advantages and disadvantages of the impact of technology on nature, society and the living conditions of individuals
- build a technical construction using their own sketches, drawings or similar support and describe how it is built up and operates
- identify, investigate and explain, in one's own words, some technical systems by describing the functions of the components forming it and their relationships.

Our work in school is based on these aims in the syllabus and we practise it in reality based situations. In this way we prepare our learners for the 'high technological society' and develop their familiarity with continuously changing living conditions. School is no longer an isolated institution; instead it is a part of the world outside. We need to open our doors and cooperate with society around us.

Looking back in the mirror we see the reflection of the work from pre-school to secondary school closely linked together.

We see the importance of letting learners and teachers be part of the learning process and work together as this, in its turn, creates good relations, trust and confidence and last but not least, it is great fun for all.

By working on this project we know that we have helped learners and teachers understand and develop their own learning.
Our self confidence has increased and we know how to cooperate with the demands of the knowledge- based society.

However, this is a lifelong learning process. Technology will always be changing and to be able to master the changes and use the new knowledge we have to go along with the Train.

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28

Creating Computer Based Animations

Tomaž Murn, Sónia Henriques Pisa, Nevenka Lamut

Abstract

The article deals with practical suggestions how to use MS PowerPoint to create animations (movies) on the previous prepared scenario. This new method is being used in primary schools environment at Slovenian primary school Vižmarje Brod since 2003. In 2004 we organized the 1st festival of animated movies with students from 4th, 5th and 7th grades as participants, which reaffirmed their knowledge, self-confidence and wish for new challenges. In 2005 we invited the Portuguese primary school Vasco da Gama to work on the same project. To spread idea around the Europe we organized 1st international festival of PowerPoint animations at Vižmarje Brod. We called it "PowerPoint wars". The response from both students and parents was exceptional, because they realized that it is possible to reach concrete results in a simple and attractive way, which reaffirmed their knowledge, self-confidence and wish for new challenges. Moreover, the computer science teacher acting as "director" gained new sense and pleasure in work. Motivation and interdisciplinary work are main objectives in this method of learning.

Key words: PowerPoint, Animations, movie, festival, new method, computer science

Introduction

Many computer science teachers face themselves with one question: which contents should be presented to children attending facultative classes; children who would rather not stop to play computer games.

Our experiences show us, that motivation is the biggest problem when confronting students with more serious and more useful contents.

The “modern” student is less patient yet sits and listens to frontal explanations, which means it is harder to motivate him. Facultative computer science classes run mostly in afternoon hours, when students’ concentration is low, which is an additional problem with motivation.

Computer games, though, are somehow a motivation and a relaxation tool for children, as they are taken away from reality for a few moments but the games don’t offer any new knowledge. Parents and teachers know how hard it is to divert children from playing computer games. We often ask ourselves, how to use their playing to direct them to something useful. The key problem accompanying us on all levels of teaching is how to present, in an attractive and interesting way, the benefits of knowledge to children. A problem and a challenge of today’s schools in general is achieving a final goal using multiple tools and areas of work and completing multiple goals at once.

Why to use a new method?

- Which interesting contents can we offer students in contemporary classes?
- How to present useful knowledge in an interesting and attractive way?
- How to achieve the final goal by using more tools in different subject areas and to achieve more goals at a time?

How we do it?

- a) Creating a movie script
- b) Searching for characters – Internet (gif animations) creating the characters with Gif animator (if it necessary)
- c) Designing of backgrounds and graphical elements
- d) Custom animation
- e) Adding sound and slide transition

Creating a movie script and searching for characters on Internet

Students create a scenario with short contents in MS Word (one A4 page), where they include the title of the movie, introduction, main part, conclusion and list key roles. Afterwards, the teacher adds scenes depending on the written scenario. Then the student has complete control and view over his work as the scenes are the new Power Point pages.

Movie script (MS Word)

Author: John Doe

Title: Hansel and Gretel

Introduction

Hansel and Gretel's poor family have a short amount of food. When their mother gets home she sees them playing instead of finishing their chores.

Main part

They run away from their angry mother, getting lost in the middle of the woods. They, eventually, come upon a house made of food. While eating the house, they are caught by the old woman, the evil witch, who lives there. She locks up Hansel and tries to fatten him up in order to eat him, but Gretel manages to cook the old woman instead.

Conclusion

In the end, they manage to break the witch's spell and free all the "gingerbread" children.

Characters:

Hansel, Gretel, Mother, Witch, Children

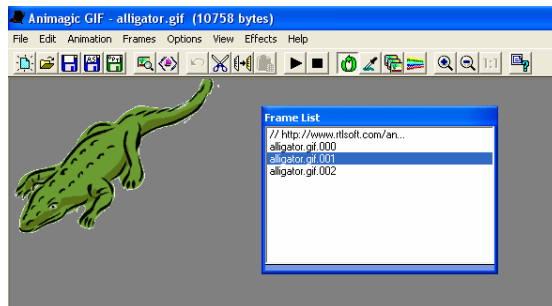
Scenes (PowerPoint slides):

1. Introducing Hansel and Gretel's home environment (children and mother)
2. Run away from their mother into the woods
3. House in the woods - eating the house
4. Witch appearance and Hansel's capture
5. Fattening the Hansel
6. Gretel pushed the Witch in to the pot/oven
7. Releasing the children – all pappy

Searching for Characters on Internet (Gif animations)

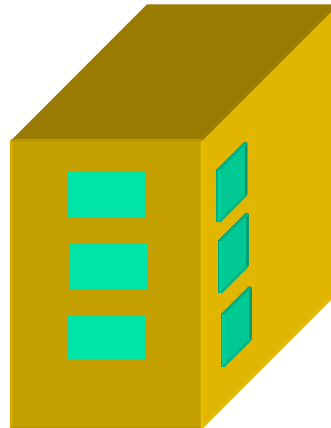
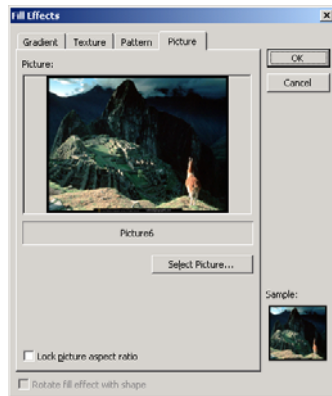
The students search and select the gif animations needed for their project. Most animated gifs and midi (music) files are available in the website at:

<http://www.heathersanimations.com/>



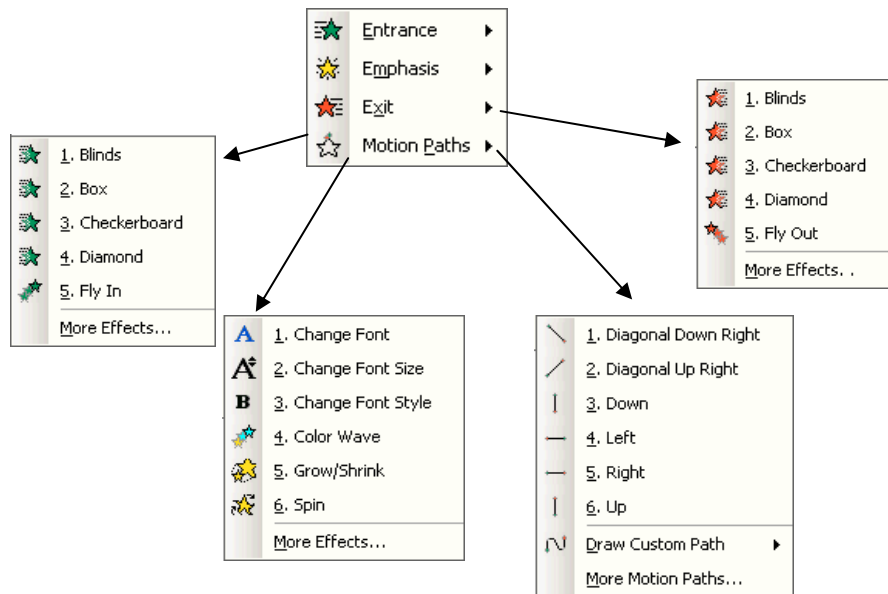
Designing of background and graphic elements

Background designing and color composition is an important part in the student's product. Students in this segment are confronted with the colors that should be used in the pictures. The teachers' experience guides the students in the learning, usage and color understanding.



Custom animation

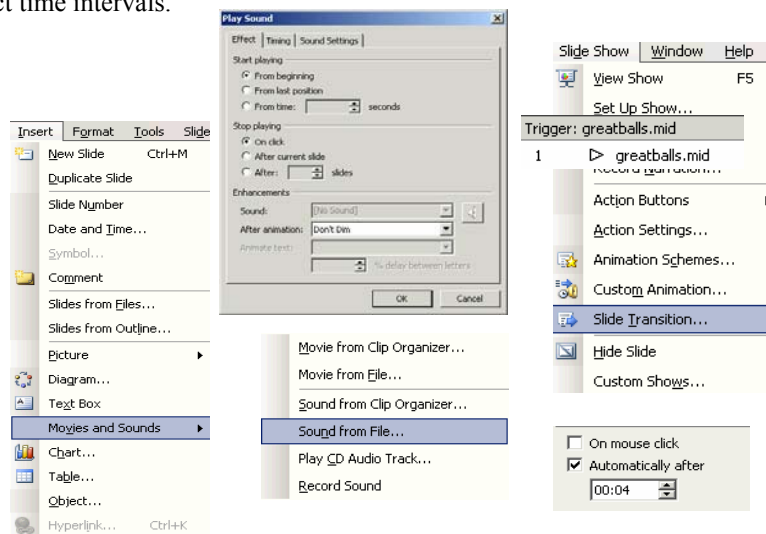
Students merge gif animations and other elements of the presentation into an entity. We could say that students bring pages to life by adding multiple animation effects offered by Power Point XP and new versions.



Insert sound and slide transition

As in a real movie, we add sounds at the end. Students add sounds to characters and scenes by adding files from internet or sounds recorded on their own using a microphone. It is crucial that sound files are in same directory as the presentation itself.

Finally, slide transitions are synchronized, so slides are changed or moved in correct time intervals.



“PowerPoint Wars” – the Portuguese case

The primary school “Colégio Vasco da Gama” participated, for the first time, in the international festival of animated film, thanks to the request of the Slovenian teacher, Tomaz Murn. This project’s final goal was to create a movie, by using the PowerPoint application.

In the Portuguese case, students were between nine and ten years old and, for most of them, it was the first time they were using this application.

“PowerPoint Wars” was developed in the Project Area subject, with the coordination of two teachers: a Portuguese Language teacher, Sónia Henriques Pisa, and a Drawing teacher, Rui Marino Brás. This project stimulated and developed the students’ creative and communicative abilities, not only through their written works but also through the images they chose and also through the research they had to do in the Internet, to finish their final presentation.

This activity, which lasted till the end of the school year, was divided into several steps, being its goal to create PowerPoint stories based on Portuguese proverbs:

- 1st – Choosing of the proverbs;
- 2nd – Writing of the story;
- 3rd – Summarising the story;
- 4th – Dividing it into several slides (like a cartoon);
- 5th – Deciding on the pictures each slide would need;
- 6th – Searching the web for pictures;
- 7th – Learning how to use the PowerPoint;
- 8th – Starting the PowerPoint story;
- 9th – Searching and applying sounds/music;
- 10th – Sharing stories in order to improve individual works
(brainstorming on usage of colour, pictures, sounds, word size and type,
etc.);
- 11th – Oral presentation of the PowerPoint projects;
- 12th – Selection of five of the projects for the Slovenian festival.

The students followed all the steps eagerly and were thrilled with the final result.

We have reached a time when students go to school because they have to and not because they want to. Teachers have to realize that their students’ dreams, hopes and wishes are no longer the same as they were ten years ago, or even less. Society has changed and with it so has Man. Based on this assumption it is easy to understand why our teaching methods must change, why they must adapt themselves to the Age we are living in. If we are given oranges, we will not make lemonade. So, if we have students driven to new technologies we will not give them an abacus. Teachers must leave their safe zone, mainly because it is not safe anymore.

“PowerPoint Wars” was well achieved and it proved that even teachers that are not related to ICT can “enter” into the world of technology. Obviously they will

not know all the answers, but let's face it, no one has. And students, believe it or not, are more than eager to teach us, whenever we need it!

With this project, students learnt not only how to use the computer (Internet search, Word, PowerPoint, Paint, etc.) but also how to cooperate with each other, to share ideas and findings, qualities that they will need in their future life.

Achieved goals (interdisciplinary)

Pupils are able to:

Computer science

- use operating system (MS Windows)
- use MS Word and MS PowerPoint
- write a Script (typing skills)
- use internet browsers (MS Internet Explorer, Mozilla..)
- create Animated Gif
- use the paint program

Mother tongue and foreign language

- use of mother tongue and its grammatical rules when writing a script
- structuring the story (introduction, main part, conclusion)
- use rhetorical abilities when presenting a script (at the Festival)

Arts in Computer Science

- colors
- typography
- compositions
- rhythm, harmony
- spatial key

Music

- creating one's own voice recording
- searching different types of music
- sound effect

Film education (Media)

Conclusion

What brings students to the computer classroom? We will mention a magical word "action", which keeps away boredom, brings up interest and metaphorically means the beginning of recording a new scene or movie. Our school is not equipped with special machines and programs for developing quality animations. However we all have MS Office -Word and Power Point. Using little imagination and knowledge, we take children to a fantasy world in the real environment where they use creative thinking and knowledge on every area of their work. The teacher takes care for good environment and additional motivation yet gives technical and professional support. While developing this project, the main strengths are the project work organization stressing on multimedia, and preparing the competition.

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29

How to Effectively Evaluate the New Role of Teachers?

Jana Kazíková and Karel Rýdl

Abstract

The changing position of the school opens the door for the new role of the teacher. Educational policy influences higher key competencies for the professional (knowledge, skills, and attitudes). What is necessary to have in the curriculum and the school programme? Is there is a need in the future for creativity and respecting children's personalities as the higher competencies? Teachers need to develop strategies of how to communicate with the child. What kind of effective self evaluation strategies do we have?

Introduction

We would like to discuss in this article a very important case – the evaluation and self evaluation of the new role of teachers.

Our aims are:

- a) to open the problem and to discuss the possible criterias and instruments for the effective evaluation of the new elements in teachers' work
- b) to understand what can influence the higher level of teachers' professionalism
- c) to use clearer terminology.

All EU countries stay under the auspices of the Lisbon Process (2000). Its satisfactory development needs an organised educational and qualificational system in every EU country. In the Czech Republic there is a very active P.A.U. – in this case as a member of the Learning Teacher Network (LTN). A group of

teachers and educators, academic orientated experts and some officers from school administration on different levels, try to encourage professionals to follow the Lisbon Process as well as the new Czech Educational Law (since January 1, 2005). This law lays down a framework for the evaluation and self evaluation processes of schools and teachers.

The background relies on us trying to predict possible developments in our society in the future which may be needed:

- how to solve the chaos and crisis which may develop
- how to be successful
- looking at the key competencies (skills),
- looking at internal and external conditions
- good use of leisure time
- looking to healthy living in the future

The example for the change of the value system from the curricular point of view

VALUE	classical perspective	romantic perspective	postmodern perspective
<i>Learning process organisation</i>	class teaching	individualised teaching	flexible grouping
<i>Educational style</i>	autocratic	laissez - faire	participative
<i>Pedagogical approach</i>	conservative	abdication (resignation)	liberal
<i>Priority</i>	knowledge emphasis	method emphasis	process emphasis
<i>Leading acteur</i>	teacher dominated	child centred	inquiry centred
<i>Outcomes</i>	teaching aids	audio-visual	learning resources
<i>Aatmosphere</i>	discipline regulated from outside	freedom and responsibility	experience
<i>Teacher competence</i>	own skills	discovery	creativity
<i>Expecting reflection</i>	activity	reactivity	transactivity
<i>Knowledge level</i>	certainly	confusion	probability
<i>Interactional principle</i>	competitive	cooperative	growth
<i>Power from</i>	others/directed	inner directed	self-fulfilling
<i>Ethic quality</i>	loyal discipline	freedom	self-responsibility
<i>General aim</i>	doing things to	doing things for	doing things with

This figure presents the development of different parts of school life during the last 300 years. Every reader is able to think about new trends. For us it is very important that the role of teacher changed from the objective influence. It is

necessary for the whole of society to support this change as the change of the teacher's role is a case not only for the teacher but for the whole of our society.

Are Common Standards or Personal Standards needed?

Different EU countries use the evaluation of the teachers' professional activities (Scotland, England, Germany, Italy or Hungary). In some other EU countries groups of experts support the idea of the effectiveness of self evaluation (Finland, Norway, The Netherlands, Czech Republic, Austria or Slovenia). The Czech Republic has developed P.A.U. - the evaluation instrument titled: **Professional Teacher Standard**. During the years 2003-2005 we looked at the different parts of a teacher's professionalism - from the new needs and society's expectations. Nowadays we try to develop through the state project "Quality II." This is looking at effective criteria and instruments for the evaluation of different parts of the teacher's professional activities.

You can see the following examples:

Key role and function	main ability	sub-skills	criteria	instrument
Educational process management	teaching planning	effective methods	pupils motivation	portfolio

Under this category there are 3 main skill, 18 sub-skills, 15 criterias and 7 instruments.

Personal development management	personal development	skills increasing	LLL-courses	certifications
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Under this category there are 2 main skills, 9 sub-skills, 6 criterias and 5 instruments.

During 2006 we would like to develop a diagram of how effective teachers' strategies are with pupils during the learning processes. This would be one of the new self evaluation instruments in the Czech Republic and accepted within the state administration and Czech school inspection systems.

In this framework we would like to include three parts:

- The learning process
- Aspects, possibilities for teacher practice and influence on the child's learning-process.
- Some questions will be posed to the teacher. For example:
 - a) how do children abilities and needs differ
 - every child is able to achieve his/her own goals dependent upon ability
 - b) main ideas and learning goals should be identified before the learning process is planned
 - every child understands the main ideas and goals

- c) to respect for children questions and ideas
 - children learn to formulate questions for the learning process.
- d) when and which diagnostic tools to use with individual pupils
 - children learn to be critical and reflective about their own learning processes.
- e) to consider changing teaching styles and methods to create dialogue with children
- f) to realise that the optimal way of learning is to learn from one's mistakes, etceteras.

Conclusion

From our practical experiences we are able to deduce that the most challenging problem for the teacher is to be able to formulate appropriate and effective goals and questions for themselves. For these to be effective self evaluation and reflection is necessary.

Our expectations and more practical experiences will be in a more concrete form during the year 2006-2007, when we complete the project "Teacher and School Self Evaluation" in P.A.U.

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30

Quality Assurance and Development

- an Example from South Tyrol, Italy

Ferdinand Patscheider and Sonja Hartner

Brief Socio-Cultural Context

South Tyrol has a population of 460,635 and is a trilingual country. The three official languages are German (69,15%), Italian (26,47%) and Ladins (4,37%).³⁷ South Tyrol is one of Italy's autonomous provinces. One of the achievements in the battle for political autonomy from Rome after World War II is the right of each individual to be educated in his/her mother tongue. This implies that there are three distinct school authorities in South Tyrol, one for each linguistic group. All three are, however, modelled on criteria set by the Ministry of Education in Rome. Italian and German are taught right from the beginning as the pupils' second language by native speakers respectively. In the schools of the Ladins community all three languages are taught. Full immersion is still a political hot potato due to the above mentioned right for everybody's education in their mother tongue, long fought for in the 1950s and 60s.

In our case study we describe the evaluation system in South Tyrol from the perspective of the German School. We have to mention that there are some similarities, but at the same time big differences, within the three systems, i.e. language groups.

³⁷ 2002 census

Development of a Quality Assurance System

In the 1990s a quality assurance system was gradually and rigorously set up in the schools of the German speaking community in South Tyrol. In the first phase school-based evaluation was promoted. Teachers were trained in order to initiate and carry out school-based evaluation processes and schools were supplied with manuals and instruments.

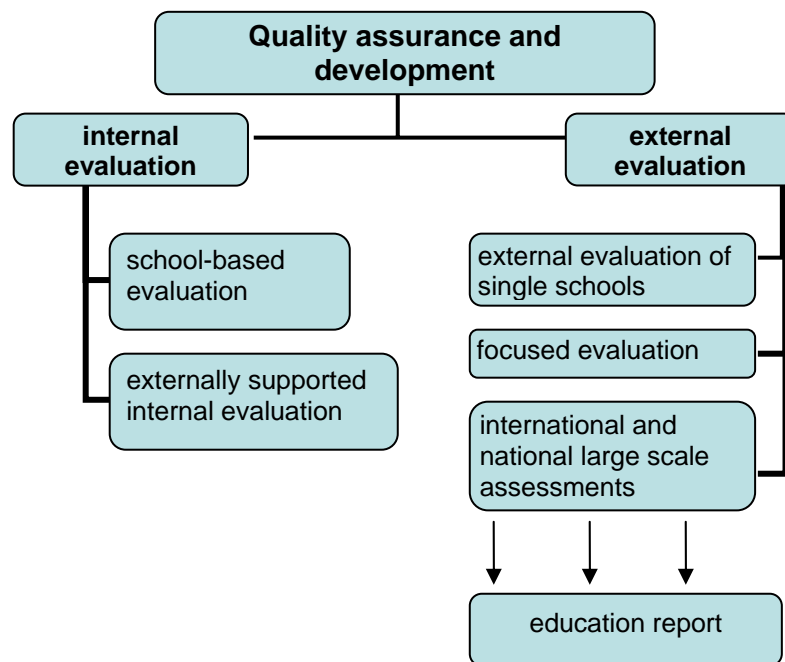
Under the Provincial School Autonomy Law No. 12/2000 schools became autonomous institutions with autonomy in the fields of didactics, organisation, research, school development, administration and finances. The schools took over the responsibility for the organisation and the implementation of their educational curricula.

At the same time schools were obliged to compile a school development plan, within a national framework, detailing the most important decisions concerning their educational objectives with corresponding steps to be taken and suitable measures of school-based evaluation, to research into the efficiency of their development.

After the schools had gained experiences in the field of school-based evaluation in 2004 the third phase started with the specific introduction of external evaluation, which was already foreseen under the provincial law No. 12/2000.

The Elements of the Quality Assurance System

The quality assurance system for the German schools in South Tyrol comprises the following elements:



Internal Evaluation

Internal evaluation means that schools evaluate themselves. This is comprised of a close analysis of the work done at the school in general or in specific areas. The aim is both quality assurance and quality improvement and to identify new objectives for future school developments. The individual school relies on a variety of different forms of school-based evaluation, data collection and interpretation. The Pedagogical Institute and the School Board offer support in the form of in-service training courses, seminars, publications, advisory service, etc. Furthermore the Institute supports the sharing of experiences in regular evaluation workshops all over the region.

The schools investigate their work in the following quality areas: learning and teaching; school culture and climate; school partnerships and public relations; leadership and management; professionalism and staff development. Furthermore school-based evaluation is an integral part of the external evaluation.

External Evaluation

External evaluation comprises the “collection of data and the assessment of the effectiveness and efficiency of the school” and is carried out on three levels: the complete school system, special groupings within the system (only primary schools, only secondary schools, only vocational schools, etc.) and the individual school. External evaluation within the schools for the German speaking language group comprises the evaluation of the activities of the schools (desk research on data provided by the schools and school visits of 2-3 days) by evaluation teams, focused evaluations, investigations into specific areas, and the participation at national and international large scale assessments.

External evaluation is first and foremost developmental. Schools get indications for their further development from an outside perspective. The results of external evaluation on the system level form the basis for measures for the regional development of the school system.

External evaluation also provides accountability. Schools are obliged to communicate the results of internal and external evaluation to the stakeholders. It is up to the schools to decide how and to what extent. On the regional level an education report is compiled.

Education Report

Every two years an “Education Report for the German School in South Tyrol” will be issued. It will be based on the relevant results of school evaluations, focused evaluations, and the participation at state-run and international large scale assessments. The education report offers steering data for the development of the South Tyrolean education system to the provincial government, the Provincial School Board, the Pedagogical Institute, and the individual schools.

Provincial Evaluation Advisory Board

The responsibility for external evaluation is in the hands of the Provincial Evaluation Advisory Board. It is appointed by the provincial government, operates

at the Pedagogical Institute but works autonomously. It is composed of nine experts of whom more than half must come from outside school or the provincial administration.

It is the task of the Provincial Evaluation Advisory Board to lay down the objectives, standards for the procedures of external evaluation of individual schools and the complete education system, to support the system of evaluation and to record if the objectives have been achieved.

Evaluation Agency

The Evaluation Agency is the executive of the Provincial Evaluation Advisory Board. It is clearly detached from the tasks and the working areas of the inspectors of the school board. The evaluation procedures, the Quality Frame and the evaluation tools are known to all stakeholders.

The experts in the evaluation agency are appointed after a transparent public selection procedure.

In May 2006 the first schools were evaluated externally.

Evaluation Workshops - Networking

As already mentioned above, the Provincial School Autonomy Law No. 12, June 2000, states that every school has to evaluate the aims of its own school development plan. To support the schools in their internal evaluation initiatives, a provincial network has been established, in order to exchange ideas, experiences, projects, etc. Teams of the head teacher plus 2-3 teachers from each school meet on a regular basis, usually monthly, to share examples of interesting practice, discuss drawbacks and work out together evaluation processes, instruments, etc.

The main aim of the network is to provide a forum for schools to learn from each other, to learn together and to share their experiences.

Each school's development plan is the basis of internal evaluation. There is no tailor made procedure/instrument, but the shared expertise of the members of the network is helpful in order to work out and coordinate strategies, to discuss procedures, and to assist one another.

So far the members of the evaluation network have mainly shared their experiences in the field of internal evaluation. Some schools have participated in national tests (INVALSI) and brought their experience to the network.

With the appointment of the Evaluation Agency and its activities in the area of external evaluation, the topics in the network might shift. Additionally schools will have to share their experiences in the field of handling feedback reports from external evaluation teams.

The external evaluation concept emphasises the value of internal evaluation – external evaluation diminishes proportionally to the amount and the quality of internal evaluation.

Conclusion

In the last decade a wide range of different quality areas have been looked at by the individual schools. For example: learning and teaching, organisation, resources, relations with stakeholders, outcome (school leavers), school ethos, school management, professionalism of staff, etc.

In the area of methods/instruments a wide range of different approaches have been applied, a lot of different tools have been worked out. Schools have experimented with questionnaires, target discs, learning journals, SWOT analyses, photo evaluations, document analyses, focused observations, lots of creative ideas, and many more.

Approximately 60% of all schools of the German speaking minority group in South Tyrol have participated in the network in the school-year 2005/06. Experiences cannot be transferred from one institution to another, nevertheless, a school does not have to start anew or reinvent a procedure that is already in place - slight adaptations are sometimes enough, so that the experiences of other schools can be taken in consideration. The discussions in the network meetings have often initiated new ideas, new processes and opened up new perspectives.

Schools in South Tyrol have now been obliged to self-evaluate themselves for the last six years. Some have done it more willingly than others. Some have done it systematically; some are still at the beginning stages. It takes time to learn how to plan and carry out self-evaluation projects. In-service training courses have been organised by the local school authorities in order to enable head teachers and teachers to acquire the necessary skills. Furthermore, if required, schools are supported by pedagogical consultants. This is a free service offered by the Pedagogical Institute.

External evaluation is now becoming more prominent. At this crucial point it is important to combine the two approaches in order to produce synergy for the benefit of all (students, teachers, parents, management, staff, stakeholders) involved in the process. A commonly shared Quality Frame, open dialogue and communication, and the appreciation of each other's work could become the key to successful synergy between internal and external evaluation, between judgemental and developmental aspects of evaluation, ultimately to the benefit of all our students.

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Guidelines and Aims of Contemporary Teacher Education in Poland

Beata Dyrda and Irena Przybylska

Abstract

In the article authors intend to highlight the variety of concepts regarding teachers professional education and growth. The abundance of ideas can be attributed to different social needs and expectations. Political, economical and cultural changes in Poland resulted in growing attention in the area of education and teachers' social role. The authors try to outline the newest tendencies in pedagogy, particularly concentrated on the models of teachers' education.

Key words: pedagogy, teachers' education, competences, in-service education, professional promotion and development

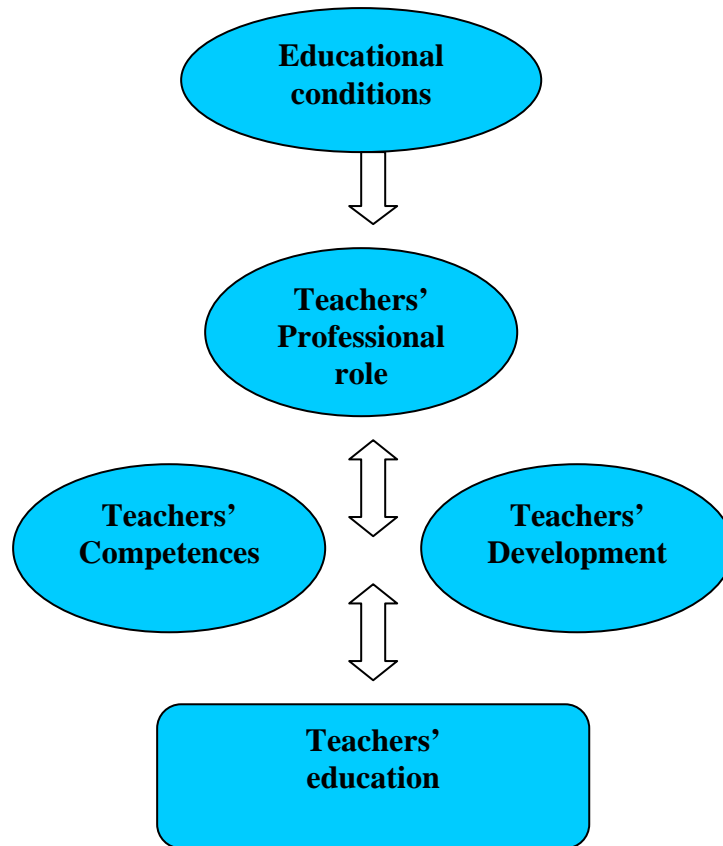
Introduction

One of the aspects of educational system transformation in Poland is changes in professional development of teachers: acquiring qualification, improving and increasing them. The changes are so fundamental and remarkable, that sometimes they are called "the new philosophy of improvement" to show how radical they are (Elsner, Knafel, 2000).

We aim to show the frameworks of teachers' education as we assume that well prepared teachers condition the progress not only in the educational system but

also the community. Unfortunately there isn't a set of skills and abilities which would be applicable throughout teachers' work. For that reason it is essential to raise the question about the individual prerequisites that help teachers to adapt to working conditions, social expectations and do their job successfully. In addressing these issues the authors are looking at a number of different but relevant concepts of teachers' education and verify it in context of educational practice. The scheme below presents the topics that would be pinpointed in the text and their importance in teachers' education.

Scheme 1 Teachers' education and its conditioners.



Source: self created

Teachers' education is multidisciplinary and it encompasses many components. The most important is knowledge of the subject matter and pedagogy which enables teaching and building relationships.

We seek the ways of professional preparation which could result in growing competences and professional fulfillment. The concepts establish the new

perspective for teachers' professional role and responsibilities. Some still essential questions must be answered:

1. What roles teachers should be prepared for?
2. What competences do they need?
3. What should be the content of teachers' education?
4. How should they be educated?

Contemporary teachers and their professional roles

Competences and professional development are key concepts in Polish educational policy but there isn't a consensus of what they really comprise of.

Expectations towards teachers have been gradually growing and diversifying so they have become complex and have a lot of facets. It is conditioned by inside and outside factors. By outside we mean factors connected with social and cultural changes. Respectively, the second group concerns professional changes. Some factors can be asserted, for example educational politics, the process of feminization in teachers profession, job specialization, motivation and identification changes, the lack of correlation between preparation for the profession and improvement in it (Krajewska, 1995, p. 76).

The teachers' role is submitted to four traditional functions attributed to schools: teaching, education, socialization and care. Depending on the context such as place, time, children and their needs, the importance of roles differ. From the above we can track four duties: a teacher as a leader of the teaching process, as an educator and carer, as a leader and organizer of children in permanent education and finally a person supplementing his/her own education and pursuing self-perfection (Krajewska, 1995, p. 67).

Teachers are supposed to help children to: create lifelong education needs, create attitudes to social roles and prepare for global and regional changes in order to make the education more adaptive and "close to life". Therefore teachers are expected to be:

1. researchers- reflective practitioners who do not only diagnose pupils and surrounding but also makes some useful changes and lead action research.
2. creators- using creative thinking and dealing creatively with problems.
3. animators of social environment- initiating cooperation between school and not only parents, but also local authorities.
4. ethics- axiological attitude to education which is expressed by representing humanistic values and teaching them.
5. intellectuals- interpreting the world, people behaviour, inquiring and seeking for the answers to educational, social and cultural problems. In addition they are expected to be open to political, social, scientific and cultural progress.
6. guides and masters- helping pupils to find their particular way of development and growth by giving hints, advice and stimulation. Particular attention is paid to teachers as a guide in the world of Informative Technology.

7. “Europeans” – aware of different cultural values, stimulating cross-cultural attitudes without prejudice and nationalism. The role turns out to be more complex as we consider the necessity to support simultaneously both Polish and European identity (compare Koć-Seniuch, 2003; Krajewska, 1995).

We are in agreement that all the above roles are complementary and essential, nevertheless the discussion about what is the crucial role of being a teacher is not completed. Moreover, fulfilling these roles and expectations is often quite complex if material and social conditions are inadequate, not to mention low quality professional preparation.

Main concepts in teacher education

The evolution in educating teachers contributes to improving the educational process. Teachers’ education must prepare for changing circumstances and growing social hopes. Consequently, the framework of their education has been sought for decades. The multiplicity of factors connected with educational situations establishes many perspectives in teachers’ education. On the other hand we refer to psychology and on that basis three models of teachers’ education can be pointed out (Kwiatkowska, 1988):

1. technological
2. humanistic
3. functional

The most traditional is the technological model which refers to behavioral psychology with its pragmatic approach. According to H. Kwiatkowska (1988) teachers were trained not educated. Enthusiasts of this model underline the parallel between process of production and teaching process. The teachers’ preparation for work with children was limited to algorithms, schemes and controlling skills. The prominence was given to technological competences at the expense of humanistic ones. Consequently, in this approach there was no place for creativity, innovation and reflections.

The second model, derived from humanistic psychology, assumed the main role was the teachers’ personality and knowledge. The representatives of this model elaborate the very important and strong link between personal growth, abilities and professional development. Further to it, the main interest is shifted from a teacher to his professional education. According to A. W. Combs (1978, in: Kwiatkowska, 1988) the teaching profession is the most humanistic of all and demands special preparation. Self-confidence, self-fulfillment, creativity and professional identity are the main conditions and aims of this model. Teachers’ personality is treated as a “tool” of effective and satisfying educational relationship. Taking into consideration the above statements there is a necessity for special recruitment to the teaching profession, based on psychological analyses of personality. Moreover, the access to the profession would be limited, only to small, talented group of people. Summing up, the model appears to be idealistic and not practical.

The newest and the most contemporary concept can be described as functional. Its roots can also be found in humanistic psychology. The crucial question is how to use theoretical knowledge in teachers' action to increase the effects of teaching. It is suggested that the more teachers know the more innovative, flexible and operative they become. The strategy of professional teachers' education should also include creating conditions for building self-knowledge which leads to professional self-esteem. Moreover, this model emphasizes the role of values and establishing interpersonal relations on the basis of respect and dialogue in communication.

Above models can be compared to wider notion proposed by K. Duraj-Nowakowa (2000): conservative, liberal and radical. Taking into consideration the main assumptions we can find similarities in the technological and conservative model; humanistic and liberal; functional and radical. The conservative assumption refers rather to the past not the future and is closely bound to tradition. The change aspects are omitted so the development is excluded from the education and teachers' work. On the contrary, the liberal concept opts mainly for the future development. Gifts, talents, potentials are considered. Further, radicals condemn narrow specialization of teachers' work as it is an obstacle to progress. They suggest that the impact should be put on social abilities, autonomy, self-reliance, responsibility and creativity which could improve cooperation with pupils, parents and school environment. Coherent are concepts proposed by Hoyle and Elliot regarding teachers professionalism (com. Gołębniak, 2001).

In practice, since political changes of the nineties, we can observe in teacher education a turn from an empirical attitude to a rather general one. The outcome is a humanistic and axiological preparation for the profession with the stress put on personal competences instead of pragmatic ones. However recently, due to our access to EU, special attention is paid to practical but high-standards competences.

Pertaining to strategies used to develop teachers' professional education, some ideas can be mentioned. If we assume that teachers' personality underlines effective teaching we concentrate on personality development in the process of professional preparation. Consequently emphasis can be put on either general knowledge or problem solving or social-emotional competences.

Model of teacher education on the basis of Polish law regulation

We agree on the need to improve or at least maintain quality of education. Teacher training makes an important contribution to it. It serves as a catalyst for the permanent adjustment and encourages innovation. In Poland the educational system provides different ways for teacher training.

Selection to the teaching profession is based on previous school achievement (the score of "Matura" exam) if applying for 3-years "licencjat" studies or 5-years master -"magister" studies. Having graduated "licencjat" studies a candidate for master studies should present their "licencjat" diploma. The Act of Higher Education, with the Ministry' acceptance makes entrance exams possible. The exams can assess knowledge or skills which are not evaluated on "matura" exam

but are important in the teachers' profession. For example, we think it is essential that candidates should be checked by a speech therapist. Any speech disorders should disqualify candidates from becoming school teachers.

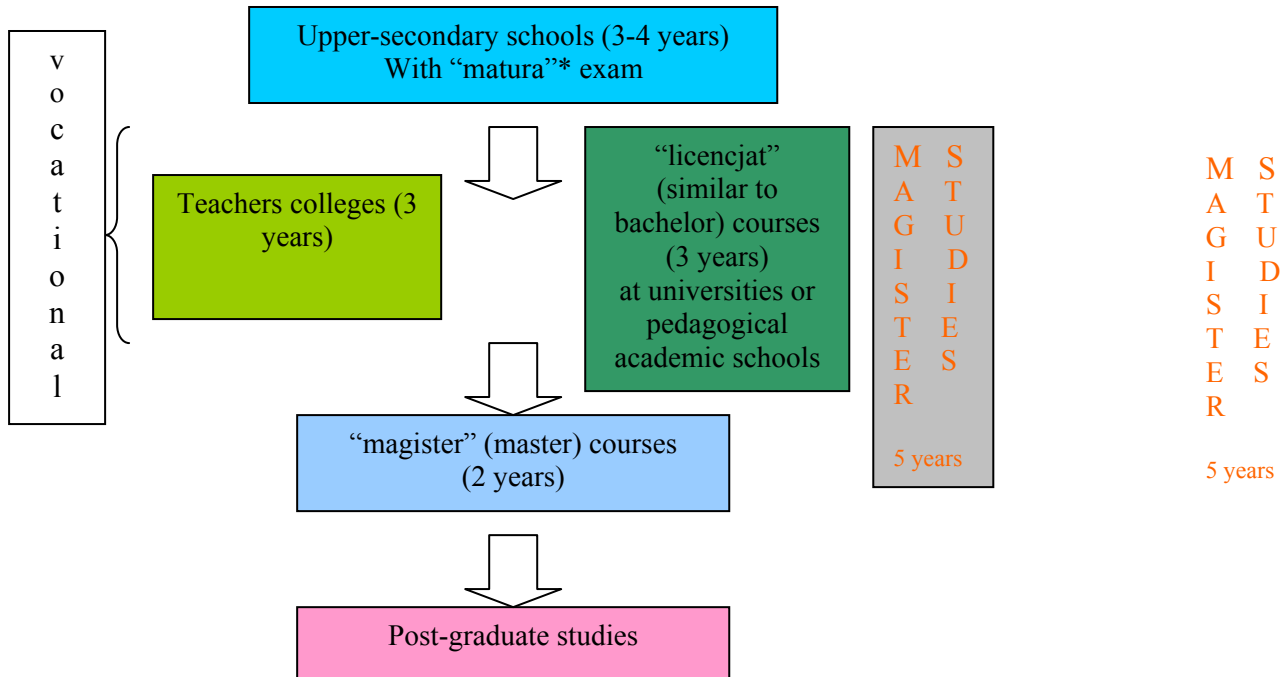
According to the Teacher's Charter (Ustawa Karta Nauczyciela z 1982) a candidate for a teacher's post must have completed advanced studies in a specialisation (e.g. mathematics, biology, etc), alongside compulsory pedagogical preparation. In the view of the newest standards teachers must to be prepared so they can teach a second subject.

Teacher training takes place in: universities, pedagogical academics schools, teacher training colleges and foreign language teacher training college. Generally, studies can be divided into to forms: day and extramural, but the standards are the same.

The teachers are prepared for pedagogical studies (universities, pedagogical academics) and other providing specialists for various professions, e.g. biologists, historians, mathematics. Both types of studies offer specialisations. For example at the University of Silesia in the Pedagogical Institute students have an opportunity to choose among: infant and elementary school education, health education, social education, and rehabilitation. Compared with other universities or pedagogical academies, some other specializations can be mentioned: the advisory profession, creative education or education of the handicapped. Studying at other institutes, students who intend to be teachers should choose a pedagogical specialisation within the subject they intend to study. There is also a possibility to acquire a teaching qualification during **postgraduate studies** for those who completed studies without a pedagogical specialisation and those who want to broaden their qualification. It is worth mentioning that regarding the newest regulations (The Regulation by the Minister of National Education and Sport of the 7 September 2004) higher education institutions intend to introduce studies covering not one but two specialisations. Two specialisations mean that a teacher is entitled to teach two, most often related, subjects for example biology and chemistry. Post-graduate studies also offer the second specialisation during 3 or 4 semesters.

Curricula contents for teachers' education are subjected to general regulations by the Ministry of Education. The scheme below illustrates possible routs of professional teachers' education.

Scheme 4. Routes of teacher education in Poland.



* final exam after completing upper- secondary education (comparable to A-level exam)

Source: self created

Traditionally teachers' education takes place at universities and pedagogical academics – outside the place of work and relatively young school-leavers or graduates without any prior professional experience start to work. Recently policy in Poland has focused on a more open and diverse teachers' education. Teachers' education curriculum is geared towards in-service education. It should result in more a flexible entry to the profession. On the other hand, the aim is to foster training in schools.

This traditional teachers training should be coupled with non-traditional ways to ensure that "produced" teachers are not deficient. Although university studies provide wide knowledge but it's mainly theoretical. Most of the students of pedagogical studies complain about the shortage of practical placements in schools. So as to give thorough and flexible qualifications these two routes for educating teachers should be complementary.

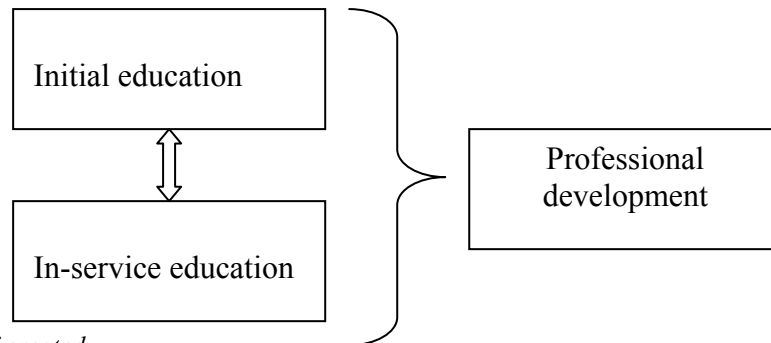
From this point of view it's important to distinguish between:

1. qualifying (initial) training
2. and in-service
 - a. continuing training
 - b. additional training

The first makes it possible to get relevant qualifications, while the second updates and upgrades professional skills. Additionally, in-service training might provide new skills and new diplomas.

The initial education of teachers can not provide them with all the knowledge and skills, it is only a foundation. However effective in-service training helps them to build constructively on this foundation during their career. Initial education and in-service education are the phases leading to professional development. In this context professional development encompasses qualifications, experiences and practical skills, so it is broader term. These assumptions are presented below.

Scheme 3. The relation between education and teachers development



Source: self-created

In Polish schools the answer to in-service education is a system of **school based staff development**. This route is designed for all teachers to enlarge their practical skills such as diagnosis, prevention, therapy, methodical skills and expansion of knowledge. Mainly it's allocated at schools but there is a need to build up partnerships with other educational institutions, not excluding universities. In school based staff development the emphasis is shifted from certificates and "just studying" to gaining skills: getting feedback and sharing experience.

The fundamental meaning in school based staff development is attributed to:

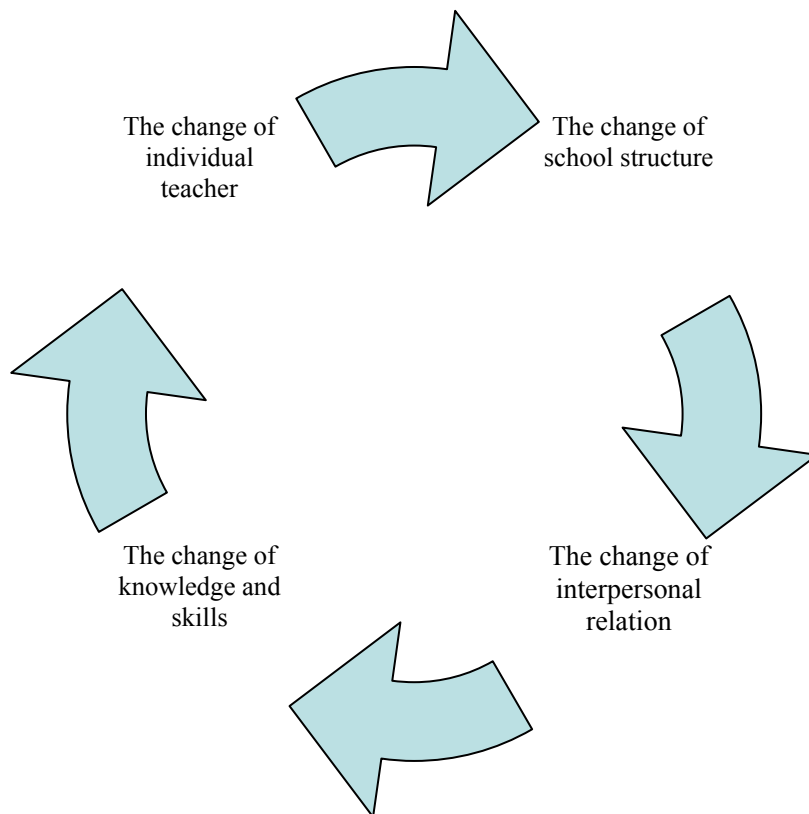
- practical use of knowledge and skills
- choosing the content for staff development adapted to the needs of a particular school or educational institution
- placing rising qualifications and knowledge in institutions where teachers work
- organising a team providing continuous supporting development instead of occasional and individual support
- more active, creative and reflective methods of learning and teaching in professional development.

The starting point in school based staff development is the needs of school and the necessity to conform to the educational changes. It does not exclude outside school development to say more such participation is postulated.

Not by coincidence, in this system some active forms are employed, for example: organizing and taking part in self-development conferences, professional discussion, observation, playing the role of “critical friend”, systematic observation along with appraisal, mentoring, shift of posts, keeping a professional journal, participating in conferences and courses, distance action learning, studying literature on a subject, benchmarking, action research, the analysis of critical events.

School based staff development should lead to changes in four areas which are presented in the scheme below:

Scheme 2. Four areas of changes.



Teacher training based at schools has an impact on the relationship between schools and teacher education institutions as well as on the work of qualified teachers working in schools. This raises two issues: obligatory cooperation with other institutions and burdening experienced teachers with additional tasks.

Considering the first it means adjusting traditional expectations on both sides and achieving a more equal role for schools. Nevertheless, in Poland the partnership between schools and teachers education institutions is still missing. School based staff development also places a demand on teachers and their work load, besides it can contribute to teachers exceeding their professional brief.

Professional promotion grades of teachers in Poland

In Poland there is not a final qualification phase. After completing studies the teacher is recognized as qualified teacher within the accomplished specialization. He/she is employed by the school head on the basis of an open recruitment procedure, for a trainee period of one year. Nowadays in Poland teacher appraisal is compulsory, it can be connected with teachers' promotion, but also during the school year head teachers evaluate the work of their teacher employees.

According to the Teachers' Charter (Ustawa Karta Nauczyciela z 1982) a teacher can be awarded four professional grades:

- Trainee teacher (stażysta)
- Contract teacher (kontraktowy)
- Appointed teacher (mianowany)
- Chartered teacher (dyplomowany)

The teachers' promotion is subjected to some conditions that must be met:

- Gaining required qualifications.
- Completing the training period "staż". Gaining a positive opinion of the head teacher after an assessment of the teachers' achievements based on the professional development plan prepared by the teacher at the beginning of the training period. It is the first step of teachers' work appraisal.
- Obtaining the acceptance of the qualification commission or examination commission, in the case of a contract teacher.

Becoming employed results in gaining a trainee degree and teachers start one year practice to get a promotion to the second grade – contract teacher. This first phase can be considered as on-the-job qualifying phase. Completing it proves whether a trainee acquired sufficient competences, if so he/she is admitted to the profession. In order to continue the professional development after 2 years of work, which is in fact a step in the promotion procedure; teachers must commence another "staż"-promotion. It lasts 2 years and 9 months and the outcome is getting appointed teacher grade, after the exam. Both trainee and contract teachers have mentors who provide professional advice and support. Mentors, chosen by the head teacher of the school, are obliged to control and assess teachers' work. After gaining appointed teacher grade, he/she is obliged to work 1 year before starting to apply for another grade. It is preceded by additional 2 years and 9 months trainee period. Unlike previous grades teachers don't have a mentor, but they prepare professional a development plan and finally obtain the grade of chartered teacher.

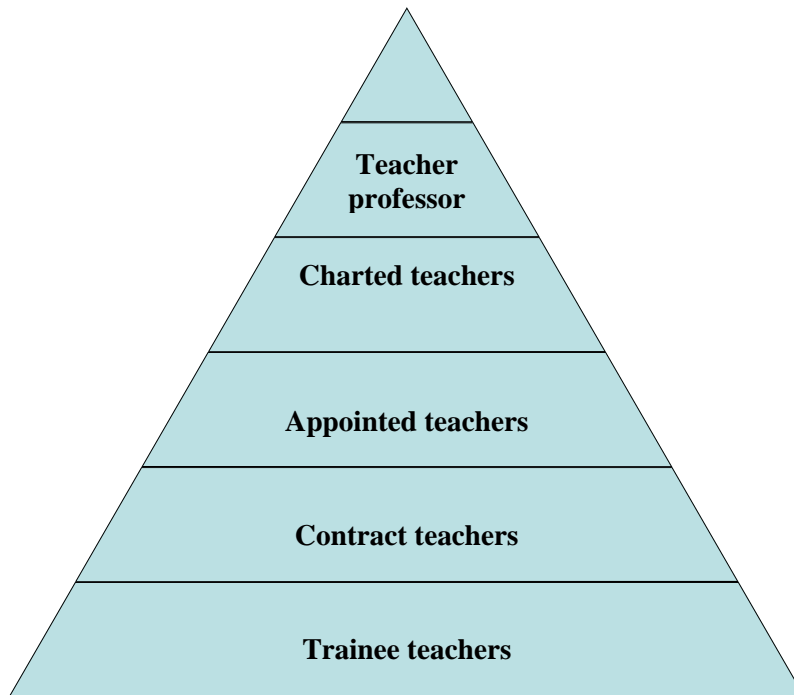
Once the teacher becomes appointed he/she gains all rights guaranteed in the Teachers' Charter. It is often perceived as professional success and also in teachers' opinion brings more stabilization and job security.

For teachers with outstanding achievements there is a possibility to get an honorary title of education profession which is awarded by the Ministry of Education.

In the procedure of professional promotion of teachers other subjects are engaged: municipal government which organize and lead the school (samorząd lokalny-gmina, powiat) and regional educational authorities (Kuratorium Oświaty).

The above procedure may be called horizontal and is connected with professional growth and broadening competences. There is also the vertical route which qualifies for posts in educational management. A teacher with relevant qualifications and promotion can apply for the posts in school of head teacher, in regional educational authorities of teacher methodological adviser, senior inspector, superintendent or in the Ministry of Education.

Scheme 4. Teachers promotion grades



Source: self created

Teachers competences

Historically, the emphasis on what we seek in teachers swings between the practical and personal domains. The latest efforts to define what teachers need to be able to do tend to emphasize the interpersonal and personal skills of teachers.

Research demonstrates that the affective competencies of teachers directly impact on student learning. Educators along with reformers try to establish a catalogue of standards for teachers what is in line with the general endeavors in Europe to increase the professionalism of the teachers' work.

In legal requirements (The Lisbon Strategy, The Bologna Declaration) fundamental transformation of education and teacher training is agreed. This transformation could benefit not only educational systems but also the whole European society. In the Report "Education and Training" by the European Council and the European Commission principles for teachers competences and qualifications are set out. The root of the thesis is the assumption that teachers play a crucial role in educating young people and they can make the educational system evolve. It is important to note that the EC recognises teachers as "key players" in implementing the reforms in a knowledge-driven world economy. The text aims to propose groups of so-called "key competences".

A lot of objectives are made to cover: high standard qualification, preparation for lifelong learning and mobility and finally partnerships. Additionally to ensure that the teachers will enhance the quality and efficiency of education. From the assumptions we can derive three groups of crucial competences which teachers' education should support. The teachers should be able to:

- work with others – they should have the ability to build interpersonal relations based on empathy, self-confidence and engagement. It is necessary to be aware of children's needs and human growth. This can help to increase social intelligence and collaboration with others.
- work with knowledge, technology and information – it is expected that they not only transfer knowledge but are equipped with abilities to construe it. It means to access, analyse, validate, reflect on and transmit information. It is indispensable to create a learning environment, supporting creativity and freedom of thought.
- work with and in society – teachers have always been perceived as contributors to socialisation process at all levels from local to global. Nowadays they should promote the role of active citizens. Teachers must be capable of creating cross-cultural respect and understanding. The task is challenging because teachers must balance between "different" and "common" values. Moreover they should cooperate effectively with local communities and educational institutions so as to contribute to local and global environment.

Proposed above competences are in congruence with pedagogical theories about teachers' education. There is agreement the teachers should be competent in the field of:

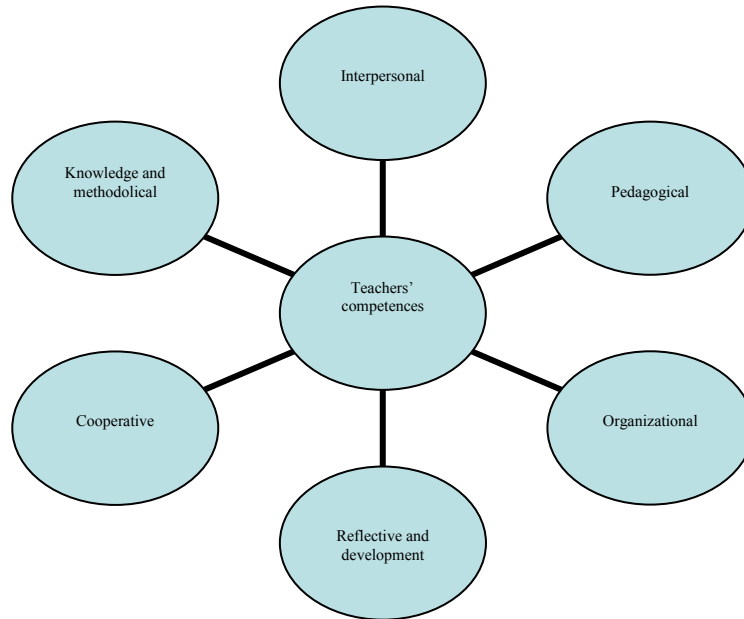
- Interpersonal competences- teachers should balance between leader and “fellow”. These kinds of competences help to create a friendly and cooperative atmosphere and encourage open communication. The competent teacher is prepared to distinguish and choose proper attitudes, for example

1. guidance ↔ counselling
2. steering ↔ following
3. confrontation ↔ reconciliation
4. corrective measures ↔ stimulation (com. www.lerarenweb.nl).

- Pedagogical competences- involving rules of pedagogical relations to provide a safe-learning environment. They are drivers for emotional, social, moral and intellectual development of pupils. Thanks to them children can become more independent, autonomous and able use their own initiative. It seems that such competences are mainly dependent on teachers’ personality and their system of values.
- Knowledge and methodological competences- the core of these competences is the ability to enable pupils to gain knowledge and experience, motivate pupils for their learning and working tasks so they can achieve accomplishments successfully. Teachers should be prepared to focus more on equipping children with skills for life-long-learning — ‘learning how to learn’ , rather than acquire skills and knowledge which will become redundant.
- Organizational competences – help teacher to organize didactic process, choose methods (e.g. brainstorming, dramas, PBL) and forms (individual or group working) of teaching, using appropriate equipment (books, maps, multimedia, etc.) which helps pupils learn better.
- Cooperation competences with colleagues and school environment- due to them teachers make a contribution to the improvement of working conditions and effectiveness of schools. They are link to communication and interpersonal capabilities.
- Reflection and development competences – similar to the concept of “reflective practitioner” by Schon (1983). Reflection means reconsideration on doing, both before and after. The teacher should be aware of underlying standards, educational values and views. The competences help to keep pace with changes in knowledge and professional practice and change accordingly. The teacher has a vision of his/her professional development knows his/her own weaknesses and strengths and finally is capable of planning his/her professional future (com. Kwaśnica, 1993; Kwiatkowska, 1998).

These competences mirror the need of lifelong education, team work and cooperation with other subjects in education. It seems that teachers’ education should be based on these components as they underpin stakeholders’ expectations. In the chapter below we try to find an application of these theories in Polish educational law.

Scheme 5. Teachers' competences.



Source: self created

Content of teachers' education in Poland

The main standards of teachers' education in Poland can be found in acts of Polish law.:

- The Act of Higher Education of the 27 July 2005
- The Regulation by the Minister of National Education and Sport of the 7 September 2004
- The Teachers' Charter of the 26 January 1982 with later amendments

In the first act standards underlying teachers' professional preparation are assembled in groups:

- Qualifications
- Pedagogical subjects
- Two subjects specialization
- IT qualifications
- Foreign language knowledge
- The period of study and practical placement
- The curriculum (demanded skills and knowledge) according to the job markets' needs.

With accordance of The Regulation by the Minister of National Education and Sport of the 7 September 2004 on the teacher training standards, curriculum of teachers preparation embraces skills that have been perceived as indispensable in working in a modern school. The skills are covered by:

- **specialisation training** – provides a basis to teach the subject: students gain the knowledge and skills that gives them the authority to lead the classes
 - ✓ main specialty – prepares teachers to teach subjects coherent with study subject (e.g. Polish when studying Polish language)
 - ✓ additional specialty – makes it possible to teach the second subject (English when studying Polish language)
- **pedagogical training** – prepares students in didactic, educational and caring duties. It is associated with specialisation training and practical placement in school
 - ✓ psychology
 - ✓ pedagogy
 - ✓ didactics
 - ✓ additional subjects (for example voice emission)
- **practical placement in school** – gives practical, professional skills. Students have an opportunity to visit schools, observe classes, assist teachers, prepare and teach classes. In detail it enables students to:
 - ✓ to get acquainted with the organization and functioning of schools and other educational institutions, especially those the student is preparing to work in
 - ✓ planning, organising and preparing the documentation of the teaching process
 - ✓ evaluating effectiveness of work and pupils' achievement
- **ICT training** to enable the use of information technology in the teaching process
- **language training-** teachers are obliged to have a good (advanced) command of at least one foreign language.

The model of graduate teacher contains skills with help to fully meet the standards of didactic and educational needs. Consequently a teacher - to be – should be prepared in the fields of:

- cooperation with pupils and teachers, local environment and families
- dealing with problems above teaching subjects along with parallel education
- educational innovation, building the pattern of “good” pedagogical practice
- permanent professional development and improvement
- educational and teachers' promotion law

In coherence with mentioned competences in theory, the above regulation states that teachers' training should lead to gaining competences in the core areas:

- didactics
- social and interpersonal
- creative
- pragmatic
- communicative

- informative and technological
- languages.

Conclusion

Policy-makers in Poland, similar to other European countries try to adapt teachers' education to actual needs and thus promote lifelong learning. Instead of presenting detailed programmes, reference is to the list of desirable competences. In general such approaches can be found in teachers' profiles which are rather skill-based. Both Polish pedagogues and the European Commission articulate a dynamic vision of teachers' education which allows teachers to work effectively and reflectively. Routes of teachers' education in Poland are various and keep changing. In each phase of education the aims are to acquire, by teachers, skills to respond to the challenges of a modern school. Although there are different possibilities of gaining qualifications there is a consistent strategy of skills development.

The pattern of professional development for teachers has moved from concern with training in techniques or present knowledge to a holistic view of early professional development and preparing for career planning. This creates both drivers for curricular change and opportunities for its implementation.

The pressing case is to incorporate acclaimed skills into teachers' education but also an appreciation of the necessity to improve teachers' education is rarely forwarded by practice.

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32

Critical Issues in European Teacher Education

Michael Kamoudis

Introduction

The aim of this paper is to provide a platform for dialogue and personal insights with other participants in the international conference by discussing the major challenges and issues for Teacher Education in the European Community (part A), describing briefly the Greek educational context (part B) within which the teacher education programmes for primary school teachers in the Greek University Pedagogical Departments takes place (part C) and indicating certain implications for teacher education in European Community. (part D).

PART A.

CHALLENGES AND ISSUES IN EUROPEAN TEACHER EDUCATION

The needs required in the field of European Teacher Education go beyond adding subject matter and semesters of study for student teachers or incorporating weekly seminars for teachers; what seems necessary is a new mentality in the infrastructure of teacher education (programmes, student teachers, teacher educators, schools, teachers).

Nowadays in the European context many critical challenges for teacher education appear to include:

1. The transformation of the role of teachers in this new century.
2. New conceptions of professional development for teachers.
3. Activities and practices that enhance life-long learning both for teachers

and their students.

4. The developing learning market outside the school system, in many European countries, with informal learning struggling with official school education.
5. Understanding multicultural education (Nieto, 1999) in the current political, demographic, cultural and historical context of European education.
6. Re-shaping schools and establishing curricula responsive to new demands in Europe.
7. Understanding teacher learning within specific contexts (Cochran-Smith, 2004).
8. The preparation and education of all students as future citizens in the European society who must be able to share common values and responsibilities.

Without effective responses to these and similar challenges, teacher education in Europe seems vulnerable to decisions of policymakers and the desires of alternative providers to meet the needs of education.

However, addressing teacher education both as a *policy* and a *political problem* (Cochran-Smith, 2004) can provide internal and external contexts that promote, support and value teachers' learning and teaching; in addition to this, other outcomes in teacher education (equity, inclusion, learning opportunities) can be accomplished especially when teacher education efforts concentrate on evidence and research (Cochran-Smith, 2004).

A first step for all "actors in education" is to acknowledge the need to respond to teacher-related issues with the participation of teachers themselves (for example, policies in teacher education can be designed with them).

A second step can involve the establishment of harmony between a teacher education programme and a school curriculum (for instance, what and how teachers learn and what and how they are expected to teach, the emotional and attitudinal aspect of student teachers and students, the teaching about Europe in both curricula, etc).

A third step can address the accountability of teacher education together with the effectiveness of schools and the flexibility of links with common European learning projects.

Furthermore, if teacher education is considered as a continuous development through different but interdependent stages, pre-service and in-service, then teachers can develop stronger voices to represent their perspectives. They can also have the opportunity to be leaders as well as learners and commit themselves to goals that are broader and more inclusive than their initial concerns. "The key to producing well-qualified teachers is to enhance greatly their professional learning across the continuum of a career in the classroom" (Darling-Hammond, Sykes 1999 : xv).

One complicated issue associated with reforms in teacher education is that of the *outcomes question*. Although there is agreement that this question is important, there is still no consensus about how these outcomes should be defined, should be measured and should be used in policy and practice decisions (Cochran-Smith, 2004).

Another issue is the existence of a coherent vision for learning and teaching both in schools and teacher education. Developing a shared vision does not come from top-down mandates, policy or vision statement alone or through the single imposition of a set of standards (Sergiovanni, 2000). Dialogue, democratic approaches in which critical thought is encouraged can lead to a shared, coherent and sustainable vision. Such a shared vision can foster the “capacity to seek, critically assess, and selectively incorporate new ideas and practices” (Fullan, 2001 : 44).

Similarly, an interesting and major point is how teacher education programmes can become effective models of professional learning communities that foster and nurture professional dialogue and collaboration (Holm, Horn, 2003). In these communities teachers can participate if they know that they will be given opportunities to create as well as receive knowledge. Teachers usually appear to become members of a community when they know that they are valued as partners and participants in an ongoing effort to improve the learning process for themselves and their students. This is important when learning communities are trying to bring people together who have different ways of acquiring, developing and using knowledge.

In addition, keeping a balance between inside knowledge (the experiential knowledge of teachers) and outside knowledge (knowledge created by research and conceptualization) can be a hallmark in these successful learning communities (Cochran-Smith, 2004).

The agenda for reform in teacher education needs, also, to rethink ways in which good and innovative teaching is conveyed by teacher educators. The potential to reorganize the way in which student teachers’ knowledge is assessed and by whom; the teaching practice, the mentor teacher, the way student teachers internalize pedagogy and their practices and closure of the gap between pre-service and in-service education, demonstrate the need to achieve consensus and a common philosophy for a broad, flexible and values-oriented European paradigm in teacher education.

This also offers an opportunity to all educators to break with ineffective past practices and reinvent teaching, learning, schooling and teacher education. Therefore, it may be useful to put the issue of improvement of teacher education in a broader context regarding the pattern, the similarities and differences of each national educational system. In the next two sections of the paper we can try and look very shortly at the public education system of a European country (Greece) and the university education it provides for primary school teachers. The final section will deal with some implications concerning the challenges and issues for

teacher education discussed in this section.

PART B.
A SHORT INTRODUCTION TO THE GREEK EDUCATIONAL SYSTEM

Table 1: The general framework of the public education system supervised by the Greek Ministry of Education and Religions.

Labour market	
Higher Education	
Postgraduate studies (Universities- TEI- Hellenic Open University)	
Universities	
Technological Education Institutes (TEI)	
IEK	
SECONDARY EDUCATION	
LYKEIO : General, Musical, Ecclesiastical (self-sufficient and autonomous), Physical Education Schools B grade Special A grade	TEE: B and A C and B
IEK	
GYMNASIO : (compulsory) (General, Musical, Ecclesiastical, Physical Education, Special)	
PRIMARY EDUCATION	
Dimotiko (Mainstream, All day, Special) (compulsory)	
NURSERY EDUCATION	
Nipiagogio (Mainstream, All day, Special)	
Nipiako tmima	
Paidikos stathmos	

Table 1. The Greek Educational system
Source: Greek Ministry of Education and Religions, 2006.

However, it is worth noting that the impact of the private sector on the nature of the Greek educational system is quite significant. The picture of the private sector developing services in the national system of education becomes more illustrative through certain examples in the non formal section: post secondary private institutes of vocational training, private centres of studies that collaborate with foreign higher institutions, private institutes for foreign languages, private preparatory institutes for national entrance examinations in higher education. It is important to note that the Greek family appreciates the value of education and spends a big part of their annual economic budget to support to a great degree, the informal schooling of their children from primary to university level. It is not unusual for a Greek family to support financially the majority of students in upper

secondary school attending preparatory private institutions so as to increase their chances of entering higher education institutions. Moreover, the family is eager to support children when they decide to study in foreign universities. This is clear in various statistical yearbook (e.g. Unesco) where Greek students studying abroad represent a considerable percentage of the higher education population in Greece (more than 13%); this student immigration seems to be among the highest in the world bringing Greece in the sixth or seventh place among other countries during the last decades.

Some characteristics in the structure and function of the Greek educational system is the over-centralized character, the top-down decisions of Ministry of Education and Religions and the quite modest percentage of GDP spent on education (3,5%). During the last five years reform efforts try to focus on

- the modernisation of school curricula in primary and lower secondary school,
- a new structure in the existing technical/vocational orientation of upper secondary school (TEE)
- a new infrastructure of education for those attending higher education studies
- the optional upgrade of education for most primary school teachers (those serving in public schools and having completed two years of studies in higher education).

In this education context, attendance rate at pre-school establishments, crèches (vrefonipiakoi stathmoi), nursery classes (nipiaka tmimata) and kindergardens (nipiagogoia) seems to be high despite the fact that it is still not compulsory. Students enter primary school at the age of six and lower secondary school at the age of twelve.

Attendance in primary school (demotiko) and in lower secondary school (gymnasio) is compulsory and each lasts for three years. Musical, church (ecclesiastical) and physical education secondary schools aim at developing students' special interests and talents.

Vocational training institutes, called I.E.K., try to integrate students who have completed lower or upper secondary school into the labour market by providing a great range of specializations.

Secondary level graduates who are twenty three years old can follow studies in certain subjects, usually not available in Greek universities, at the Greek Open University. Furthermore, the same institution provides postgraduate studies for university graduates in a very limited area of subjects. In both cases, there is a 'numerus clausus' system where students are admitted by drawing lots.

Children having mental, physical, visual, hearing, and similar impairments attend special education schools or classes within schools or in rehabilitation centres. Upper secondary education comprises different types of unified and technical vocational schools and lasts three years but it is generally considered more as a

preparation period for entrance in higher education institutions.

Completing secondary education students receive a leaving certificate and participate in national state examinations for admission in higher education. Upon receiving their final grades candidates declare and fill in their departmental preferences in one or two of the five available scientific tracks in which all departments (university and technical institutions) are allocated. From academic year 2006-2007 students are required to have attained at least a minimum level of success either in their written grades (10.000 points) in the nationally examined subjects or in their access grade (10 out of 20) so as to be considered candidates for higher education. The percentage of those entering departments of their first choice is rather small.

Successful candidates in university pedagogical departments enter through a non existing track, called 'the common track': this means that these candidates can sit for examinations in the subjects offered either in track I (Arts) or track II (Sciences). This is crucial because the other candidates in these two tracks can enter either to the department of their preference, for example Philosophy, Mathematics, Law, Physics, etc, or to one of the eight university pedagogical departments. However, student teachers are more likely to be attracted to the teaching profession when they are provided with supportive and objective procedures regarding selection criteria. For instance, this could be a separate track where examinations would allow candidates to exhibit their abilities, skills and motivation to follow this profession.

Although access to university pedagogical departments has become more demanding lately, due to the availability of teaching posts in primary school, many candidates consider these departments as an alternative solution in case they do not succeed to secure a place in the university department of their choice.

Generally speaking, the entrance examination system for studies in higher education (universities and technological education institutes) appears to be an acute issue in Greek educational policies and all governments have tried to find different solutions by introducing often various changes or reforms in this 'numerus clausus' examination system.

According to the Greek constitution public education is free of charge for students in all levels of education. This public and cost-free education includes, among other things, teachers' salaries, the publication and distribution of students' and teachers' school books in nursery, primary, secondary schools, the coverage of cost regarding books in higher education. Furthermore, the Ministry of Education and Religions addresses the education of Greek students living abroad by covering the cost of their education materials and the salaries of teachers who are dispatched from public schools and sent to teach in various countries all over the world.

Primary school and teachers

Lately there has been pressure, mainly from teacher's unions, for a 12 year

compulsory education, beginning first with nursery education which is still optional and is provided by nursery schools (*nipiagogio*), usually in the morning (8.30-12.30). Primary school (*dimotiko*) and lower secondary schools (*gymnasio*) still take the responsibility for a nine-year compulsory education.

Primary school education is available for children aged 6-12 where children are assigned to six classes by age. Each school comprises 6 classes each of which lasts one year and operates five days a week between 8.15 and 13.30 and very often as non obligatory all-day school (until 16.00 in the afternoon, activities include art, music, computer, foreign language, assistance lessons.) In remote or areas that are not easily accessible there are single-class schools (one teacher responsible for all pupils) or schools with a limited number of teachers (2 or 3 or 4). In the first two classes, assessment is descriptive; later, it entails a scale, ranging from quite good to excellent (class C and D) or a marking scale for classes E and F (good 5 and 6, very good 7 and 8, excellent 9 and 10). Students receive a progress certificate in their first five classes and a study certificate in the sixth grade which enables them to enroll in the second phase of compulsory schooling, the lower secondary school (*gymnasio*).

The primary school curriculum includes subjects in different areas and the textbooks, whose content is identical for all students, are accompanied by a teacher's book which provides detailed and specific methodological suggestions in the organization and presentation of the teaching units (New books in all subjects are going to be introduced in the school year 2006-2007).

Most of the subjects in the curriculum are taught by the same primary school teacher. The exception to this is the teachers (who have graduated from university departments) that provide teaching in certain subjects such Music, Physical Education and Foreign Languages. Since the school year 2005-2006 English is taught from third to sixth grade students while in September 2006 French or German is going to be taught in addition to English, to fifth and sixth grade students.

All prospective teachers who are going to teach in public schools must pass successfully national examinations held by a body responsible for the recruitment of all civil servants (ASEP). Then they are appointed by the Ministry of Education and Religions according to existing vacancies and needs in public schools and become permanent civil servants after a probationary period of two years. When they are appointed they are placed in the first level of the hierarchy (grade C) ; after two years' service they are advanced to grade (B) and after six years' service to grade (A). Those teachers who work in public schools on a non-permanent basis cover immediate needs and are recruited from successful candidates in the ASEP examinations according to district lists on an annual basis.

In-service training is available only to a limited number of appointed primary school teachers in public schools. Entry to this kind of training is available for teachers having five years class experience and success in national examinations. The duration of studies is two years and is under the control of the university

pedagogical departments. Upon completion of their studies teachers are awarded a diploma either in general or in special education.

**PART C.
TEACHER EDUCATION FOR PRIMARY SCHOOL TEACHERS IN THE
GREEK UNIVERSITY PEDAGOGICAL DEPARTMENTS**

The main general remarks regarding common and characteristic features in the programmes of the nine University Pedagogical Departments for primary school teachers in Greece can be summarized as follows: The pedagogical departments were established in accordance with State Law 1268/82. The aims of the departments as specified by Article I, paragraph 2, state that the mission of these institutions is

- *To develop and advance the pedagogical sciences through educational research and teacher education.*
- *To instill in its graduates the appropriate academic and scientific orientation necessary to their profession.*
- *To contribute and promote the level of education by catering for the ever- increasing needs in the field.*
- *To contribute in the search for solutions to educational problems.*

The departments are located in nine different cities involving the universities listed below:

Alexandroupoli	University of Thrace
Athens	University of Athens
Florina	University of Thessaloniki
Ioannina	University of Ioannina
Patra	University of Patra
Rethymno	University of Crete
Rhodes	University of Aegeo
Thessaloniki	University of Thessaloniki
Volos	University of Thessalia

Table 2. Location of University Pedagogical Departments in Greece (2006)

Student teachers can also be admitted to a university pedagogical department, newly established at the university of Thessalia, where they are trained to become teachers in special education schools. (Since their university curriculum is differently constructed and with subjects addressing mostly special needs, this department will not be included in this discussion).

Although each of the eight departments is responsible for the organization and the implementation of its own programme, there are some common features. These can be summarized by the following points:

1. Courses in the pedagogical departments are offered on a semester basis. Classroom teaching is very often for three hours a week; one credit corresponds to one hour teaching per week and between one and three credits can be earned when teaching is combined with practical exercises or seminars. Grades in each course vary from 1 to 10. Student teachers must attain a pass mark of at least 5/10 in each required course. For the final degree grade, the mark of each course is multiplied by a "factor of importance" and the figures from these multiplications are added together and are then divided by the total number of all the factors. The factor of importance ranges between 1.0 and 2.0 courses carrying 1-2 credits take (1.0), 3-4 credits (1.5) and more than 4 credits 2.0. Examinations are held within a period of two weeks (June) and three weeks (September; January - February). The types of examinations are written or partly written with assignments or oral presentation.
2. Teaching is conducted in the form of lectures, seminars and teaching demonstration which can also include practical exercises, pedagogical workshops and research. Lectures provide an overall, general introduction to particular areas of study. In seminars, student teachers under the supervision of their teacher educator, study a particular theme in depth within a defined subject area. Practical exercises refer to independent courses which contribute to students' further development of general knowledge and general education. Teaching practicum refers to those types of practice which include classroom observation and student teaching in primary schools under the supervision of teacher educators and cooperating teachers. During the didactic methodology courses, student teachers are exposed to different teaching methods. It is common policy in the departments to allow students to undertake seminars, workshops and teaching on the pre-condition that they have successfully completed the relevant theoretical courses.
3. The standard period of time required to get a degree is eight semesters (four years). Student teachers who do not complete their studies within this period for various reasons, are allowed to do so within another specific period.
4. Courses are considered to have been taught sufficiently after at least thirteen weeks teaching; in some cases, they are repeated the following year. Most single courses are available as three credits with only a few exceptions.
5. The concurrent model is adopted in all university pedagogical departments. Different emphasis is given on the start and the period of the teaching practicum. Some departments focus on (atypical) subject matter specialization and other

departments on all round teaching skills.

6. Many pedagogical departments allow or encourage student teachers to receive a certain number of credits in courses which may not be available in university pedagogical departments or which are offered at advanced level in another university department.

7. Courses are classified as compulsory, compulsory choice (courses in specific disciplines from which student teachers are required to choose a certain number) and elective courses, where there is no restriction regarding the discipline area from which courses will be attended.

Degree Requirements

The way courses are allocated in the programmes of university pedagogical departments is not identical. In most cases, there is an induction programme, including all types of courses available in the department but there is the possibility for student teachers to structure an individualised programme with compulsory choice and elective courses and integrate it into the compulsory courses, either in the autumn (1, 3, 5, 7) or spring semesters (2, 4, 6, 8).

One common element in the requirements of university pedagogical departments regarding the status of courses provided during the programme of studies, in that courses changing category do not affect student teachers academic progress as long as they have been successfully completed.

Compulsory choice (CC) courses are arranged within a rich array of thematic units, usually in different disciplinary sections. From another perspective, (CC) courses can focus not only on introductory concepts but also on a more detailed analysis of issues and problems related to school culture involving a kind of educational research.

However, the number of university pedagogical departments offering elective courses (E) is rather limited as well as the percentage of credits received in these courses.

A General Overview

The programmes of the nine university pedagogical departments appear to have been organized mainly around three areas: one in Psycho-pedagogy, a second in Humanities, Sciences and Mathematics and a third embracing Methodology and Design of Curricula courses. This indicates that the preparation of prospective teachers in primary school is being viewed as a shared responsibility of academics from various disciplines. Although there is a ceiling requirement in subject matter knowledge requirements, emphasis is given to courses addressing a rich array of issues in Pedagogy and Psychology. Equal attention is given to courses exploring Methodology, either general or specific, from the perspective that it is a necessary basis for student teachers effective teaching. On the other hand, the teaching practice component, upon which student teachers are expected to build their professional growth, does not have an extensive application in the whole programme of university pedagogical departments. However, it is positive that it

is a compulsory component and that it has been integrated throughout the eight semesters, facilitating real experiences within school culture.

The general structure of teacher education programmes seems to have been built on the assumption that student teachers are able to absorb an extensive knowledge base, receiving credits from courses belonging to different categories. Compulsory choice and elective courses provide the opportunity for student teachers to develop a personal and individual curriculum according to their interests and needs, along with those courses required in the compulsory component of the programmes. Another positive feature is the possibility given to student teachers to attend and successfully complete additional courses apart from those required for graduation, in this way reinforcing their knowledge base in various areas.

PART D IMPLICATIONS FOR POLICY

Policy approaches in many European Councils (e.g. The Lisbon European Council, March 2000) set specific goals for a strong, competitive and knowledge based economy in Europe. This means also that education should be flexible enough to adapt to changing needs.

Enhancing the quality of education and vocational training is one of the main priorities of the European Community action programmes (e.g. Socrates, Comenius, Leonardo Da Vinci). The Council of Ministers of Education and the European Parliament have given emphasis to the issue of quality by adopting the basis of proposals from the Commission certain recommendations and key indicators.

One example of this is how the European Community considers education to be a driving force for the effective implementation of the 'Work programme 2010 for education and training systems'. Member states are advised to give priority simultaneously in three areas:

- the improvement of the quality and effectiveness of education at all levels
- a lifelong learning approach for the development of citizenship, social cohesion, employment and personal excellence
- an increased mobility within Europe for learning and teaching purposes.

In this context, member states provide a joint report every two years until 2010 on actions taken and progress made at national level towards these common objectives.

Among these European common references and principles that should be developed and implemented at national level, top priority for European Community is the issue how to 'make the profession of teacher/ trainer more attractive' in the coming years.

This entails that national legislation steps and practices of member states should encourage the training and recruitment of effective and caring teachers and at the same time they should ensure setting up mechanisms for teacher development at national and European Union level. Furthermore, a failure to address challenges in the teaching profession of some member states such the issue of teaching shortage, of low salary, of inadequate pre/ in service education would represent serious impediments to the objectives to raise the quality of lifelong learning as well as to promote a European mobility of teachers and teacher educators as part of their career development.

Among the key questions that can be posed to serve as a springboard for a discussion concerning important issues in teacher education within the European Community are the following:

What does society expecting European teachers to get better at?

What does society want teachers to be in the Europe of 21st century and how can this become possible?

Why does it seem that teacher education courses often fail to produce sophisticated and critical thinking among student teachers?

Is experience the only real teacher of prospective teachers?

How can teacher education be improved so that graduates begin to think like experts?

In what ways do teacher associations in European member states invite teacher education institutions to be accountable to the teaching profession?

How can teacher educators help prospective teachers manage the ethical dilemmas of teaching while promoting their student teachers' moral development?

What are the attitudes, conceptions, beliefs and values underlying teacher education in European institutions?

Are student teachers well prepared for a role where they will accept responsibility for lifelong learning and respond to a range of challenges throughout their career?

Why is it important to examine the social, personal and professional components that exist within the idea of teacher development?

In what ways are teacher educators and school teachers acknowledged and encouraged when they make an effort to share their own experiences as a way of development?

All these have various implications. One implication is that teacher education, like any field in higher education, is subject to occasional trends, breakthroughs and

even paradigm shifts. Taking this into consideration, as well as cross-national differences in teacher education that exist throughout European countries, it seems important for researchers to find out how to improve the quality of the process of becoming a teacher.

A second implication is that learning to teach should be viewed not in terms of passive assimilation of knowledge but as a personal process through which teachers build knowledge from actions, experiences and interactions with educational and social community. Rather learning to teach should begin when a student teacher enters a teacher education institution, develop throughout a teachers' career and end the time a teacher applies to receive one's pension. This process should be creative involving a complex, authentic, sincere and caring interaction between teachers and teacher educators as well as among teachers, students, families in the school and social context.

A third implication denotes that the development of good practices and policies regarding teaching and learning in teacher education at a European level may need careful consideration. For example, the quality issue in European teacher education should be better understood, addressed and integrated in future common policies.

A fourth implication indicates that despite the introduction of new technologies, new pedagogies and new forms of partnerships in teacher education, many programmes still seem to fail to contribute to school reform.

From the point of view of a teacher a related question may arise: Is it necessary to adopt one common European teacher education programme for future teachers? The answer is difficult and not a single one. Part of the reason is that there are so different sets of national standards of the member states that apply to the preparation of teachers. The adoption for teacher competences and qualifications agenda is being promoted in the field of European higher education to make Europe's education and training systems a world quality reference by 2010 (Barcelona European Council, March 2002); this means that it is necessary for member states to use cooperation tools such as indicators, benchmarks and exchange of good practices so as to gain insight into the future needs and structure of teacher education in Europe.

Flexible and positive approaches are a possible starting point for gaining acceptance among European teacher education institutions. These approaches can in turn lead to healthy opportunities for professional collaboration and growth between schools and teacher education both at national and European level. As a result, concerted efforts could improve mobility of teachers and the exchange of good practice.

One simple example is the provision of a small common component in teacher education. For instance, courses in the European dimension of learning and teaching. Such a component could also provide the opportunity to make explicit the heritage the European values, history and culture and how these concepts are

associated with the education and citizenship of future students and teachers in Europe.

A second example is a consensus regarding the quality of the teaching practice. Prospective teachers need firsthand opportunities to integrate theory with classroom practice as well as training in practical-ethical judgments. Therefore, a common European teacher education policy structure on this issue could set up mechanisms for quality assurance, evaluation of progress, monitoring improvement and time allocated to teaching in the classroom.

A third example is the creation of a network of mentors for student teachers during their practice in schools. This would enable student teachers, teachers and mentors to share knowledge with each other another and to learn the important roles of 'colleague' and 'learner'. The responsibility of such a mentor will go beyond that of a model to that of a caring person who can create new images of what, when, and how teachers learn. These new images will require a corresponding shift from policies that seek to control or direct the work of teachers to strategies that develop teachers' capacity to be responsible for student learning. In this way, knowledge can be viewed as constructed by and with practitioners for use in their own context rather than as something brought by policy makers as a single solution for top-down implementation.

A fourth example is the linkage of pre-service with in-service education with specific practices in a way that all participants will have a sense that learning about teaching is a lifelong process. However, sustaining attitudes, roles and practices in the classroom will require other structures and support both outside and inside school. With such a step it is possible to create new communities of practice within and across national systems of teacher education in Europe.

Such approaches - common elements in the teaching practice, a body of caring mentors and effective links between pre and in service education - can be developed at national and cross-national level. They can provide opportunities to enrich teaching and learning methods, challenge the role and responsibilities of teaching profession and promote critical inquiry into teaching practices and student outcomes in European teacher education institutions.

Small, but meaningful and coherent, common policies at European level in teacher education programmes that will be accepted, may help student teachers share a personal and European vision of learning and teaching. These common policies will help student teachers value the diversity, experience and contribution of others and encourage reflection on their own experiences from which they will be able to learn. Similarly, periodic meetings can be established so that teacher educators and teachers develop a partnership approach to share their experiences and offer support for one another. It is important that both groups work as equal partners to provide a high quality teacher education in the European context avoiding stereotypes and assumptions of commonality of values and practice in teaching and learning.

Whether teacher education in The European Union is implemented in different models (e.g. concurrent, consecutive,) and in different contexts (universities, non-universities institutions) it is time to promote issues that deal with:

- academic excellence and quality teaching
- caring teacher educators
- partnerships and collaboration between schools and teacher education which will be based on trust, sincerity and exchange of good practices
- teachers who will be eager to share the vision of education, their professional development and the well-being of their students
- the ethical and intellectual quality in the school they are working.

Summing up, the crucial question remains: can teachers become Europe's greatest hope in educating all children and in creating effective, morally and healthy learning environments?

Current challenges and difficulties may seem insurmountable but they can be resolved. The problem is turning rhetoric into reality.

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33

Remodelling the Workforce for the 21st Century

Iwan Davies, Franca Kinchington, Tony Hayes

This paper examines the process of workforce reform in England, exploring its development and implications for a primary school and a Local Authority. These case studies illustrate the reality of turning policy into practice and enable European colleagues to reflect on their own contexts in times of teacher shortage and a profession under stress.

Introduction: The Issue of Teacher Workload

In order to ensure the success of any major reform a key question that must be posed is 'Is there a need and what will happen if the underlying problem is not addressed'?

Teacher workload in England, as with many European countries, is a major issue. It has become so as a consequence of the raft of educational reforms that have taken place since the introduction of the 1988 Education Reform Act in England, bringing with it major changes to the curriculum, assessment, recording and reporting practice and of course pedagogy. The drive to raise standards and student achievement is laudable and supported by all teachers, however of concern was that teachers were becoming bureaucrats instead of educationalists, with form filling and administration taking them away from their prime function which was to teach and educate children.

Fall-out over the years has been extensive to the detriment of the profession, and has resulted in teacher stress, staff sickness and experienced people leaving the profession. This has been evidenced across all phases and levels of responsibility

from much needed classroom teachers to headteachers. The National Remodelling Team (2004) report that,

‘teachers cite workload as their major reason for leaving the profession; that over 30% of a teacher’s working week is spent on non teaching activities; that 45% of teachers are due to retire within the next 15 years, and that, 30% of teachers leave the teaching profession in the first five years’.

Schools and Local Authorities have reported staff shortages and, in some regions, an inability to fill key roles. In addition to the impact on teachers as individuals and on the profession as a whole, this has a direct impact on student achievement, standards and the quality of the educational experience schools are able to give their students.

One of the key initiatives evolved to address these issues is the National Agreement on **Raising Standards and Tackling Workload**, signed by Government, employers and school workforce unions on 15th. January 2003. The Agreement impacts directly on teachers but also importantly acknowledges the key role played by school support staff, creating a wide range of new roles for adults (including Higher Level Teaching Assistants) who support teachers’ work and students’ learning within schools.

In seeking to create positive change in teachers’ work-life balance one has to address the financial and management implications for schools. Costing data from the pilot schools was used to create a national model for the implementation of contractual changes that suggested that that the majority of schools would be able to implement the contractual change by remodelling their existing resources. The statement issued by the Minister of State for Standards on the 13th. July 2004, acknowledged the ‘additional pressures on schools’ budgets created by workforce reform’ and for this reason in the July funding statement for 2005-2006, ‘maintained primary and nursery schools would receive a minimum guaranteed increase in per-pupil funding of at least 5% while the minimum guarantee would be 4% for secondary and special schools’.

What is apparent is that schools have had to adapt the model in order to meet their budget and specific needs of their school, so it is not a question of ‘one size fits all’. This model works best when a ‘whole school community approach’ is used; it enhances the role of support staff and provides a much needed career structure for higher level Teaching Assistants, and finally, it enables teachers to do what they do best - managing learning and teaching.

Remodelling the Workforce: Stages of Development

The following details the process from the pilot phase to implementation:

Pilot Phase: September 2002 (32 schools)

Raising Standards and Tackling Workload: A National Agreement: signed January 2003

Phase 1: September 2003

No teacher to be routinely required to undertake clerical and administrative tasks;
Provision for teachers and headteachers to have a reasonable work/life balance;

Teachers with management and leadership responsibility entitled to a reasonable allocation of time within school sessions to allow them to carry out their duties.

Phase 2: September 2004

Introduction of an initial limit on cover for absent teachers (38 hours per year) with the aim of ensuring that teachers rarely cover.

Phase 3: September 2005

Introduction of contractual changes, specifically guaranteed professional time for Planning, Preparation and Assessment (PPA) (a minimum of 10%) within school time;

New invigilation arrangements put in place;

Dedicated headteacher aimed at enabling school leaders to focus on school improvement.

This is the rhetoric, but how does this translate into practice? The views that follow explore Workforce Remodelling from the perspective of a large successful primary school and from one of the biggest local authorities in the country, identifying both the issues and the impact.

Workforce Remodelling

The headteacher's tale – a Primary School perspective

The New Labour Government's idea of giving all teachers 10% release time sounded like a wonderful idea. Up until this point, primary school teachers had not had any non-contact time. All their planning, preparation and assessment (PPA) has had to be completed in their own time. Our system requires teachers to provide evidence of very detailed planning for their lessons. This, together with complex assessment and tracking systems has meant that teachers spend much of their evenings and weekends completing paper work. The Government decided that all teaching staff should have time during their working week for this work, however, it must be acknowledged that the Government really had not thought through the cost implications of implementing this proposal in primary schools. They knew that in secondary schools teachers already had regular free lessons that they could use for PPA and that it was relatively easy for secondary schools to ensure that all their teachers regularly received 10% release time. In primary schools however, the change would be far more difficult and expensive to implement. The Government nevertheless rushed to build PPA time into teachers' contracts, forcing headteachers to implement their directive.

In order to understand the complexity of the situation, it is important to understand that schools in England have a devolved annual budget that has to pay for everything in their school. As headteacher I must pay all salaries for teaching and non-teaching staff from this sum and also, pay for the upkeep of the buildings and site, books and equipment and the many other costs that are incurred by a large school. The amount each school receives is almost entirely based on the number of children that attend. For most schools, the amount received is barely enough to keep the school running. Many schools consequently are unable to afford to employ teachers to cover the 10% PPA time and are having to use non-qualified classroom assistants to cover the release of their teachers. The government has encouraged this use of classroom assistants, calling it 'workforce remodelling' and

describing it as an opportunity to redefine their role and develop them personally. The largest teachers union, the NUT, strongly believes it is detrimental to our children's education to put unqualified people in front of a class of children and that the programme of workforce remodelling is just a way for the government to save money.

My school is a large primary school with 635 children arranged into 21 classes. Clearly, in order to release teachers for 10% of their time, I need to employ 2.1 full-time equivalent teachers. The cost to the school for these teachers is £62,000 per year. The budget allocated to my school is £1.4 million and last year the government gave my school an extra 1% to pay for PPA time. This gave me £14,000, a shortfall of £48,000 which, if I wish to use teachers to cover PPA, I must find from elsewhere in my budget. By cutting other areas, I have just been able to afford to cover PPA using qualified teaching staff but most schools cannot find this sum and are forced to look for other ways of releasing staff including using classroom assistants to cover classes. In my personal view the Government's programme of workforce remodelling is damaging to the profession and does not contribute to improving the provision of an effective programme of education for our children.

Workforce Reform and Remodelling Supporting and challenging schools to change – A Local Authority Perspective

This personal account presents the perspective of an Assistant Headteacher seconded to the Local Authority to lead on Workforce Reform and the Remodelling agenda at a time when the Authority was itself, undergoing a process of substantial re-organisation and re-structuring of its staffing and services. Issues that surround the leadership of a reform change process at Local Authority level are explored. The process is designed to secure the implementation of statutory contractual changes and the practical implementation of new working arrangements for staff working in all of the authority's schools.

The county of Kent is among the largest Local Authorities in England. It is located in the South East corner of the country and has within it 615 schools. Of these, 472 are Primary, 101 are Secondary, 3 Middle, 1 Nursery and 38 Special Schools. Nationally, Kent accounts for 2.67 % of the schools in England. As a result of the Authority's re-organisation, fragments of a county-wide remodelling strategy existed but lacked any real coherence or capacity to deliver an adequate level of support or challenge to schools within the tight timescale delineated by the government.

Politically and strategically the *National Agreement* signalled a new and, to many, a radical way of working for schools in the 21st. Century. It had promised to '*free teachers to teach*' and '*tackle workload*' whilst, simultaneously, '*raising standards*'. It also sought to introduce more adults into the school context – in some circumstances, new para-professionals, whose work would be to support and assist the teacher in the learning process. The changes would also bring with them

more and improved career pathways for support staff as roles changed and new ones were created.

For the first time, teachers in primary schools would be contractually entitled to 10% timetable remission for the purpose of Planning, Preparation and Assessment (PPA time). All teachers would be protected from excessive covering for absent colleagues, as well as the need to invigilate externally set examinations. Putting up displays in corridors and classrooms as well as 'routine clerical and administration tasks' were also considered not a good use of a qualified teacher's time. Under the new agreement, such tasks and duties would, if deemed necessary, be distributed amongst the school's support staff or, in the case of unnecessary tasks/duties, be abandoned.

At the outset, the agenda became for many a double-edged sword that, on the one hand, promised the profession all the advantages mentioned above. However, to other stakeholder groups it raised major concerns surrounding the potential de-professionalising of a graduate teacher profession; the shifting of increased workload to support and administration staff and little funding to implement the changes. Some critics went further to suggest that implementing the changes would inevitably exploit support and administrative staff for a minimal increase in salary that would not reflect the level of responsibility the new role entailed.

As the scale of the challenge revealed itself, certain priorities became apparent. They included,

- The need to fully understand the reform agenda including all its ramifications that went beyond the immediate timescale for implementation.
- The need to consult on the formulation of a coherent and costed strategy
- The need to develop sufficient capacity to deliver the training and support programme
- The need to 'market' the agenda to internal stakeholders within the Authority
- The need to foster positive working relationships with the National Remodelling Team (an arm of the Department for Education and Science, responsible for rolling out the agenda, monitoring LA engagement and school compliance with statutory requirements)
- The identification of key 'change catalysts' in each of the 23 clusters (geographical grouping of schools)

Each are considered in turn.

Understanding the agenda

The rationale for the *National Agreement* had grown out of a substantial survey of the teaching profession, carried out by Price Waterhouse Coopers in 2001, and had confirmed what most professionals working within the system had felt intuitively. Namely, that teaching was no longer seen as an attractive career prospect for

young graduates. Recruitment rates had plummeted. Perceptions of excessive workload, poor pupil behaviour, high levels of stress had created a negative marketing image of teaching and teachers.

For those who had braved such adverse publicity and joined the profession, statistics confirmed that the quality of experience in the first two to four years was instrumental in either retaining staff, or losing them from the profession. The 'drop-out' rate at this stage had become significantly high.

Along with the above pressure points, there was the ticking demographic time bomb of the aging profession. Statistics confirmed that in excess of 45% of the current teaching profession would reach the age of 60 within the next 10 years and would want to retire. So along with recruitment and retention, the retirement issue compounded the need to accelerate the reform agenda to ensure a sustainable workforce in the near future.

A number of the proposed measures introduced within the *National Agreement* were created to make the job of a teacher more manageable; to ensure a better work-life balance; in short, to make the conditions of service more attractive to prospective applicants.

Prima facie, there were compelling reasons to change working practices for the better. The longer term aim of the reform was to create greater flexibility in the school system by developing greater capacity to deliver future agendas such as the 'Every Child Matters' agenda (2005) which was to link up a range of children's services to support all pupils.

Understanding the agenda has meant thinking through the implications for all stakeholders, both in the long and short term, and accepting the high degree of scepticism, uncertainty, and challenge that the school workforce would face as it experimented with largely untried and untested ways of working. New frames of reference would be invented, new parameters described, where the old ways would lie uncomfortably alongside the almost lawless new practice.

Periods of reading and re-reading legislation, lengthy discussions with colleagues and the modelling of hypothetical scenarios that challenged the law, enabled me to understand and apply basic principles.

From a Local Authority perspective the Government's drive towards '*Schools leading Reform*' further accelerated the de-centralisation agenda and with it the concerns over the loss of control.

Stakeholder consultation

Before formulating and agreeing a strategy to support Kent schools through the remodelling process, there was a need to consult representative stakeholder groups. This was partly satisfied through the 'Remodelling' Steering Group that represented,

- Headteachers of Primary, Secondary and Special schools
- The Local Authority Schools' Personnel Service
- Support Staff training
- Employee relations (and indirectly, the Trades Unions)
- The Local Authority Schools' Advisory Service (including governor training)
- The Primary Excellence Project team

Beyond this formal consultative mechanism, informal discussions with teams, such as the Local Authority Finance team, headteachers, parents and a range of other colleagues helped identify the anticipated level of need, and also gauged the level of likely hostility in rolling out the agenda.

At the end of the consultation process a very clear picture emerged and the strategy outlined and costed to enable each school to:

- Attend 3 workshops – the first to outline the agenda and to understand the change process and learn about the legislation/financial implications. The second workshop equipped schools with 'skills and tools' to enable them to identify the issues, generate solutions and deliver the changes. It also encouraged collaborative working across the cluster. The third workshop provided headteachers with one-to-one access to a remodelling consultant so that specific school-based issues could be addressed, and hopefully resolved.
- In addition to the workshops, each school had an entitlement to the equivalent of one day remodelling consultant time. This meant that a school could request a member of the local remodelling team to support the school in moving through the agenda. In practice, this could mean a variety of things. For example, consultants could be used to give briefings to staff, parents, governors, or perhaps to work with school change teams to identify and resolve key issues surrounding implementation of the *National Agreement*.

The strategy then, was to operate on several levels.

Our attention next turned to consider the capacity that the Local Authority possessed to roll out the strategy. It was imperative that this was implemented in a well-co-ordinated way that ensured a consistency and clarity of the key messages.

The process of identifying highly skilled and competent 'change catalysts', who not only understood the agenda but could also envision a future in which schools functioned flexibly and just as effectively, with new practices and structures in place, was to be a challenge.

The individuals recruited to the team needed also to operate effectively and rationally in the face of heightened emotional reaction from groups of headteachers dissatisfied with the level of funding, the erosion of the teacher's

professional status and challenging timescale. Research on change management told us that before any rational changes could be embedded and accepted by stakeholders, attention had to be paid to the emotional and political implications of the proposed changes.

The principles of stakeholder ownership and empowerment are vital components in implementing change so it was vital that the delivery team was made up of a range of stakeholders. In practice this meant Local Authority employees, some headteachers and a small number of independent consultants were nominated to train as Remodelling Consultants.

This mix of personnel combined perspectives, skills and abilities. For example, a headteacher with detailed working knowledge of the operational 'end' of schooling complemented the broad and generalised experience of a consultant accustomed to working as a 'critical friend' across a range of schools, phases and contexts.

Each consultant received at least 3 days' training to prepare them for the role of delivering cluster-based events to large audiences; working with school leadership teams; governing bodies; parents' meetings; school change teams.

The team comprised 23 consultants of which 9 became the most frequent and active 'change agents' within the Authority.

The deliberate policy of training headteachers meant that skills, tools and knowledge would become, over a period of time, embedded at school and cluster level which, as the process began to roll out, became a distinct advantage. It meant that expertise was already 'dotted' around the county and not only possessed by external 'experts'.

From the first training/briefing events it became obvious that consultants needed to possess a specific combination of qualities and skills to make an impact since the contentious and radical nature of the agenda drew a range of rational and irrational responses from delegates in workshops.

Effective management of those meetings were achieved by members of the team who:

- Were consistent in the messages they delivered
- Could show empathy with the negative views being expressed whilst remaining focussed and 'on message'
- Transmitted positive optimism about the future – making the new demands seem achievable and manageable
- Showed a high level of resilience
- Communicated clearly with the audience
- Took time to explain and give answers
- Acted with integrity

- Treated audiences with respect and professionalism

Communication within and between members of the team over the 18 months of its existence was vital to update information, share experience and gauge the effectiveness of our programme's delivery.

During a 12 month period the team delivered over 60 workshops to school leaders each of whom were moving through the agenda at different speeds, some requiring little external support whilst others needed intensive and sustained school level support.

During that time, as the agenda filtered into the public domain (centrally through the press, websites, and publications and locally through training events/briefings) the pace of change accelerated and intensified.

Stakeholders aimed to make sense of it all as they began to think through its implications for their schools, governing bodies, teachers, children, parents, examining questions such as: *How will the changes affect me? What's positive in this agenda for me? What's against my interests in the proposed changes?* The strategy sought to be proactive, designed to arrest potential de-motivation, stem wide-scale hostility and statutory non-compliance.

Through periodical monitoring, the emerging levels of engagement and response were recorded and fed back to central government, as part of the Authority's process of accountability for implementation.

At the end of the 18 month period, the Authority had become a 'green authority' in the eyes of central government – the strategy had delivered the support programme, within budget and within timescale.

On reflecting on the change process, it is interesting to note the significant factors that were imperative in translating strategic intention into action. Whilst there were many contributory factors to this successful process, four key elements were paramount.

These were:

1. Understanding the change process
2. Equipping the key players with the skills and tools to do the job
3. Confidence-building and optimism
4. Leadership at all levels

1. Understanding the change process

It is vital for everyone seeking to bring about change to have a full understanding of the process itself – its different phases and their impact on people's levels of belief, morale and motivation. This understanding needs to extend to each individual identifying for themselves, at various stages of the process, their own feelings, and the behaviours and attitudes they need to adopt in order to play an active part within the process. Teams need to invest time at the beginning of the process to create a credible and coherent vision of the future. The more

compelling the vision, the greater the motivation is to commit to action. Without a vision that is shared and understood, there is little reason or desire to change.

2. Equipping the key players with the skills and tools to do the job

Identifying and prioritising the relevant issues for examination requires individuals and teams to analyse their own familiar context in a systematic, honest and objective way, acknowledging that sometimes this can be a painful and emotionally draining process. Individuals and teams require a range of high level skills and practical strategies to enable them to manage constructive discussions/meetings, to solve problems, prioritise a range of solutions and implement the resulting changes.

If key players in the form of individuals and teams possess these skills and succeed in distributing them within or beyond their organisation, they undoubtedly feel empowered as owners of the solutions, and so equipped to control the process.

3. Confidence-building and optimism

Confidence-building and optimism are both pre-requisites and outcomes of effective leadership during periods of change. These qualities and attributes of individuals and teams become self-sustaining and infectious within a change process when 'we have got it right'. A compelling vision that is worth striving for has a positive impact on everyone and nothing succeeds more than success.

Whilst leaders create the conditions to build confidence and the capacity to believe that a different future will be better for everyone, it is not the sole prerogative of one person. It is the responsibility of everyone charged with bringing about the change to reinforce the successes through celebrating even the smallest landmarks in moving forward.

4. Leadership at all levels

Whilst this element has been alluded to in the above paragraph, successful change, is reliant upon the leader's ability to empower others to lead and to distribute this capacity across the whole organisation.

As soon as our programme began, it became obvious to us that in those schools that identified the opportunities offered by this agenda, that minimised the potential threats and felt confident of resolving the issues encountered, the proposed changes occurred rapidly. In short, the school's capacity to change was proportional to the leader's influence and their ability to understand and manage the complexity of inter-personal transactions before attempting to secure rational solutions.

Final remarks

The experiences shared here are from a personal perspective, and have considered the practical application of the principles underpinning effective change management. However some mention must be made of those factors that lie beyond the immediate reach of school leaders that would, if overcome, ease the introduction of new working patterns.

It became evident in our work that some primary schools were financially better placed to introduce contractual changes such as PPA time than others because of their budget position. Critical factors in determining the level of flexibility in staffing deployment were highlighted to us by headteachers in our meetings. Some of these can be summarised as:

- The percentage of the school's budget allocated to staff costs (salaries): In some cases this could account for 80 – 90% of the school's income. The higher the figure the less flexibility the head had in costing viable strategies. The number of students on roll largely determines the school's income. In a number of cases, mostly Primary schools, a projected fall in the roll was anticipated over the next 3 year period. In this circumstance, the introduction of a sustainable strategy was the main concern of the headteacher.
- Resourcing other than budget: In some schools, mostly small primary schools, a lack of flexible accommodation made implementing changes difficult. For example, the lack of classroom space to facilitate more economical pupil groupings when required, reduced the number of curriculum/staffing options. In some circumstances, the lack of adequate staff workroom/staffroom facilities for teachers' PPA time encouraged off-site solutions.
- The availability of staff: In some settings, mostly small rural schools, the availability of a 'pool' of staff to recruit from proved difficult. Occasionally, and more often by chance than design, multi-skilled individuals already worked at the school and offered the flexibility and the experience required to take on additional roles. But this was not an option in many isolated rural contexts.

In reality, some schools were already operating in difficult contexts before the workforce reform agenda forced them to meet a new set of challenging demands. To some school leaders, the new agenda became the focal point for their anger and hostility. In a small number of cases, the forces of conservatism resisted change as long as possible whilst the innovators and risk-takers harnessed the opportunities to work differently to the school and pupils' advantage.

The future

Towards the end of the funding and delivery period, the strategy was focused on the future sustainability of the practices that had been introduced. Whilst there was no requirement for Local Authorities to provide support for schools in the longer term, a view was taken to create a structure that would encourage different ways of working.

Funding that remained from the Reform agenda was 'rolled over' to create 6 virtual centres around the county that could act as local points of contact for

remodelling, as well as to support future leadership development and training. These centres are seen as a link to the future, their work embedded in processes that build regional leadership capacity. They act as catalysts for change and innovation, and encourage schools and other children's organisations and their staff to work collaboratively to provide high quality learning experiences for all pupils.

References

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The New Role of Teachers in the Czech Republic

Jaroslav Richter

How our organization contributes to the new role of teachers in the Czech Republic

First of all I would like to introduce our organisation – Institution for Further Teachers Training (FTT) in Nymburk (Czech Republic) - which is a “Learning Teacher” project partner. This staff consists of 4 full-time workers and 10 external methodologists profoundly experienced teachers from different types of schools.

Our institution conducts analyses of schools need, cooperates with the above mentioned group of methodologists and other lecturers, schools and offices. We have got 50 educational programmes accredited by the Ministry of Education. On this basis we organized 114 training workshops, lectures, seminars and excursions in the last school year.

In this school year the main aim of our work has been to help the kindergartens and primary schools in our region to create their own School Education Programmes (SEP - see my contribution in the second publication). Therefore we have again organized a lot of seminars, lectures, excursions workshops and meetings.

The following table shows the size of our work (dated 31st March 2006):

<i>Educational area (and school subjects)</i>	<i>Number of action</i>	<i>Numer of trainees</i>
1. School management	24	692

2. Pre-school education	14	233
3. Primary education:		
Infant school (the first level of the primary school)	10	172
Czech language and communication	10	160
English	10	138
German	5	60
Mathematics and their application	6	92
Information and communication technology	5	75
Man and society (civics, family education, history)	5	101
Man and nature (physics, chemistry, natural science, geography, ecology)	4	52
Art and culture (music, artwork, drama)	31	493
Man and health (physical education, health education)	8	119
Man and world of work (working activities, job selection)		
4. Middle education – general subjects		
Middle education – special subjects		
5. Handicapped children education	3	17
6. Pedagogical and psychological education	14	220
7. Educational consultancy – social-pathological events prevention		
8. Language education - language literacy	1/13 (all year course)	
9. ICT education - computer literacy (course at 30 hours)	13	150
10. Education in European propositions	1	9
11. Multicultural behaviour and education		
12. Environmental behaviour and education		
13. Out-of-school education		
14. Other people education	2	138
In sum	169	2921

The participation at these education activities is quite voluntary. The subscription charge is paid from the state budget by means of school directors.

The specification of the content of the main educational activities:

School Management

How to get money for the school projects

ICT training financing

Medial education in the SEP

The primary prevention (social problems) in everyday work of teachers and headmasters

The new administrative rule

Law-book of work and labour law
Environmental education, schooling and enlightenment for headmasters
Team cooperation by the creation of SEP
How to judge the quality of the education –inspection of classes

Pre-school Education

The troublesome child in the kindergarten
The emotional education in the preschool and the younger school age
Ecological education
The principles of the creation of SEP in the kindergarten
The fairy tale in project teaching.

The first level of the primary school

Personal and social education in the practice of the teacher in the first class
Generic method of reading
How to teach English language at kindergarten and in the first class of the primary school
The first meeting – nottraditional certificate of school
The grounding of the mathematics in the first level of the primary school

Czech language and communication

Czech language lessons
Drama lessons in Czech
How to correct and evaluate compositions in Czech

Foreign languages

Widening its use in other subjects in addition to English and ICT
German and SEP
Linguistic and methodical training of English for the teachers at the first level of the primary school

Mathematics and their application

How to create SEP in mathematics
The problems of teaching solid geometry in the primary school
The mathematics around us - for example, the capacity and circumference of the spatial models

Information and communication technology

Interactive board utilization in teaching
Excel and its utilization
ICT at the first level of the primary school
ICT and its utilization in teaching school subjects

Man and society (civics, family education, history)

Historical topography – we recognize our region
Kutná Hora – the Unesco city monuments reservation
Education about thinking in the Europe and global relationships
The human relations from the view of national minorities
The power of memory - how to teach about holocaust
Multicultural education – the sectional theme in the SEP
SEP and the teaching of the history

Man and nature (physics, chemistry, natural science, geography, ecology)

Search of the school planetarium
The geographical topics in the SEP.
The ecological literacy of the teachers in the primary and secondary schools

The visit to the sanctuary for sick animals
The pupils' key competences – active teaching not only in biology
Physics at the SEP

Art and culture (music, artwork, drama)

Cycle of art workshops in wire, textiles, painting, drawing and pottery
Art education in the SEP

Musical workshops (songs and rhymes for various seasons)

Man and health (physical education, health education)

The educational area “The man and health” in the SEP

The child's injuries and their prevention

Aerobics for children from 4 – 9 years

We play and practise with small apparatus

Pedagogical and psychological education

The sectional theme personal and social education and its inclusion in SEP

The music therapy

The social games with the class

The problems of talented children

The crisis in the family

The cooperative staffroom

Games for the managing aggression and trouble

Violence and chaos at school

Know-how to relax

The other educational institutions in the Czech Republic, state or private, work in similar way.

In addition - The Educational Research Institut in Prague has opened the trial operation of the new methodical portal (www.rvp.cz) that goes in for problems of the Framework Educational Programmes. The headmasters and the teachers can find on the pages of this portal:

FEP including comments, manuals for the creation of the School Education Programmes (SEP), the illustrations of the SEP, didactic trends and methodical progress in the Czech Republic and abroad, the overview of the seminars and the educational courses, refer to professional literature and of course the great area for the discussion.

The Educational Research Institut in Prague has also organized the training of the co-ordinators – teachers who will help the headmasters and the colleagues to create the SEP.

All these activities aim at the better preparation of the teachers in the Czech Republic for their new role in the future.

Jaroslav Richter

Institution for further Teachers Training in Nymburk, the Czech Republic

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Round Table Discussions

Observation reports from the four round table discussions at the Ljubljana Conference

WHICH NEW BEHAVIOURS ARE CRUCIAL FOR TEACHERS AND TRAINERS TO MASTER IN THE LEARNING SOCIETY?

By the observer Luísa Carreira (PT) and the moderator Dr. András Tarnóc (HU)

The round table session included 13 participants from the U.K., Slovenia and the Netherlands. The participants were asked by the facilitator to think about and discuss given questions related to this thematic area.

The group discussed the following questions:

How can teachers and trainers help students most effectively in the learning process?

Teachers should inspire their students to engage in a process of discovery as well as leading them through such a process. Teachers must provide opportunities for students to involve themselves in the learning process and encourage students' active participation in their learning. If teachers help them to define their aims, they will be more motivated to achieve their goals. It is very important that teachers help their students to acquire skills to learn for themselves.

What can you do in order to facilitate the development of the learning society?

It is important to use a range of different processes to facilitate trustful relationships in order to enable the development of the learning society. Effectiveness is not general; some processes will be more effective than others. It is important to find out what students already know, then what we want them to know and how will they find out about the information.

Has your school turned into a professional learning community?

To make a school a learning community it is most important to give people time to reflect upon this concept and a common purpose must be found. All the individuals involved in the school must be aware of what they are doing and what will be the impact of their actions and decisions in the students. The leadership must be prepared to take risks. In a school, as a professional learning community, one has to have the feeling of belonging.

Should learning be personalised, or remain in its present mass-orientated perspective?

Students should have personally orientated opportunities. A general approach just doesn't exist because all students are different and learn in different ways. On the other hand, when you organise education, you have to have in mind evaluation and for that purpose you have to have a group. Evaluation is a generalising process, not an individual one that takes in consideration the skills and the competences of each individual.

Can information and communication technology undermine the role of the teacher?

Teachers are needed to organize knowledge. Technology is very important in the process of learning and the role of the teacher is more and more the one of facilitating the use of such technologies and all the flow of information that it provides.

What are the rewards of teaching in the learning society?

The rewards of teaching are the learning and the success of the student. It is very important for teachers to realise that students have made positive changes in their lives and that those changes are the result of their learning process and accomplishments.

Who is more important in the learning society, the student or the teacher?

This is a false question since they need each other and are both learning. We, as human beings, are all learning.

Conclusions from the round table questions

The concept of personalised learning was underlined during this discussion. Teachers must have the ability to help students to develop different skills and engage them in their learning process. The role of the teacher is more and more defined as the one of facilitator of the learning process.

In a professional learning society, all the individuals have to be involved in its development, and have the feeling of belonging and trust.

RESEARCH COMPETENCE CONTRIBUTES TO IMPROVED PERFORMANCE AMONG TEACHERS AND TRAINERS

By the observer Bill Goddard (UK) and the moderator Ivan Lorenčič (SI)

There was a lively discussion amongst the group and it reflected a range of views about the proposition that school-based research could contribute to improved teaching. It was clear that there were different perceptions of what counts as research in the different cultures represented at the table and the definition of broad or narrow research was of some importance.

There was a brief overview of those characteristics which may be thought to be useful for teacher research competence. These embraced methodology, which was essentially about whether quantitative or qualitative paradigms would be beneficial, and, as we shall see below, there was a difference of opinion about the validity of the alternatives. It was also noted that research competence engages with the identification and analysis of literature and this embraces the development of conceptual frameworks and the interpretation of both primary and secondary source evidence. Such evidence comes from data collection techniques, an understanding of which is another requirement of the active teacher researcher. This particularly requires a consideration of ethics involved in enquiry. Techniques of comparison and reflection are also seen as important aspects of teacher research as are the recognition of legitimate processes of research and processes of understanding. In terms of outcomes from teacher research there is a need to ensure a connection between evidence and analysis but also of the personal impact on the teacher researcher himself/herself.

From the starting point of the assumption in the title the round table discussed the possibility that any school-based research could be valid and therefore have a meaningful impact. As in the final conclusion to the discussion there was a difference of opinion as to whether teachers were capable of research. This difference was on traditional lines – whether teachers could have the research skills and methodologies to make valid and reliable investigations, on a part-time basis, which would enable teaching and learning to be improved. One strongly held view which was expressed was that only professional researchers would have the skills, methodologies, and validity to carry out research which could be relied upon. The other view, in a sense reflecting the assumption of the title, was that only by enabling teachers to do their own research would we have meaningful engagement with the realities of particular classrooms. In this context it was pointed out that research does not necessarily involve the whole school and that it may be focused on particular micro-issues pertinent to a particular teacher or section of a school.

One view expressed was that teachers in one of the countries represented do not now accept University researchers who stand outside the school. What they required was the development of meaningful contexts between school and university so that research was specifically relevant to particular situations. Only by participating in this interface was it thought that the research would be noted, believed and acted upon. An issue which was raised in relation to this was that teachers found that it was problematic to fill in a questionnaire and then have no subsequent feedback, apparently a common experience. By being involved they at least have a stake in the process and access to the outcomes. Indeed it was noted that teachers felt that it was good to show results of research to colleagues and that this was powered by a belief that it was good to learn rather than teach. Demonstrating to pupils/students that teachers remain as learners was one of the strong messages which was thought to be useful in encouraging pupil/student attitudes to learning.

On balance the round table seemed to be in favour of teacher research competence although it needs to be noted that one member specifically stated that he was not convinced that teachers should be researchers. There was also a general feeling that such research competence could contribute to improved performance among teachers and trainers.



CREATING A COLLABORATIVE LEARNING ENVIRONMENT AT SCHOOL: PURE FANTASY OR POSSIBLE REALITY?

*By the observer Birgitta Andersson (SE)
and the moderator Marjeta Zabukovec (SI)*

**About the term - What is a collaborative learning environment?
Is there any difference in these words?**

Cooperative learning
Collaborative learning

Cooperative or collaborative learning is a team process where members support and rely on each other to achieve an agreed goal.

Collaboration is a philosophy of interaction and personal lifestyle whereas cooperation is a structure of interaction; collaborative learning is based upon consensus building through cooperation by group members. In contrast to

competition where individuals compete with other group members, collaboration focuses on the process of working together.

In cooperative learning, students work together in small groups on a structured activity. They are individually accountable for their work, and the work of the group as a whole is also assessed. Cooperative groups work face-to-face and learn to work as a team.

The environment helps your cooperation.

Workers need to be able to think creatively, solve problems, and make decisions as a team.

We looked at two pictures and had a discussion about what we saw.

We saw two ways of learning. In one of the pictures there was no happiness and no teamwork.

In the other picture it was the opposite.

Do we need a collaborative learning? Why?

Everyone needs a group. We need to develop skills for teambuilding. We need self-motivation. Where are we going in the society...egotism?

Playing is collaborative learning as they do in pre-school. The classroom is an excellent place to develop team-building skills you will need later in life.

What kind of knowledge do teachers need to create a collaborative learning?

Find your role.

Listen to each other.

Prepare to take risks.

Use several methods.

Invest in motivation.

Tools for good quality meetings.

Is creating a collaborative learning environment at school pure fantasy or possible reality?

The conclusion of the discussion was that it is already a reality!

LEARNERS' ABILITIES TO TRANSFER WHAT THEY HAVE LEARNT TO NEW SITUATIONS: AN OVERLOOKED ISSUE?

By the observer Polona Oblak (SI) and the moderator Crostovalina Afonso (PT)

One of the major goals for schooling today is to prepare learners to adapt flexibly to new problems and settings in life. The discussion on this topic tried to answer the following four questions:

- How many significant changes can we identify in the learning process in comparison to past times?
- How can we check if the learning process is truly successful?
- What methods can be used to check that the transfer of learning has taken place?
- And finally, what are the implications of their process in teachers' professional development.

The majority of the discussion focused on teachers, their personal development and the development of schooling in order to educate/equip students with new adaptable and transferable skills. Not only the learners need to be equipped for adapting to new problems and new challenges, but also their teachers need to be taught how to teach those skills. This can be done with a very successful method called teaching mentors or advocates. The most precious experience for life long learning as well as transferring knowledge to other fields and areas of development is achieved with a dedicated teacher, good teaching tools and equipment.

One of the major goals of schooling today is to fulfil the aims of society, some of which might even be political. Additionally we hope to educate and develop learners to think with their own heads, learn how to transfer skills to other areas and to use their knowledge pragmatically. There have been many significant changes throughout the past. The primary school is obligatory and welcomes more children to school and less on the streets and in prisons. More and more learners (even girls and women) are educated, not only to degree standard but also to masters or PhD level. Individuals are challenged to develop their critical point of view. The needs are set among the teachers (school), individuals (learners), parents and in some cases politics (government). In Portuguese schools the boundaries are wider than they used to be, but the question rises what is the reality of schooling/ teaching/ or education. It was noted that in England the school system has not left the reforming paradigm yet. There is a tendency towards group and personalised learning but this is a questionable idea.

In the modern, still changing/ developing society, there is a great need for technological development at schools along with the technical support for teachers and ICT technology. Teachers are sometimes being pushed to adapt new

technology/methods. It is very stressful for teachers to cope with all the changes. It feels like 'we are constantly running to try and catch the train' said a Portuguese colleague. Furthermore, new technology has influenced learners tremendously throughout time. It was also believed that the use of ICT was a good way to motivate learners. Learners are usually more interested, their attention span is over 1 hour and 30 minutes, it raises self-esteem and, if required, learners work in teams. They are totally involved because they are encouraged to find things that interest them. In other words the creative society of the future needs technology if it wants to improve and so does the modern school. One of the problems which arises in Portugal is concerned with the use of ICT at schools. Namely, new technological equipment is used for solving old problems, which is not necessarily something negative.

One colleague believed that all great changes are done slowly, so does education resist quick changes? What is also changing is the role of the teacher. The teacher's role is changing from an individual to a collaborative competitive practitioner. Teachers are mere facilitators of the educational process. They are challenged to assess, evaluate and monitor whether the learning process has been successful. One colleague claimed that a lot has been said about assessment and evaluation, but are people entitled to assess each other? Does the assessment push everyone down the same rut? And is it only the academic way of thinking that has a value? It has also been said that to assess themselves empowers people. And what is more, even if the teaching process is successful, the teachers will not be aware if success has been achieved because success requires that knowledge is applied in a different context. Like coaching a football team, one can see how hard the footballers have been working when they are on the field playing the game. For teachers and young teachers in particular, it is very important to have another teacher, to monitor a teacher's learning progress. Having a teaching mentor, or the so called advocate, means having someone there at all times to help teachers develop personally and professionally. It is a one to one method and, because of that, is not cost-effective. An example of this would be assessing the development of a weaker student throughout his education.

Changes and successful adaptation and transfer to new areas are an ongoing process and it can not happen over night. The transfer of learner's abilities is an overlooked issue and to monitor such process we need patience, help on the professional level and a long term relationship with our students, such as monitoring their development throughout kindergarten, primary school, secondary school and the university. Nonetheless, even if the transfer is successful teachers might never know it. The most important challenge stays for those learners whom a small step for ordinary people in real life, presents a big step for them as individuals. This is true with problematic children (teachers usually remember bad/ weaker students who changed for the best) or children with special needs and mentally handicapped children. Even children like them, and especially them, need to experience success in order to know it. Success can be achieved by taking a more personal approach, by having teaching mentors or advocates, like monitoring the learner's development and last but not least, properly equipped schools.

