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Teacher planning in a era of accountability for student outcomes

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**Teacher Planning in an Era of Accountability
for Student Outcomes**

by

Scott C. Zehnder Dip. Teach., B.Ed.

**A Thesis submitted in Partial Fulfilment of the
Requirements for the Award of**

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at the Faculty of Education

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ABSTRACT

The focus of the study of teaching has shifted gradually away from the process-product research paradigm to one which emphasizes the role of teacher and student thought processes. Researchers have identified teacher planning as an area of study likely provide insights into the role of teacher thought processes. Since the nineteen seventies a number of important studies into teacher planning have been completed. An examination of the teacher planning literature revealed that certain types and functions of planning recur in the research. The literature also shows that the rational-linear planning models which are prevalent in teacher pre-service education do not adequately describe teacher planning in practice.

Several studies have attempted to describe teacher planning in terms of models. Although these studies more closely described actual teacher planning, modelling of teacher planning is incomplete. Some research has also attempted to establish relationships between teacher planning and teacher actions and the subsequent outcomes for students.

Western Australian schools are presently subject to a climate of change driven principally by economic considerations. A fundamental shift in emphasis has occurred in teacher accountability policy and as a result teachers are now accountable for the outcomes of students instead of the traditional accountability for planning programmes of work. Case study techniques were used to examine the extent to which these policy

changes and the associated de-regulation have affected the planning practices of six teachers. The thought processes involved in planning were described and a naturalistic model of planning was developed.

The study found that the teachers did not plan as they "should" in two respects. First, they only applied rational models when using planning formats which assisted them with the writing of objectives. In this respect the teachers did not apply the rational models from their pre-service education. Second, the teachers did not apply an outcomes approach to planning, as required by the Education Department accountability policy.

The study also examined the six teachers' perceptions of accountability and the accountability techniques applied in two schools. The teachers perceived accountability as a professional obligation. Teachers were not being held accountable for planning within the school management information system. Although the focus for accountability discussions had shifted to accountability for student outcomes, the teachers continued to apply an activities-first approach to planning.

Declaration

" I certify that this thesis does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any institution of higher education; and that to the best of knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text."

Dedication

This thesis is dedicated to the memory of my former principal and dear friend, Bob Gray, who passed away on November 4th, 1994. It was an honour and a privilege to know Bob. He will be missed and remembered always.

ACKNOWLEDGEMENTS

I wish to acknowledge the enormous contribution made to this thesis by the study teachers, code-named Annabel, Beth, Caroline, Donald, Elaine and Felix. I am extremely grateful for their time, the honesty of their interview statements and the provision of their planning documents. In particular, a special thanks is due to Felix who invited me into his home and provided a rich source of data.

The contribution of Pamela and Patricia (pilot study teachers) is also gratefully acknowledged. Special thanks are due to Patricia because of her assistance with data analysis.

I am indebted to Bob King for his informal discussions, planning ideas and for practicing an excellent model of teacher accountability.

I wish to take this opportunity to formally thank my mentor and friend, Associate Professor Len King, for his outstanding efforts in the supervision of this thesis. He is every student's idea of a perfect supervisor. His thoughtful deliberations have been indispensable and insightful on all occasions and his research and teaching are an inspiration.

My deepest acknowledgement is to my wife Sue for her unflinching support and her acceptance of my long absences. I look forward to spending more time with her and our baby son, Samuel.

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CHAPTER ONE

INTRODUCTION

1.0. Overview

Teachers cannot teach successfully without some form of planning. Planning is one of the fundamental tasks of the teacher through which the framework for student learning is created and classroom operations are prepared. Effective planning may be a pre-requisite for teaching effectively. The forms of planning are numerous ranging from brief moments of mental rehearsal prior to a lesson, to detailed written plans intended to be followed by a colleague or submitted to a superordinate. Teachers often spend considerable out-of-hours time on planning, indicating that they regard it as one of their most significant tasks. The importance of planning is also acknowledged by administrators and education systems through the allocation of logistical support and student-free time for planning purposes (Borko & Niles, 1987).

Teacher planning has attracted considerable attention from researchers which further suggests its perceived importance to the teaching process. Previous studies have examined the nature of planning and the cognitive processes involved in planning. Several studies have attempted to provide models which describe planning. Researchers have yet to describe what constitutes "effective" planning.

Teaching has been regarded as a decision making and problem solving process by researchers. If this is a legitimate assumption about

teaching then a study of teacher planning has potential to provide important insights into teacher's thought processes at one of the few times when the teacher is free from the pressures of working face to face with students. The teacher should be able to make rational, pro-active decisions during planning. The complexity and unpredictability of the classroom often prevents rational decision making. An understanding of the rational intent of planning versus actual teacher behaviour may reveal elements of the nature of the classroom and the difficulties faced by teachers. Examining teachers' thought processes through their planning has the potential to reveal what teachers regard as the priorities of their professional lives and to help to explain teacher behaviour. This research may reveal implications for teacher educators, system level administrators, school administrators, teachers and educational innovators.

1.1. Background to the study

Prior to 1989, teacher planning in Western Australian primary schools was dominated by the practice of "programming". Programmes were longer term written plans covering all curriculum areas. Teachers were typically required to submit programmes to the school principal at the beginning of each school term. The programming tradition had existed for decades and was supported and perpetuated by the Education Department, school administrators, teacher education institutions and teachers' work practices. A preferred planning mode in the

programming era was the rational, "objectives first" approach based upon the curriculum model first proposed by Tyler (1950). Teachers tended to apply this model because of the expectations of their principals and because this was the model promoted during their teacher education.

Programmes also served as a major means of teacher accountability. Teachers were partially evaluated on the basis of their programmes and inexperienced teachers and those seeking tenured positions often had their programmes scrutinized closely. The programmes of experienced teachers and teachers well known to the principal sometimes received only cursory attention. Programmes were assessed on a subjective basis by school administrators, usually the principal. Consequently there existed little consistency in the content and assessment procedures required of programmes.

In 1989 an industrial dispute between the Western Australian Education Department (see chapter 3) and the State School Teachers' Union was resolved with the signing of a Memorandum of Agreement (Ministry of Education ,1990). Part of this agreement was that Education Act Regulation 177 (Appendix A) was de-emphasized. This regulation required teachers to submit programmes to the school principal at monthly intervals. The teachers' union and the Education Department believed that such a regulation was redundant and was not conducive to the creation of a climate of professionalism in the contemporary, self-determining school. More significantly, it was held that an emphasis on the pre-active planning phase was no longer appropriate in terms of

teacher and school accountability and that a preferable approach would require teachers to account for the learning outcomes of their students (see chapter 3). Teacher reaction to the de-emphasis of Regulation 177 appeared to vary from a belief that they were no longer required to plan, to teachers continuing to submit written plans as before. The latter applied particularly to temporary teachers and those applying for permanent status within the Education Department.

The advent of the Education Department School Accountability policy (Ministry of Education, 1991), a consequence of the Better Schools Report (Ministry of Education, 1987), formalized the shift in emphasis from accountability for learning objectives to accountability for measuring, evaluating and reporting on student outcomes. The change has resulted in concerns among some teachers and administrators regarding teachers' planning and accountability for outcomes. Teachers were freed from the constraints of Regulation 177 but at the same time were required to account for the outcomes of their students. Implicit in accountability for outcomes is the need for some form of planning. Has the deletion of Regulation 177 and the advent of the accountability policy induced substantial change in the way teachers plan or do they continue to plan as they did before? In what ways are teachers held accountable in the present setting?

1.2. Significance of the study

The significance of the present study lies partly in the potential for

examining thought processes of teachers at one of the few times when they are not engaged in face to face contact with children. Various studies (Brophy, 1982; Shavelson, 1983; Doyle, 1986; Bullough, 1987) have shown that teaching is a very complex, difficult occupation where teachers are required to solve an array of problems in order to function successfully in the classroom. The rapid pace and complexity of interactions in the classroom may prevent rational decision making. A study of teacher planning in the pre-active phase may provide insights into the nature of teacher cognitions. Are teachers really decision makers and problem solvers or is planning no more than a routine task, entered into with minimal thought?

The study also draws significance from the opportunity to closely examine teacher planning practices with the result that it may be possible to describe the contribution teacher planning makes to a notion of "best practice" for teachers. The best practice concept has implications for teachers' individual accountability and could add materially to the accountability debate and its relationship to professional or technical conceptions of teaching.

Economic rationalism, the impetus for economic policy in developed countries for several years, requires all industries, including state funded education, to become more cost effective (Judge, 1989). According to Willms (1992) one of the doctrines of the market forces movement is that, "publicly funded organizations should be held accountable by having to report regularly on their performance." (p.3). It

is partly the need for politicians and educational administrators to justify educational expenditure, in a climate of diminishing available funds, which drives the concern for greater accountability from education systems (Caldwell, 1993). By shifting the emphasis for teacher accountability from learning objectives, as was the case with programming, to more tangible student outcomes, politicians and educational administrators believe they are better able to monitor the efficiency and effectiveness of the education system.

The emphasis on student outcomes has been combined with a growing trend to re-structure schools and devolve further responsibility for the day to day control of the school to principals and teachers. This is a trend already seen in Western Australia and Victoria and in comparable countries such as the United Kingdom, Canada, United States, Japan and New Zealand (Beare & Lowe Boyd, 1993). Devolution proposals in Western Australian schools have caused disputation to the point of industrial action. Significant policy changes have occurred which have the potential to influence traditional teachers' work practices. Several authors have described teachers' apparent reluctance to change well established work habits. Tuckwell (1980) found that despite in-service education on planning which the teachers acknowledged as enhancing their awareness of planning issues such as the writing of objectives, little impact on teachers' practices was reported. Weatherley and Lipsky (1977) and Berman (1986) reported that legislative change did not ensure that teachers would alter their work practices. Berman contended that some

changes, including legislative ones, may not be successful because they require a willingness and capacity by the participants to engage in a complex learning process in order to change their work practices. Furthermore, the intent of employers to de-unionise (Hill, Howard & Lansbury, 1982; Costa, 1990; Dabscheck, 1990.), to restructure work practices and to resort to work place agreements and enterprise bargaining is likely to maintain the momentum for change in the work of teachers. This momentum for change includes the area of teacher accountability for student outcomes with the associated implications for planning. Consequently, this study has the potential to provide insights into the effects of change in education. Does a de-regulated work place necessarily result in changes to work practices?

1.3. Purpose of the study

The purpose of the study was to examine teacher planning processes in the post-memorandum era in order to determine how the contextual change of de-regulation had influenced teacher planning in primary schools. The researcher was also concerned with comparing teacher planning in the Western Australian environment with previous studies of teacher planning.

Teacher perceptions of their planning requirements and their accountability for student outcomes were also studied. In addition, the means by which teachers report on student outcomes and the use to which this information is put within the school management

information system were examined.

1.4. Research Questions

Question 1. What values, attitudes, assumptions and beliefs underpin teacher planning?

This question was regarded as pivotal for the entire study because of its potential to reveal causal explanations of teacher behaviour. It was hypothesized that teachers' behaviour was governed by their thoughts and feelings, consistent with work by Shavelson (1983). Therefore, carrying out research into aspects of teachers' thought processes could reveal the deep seated cause of teacher actions (Clark & Peterson, 1986). If the teachers had not altered their planning practices in spite of de-regulation it was hypothesized that this could be related to their values and beliefs about teaching.

Question 2. What cognitive processes occur during teacher planning?

This question was linked closely to question one. The researcher was concerned with examining teachers' cognitive processes during planning. Questions 1 and 2 also related to an assumption (see chapter 3) that teaching is a decision making process. Is planning a purposeful, reflective process or is it simply a routine task entered into with minimal thought? Question 2 was also partly concerned with determining the validity of the Yinger model of planning in the present setting (see

chapter two). It was regarded as desirable that the study should lead to the proposal of a new model of planning based upon the data collected during the study.

Question 3. To what extent has de-regulation and the introduction of the Education Department Accountability Policy altered the ways in which teachers plan?

The researcher anticipated that this question could be answered by an examination of the teachers' previous planning documents. It had been observed that some teachers kept their old programmes. By comparing these to their current planning documents aspects of the question could be addressed. It was expected that the teachers would also be able to describe in interviews the extent of change to their planning and its relationship to de-regulation and the accountability policy.

Question 4. To what extent does teacher planning reflect the emphasis on student outcomes?

The emphasis in the Education Department's accountability policy (Ministry of Education, 1992) is on accountability for outcomes rather than planning. The purpose of this question was to determine the extent to which teachers were able to demonstrate their accountability for student outcomes and the extent to which they were planning with an outcomes emphasis as opposed to an objectives or activities emphasis.

Question 5. What are teachers' perceptions of their accountability for planning?

This question involved in-depth interviewing in an attempt to describe teacher perceptions of accountability. It was hypothesized that accountability perceptions were related to teachers' personal belief systems, including the teachers' personal work ethic.

Question 6. How do teachers demonstrate their accountability for planning within the school Management Information System?

School administrators have various systems in place which provide information regarding school performance. At present these systems are termed the *Management Information System*. It was anticipated that this question could be addressed by participant observation.

Question 7. How do teachers relate their planning decisions to the school development plan?

The School Development Plan (SDP) represents the written documentation which describes the future directions of the school by addressing school performance indicators and priorities. The SDP is a significant part of the cycle of school improvement. The researcher was concerned with describing the extent to which teachers actively referred to the SDP in their planning. Since the SDP is developed with staff collaboration, to what extent was the plan adopted and "lived" by

teachers? The researcher contended that if teachers were committed to the SDP and intended to carry out its priorities, then some form of written acknowledgement should be expected to appear.

1.5. Outline of the thesis

The introductory chapter is followed by a review of selected literature on teacher planning and teacher accountability. The teacher planning literature is reviewed in three sections namely types and functions of planning, models of teacher planning and teacher planning, teacher actions and teacher effectiveness. The review of accountability literature focuses mainly on the debate concerning a conception of teaching as a professional or a technical occupation. Chapter Three examines the theoretical basis of the study, including a section on the conceptual framework and the definitions and assumptions underpinning the study. Chapter Four describes the methods used for data collection, data analysis and data display. Two main sections are included which describe the design and the procedure of the study.

Chapter Five reports the six case studies. The planning methods of each teacher participant are described in detail in approximate relationship to the research questions. Chapter Six addresses and attempts to answer the research questions directly. Chapter Seven describes the main theory generated from the study, including a naturalistic planning model. The concluding chapter (eight) includes implications and recommendations foreshadowed in Chapter One.

CHAPTER TWO

REVIEW OF LITERATURE

2.0. Overview

The teacher planning research was reviewed and classified it into three major groups; studies which described the *types and functions of teacher planning*, studies which proposed *models of teacher planning* and studies which attempt to establish *links between teacher planning and teacher actions and effectiveness..* The first section of this chapter reviews the research under these categories.

The curriculum planning literature was reviewed in order to gain an overview as to how the earlier planning models were developed. Several writers have sought to establish a relationship between teachers' instructional planning and curriculum planning (Tyler, 1950; Print, 1987;). In the normal course of their work, teachers are concerned with reducing the curriculum into instructional parts, rather than creating entire curricula. Therefore, this study focussed mainly on teacher instructional planning. Although there exist some similarities between instructional planning and curriculum planning, general curriculum theory was not within the scope of this study.

It was anticipated that this study would have implications for teacher education institutions. However, the teacher education research was not within the scope of this study, except where the teacher planning literature made reference to teacher education. From these references it

was possible to establish how teachers are prepared for their planning tasks by pre-service teacher education.

Literature on the accountability of teachers is reviewed later in the chapter. The accountability literature was predominantly concerned with system level and school level accountability. It was not intended to review all of the substantial body of educational accountability literature, except where it was determined as relevant to questions of the accountability of individual teachers. However some of the general accountability literature was reviewed in order to determine trends of significance to this study. Literature which was concerned with what can be described as "best professional practice" was deemed relevant in the sense that planning can be regarded as a component of best practice. In general, more recent literature was reviewed in an attempt to explain the increasing momentum for accountability.

2.1. Types and Functions of Planning

Studies by Yinger (1978) and Clark (Clark & Yinger, 1979b) established that teachers engaged in as many as eight different types of planning; year, long range, short range, weekly, daily, term, (which related to a time frame), and lesson and unit planning (which related to the structure and content of the planning). Teachers rated unit planning as the most significant, followed by weekly and daily planning (Clark & Yinger, 1979b). Clark and Yinger also found that planning prepared the teacher cognitively and instrumentally for teaching as well providing the

basis for the interactive instructional processes. In addition to this form of preparation, they found that planning served an important psychological function in helping to reduce anxiety and provide the teacher with a sense of direction and instilling a feeling of confidence.

Clark and Elmore (1979^a) used interviews, observation and journal keeping to study planning of 5 teachers of K-5 in the early part of the school year. They found that most attention was paid to establishing a suitable physical environment and social system in the classroom. In a later study (1981) of one second grade teacher they found that yearly planning was a process of adapting the curriculum to the needs of the teacher and the class. The teacher also spent time familiarizing herself with new curricula and in arriving at a practical instructional schedule. Planning was also seen as having an important function both before and during instruction (Clark & Yinger, 1979^b). Teachers used planning to familiarize themselves with content, to collect and organize resources and to allocate sufficient time before the lesson. They used planning to organize students, begin activities and to develop a framework for instruction and evaluation.

In an ethnographic study of one elementary school teacher, Yinger (1978) found that planning was activity driven in that the basic unit and starting point for planning was the learning experiences the teacher chose. Yinger saw this as a fundamental aspect of the teacher's decision-making process.

"Activities were described as the basic structural units of planning

and action in the classroom. Nearly all classroom action and interaction occurred during activities; the remaining time was used in preparing for activities or making transitions between activities."(p.13)

Yinger also found that the activities acted as "controlled behaviour settings" (1980). A behaviour setting was defined by Kounin (cited in Yinger, 1980) as having four distinct features; definite temporal and spatial boundaries, a physical milieu of learning resources and materials, a pattern of behaviour and interaction between the pattern of behaviour and the physical components. The teacher controlled and manipulated the behaviour setting and at the same time was controlled and manipulated by it. Doyle (1986) found the inherent complexity and uncertainty of the classroom had a profound effect on the teacher's actions. One of the teacher's most important functions was to organize and schedule activities for a group of students. The teacher's task also involved "gaining and maintaining the co-operation of the students in activities which fill the available time"(Doyle, 1983; p.179). Teaching and learning was not the teacher's only concern. Management of the classroom was also seen as a key task of the teacher. Planning activities was an aide in achieving the co-operation of students. Doyle (1986) described two major teacher tasks related to learning and order. Learning was served by the teacher's instructional function and order was served by the management function. Each function required planning.

Routinization of planning

Yinger (1978) also identified the use of routines as another distinctive feature of teacher planning. The study teacher used routines as a means of establishing and regulating activities and to simplify planning. Routines were so prevalent that Yinger (1978) described the teacher's planning as the "selection, the organization, and the sequencing of routines"(p.16).

Yinger identified four types of routines. *Activity routines* were the controlling influence over the instructional activity. The teacher managed her activities principally by routinizing them so that one reading lesson, for instance, looked very like any other reading lesson. The tendency to routinize activities developed as the year progressed. *Instructional routines* were the routines which established instructional behaviours in the same patterns and sequence over time. For example, the teacher used certain routines for questioning and for giving instructions. *Management routines* were those used to co-ordinate and control classroom behaviours not related to instruction, such as those which controlled lesson transitions and distribution of materials. Finally, *executive planning routines* were the routines which the teacher used for preactive (pre-instructional) planning. A given planning task would produce certain thought patterns based on the teacher's previous experience. Routines were established for unit planning as distinct from daily, weekly or term planning. Yinger found that teacher routines had two main effects. First, they increased teacher flexibility and effectiveness

thereby reducing the complexity of the classroom. Second, routines reduced classroom complexity and unpredictability for the students and clarified teacher expectations.

Mental planning

Several researchers have found that most teacher planning does not appear on paper. Using observation, analysis of written plans, interviews and stimulated recall, Morine-Dersheimer and Vallance (1976) studied 20 teachers of second grade and 20 teachers of fifth grade and found that most of their planning took place mentally. When written plans were used, the most typical form was that of an outline or list of topics. In a later study of 10 elementary school teachers, Morine-Dersheimer (1979) found that the teachers would abandon their plan if they found that the flow of the lesson was threatened. The study also found that the teachers used a mental "image" of the lesson to guide them through routine instruction.

Smith & Sendelbach (1979) produced similar findings in their study of 4 teachers of sixth grade. They found that teachers' planning produced a mental image of the unit which acted as a guide and the teacher tried to recall these images during instruction. These researchers also found that very little of the plan was documented. The teachers depended heavily on published teachers' guides and texts, using these as their source of subject matter and learning objectives.

McCutcheon's (1980) ethnographic study of 12 first to sixth grade

teachers, supported the view that much of the teacher's planning occurred mentally. McCutcheon described teachers' mental planning as a complex mental dialogue and a form of reflective thinking prior to documentation. Mental planning was seen as the richest form of planning used by teachers. Some of the thinking was outlined sketchily in planbooks but most of it did not appear on paper. The teachers believed their brief notes were the most useful form of planning. McCutcheon examined the teachers' planbooks and found that they typically listed activities, pages in textbooks or teachers' guides and a few notes about concepts to be covered. There was evidence that the teachers created routines and that planning was seen as one of the routine tasks of the teacher.

McCutcheon (1980) also examined what teachers did if unexpected events occurred. The teachers coped with these occasions by eliminating or adding an activity which required a minimum of mental planning. McCutcheon also found that longer range planning was seen as counter-productive because of the unpredictable nature of teaching. Many teachers relied on texts to guide them over longer periods.

According to McCutcheon another function of written plans was to satisfy the demands of administrators. Many teachers had their written planning examined regularly by the school principal. McCutcheon found that many teachers only listed objectives in their written plans if required to do so by the principal. There was general agreement among these teachers that the need to write objectives was obviated by the presence of

objectives in syllabus documents. The provision of written plans was also seen as important for use by substitute or relief teachers. In these instances the teacher provided a great deal of background information which related particularly to how the class systems operated in addition to information about actual lessons.

The literature provided substantial descriptions of the types and functions of teacher planning. Researchers have also attempted to describe teacher planning in terms of models.

2.2. Models of Teacher Planning

Rational-linear models

Some researchers have attempted to establish a relationship between models which describe teacher planning and more general curriculum models. The most durable and influential model has been the rational-linear model first proposed by Tyler (1950) and elaborated upon by Taba (1962), Popham (Popham & Baker, 1970) and Mager (1975). The rational-linear model was based on models from economics and city planning theory (Yinger, 1978) and military models (Eisner, 1979). It was also intended for use as general curriculum model as well as a planning model. Tyler's model suggested that planning should be based around four main questions, beginning with objectives. The planner next selected learning activities, organized the learning activities and specified evaluation procedures. Critics of Tyler's approach appeared to overlook

that he saw his model as only one possible planning rationale. He encouraged teachers to develop their own systems of curriculum planning (Marsh, 1986). The Tylerian model and its derivatives, grounded in behaviourist psychology, have been used by teacher education institutions for decades. Generations of teachers were trained to plan using this "objectives first" model. Until the early studies on teacher planning in the nineteen seventies, it was assumed that this was how teachers planned.

The emphasis on objectives from the nineteen fifties had been due in part to the dominant behaviourist view of learning, particularly in North America. Many researchers became interested in measuring learning in terms of *observable behaviour*. (Bloom, 1956; Mager, 1975; McAshan, 1970; Print, 1987.). Some writers developed very prescriptive systems for writing *behavioural objectives* (Mager, 1975). Critics of the behavioural approach to preparing objectives cited the difficulty in writing objectives for the "affective domain" (Bloom,1956), as well as the need for greater flexibility in being able to react to spontaneous situations and the need to include "expressive objectives" (Eisner,1967).

Tyler's work gave rise to a number of other models which attempted to explain the process of curriculum development. Taba (1962) proposed another rational model, beginning with needs diagnosis and then proceeding in similar steps to Tyler's model. Wheeler (1974) extended the Tyler and Taba approaches, producing a *cyclical model*. (Fig.1).

(Fig.1).

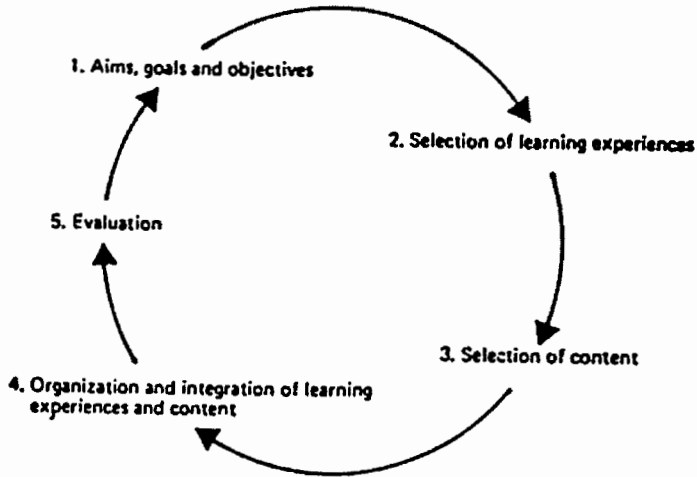


Fig. 1. Wheeler Model of Curriculum Development.

Source: Print, M. (1987). *Curriculum development and design*. Sydney: Allen & Unwin.

Nicholls & Nicholls (1978) applied the same elements as the previous models although a starting point was not prescribed. This made the Nicholls model more applicable as a general planning model (Fig.2).

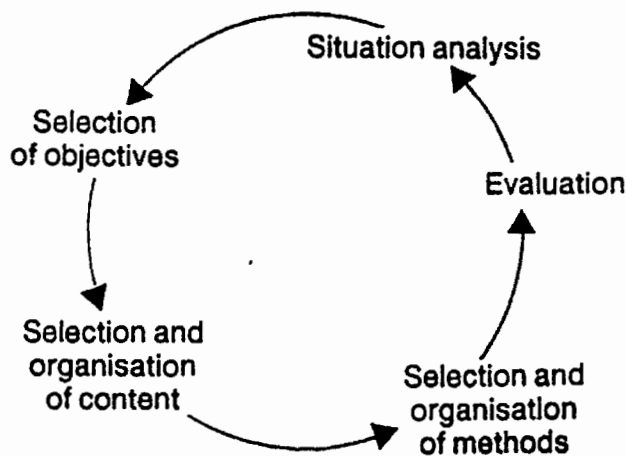


Fig. 2. Nicholls Model of Curriculum Development.

Source: Print, M. (1987). *Curriculum development and design*. Sydney: Allen & Unwin.

A Naturalistic Model

Walker's naturalistic model (Fig.3) represented a significant departure from previous rational-linear models. Walker believed that objectives or rational-linear models were not commonly in use or particularly successful (Print, 1987). Curriculum developers entered into discussions with a platform of pre-determined ideas, values, beliefs and conceptions which influenced the kinds of curricula likely to be produced through the deliberations and design phases. The Walker model was based upon participant observation of actual curriculum development (Marsh, 1986). Walker was concerned with describing the actual process of curriculum development instead of describing a theoretical model.

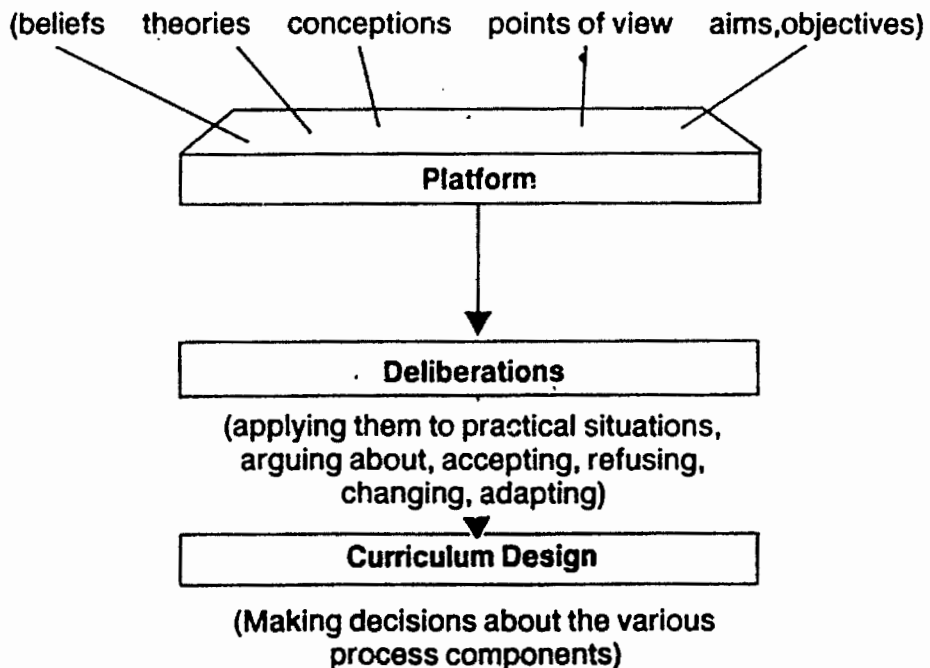


Fig.3. Walker Model of the Curriculum Process.

Source: Print, M. (1987). *Curriculum development and design*. Sydney: Allen & Unwin.

The role of objectives in planning models

MacDonald (MacDonald, 1965; MacDonald, Wolfson & Zaret, 1973) and Eisner (1967) suggested an alternative to the rational-linear model. In their "integrated ends-means model" (cited in Zahorik, 1970) they contended that teachers did not begin their planning with objectives and progress logically through to activities and evaluation, but that the first decision they made involved activities. They argued that objectives arose only in the context of an activity. It was Eisner's (1979) contention that too much emphasis was placed on behavioural objectives, an emphasis grounded in the behaviourist traditions of psychologists such as Thorndike, Watson, Hull and Skinner. Eisner cited Bobbitt as one of the earliest behavioural theorists in the planning domain. His objectives were vague compared to modern behavioural objectives but the "spirit of behavioural specificity is the same." (1979, p.95).

Taylor (1970) studied planning in British secondary schools using group discussion, analysis of course syllabi and a questionnaire. He found that the most common theme in the teachers' planning was pupil needs, abilities and interests. Subject matter was next in order of importance, followed by goals and teaching methods. Taylor emphasized the importance of teachers considering the context of their teaching first and then considering the learning activities likely to involve and interest the students. The teaching purposes were only significant when this had been carried out. Taylor concluded that teacher planning should begin with content and the associated contextual considerations and next

consider student needs, attitudes and interests. The teacher should then consider aspects such as aims and purposes of the course, learning situations, philosophy of the course, criteria for judging the course, assessment of students' interest level and finally, evaluation of the course. Taylor found that teachers paid very little attention to the evaluation of either their own courses or of the curriculum as a whole.

Zahorik (1975) was also concerned with identifying the starting point in teachers' planning. Teachers were asked to list the decisions they made prior to teaching and to indicate the order in which they made them. Zahorik created categories from the teachers' responses, reflecting the planning themes which occur frequently in the literature; objectives, content, pupil activities, materials, diagnosis, evaluation, instruction and organization. The most frequently mentioned decision was related to pupil activities (81%). Content (51%) was the first decision made most frequently, followed by objectives (28%). Zahorik concluded that teacher planning did not follow a linear model beginning with objectives and that objectives were a relatively insignificant planning decision.

Zahorik's research was supported by Morine-Dershimer and Vallance (1976). These researchers collected written plans for two prescribed lessons. They described and analysed them according to several criteria including specificity, format, goal statements and evaluation procedures. Morine-Dershimer and Vallance found the teachers' planning involved little concern for behavioural goals, diagnosis of needs, evaluation and alternative courses of action. The

teachers reported that the researcher prescribed lessons were not a true reflection of how they normally planned.

The Yinger Process Model

The principal planning model which has emerged in contrast to the rational models has been Yinger's (1978) "Process Model", based on a study of one elementary school teacher's planning. According to Yinger, the teacher planned in three distinct stages; *problem finding, problem formulation/solution and implementation, evaluation and routinization*. (Fig.4.).

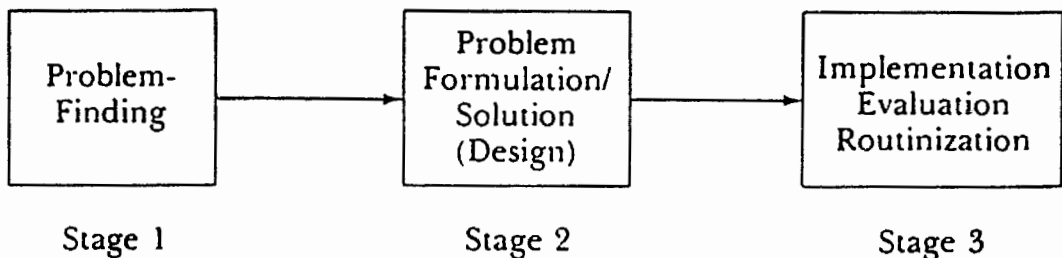


Fig.4. Yinger Process Model of Teacher Planning

Source: Yinger, R. (1980). A study of teacher planning. *Elementary School Journal*, 80, 245-257.

In the first stage the general planning task was translated into a specific planning problem (p.26), which Yinger described as the *planning dilemma*. The planning dilemma was part of the general teaching dilemma, which was influenced by other factors including environment and organization, curriculum and resources and pupil characteristics (Fig.5.). The teacher produced an *initial problem conception* which was

derived from the interaction between the planning dilemma, the teacher's knowledge and experience, the teacher's goal conceptions and the availability of suitable materials.

The repertoire of teacher knowledge and experience was described by Yinger as the ideas which the teacher may use as the basis for the initial problem conception. This knowledge and experience also included the executive planning routines and may influence the way in which the planning problem was perceived. The teacher's goal conceptions related to the teacher's expectations for a particular group of students. Materials included all information sources as well as teaching materials. Yinger described two constraints to the initial problem conception. The initial idea must be feasible within the teaching goal conceptions and must be one which has not failed recently. Having conceived the initial shape of the problem, the teacher entered the creative stage of Yinger's model, problem formulation and solution.

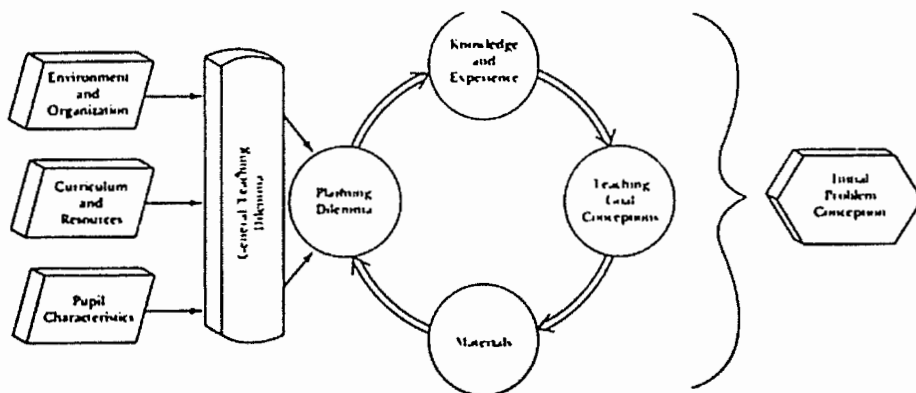


Fig.5. The problem finding stage of the Yinger Model

Source: Yinger, R. (1980). A study of teacher planning. *Elementary School Journal*, 80, 245-257.

The second stage involved most of the planning energy (Fig.6.). This was the "design" phase where initial solutions were tested and elaborated upon until a satisfactory solution was found. Planning in this stage gradually became more specific, having begun with the general problem conception. Potential solutions to the planning problem passed through phases of elaboration, investigation and adaptation as the tentative solution was developed. According to Yinger, the design cycle lasted from a few minutes, where only minor elaboration to the initial idea was required, to several weeks where the initial idea may pass through several phases of elaboration, investigation and adaptation. Yinger described planning as a "constructive activity represented by continual elaboration, mental testing, and adaptation of ideas." (cited in Borko & Niles, 1987).

The final stage of Yinger's model involved the actual implementation and evaluation of the plan (Fig.7.). The success of the tentative solution was evaluated by the teacher. If successful over time, the teacher refined the activity, based on the evaluation. The activity was eventually routinized and consigned to the teacher's repertoire of knowledge and experience. Yinger emphasised that each planning episode resulted in an expansion of the teacher's knowledge and experience which in turn affected future planning. If unsuccessful, the activity was either returned to the design cycle or rejected. Rejected activities were also included in the knowledge and experience repertoire and became the basis for accepting or rejecting planning solutions.

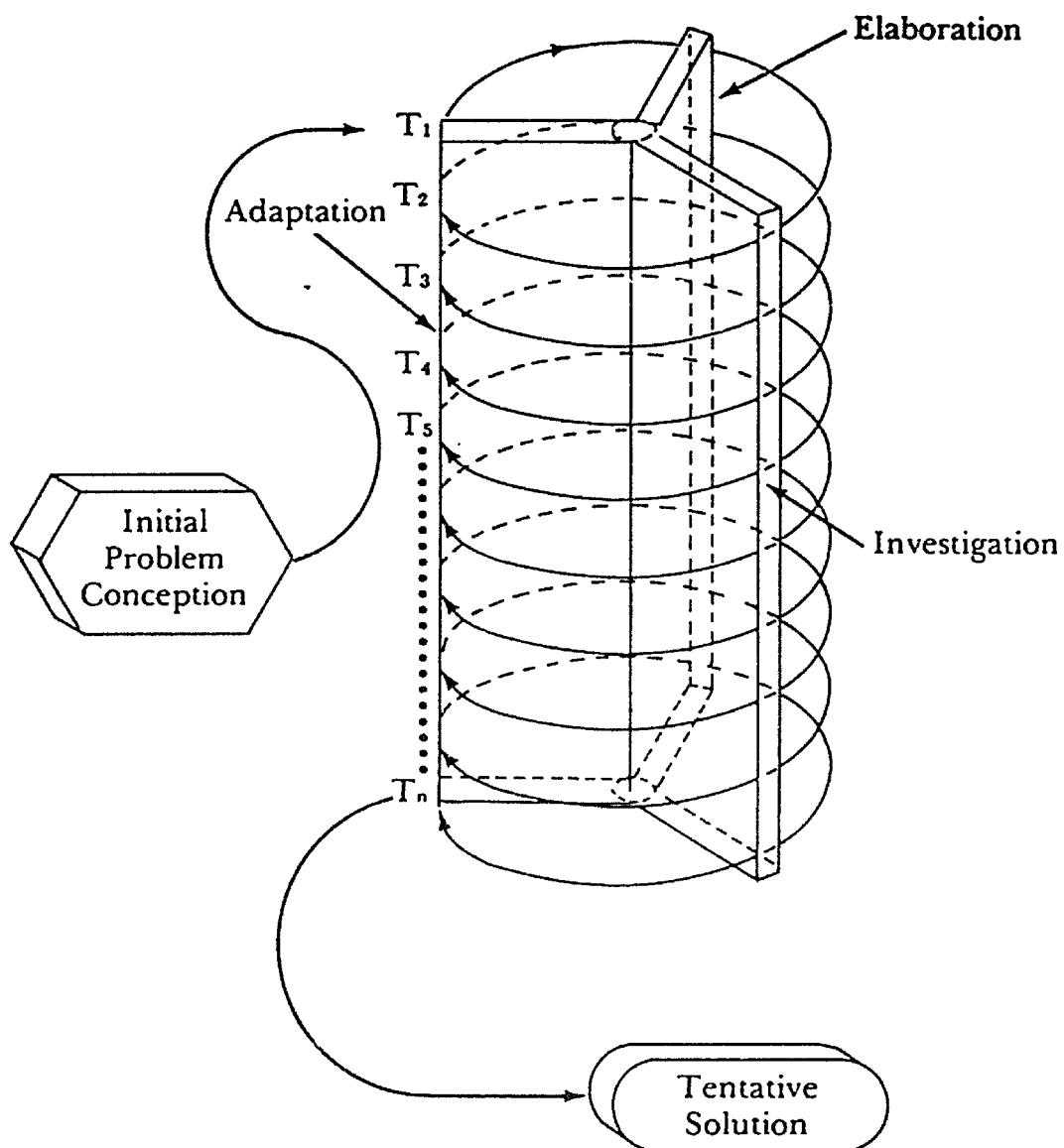


Fig.6. The problem formulation and solution stage of the Yinger Model

Source: Yinger, R. (1980). A study of teacher planning. *Elementary School Journal*, 80, 245-257.

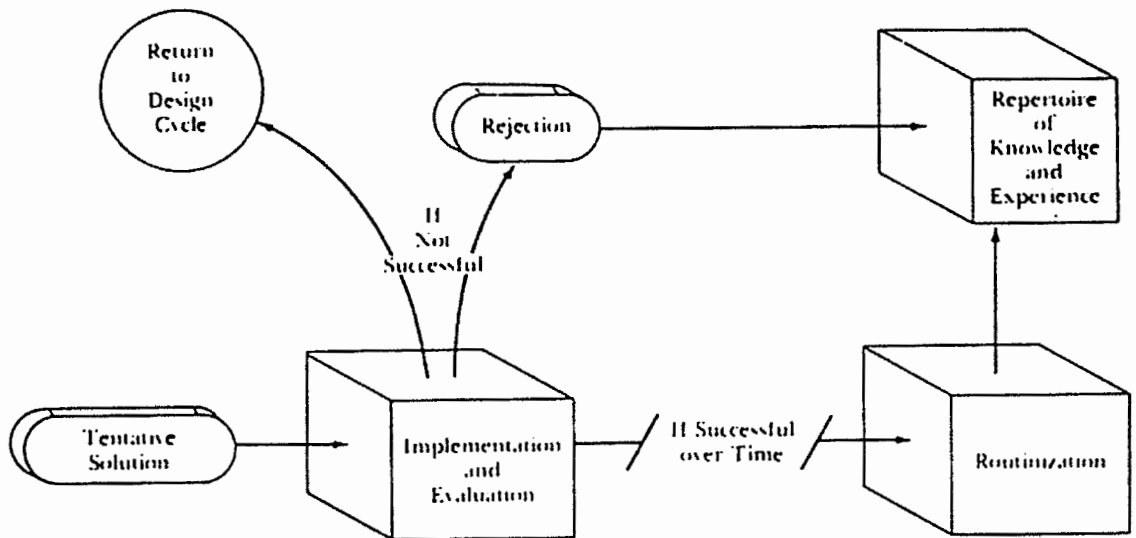


Fig.7. The implementation, evaluation and routinization stage of the Yinger Model

Source: Yinger, R. (1980). A study of teacher planning. *Elementary School Journal*, 80, 245-257.

Yinger further investigated his model in conjunction with Clark (1979b). They found that teacher planning was a process of commencing with a general idea and gradually moving through levels of elaboration and refinement. This was an approach which is consistent with Gronlund's (1978) theories on preparing objectives where teachers should plan general objectives and work towards the more specific.

Other non-rational planning models

The question of why teachers abandon rational planning models has concerned a number of researchers. Toomey (1978) was more concerned with teachers understanding the nature of their planning rather than rigidly following a prescriptive model. According to Toomey,

teacher beliefs were likely to result in different planning styles. Toomey argued that a teacher who valued student initiated activity was more likely to use broad objectives in their planning keeping student interests in mind. Conversely, a teacher with strongly held beliefs about the presentation of curricula and knowledge would be more likely to carefully select and organize objectives. By knowing where the individual was "coming from" (p.219) the teacher could develop an approach to planning which was more practical and could be supported and improved.

Research by Sardo Brown (1988) supported Yinger's model. In a descriptive case study of twelve middle school teachers, Sardo Brown found that the rational (objectives first) model was not being applied. Sardo Brown contended that the Yinger process model was a better description of yearly, unit and weekly planning. Leinhardt's (cited in Sardo Brown, 1988) research showed that teachers concentrated on the scheduling of goals, content and activities during short term planning. According to Sardo Brown, this represented a better description of daily planning. The teachers focussed on activities rather than on objectives. Sardo Brown also found the teachers relied heavily on plans constructed previously. There was little evidence of the teachers developing new instructional units and they rarely constructed new lessons. Sardo Brown found the teachers were mainly concerned with fitting previously tried activities into the available time and the existing curriculum guides. These findings suggest that teachers act more as curriculum

implementors than curriculum planners or innovators.

Teachers' planning "styles" have been studied by several researchers. Sardo (cited in Clark & Peterson, 1986, p.265) described a relationship between planning style and teaching experience. In a study of 4 junior high school teachers ranging in experience from 2 to 30 years, the planning of the inexperienced teachers followed the Tyler Model more closely while the planning of the more experienced teachers was less systematic. Planning occupied less of the experienced teachers' time. Sardo found that teachers were more concerned with the flow of activities and longer term planning than with minute details of individual lessons.

A substantial body of research has shown that despite being the predominant planning model in use in teacher education (MacDonald, 1965; MacDonald, Wolfson & Zaret, 1973; Zahorik, 1975; Yinger, 1978; Eisner, 1979; Sardo, 1982; Neale, Pace & Case, 1983; Shavelson, 1983; Thomson et al, 1988; Clark & Yinger, 1989; Kagan & Tippins, 1992), Tyler's model is rarely used in practice. Neale, Pace & Case (1983) investigated the possibility that this was because of inadequate instruction in the rational model. The researchers found that attitudes to rational-linear models were generally favourable and that most experienced teachers agreed that systematic planning models were only useful to novice teachers. All teachers demonstrated knowledge of rational-linear models and these models received administrative support. According to Shavelson (1983) there was a clear "mis-match" between the model and

classroom practice. He believed the mis-match arose because a teacher must balance educational goals, take into account students' goals and maintain the flow of the activity or risk management problems (Doyle, 1979). "Activities, then, not the prescriptive model, are the focus of teacher planning." (Shavelson, 1983, p.402).

Thomson, Braithwaite, Kensell and Mottram (1988) reviewed the research on teacher planning and carried out a study into the planning of student teachers and graduate teachers. They concluded that primary and secondary teachers had different planning priorities. Secondary teachers saw long term planning in terms of statements about content to be covered. Aims and objectives were seen as part of the syllabus which may or may not be copied into the programme of work. These findings are supported by several previous studies (Taylor,1970; Zahorik,1975; Smith & Sendelbach,1979; Sardo,1982). The primary teachers in the study saw aims, objectives and content as their main planning emphasis but they were more concerned with constructing their own curriculum. Thomson et al (1988) also concluded that the teachers in their study were not planning according to the rational-linear model.

An approach to planning which used the notion of "planning questions" was suggested by Posner (1985). This model begins with the activity and allows for successively more specific decisions. Posner's preliminary planning sheet (Table 1) begins with general questions and continues with additional questions which elaborate on the initial plan. The sheet (Good & Brophy, 1991, p.564) provides a planning framework

for the early organization of planning questions. By beginning with questions about activities and including all other planning elements, Posner's approach more closely approximates how teachers actually think about their planning.

Table 1. Preliminary Planning Sheet

Planning element	Planning question	Preliminary answers
I. Direction		
1. Activity	What activity do you plan to initiate or lead?	
2. Objectives	What are the students supposed to learn from the activity?	
3. Entry characteristics	What prior skills and understandings do you expect the learners to bring to the lesson?	
II. Specifics		
4. Content	What specific content will you cover?	
5. Procedures	What will you and the learners do during the activity?	
6. Results	What results do you expect?	
III. Provisions		
7. Resources	What facilities and materials will you and the learners need to carry out this activity?	
8. Feedback	How will you and the learners be provided with feedback regarding their progress?	
9. Time	How long will the activity take?	
10. Follow-up	What activities will you assign as a means of re-inforcing the lesson?	

Barry and King (1988) proposed a model of teacher planning (Fig.8.) which in several respects departed from the "objectives-first" approach. This model was originally suggested by education faculty staff at a teacher education institution. It was essentially a cyclical model where the teacher could begin at any given point and proceed through the various planning stages. Like Posner's approach, this model represented actual teacher planning more accurately. Content was seen as a central focus. Barry and King also approached the initial stages of planning by asking a series of planning questions (p. 12-21). The questions included "background" factors, (pupils' needs, interests etc.) resembling Taylor's (1970) model, and then proceeded with planning questions relating to objectives, content, learning experiences, and evaluation.

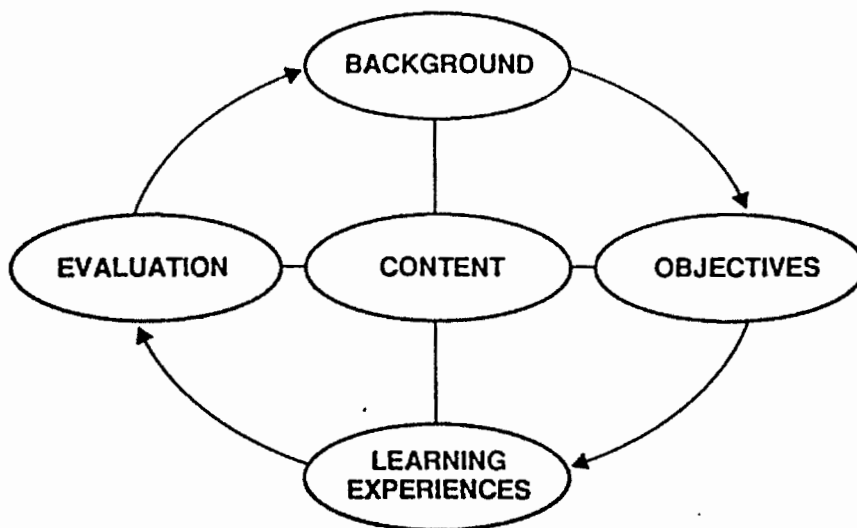


Fig. 8. Barry and King Cyclical Model

Source: Barry, K., & King, L. (1988). *Beginning teaching*. Sydney: Social Science Press.

A study of collaborative planning by student teachers by Lalik & Niles (1990) also supported Yinger's (1980) planning model. The researchers asked two groups of student teachers to collaborate on a

planning task (a thirty minute reading comprehension lesson). Five aspects of the task received attention; the lesson plan, sub-tasks of the planning process, content of group interactions, student teachers' thinking and student teachers' perceptions of their learning. Data were gathered using ethnographic methods. Lalik and Niles found that a very significant proportion of time was spent discussing activities.

"Apparently, ideas about how to conduct the reading lesson and what teachers and students would do during the lesson were especially salient for these student teachers." (p. 327).

Describing the actual planning models applied by teachers has significance for all levels of education, particularly teacher education. Research has shown that teachers use planning models which highlight the elaborative, decision making aspect of the pre-active phase. Teachers tend not to follow a rational (objectives first) model. Examining the question of why teachers choose an *activities model* rather than why they do not use rational (objectives first) models may reveal more about the problems and practice of teaching. What effect do these planning processes have on teachers' classroom behaviour and effectiveness?

2.3. Teacher Planning , Teacher Actions and Teacher Effectiveness

Comparatively few studies were identified which attempted to establish clear relationships between teacher planning, teacher actions and teacher effectiveness. Zahorik (1970) found, in an observational study of twelve elementary school teachers, that when given set plans to

use two weeks in advance, the teachers were less sensitive to the needs of their students and less likely to respond spontaneously to events which occurred during the interactive phase. Marland (cited in Tuckwell,1980) reported that while the act of planning functioned to programme the teacher to act in a pre-determined way the plan only entered the teachers' interactive thoughts if the lesson was disrupted.

In one of the few studies carried out in a laboratory setting, Peterson, Marx and Clark (1978) asked twelve teachers to prepare a new unit for junior high school students. The teachers were asked to "think aloud" during their planning sessions. Their statements were audio taped and coded into categories very similar to those used by Zahorik (1970). The researchers found a positive correlation between planning behaviour and interactive teaching behaviour. With these teachers the initial focus was on content but this shifted gradually to instructional processes, giving the least amount of their time to planning objectives. This study suggested that as the task demands on teachers change so does the nature of the preparation.

Carnahan's (1980) study of nine teachers of fifth grade is one of the few in the literature which attempts to find a correlation between teacher planning and teacher effectiveness. Carnahan rated teacher plans on the basis of their emphasis on the use of smaller groups. The curriculum materials in the study incorporated a similar bias. Plans which focused on individuals or small groups were rated as high quality plans and the reverse was true of plans which focused on large groups. Classroom

observers then rated the interactive teaching for clarity, motivation strategies and student engagement. Carnahan found no statistically significant correlation between plan quality and teaching quality ratings. Despite the bias in the selection of plan-rating criteria, the disparity between effective planning and effective teaching appears significant. Carnahan suggested that this could be due to teachers using planning as a means of organizing and structuring lessons rather than for planning specific verbal behaviour. This finding is supported by a number of studies (Morine-Dersheimer, 1976 & 1979; Sardo,1982).

The research shows that teachers' plans are an excellent predictor of their classroom actions (Tuckwell,1980; Shavelson & Stern,1981). Plans have a significant influence on outcomes for students. Planning decisions influence the content, materials, social climate and activities used in the classroom. Some studies have shown that once written instructional plans are completed, teachers tend not to deviate from them (Zahorik,1970, Shavelson & Stern,1981). Shavelson and Stern (1981) and Smith and Sendelbach (1979) found that knowing a teacher's plan for a lesson meant that many of the teacher's actions could be predicted. Teachers' planning is a crucial component of their decision making processes affecting many of their pedagogical judgements.

Deschamp (1983) carried out a case study of five teachers' planning. He found that his subjects' planning styles varied considerably, from extremely detailed long term plans to mental planning which was not written down. With one exception, the teachers spent substantial out-of

hours time on planning. The teachers regarded their planning as professionally vital, giving most attention to their own areas of competence. Deschamp found that the teachers made distinctly different use of the prescribed curriculum materials and available support. He was able to show that each teachers' planning emphasis and approach resulted in quite different outcomes in the classroom.

Several researchers have found that "coverage" of the curriculum can create concerns for some teachers. Teachers at various times must reduce the curriculum into "parcels" which can then be translated into lessons. This is part of the "operationalizing" process which occupies teachers (Woolfolk, 1990). Decisions requiring curriculum reduction can create difficulties in the classrooms of inexperienced teachers or those with poor planning and instructional skills (Brophy, 1982). Brophy emphasized the need for teachers to problem solve and make their own planning decisions. According to Brophy even the most skilful teachers can have difficulty reducing the curriculum into instructional parts and in covering the intended content adequately.

Bullough (1987) studied the planning and planning thoughts of a teacher through the first year of teaching. This study provided insights into the developmental processes of teachers, describing how a novice teacher made the transition from the theoretical to the real world of teaching. Bullough's subject, Kerrie, passed through the stages of development suggested by Ryan (cited in Bullough,1987). In the *fantasy stage* the teacher had her first serious thoughts about becoming a teacher.

The potential teacher imagines classes of highly motivated students anxious to please the teacher. The fantasy stage also involves unpleasant thoughts of the worst scenarios which could be faced. Planning for the first weeks of teaching (fantasy stage) was difficult because the teacher could only imagine what the students would be like. Kerrie used her experience as a mother to imagine the means she would use to cope with her class. Kerrie preferred to carry out her actual planning at home. This teacher gave little attention to instructional goals in planning for the first weeks of teaching. Her main concern was to plan activities and the flow of activities. She used a great deal of mental rehearsal before classes. Kerrie found that control problems gradually increased.

The *survival stage* came with the realization of teaching's two basic tasks, learning and order (Doyle,1986). According to Bullough, Kerrie's lack of planning for management was the source of her greatest problems in the survival stage. Bullough noted the difficulty Kerrie was having keeping the children on task, combined with the unpredictability of the classroom environment. Kerrie began to judge her performance as a teacher by the degree of control she was able to maintain. A "good day" was defined in terms of student behaviour. Effective planning was closely related to effective teaching. Instructional decisions were made on the basis of her predicted ability to be able to maintain control. Activities which were "fun" or out of the ordinary were avoided. Kerrie began to develop a teaching style which was characterized by activities and management patterns which had been successful. At this point she had

begun to progress into the *mastery stage*.

At the mastery stage, Kerrie demonstrated an ability to anticipate management problems, student learning became the central focus of her teaching, she became more efficient in her planning, she developed instructional routines and she developed a greater knowledge of her students' abilities and interests. Kerrie was careful to ensure her subject knowledge was adequate and she preferred to over-plan in order to cope with potential problems resulting from students completing work early. This teacher had progressed through the various stages with little assistance from senior colleagues and her teacher education. Bullough was concerned that Kerrie had overlooked planning for management, partly because this had not been required during her teacher training.

The concern was also expressed that Kerrie gave little attention to planning instructional goals (objectives). According to Bullough, Kerrie had defined the teacher's role as instruction and management, not as establishing educational purposes. Bullough contended that models of teacher planning should be generated, based on teacher experience, which represent teacher planning more accurately than rational models. These models have the potential for enhancement of the teacher's role professionally and educationally. Bullough's study suggested that since teacher planning is predominantly a mental activity, teachers should be taught to think better. According to Bullough, teacher planning should be investigated as a "collaborative, dialogical, non-sequential but clearly logical, form of problem solving..." (p.248). Models which are based on

these assumptions may be of more relevance than rational models.

It appears that planning can be regarded as an essential component of teacher effectiveness although attempts by researchers to relate teacher planning to teacher effectiveness are incomplete. In a climate of change driven by an "effective schools movement" (Caldwell, 1993), identifying what constitutes effective planning may become necessary because of teacher accountability concerns. To what extent does the literature relate teacher planning and effectiveness to the accountability of the individual teacher? What is the conception of the accountability of teachers?

2.4. Teacher Accountability Literature

The effective schools movement has gained impetus over the last decade. Economic imperatives motivate politicians and educational administrators. The present economic rationalist doctrine requires the products of education to become more tangible and more accountable. "Educators and administrators have dramatically increased their efforts to collect data describing the performance of their educational systems." (Willms, 1992). How has this momentum for change affected teacher accountability?

According to Judge (1989), British education was enmeshed in a contradictory range of views. A mixture of "populism (the professionals are not to be trusted), consumerism (parents should choose), materialism (schooling is linked to the economy) and centralism (big decisions should be taken by big people)" (p.813) had dominated the educational debate.

Judge contended that the notion of a national curriculum and teacher accountability with performance being linked to that curriculum was widely accepted. The results of national curriculum testing were to be used to "provide market information about the schools-so that parents can make informed choices-and to strengthen the push for teacher accountability" (p.814).

Judge argued that the momentum for change in British education was emanating from attempts by the Conservative government to replace a welfare society with one driven by market forces. Other instruments of government, such as the National Health Service, were the subject of debate. Judge concluded by claiming that if there had not been a crisis in British Secondary Schools before the introduction of the Education Reform Act, the Act had now created a crisis. Black (1993) contended that right wing political views required the creation of a kind of educational market economy. According to Black, schools would compete against each other and customers (parents) could have choice of schools. The Education Reform Act was intended to create this market economy and schools would prosper or decline on the basis of their performance. Presumably, performance was to be linked to government funding and teacher accountability.

The political complexion of the accountability debate was also described by Kogan (1988). "Education accountability serves as a paradigm for social policy analysis because it exemplifies fundamental questions for policy makers." (p.145). Education was an area of work which required

the skills and commitment of individuals who exercised discretion within the bounds set by the system. Educational content was viewed subjectively by the large number of groups associated with it. Therefore, political policy makers will see education as a means to achieve social and political agendas. The extremes of the political spectrum will often be evident in educational policy.

Smyth (1994) contended that policy makers in government no longer perceived members of society as citizens who possessed rights of access to goods and services such as public education. In responding to the South Australian Audit Commission Report, Smyth argued that members of society were perceived as consumers who could purchase goods and services provided they had the money. Smyth argued that a fundamental shift in the conception of society and its members had led to an accountability emphasis in education which owed more to ideology than to economics. According to Smyth, the current outcomes emphasis was driven by this ideological shift. The advantage of educational outcomes was that the "products" of education could be more readily measured.

The educational accountability debate was centred around three models of accountability; public or state control; professional control and consumerist control (Kogan,1988). Public control implied the appointment of officials to oversee educational quality. Professional control was the control of educational accountability by educational administrators and teachers. Consumerist control involved a

participative partnership between the educational consumer (parents and the community) and teachers. Kogan argued that although a public control model was being practiced in Britain, much recent writing had recommended the professional mode of accountability. This model was based on self evaluation and self reporting and responsiveness to the needs of clients. Kogan reported some misgivings about teacher self-reported performance. Where accountability was used to increase control by principals, teachers may "find ways of disguising their departures from detailed prescriptions to which they feel little commitment." (p.49).

The teacher accountability debate depended upon the individual's fundamental beliefs about society and a conception of teaching. Tom (1987) described two basic conceptions of teaching; a technical conception and a professional conception. Debate and conflict between educational administrators and teachers was likely when a mismatch existed between these conceptions. The technical conception implied teachers function as assembly line workers with their final products being "educated" students. According to Tom, a technical conception was based on three themes; distrust of teachers, teacher autonomy conditional on student achievement and teacher accountability based on student performance rather than sound teaching practice. The resultant accountability structure was top-down. In such a structure, teacher remuneration would be based on student performance.

A professional conception of teaching was based upon autonomous professionals selecting the best practice for various teaching

situations. According to Zeuli and Buchman (1988) teaching was not simply a case of presenting material, allowing students time to practice and finding out what students have learned. Teaching involved understanding "when, to what purpose, and for what reasons some teaching strategy ... may be effective" (p.142). Under the Zeuli and Buchman conception, teaching was a problem solving, reflective process requiring knowledge of pedagogy and educational research beyond what could be gained from socialization and popular myth about teaching. These authors contended that reflecting about teaching always lead the teacher to ponder "what else needs to be done and thought about" (p. 149).

Tom contended that teachers' pay should not be linked to student performance, principally because no mechanism existed to validly assess the impact of teacher performance on student progress. Teacher performance was only one variable affecting student progress. "Student performance has a variety of determinants, one of which is teacher performance." (p.507). Tom described teacher accountability of this type as unworkable, drawing an analogy with social workers being paid according to the number of drug addicts they helped recover or doctors only being paid if their patients recovered. In order to attract quality people to teaching, Tom believed it was imperative that the task of teaching not be perceived as "undoable". That is, teachers should not be held accountable for factors beyond their control. Tom advocated an approach to accountability based on "best practice" signalling a need for

research to identify what constituted best professional practice in teaching.

Haertel (1991) also described the move towards increased professionalism in teaching. Greater professionalism implies greater accountability and in the case of Haertel's article, teacher assessment. Haertel described some of the difficulties with developing the means to assess teachers. Haertel contended that the form of teacher assessment depended upon a conception of teaching. Darling-Hammond (1986) described a bureaucratic and a professional conception of teaching. The bureaucratic conception related to Tom's technical conception in that curriculum decisions are made "top-down". Teachers were not the curriculum designers, but rather they simply followed directions from administrators and specialists. Teachers' work was closely supervised. They did not engage in critical self-evaluation. Under a professional conception of teaching, "teachers plan, conduct, and evaluate their work both individually and collectively." (p.532). Teaching was evaluated with the aim of determining whether best practice is being applied.

Haertel (1991) believed that in a professional conception of teaching, the systems of control should operate similarly to those of other professions such as law and medicine. The control of the profession should be in the hands of the teachers. This would mean the establishment of more rigorous requirements for entry into the profession, such as academic standards. According to Haertel, teacher assessment should be "grounded in some conception of the knowledge

base of teaching." (p.8). Descriptions of best practice needed to be developed based upon the already substantial and growing base of pedagogical knowledge which was available to teachers.

Ericson and Ellet (1987) argued that the tendency to apportion blame for educational ills to the teaching profession was related to a flawed belief that the teaching and learning situation was causal in nature. According to a causal theory, if students are not learning, teachers are not teaching. The theory implied that teachers should be held strictly accountable for student learning, or lack of learning. If this theory was extrapolated, teacher remuneration would be linked directly to student performance, similarly to descriptions by Tom (1987). Ericson and Ellett contended that the causal theory was ill-conceived because it was " (1) an inappropriate conception of the form of causal relationships in understanding the teaching/learning situation and (2) the omission of the student's role in that situation." (p.278). This implies that if it is the job of the teacher to teach, then it is the job of the student to learn.

Ericson and Ellett contended that teachers should be held accountable but only "for that which is in their power to control." (p.292). Further, the authors contended that parents and students should recognize and accept their responsibilities in order to assist students to become more active learners. Ericson and Ellett also acknowledged that some parents and students existed in such dire circumstances, such as poverty, as to limit the degree to which they could encourage their children.

Research into student mediations has also suggested that a causal

theory of teaching may be flawed. According to Wittrock, student thought processes represented a "coherent set of cognitions centrally involved in mediating the effects of teaching" (1986, p.311). Wittrock described a number of factors, other than teacher performance, which may be significant in student achievement. Pre-eminent among these factors was the students' belief that success at school was possible. Wittrock contended that student expectations varied even when receiving the same treatment by teachers and that students did not always accurately perceive differential or similar treatment given by teachers. Applying best teaching practice to a given teaching situation did not guarantee improved student achievement because of student mediations.

Wagner (1989) explored the notion of the responsibility for learning being nested with students. Attempts at quality assurance developed in manufacturing and others forms of enterprise had limited application in education. Wagner argued that the influences on student learning went beyond the effect of the teacher and the school. These influences were multiple and undetermined. Wagner concluded that "schools bring little to bear on a child's achievement that is independent of his background and social context;" (p.127). Therefore, accountability arrangements should be ethically justifiable, based on reasonable causal responsibility and practical and suitable for the purpose of the accountability relationship. The notion of reasonable causal responsibility again implies the use of best educational practice to attempt to solve teaching and learning problems.

The trend towards accountability for outcomes has been based on the belief that educational problems may be partially solved by making teachers accountable for nationally agreed outcomes. The outcomes are based on broader statements of expected student achievement, sometimes termed performance indicators. Singh (1990) expressed several reservations about relying on performance indicators because of the complexity of educational problems. Accountability should not be seen as a rational technology because it sought to measure a non-rational setting. Students disadvantaged by their economic and social environment were not likely to be well served by performance indicators which were derived from political agendas. Singh argued that a reliance on performance indicators was likely to "reduce educational administrators and teachers to the level of technicians, further de-skilling them, and further undermining their morale."(p.86). Performance indicators were not likely to prove very useful for accountability because they would provide misleading information on the work of educational professionals.

The effective schools movement has found support within the Education Department of Western Australia (EDWA), initially through the Better Schools Report (Ministry of Education,1987). This report resulted in a succession of policy documents which included the accountability policy (Ministry of Education,1992). The outcomes emphasis continued a cycle of change away from teacher accountability for planning (objectives emphasis) to accountability for outcomes. The

development and trialling of the Student Outcome Statements (Ministry of Education,1994) has implications for teacher accountability, teacher planning and administrators and the Management Information Systems within schools. The extent to which these changes have been adopted by teachers is a part of the focus of this study.

2.5. Summary

Teacher Planning Literature

Teacher planning is a highly significant aspect of the pre-active and the mental lives of teachers. The literature on teacher planning demonstrates that teachers plan to provide a structure and framework for their interactive teaching. The structure includes planning over different time frames and the creation of routines. Planning has an important role in reducing teacher anxiety about their teaching tasks. Research also shows that teachers feel the need to be able to respond to the unpredictable events which occur. The unpredictable nature of teaching often negates the teachers' plans to the extent that an over-emphasis on longer term planning can be seen as counter-productive.

Planning helps primary teachers to structure activities, whereas secondary school teachers appear more concerned with content. The research shows that, particularly for primary teachers, the activity is the basic planning decision from which all other decisions are made. Content is also significant to primary teachers. Learning objectives are

either assumed because of their presence in subject syllabus documents or included as part of the teacher's mental planning. Teachers use written plans only as a guide. Experienced teachers use predominantly mental planning with most of their planning not appearing on paper. Less experienced teachers tend to rely more on their written plans and are more likely to use a rational-linear planning model. In cases where teachers were required to submit written plans to principals they were usually required to include objectives in their planning.

The research demonstrates that rational models of teacher planning do not adequately describe the planning processes used by the majority of teachers (Kennedy, 1982). Decisions about activities or content are what drive teachers' planning, not considerations about objectives. This does not imply that teachers' planning is irrational. Several researchers have shown that teacher planning is a complex, evolutionary process of problem solving for which the rational-linear models represent an oversimplification (Shavelson & Stern, 1981; Yinger, 1978). The Yinger Process Model (1978 & 1980) appears to represent actual teacher more closely. This model emphasized the importance of the teacher entering a cycle of testing and modifying tentative solutions to planning problems with reference to a repertoire of knowledge and experience.

The studies which examined the relationship between teacher planning, teacher actions and teacher effectiveness demonstrated that planning had a definite influence on the learning opportunities of students through its influence on the creation and structuring of

classroom processes. These studies emphasized that the details of interactive teaching, such as specific verbal interactions, were unpredictable. Due to the unpredictability of the classroom, the reduction of the curriculum into day to day teaching remains an uncertain process. Planning functions in part to reduce this uncertainty.

Accountability Literature

The accountability literature reviewed illuminated the debate between two opposing economic and educational ideologies. The effective schools movement is driven by economic rationalists who argue that schools and teachers should be held accountable in terms of tangible student outcomes. According to this ideology, schools should be required to demonstrate their effectiveness in terms of improved productivity and greater cost effectiveness. An accountability system should allow schools to be compared so that consumers (parents) can send their children to the school of their choice. In an education system based upon economic rationalism, teachers are seen as technicians and teacher accountability should be based upon student achievement. In some cases, the suggestion arose from the literature that teacher remuneration should be linked to student performance.

The opposing view to the effective schools movement is based upon a conception of teaching as a professional, problem solving process (Zeuli & Buchman, 1988). This view describes publicly funded education as a right for the citizens in a democratic, equitable society. According to this

conception of teaching, teachers can only be held accountable for those aspects of their work which they can control. Even the best available teaching does not guarantee appropriate student outcomes because of the influence students exert over their learning (Wittrock, 1986). Student background factors such as motivation, poverty and parental expectations can mediate between teaching and what students eventually achieve. Students, with parental support, should be encouraged to accept greater responsibility for their learning (Wagner, 1989).

The literature reviewed argued against the fundamental tenets of the effective schools movement. Education should not be considered in terms of the productivity models applied to industry. Improved student outcomes are more likely to occur in a climate of professionalism where best practice is identified and teachers exercise greater control over their profession and educational decisions. Therefore, linking teacher accountability directly to student outcomes is seen as inappropriate within a professional conception of teaching.

CHAPTER THREE

THEORETICAL BASIS OF THE STUDY

3.0. Overview

The theoretical basis of the study is described in this chapter. Methodologies applied in the study of teacher planning are discussed and the conceptual framework is described. The definitions of key terms and assumptions upon which the study was based are included in the final section.

3.1. Theoretical framework

Until 1975 the major emphasis in the study of teaching was to establish relationships between teacher behaviour, student behaviour and student performance. The positivist "process-product researchers" (Clark & Peterson, 1986, p.257) were mainly concerned with how teacher behaviour influenced student behaviour and the subsequent effect on student achievement. Jackson reported one of the first studies into the domain of teachers' thought processes (cited in Clark & Peterson, 1986). This was a descriptive study which represented a departure from the correlational and experimental research paradigms which were dominant at the time. Jackson's work represented the full complexity of the teacher's task. He made the conceptual distinction between the preactive and interactive phases of teaching and "called the attention of the educational research community to the importance of describing the

thinking and planning of teachers as a means to fuller understanding of classroom processes" (Clark & Peterson, 1986, p.255-256). Jackson's work gave impetus to a research paradigm which is concerned with the thought processes which produce the observable teacher behaviours and subsequent outcomes for students.

A shortcoming of much of the process-product research was that it assumed that teacher thoughts and teacher actions were unidirectional (Ericson,1986). This process was not a "one way causal influence ... rather than reciprocal exchange of phenomenologically meaningful action"(p.133). Furthermore, Ericson contended that process-product research presented an "extremely reduced view of classroom process"(p.133) and that the product studied, such as end of year tests, was often narrowly defined .

The teacher thought-teacher action domains are fundamentally different in two key ways. First, they represent distinctly different research paradigms in the study of teaching. According to Anderson and Burns (1990) "Paradigms form around questions ... Over time, the core concepts that define a question, the methods for conducting studies, and the implicit assumptions about cause-effect relationships are partially standardized and taken for granted by investigators." (p.6). This evolution of a research paradigm has been the case with research into teachers' thought processes. Second, the model (Fig. 9.) illustrated that the relationship between teacher thoughts and actions was reciprocal (Ericson,1986). Until 1986, Clark and Peterson (p.257) believed most

research had not explored the reciprocity suggested by their model. In addition, because the mental processes of teachers were not observable, significant methodological differences emerged in research within the domains.

According to Maguire (1993), process-product research had recently been overtaken to some extent by the study of teacher thought processes. Researchers at present are more concerned with teacher thinking than with what students learned. Despite this trend, Maguire argued that a resurgence of process-product research was evident where research projects were based on effective schools literature and outcomes based education (p.276), suggesting a behaviourist approach was dominant among process-product researchers while teacher thought processes researchers belonged to a cognitivist paradigm.

Shavelson & Stern (1981) argued that research on teacher thought processes was based on two assumptions: that teachers are rational professionals and that teachers' actions were guided by their thoughts, judgements and decisions. An acceptance of these assumptions (see section 3.4) may explain why researchers have given so much attention to the study of teacher thought processes in recent years. First, an analysis of the means by which teachers arrive at their professional decisions may be beneficial in determinations about the future status of teachers as professionals. As was indicated in the previous chapter, considerable debate exists concerning the status of teaching. There exists a trend towards greater teacher accountability. Research which reveals the

difficulties and complexity of the teachers' work may better inform educational administrators. Research on teacher thinking has the potential to raise the overall status of the profession. Second, the effective schools movement is concerned with improving educational outcomes for students. If research was able to establish the significance of teacher thought processes, the emphasis in pre-service and in-service teacher education could focus on developing more reflective, problem-solving practitioners. By improving the quality of teacher thinking it may also be possible to improve the quality of student learning.

Shavelson (1983) argued that because teachers typically carry out their planning away from direct contact with students, the study of teacher planning was an excellent medium for studying teacher thought processes. Planning was one of the few opportunities for teachers to be reflective about their teaching. It had a profound influence on the teacher by providing the framework for instruction and by instilling the confidence to carry out the instruction. Planning also influenced outcomes for students because of the resultant content, activities, materials, behavioural and social climate created by the teachers' plans. Brophy (1983) also contended that the teachers' plans had a significant influence on classroom outcomes.

3.2. Methodologies used in research on teacher thought processes

In the teacher planning literature, the data collected have been predominantly qualitative in naturalistic settings representing a

departure from many of the quantitative methods of the process-product researchers. The process-product research paradigm has traditionally involved the use of quantitative methods in an attempt to obtain "objective" data. Flaws with this approach have been identified and alternative methods developed which attempt to gather richer data from a wider variety of sources. Qualitative research on teaching is not so concerned with generalizing findings (Ericson, 1986). Student achievement is dependant on many variables, only one of which is teacher performance (Wittrock, 1986). Qualitative research is interpretive and is concerned with rich description and making "immediate and local meanings of actions" (p.119).

According to McIntyre (1991) process-product research had demonstrated clearly that "prescriptive generalizations about teaching *not* based on the study of classrooms, whatever their source, were dangerously untrustworthy"(p.119). Recently there has been a re-appraisal of the more traditional forms of "scientific" research. The status of an area of research was determined previously by the extent to which the research had progressed from descriptive and correlational studies towards true experimental designs (Fisher & Berliner, 1977; Gage, 1979; White, 1984, cited in Nuthall & Alton-Lee, 1990)). According to Nuthall & Alton-Lee "the choice of method should be based on an understanding of the nature of the problem being investigated."(p.548). Traditional scientific research methods may not be relevant in finding solutions to problems of concern to educators. Many research questions of interest to

educational researchers are best explored using qualitative methods. Shavelson (1983) argued that qualitative research had methods and analytical techniques with their own "canons of methodological rigour just as quantitative methods do" (p.394).

Methodologies used in the studies reviewed included combinations of interview, observation (participant and non-participant), ethnography, document analysis (of teachers' written plans), "thinking aloud", stimulated recall and case study. Zahorik (1975), used questionnaire although this method was not common.

In keeping with a naturalistic research paradigm, data analysis in this body of research was typically inductive, generative, constructive and subjective (Goetz & LeCompte, 1981; Lincoln & Guba, 1985). The products of analysis were usually rich description (Ericson, 1986) of the research setting with a production of substantive theory.

3.3. Conceptual framework

The model (Fig. 9) proposed by Clark & Peterson (1986) was adopted as the conceptual framework for the study. The model depicts two broad domains of educational research; teacher thoughts and teacher actions and their observable effects. Teacher planning is contained within the teacher thought domain. Teachers' theories and beliefs were also explored by this study in order to attempt to explain teacher planning behaviour. The researcher contended that the basis of teacher planning behaviour was a personal belief system.

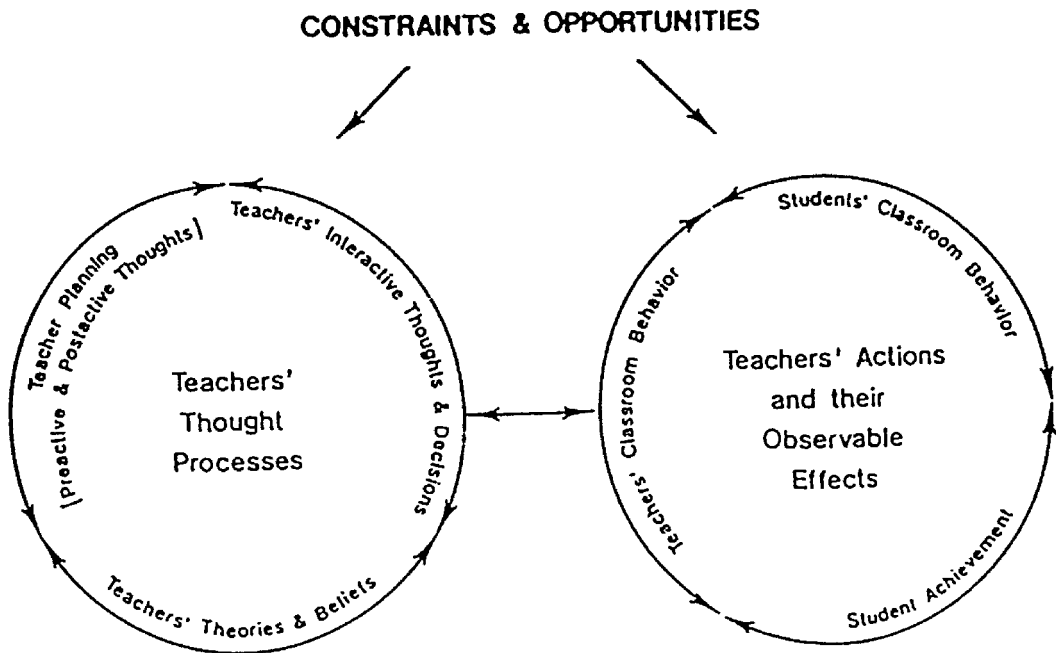


Fig.9. Conceptual Framework

Source: Clark, C. & Peterson, P. (1986) Teacher's thought processes. In M.C. Wittrock (Ed.), *Handbook of research on teaching* (3rd Ed.). New York: MacMillan

3.4. Definitions and assumptions

For the purposes of this study, teacher planning was defined as "any activity of a teacher that is concerned with organizing his or her school-related activities, or the activities of students, other teachers, aides, parent volunteers, and so on" (Clark & Yinger, 1989, p.223). A broad definition was used because teacher planning encompasses so many dimensions. Teacher planning is a very complex "juggling of much information about children, subject matter, school practices and policies" (McCutcheon, 1980). This study was concerned with teachers' written planning as well as the cognitive processes they employed in making their planning decisions. Written planning, in all its forms, was seen as an indicator of teachers' thought processes.

Pre-active planning was defined as the planning processes teachers used prior to their inter-active teaching. Inter-active teaching was defined as the time when teachers are actually engaged in contact with students. When teachers engaged in planning while in the act of teaching, this was defined as inter-active planning. Post-active planning was defined as the thought processes teachers applied after the interactive phase.

It was assumed that teaching is a decision making process and that planning is one of its crucial, complex components. Teacher planning was seen as a purposeful, reflective activity and teacher planning was assumed to have a profound influence on teacher classroom behaviour. A partial focus of this study was to attempt to verify these assumptions (see research questions 1,2 &3).

Accountability was defined as "a condition in which individual role holders are liable to review and the application of sanctions if their actions fail to satisfy those with whom they are in an accountability relationship." (Kogan, 1988, p.25).

Student outcomes were defined as the tangible achievements of students and were not to be confused with the "Student Outcome Statements" (Education Department,1994) being trialled presently by the Western Australian Education Department.

Programmes were defined as the long term written plans used traditionally by teachers in Western Australia. Programmes were regarded as unit or term plans in separate subject areas. The short term

(day book) operational plans of teachers in Western Australia are usually referred to as the daily workpad.

The current structure and title of the state school system in Western Australia is the Education Department of Western Australia. This title was reverted to after a period as the "Ministry of Education". For ease of readability the present title is used throughout the text and "Ministry of Education" is used for references published under the previous title.

CHAPTER FOUR

METHOD

4.0. Overview

The chapter describes the research methods and procedures applied during the study. The research design, selection of teacher cases, types of data sought, sources of data and methodology are discussed in the first section. Procedure and data analysis are described in the second section.

4.1. Design of the study

Introduction

This was a descriptive study undertaken principally in the naturalistic setting of a metropolitan primary school, School A. Individual case study methodology was selected as the method most likely to produce the types of data required. The researcher was appointed as a teacher to School A at the commencement of 1993. Following a two year secondment to a University Education Faculty, 1993 was the researcher's sixteenth year of classroom teaching. Data were collected through the second half of 1993 and the first half of 1994.

School A is located in a lower socio-economic, suburban area. As a consequence of its socio-economic setting, the school had been included in the Priority Schools Programme (PSP) since it opened in 1978. The PSP has the objective of providing, principally through additional funding,

educational and social opportunities which the students at the school may not otherwise experience. The principal was also appointed to School A in 1993. This was the principal's second PSP school. School A had ten classroom teachers on the staff in 1994 and one deputy principal. Enrolments at the school had been declining in recent years. An Educational Support Unit, for children with learning and physical disabilities, also operated on the campus. The present study was later expanded to include an additional teacher at a non-PSP school, School B. One teacher transferred from School A to another non-PSP school (School C) at the end of 1993. Further data were collected from this teacher while she was teaching at School C.

The research questions were designed to produce data which focussed principally upon teachers' thought processes during planning and issues relating to teachers' perceptions of their individual accountability.

Research questions

1. What values, attitudes, assumptions and beliefs under-pin teacher planning?
2. What cognitive processes occur during teacher planning?
3. To what extent has de-regulation and the introduction of the Ministry of Education Accountability Policy altered the ways in which teachers plan?
4. To what extent does teacher planning reflect the emphasis on student

outcomes?

5. What are teachers' perceptions of their accountability for planning?
6. How do teachers demonstrate their accountability for planning within the school management information system?
7. How do teachers relate their planning decisions to the school development plan?

Teacher subjects

Two volunteer teachers were involved in the pilot study. The first volunteer, designated as Pamela, was a first year graduate teacher. The second volunteer, Patricia, was a teacher with more than ten years experience, both in the regular classroom and as an Art Specialist.

For the main study, all teachers at School A were invited by letter (see Appendix B) to participate in the study. Of the ten teachers approached, five volunteered. An additional teacher subject was sought from a non-PSP school, School B, in order to provide verification of data gathered at the principle research site and to investigate whether individual schools exhibited distinct planning "cultures". A teacher (Felix) of similar experience and qualifications to the researcher, teaching at the same year level (seven), was approached. This teacher's acceptance resulted in the study sample consisting of six subjects. The other subjects were code-named Annabel, Beth, Caroline, Donald and Elaine. Annabel transferred to School C in 1994. All other subjects remained teaching at School A or B throughout the study. Interviews with Felix were

conducted at his home. All other interviews were conducted after school hours in the teachers' classrooms.

Types of Data Sought

The study was concerned with providing detailed description and causal explanation of teacher behaviour during planning in view of the changing task demands from the system level. The research questions required data which provided insights into the mental processes, beliefs and perceptions that underpinned teachers' planning. The types of data sought focussed upon teacher beliefs and attitudes about planning, types of planning, implicit teacher theories about planning, routine planning practices and the requirements of administrators in order to explain teacher reaction to de-regulation and changes to accountability policy. Therefore, it was necessary that the research design provide opportunities to collect data which spanned a full school year, including the important planning time at the beginning of the year. The research design also allowed data to be gathered in an atmosphere of trust and collegiality and included all aspects of planning and all subjects taught.

Data Collection and Display

The case study design was selected because it provided the best opportunity for the researcher to collect and interpret the types of data indicated above. The research questions required the collection of rich, qualitative data. To obtain these kinds of qualitative data, interviews

were selected as the principal method of data collection. Triangulation was achieved by document analysis of teachers' written plans and by participant observation (including the researcher's own planning). These research methods are discussed in the next section.

The case study design was also selected because of the need to undertake the study over an extended period of time. The time factor allowed a rapport to develop between the researcher and the subjects. It was anticipated that the subjects might at first be reluctant to reveal much about their planning practices so the researcher/subject relationship was seen as crucial to the collection of high quality data. A relationship of trust was developed between the subjects and the researcher through being colleagues at the same school or, as was the case with Felix, by sharing common teaching experiences. In some instances, ideas about planning and other aspects of teaching were shared between researcher and subjects. Informed consent was secured with the researcher emphasizing to the subjects that the study was to be non-judgemental of their planning. This was regarded as significant because these teachers had experienced the pre-memorandum practice of submitting their programmes for the principal's approval and may have regarded the examination of their written planning as intrusive.

Ease of access to the site and subjects was also a consideration. The main body of data from interviews and accompanying document analysis were displayed as individual case studies because this assisted interpretation of the data and because of the opportunity to provide

detailed descriptions of the planning practices and perceptions of individual teachers.

Observational data and document analysis were also used to verify and interpret the interview data and to address some of the research questions.

Methodology

Naturalistic studies are typically inductive, generative and constructive (Lincoln & Guba, 1985). The researcher is concerned with eliciting the subjects' "own interpretation of reality" (Goetz & LeCompte, 1981, p.54). Since the present study was concerned with an in-depth examination of the teachers' planning, rather than with surveying general trends, individual case study design was applied. Case study is a broad term which describes an intention to focus on an *instance or an example* as opposed to a population. Consequently, the findings of case studies relate only to that instance and are not generalizable across broader populations. Case study rests upon the assumption that the peculiarity and particularity of a phenomenon merits the attention and interest of the researcher.

Case study has a number of advantages over survey research. According to Kennedy (1979), case study affords the opportunity for the researcher to determine how the intricacies of a particular set of phenomena operate. In addition, case study is an important alternative to survey research because some phenomena are not systematically

distributed and may not appear in random samples (Stenhouse, 1978). The researcher is more directly involved in the study and consequently can observe closely and develop a rapport with the subjects. Data collected in these settings are more likely to be accurate and truthful and are not limited by a pre-determined instrument such as a questionnaire. Researcher and subject are in face to face contact so that understandings and meanings can be jointly determined in a less formal climate. This leads potentially to a more in-depth understanding of the situation, the collection of rich, "thick" data and an enhanced ability for the researcher to verify and interpret data. The researcher is also provided with the flexibility to identify and test new variables. The study can then be presented in a more readable, identifiable style in an endeavour to represent the holistic complexity of the situation under inquiry. Rich description of the research situation is provided, possibly including the informants' personal insights in verbatim form.

Validity and reliability in case study interviews

Case study also provides opportunities for the researcher to collect data using a variety of techniques such as interviews and observation. Interviews allow the researcher to immediately follow up the subjects' responses. This is often not possible with surveys. The interview is not merely the oral administration of a questionnaire. The subject is confidently able to offer and elaborate upon personal insights and perceptions. These types of insights and perceptions are difficult to gather

in a survey. The interviewee/researcher rapport and face to face nature of interviews can contribute materially to the quality of the data.

Despite the advantages of using interviews as a source of data, the researcher must be alert to potential concerns about objectivity, validity and reliability. According to some authors, validity and reliability can be considered as components of objectivity (Minichiello, Aroni, Timewell & Alexander, 1990). Therefore, objectivity can be improved in part by including validity and reliability checks in the research design. Kirk and Miller (cited in Minichiello et al, 1990) described validity as "the extent to which it gives the correct answer, or a finding is interpreted in correct ways"(p.208). The qualitative researcher attempts to achieve a close match between what informants report as their beliefs, attitudes and perceptions and what can be observed in the interview. The researcher can also check validity by maintaining a close involvement in the research setting. The researcher is engaged constantly in checking meanings and understandings against possible sources of misinterpretation. Probing and cross-checking occurs in interviews so that discrepancies can be identified and investigated further. By conducting recursive interviews, the researcher can verify the consistency of informants' statements. Other methods such as observation and document analysis can help triangulate the data and determine whether the subjects' self reported intentions (Gage & Needels, 1989), beliefs and attitudes are consistent with their actions. Against a background of these kinds of validity checks, the researcher can begin to interpret data and to

form tentative hypotheses.

The researcher should also avoid entering the interview with pre-conceived ideas. Descriptive studies have the benefit that the researcher is not hoping to prove an existing hypothesis but is seeking to describe a situation with a view to explaining phenomena and generating theory grounded in the data (Gay, 1987). The researcher must be prepared to have tentative ideas challenged and should be prepared to modify preliminary hypotheses.

The principle threat to the validity of interview data is the potential for informant and researcher bias. Every individual enters the interview situation with various beliefs, attitudes and prejudices. Informants may wish to portray themselves in a favourable light or to exert control over the interview. The informant may manipulate the interview by half answering questions, not answering, making misleading statements or saying what they believe the interviewer wants to hear. Being interviewed does not mean we "suddenly discard the fact that we belong to a family, an ethnic and/or religious group and are members of a class or gender." (Minichiello et al, 1990, p.221). These forms of bias can be minimized in part by working with volunteer subjects. By volunteering the informant displays a willingness to provide time for the researcher. This represents a level of commitment to the study and combined with the rapport developed between interviewer and informant, is likely to produce more accurate, truthful data. Triangulation also assists the researcher to minimize informant bias.

Researcher bias can become evident through the framing of the interview guide (see Appendix C), the inadvertent or deliberate use of prompting, asking leading questions and through the interpretation of the data. The researcher can avoid these difficulties by being aware of the potential for bias and by attempting to maintain impartiality. The potential for over-rapport (McCall & Simmons, 1969) must also be recognized. Researchers should take care to maintain a balance between objectivity and interviewee/researcher rapport during interviews and while carrying out observations.

Reliability in qualitative research has been described by Kirk & Miller (cited in Minichiello et al, 1990,p.208) as the "extent to which a measurement procedure yields the same answer". In case studies which use interviews as the main data source, reliability is seldom quantifiable. The reliability question centres around whether other researchers would obtain similar results and interpretations in similar research settings.

Case study researchers can improve reliability by:

1. using multiple sources of data
2. studying the subjects in various circumstances
3. conducting the study over an extended period of time

(Deschamp, 1983).

An additional means of improving reliability involves reporting the study as a detailed account so that data collection, analysis procedures and decisions made by the researcher are replicable. In the case of interviews,

interview guides should be included.

Participant observation in case studies

Case studies can also involve participant observation as a main source of data or a means of triangulation (Spradley, 1980). If the researcher is directly involved as a participant, the opportunity exists for the collection of high quality data because the researcher is actually able to experience the situation in question. The "insider/outsider controversy" (Minichiello et al, 1990, p.216), has resulted in the merits of being a direct participant argued against the possible benefits the outsider can bring. The insider can gain access to the research site and informants more easily. Informants are less likely to be affected by bias if the researcher is well known to them, such as in a situation where the researcher is a colleague. The researcher and subjects are able to communicate more meaningfully because they speak the same language and share a work culture and experiences through which they can relate. The participant observer is better positioned to interpret data because of a greater depth of understanding. Conversely, the outsider is more likely to interpret data and report findings impartially. The insider must be aware of the need to maintain objectivity and report data without prejudice, even at the risk of causing offence among the informants.

Document analysis in case studies

Document analysis is a useful method of obtaining data, either as a

main source of data or as a means of verifying other data. In the case of the interview, self reported intentions can be checked for consistency against documentary evidence. Observational data can also be cross-checked using document analysis. Document analysis can also provide valuable insights into the full complexity of the situation under study and can assist in the creation of additional categories for analysis.

4.2. Procedure

Pilot study

A pilot study was undertaken in order to trial interview protocols and to generate preliminary categories for elaboration and probing during the main data collection phase. Two volunteers, Pamela (in her first year of teaching) and Patricia (an experienced teacher) were interviewed. As this was Pamela's first year of teaching, the researcher was also interested in assessing the extent to which the rational model persisted into the early years of teaching. A longitudinal study of the development of Pamela's planning is continuing. Patricia was approached to assist the researcher with validity checks after analysis categories had been generated.

The case studies

All volunteers at School A and B were engaged in preliminary discussions about the purpose of the study. The main emphasis of these

preliminary discussions was to develop researcher/informant rapport and to re-assure the subjects that the study was non-judgemental of their planning. The teachers were provided with some background on the teacher planning literature focussing on the usefulness of studying teacher planning as a means of gaining insight into teachers' thought processes. Subjects were not informed about precise details of the research or interview questions.

Data collection in the main study began with initial interviews, ranging in duration from approximately forty minutes to sixty five minutes. Interviews were semi-structured with questions which related directly to the research questions. This style of interview was selected because of the need to probe deeply and to allow the subjects to express their thoughts freely. The researcher attempted to allow the flow of conversation to develop while returning to the interview guide when appropriate. The guide was then used to maintain the focus of the interviews and to verify the internal reliability of statements made by the informants. Interviews were audio-taped and transcribed. The process of transcription allowed for preliminary data reduction and analysis.

Data from the first round of interviews generated most of the categories for analysis and were used to develop more highly focussed questions for the second round of interviews. Some categories were based directly on the research questions while others reflected trends which emerged from the data (see Appendix D). The first round of interviews were completed in October, 1993.

The second round of interviews were carried out through the early part of term one and some of term two, 1994. The collection of data from this active planning time was considered essential for the study. The researcher was concerned with comparing planning approaches at the beginning and end of the school year. The second round of interviews focussed on more specific aspects of the research questions, with particular emphasis on teachers' thought processes and their accountability perceptions. Observation had revealed to the researcher that teachers placed great importance on having a "good" school day. This emerged as a line of enquiry for the second round of interviews (see Appendix C, Interview guides). At this time the teachers were also asked to provide samples of "typical" daily workpad entries, current timetables and examples of past (prior to 1989) and recent programmes. The volume of material provided varied. Teachers were not pressed for documents because of the need to maintain good rapport and because of possible unpleasant memories associated with the past practice of submitting programmes.

The study provided an opportunity for the researcher to carry out detailed observation of phenomena as a participant. Observational data were used to verify and interpret interview and document data in relation to all research questions. Some questions, particularly questions 5, 6 and 7 were addressed more effectively by observation. With these questions, interviews were used to verify the observational data. Observational data were recorded as field notes throughout the study.

These data consisted of

1. Statements relating to the research questions made by the School A principal during staff meetings;
2. Notes concerning the "outcomes" interviews between the researcher and the principal;
3. Observations of the subjects' planning behaviour;
4. Comments about planning made informally by the other teachers at the school;
5. The researcher's own trial "outcomes" planning documents;
6. Anecdotal notes and ideas concerning the study and
7. Observations relating to the School Development Plan planning procedure and the school Management Information System.

In addition to the above, a number of documents related to planning and accountability were collected. These had been distributed by the principal to the teaching staff of School A during professional development days when discussion had been centred on planning and accountability. Several of these documents are included as appendices.

Data Analysis

The flow model (Fig. 10.) proposed by Miles and Huberman (1984) was the principal method of data analysis. Data collection, display and reduction were continual processes allowing the researcher to draw and verify conclusions and to generate grounded theory. Initial hand-written

transcripts of audio-taped interviews were transferred to word processor. By processing the transcripts in this way the researcher was able to become increasingly familiar with the data, to identify features of each teacher's planning, to carry out data reduction and to categorize and code the teachers' responses to interview questions.

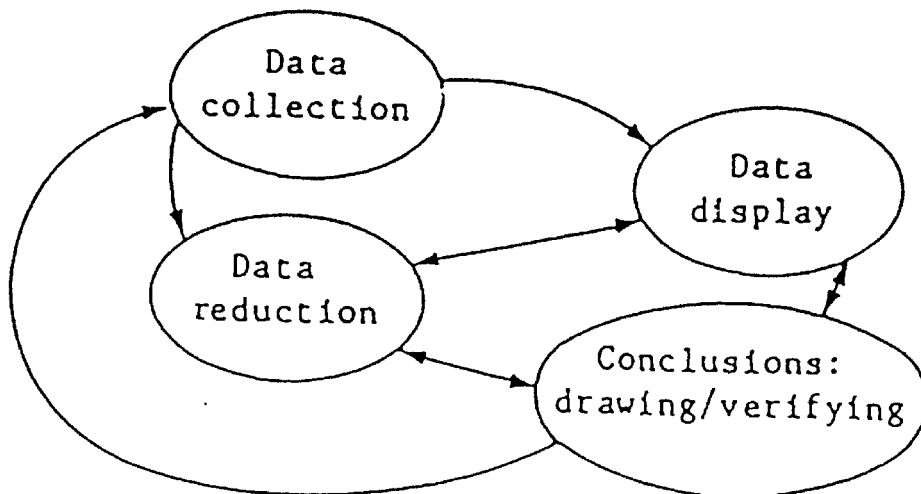


Fig.10. Flow model of data analysis

Source: Miles, M., & Huberman, M. (1984). Drawing valid meaning from qualitative data: towards a shared craft. *Educational Researcher*, 84, 20-28.

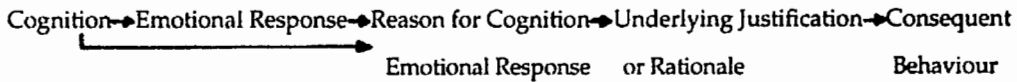
The researcher was concerned with identifying recurrent themes and patterns which emerged from the interviews. These categories became the basic units of analysis for the study. Analytic induction methods (Goetz & LeCompte,1981; Lincoln & Guba, 1985; Minichiello et al, 1990) were applied to the data from the first interview so that common

themes which emerged could be analysed as they were collected. The induction process produced the majority of data categories for analysis. Six of the categories related directly to the research questions. The remainder were generated from the data. The initial analysis was used to create more highly focussed questions for the subsequent interviews. One of the pilot study teachers assisted the researcher by verifying that the categories generated were an accurate reflection of the data. The coding of data into the various categories was discussed and negotiated. This teacher and the researcher agreed that the data had been coded into appropriate categories. These procedures were applied as checks to validity and reliability. Data reduction was carried out throughout the process of transcription, particularly as categories became more obvious. Commonalities among interview, observational and document analysis data were also generated inductively.

Attributional analysis (King, 1979) of selected interview data was applied after coding was complete (Fig.11.). This was carried out for each teacher in order to attempt to identify individual causal explanations of some planning behaviours and the values, attitudes, beliefs and assumptions which underpinned the behaviour. This form of analysis provided an additional dimension to the data analysis. Planning behaviours were selected for attributional analysis on the basis of their individuality when compared to the other study teachers and their potential suitability for the generation of grounded theory. Generalized examples of attributional analyses were displayed in each case study (see

chapter 5).

Fig. 11. Attributional analysis of interview data



Source: King, L. (1979). An analysis of student achievement related behaviour and the expectancy effect. Unpublished doctoral dissertation, University of Alberta.

Document analysis was applied in order to identify planning variables and to confirm previous planning theory in view of the contextual changes described earlier. Documents were examined initially with reference to the research questions and then analysed further in order to create additional categories for analysis. Entries in the programming documents were coded according to the headings used by the teachers (i.e. objectives, activities, resources, evaluation, organization). A word count was carried out for each category. Each count was represented as a percentage of the total words used by the teacher in each programme. This was seen as a simple method of determining the relative importance to the teachers of each type of programming entry. Daily and weekly plans (daily workpad) were categorized into other scheduling (sub categories; Administration & Duties Other Than Teaching time), activities (sub categories; lesson outlines, content lists, book/page references & worksheet details) and routines (Appendix E).

Analysis of daily planning documents involved a count of each type of entry instead of a word count because each entry represented a

discreet unit. Each type of entry was presented as a percentage of the total number of entries. The researcher determined that this form of analysis could reveal the relative importance of each category to the teachers.

4.3. Summary

1. The research questions required the collection of rich, "thick" qualitative data.
2. The individual case study design was chosen as the most suitable means of collecting the data required. Therefore, this was six case studies of teachers' planning, undertaken in the naturalistic setting of a metropolitan primary school. One teacher was a volunteer from another school.
3. Data collection was principally by interviews triangulated with document analysis of teachers' written plans and participant observation. Data were collected over a full school year.
4. Data analysis applied the Miles and Huberman (1984) flow model. Additional analysis was undertaken using attributional analysis (King, 1979).

CHAPTER FIVE

SIX CASE STUDIES OF TEACHER PLANNING

5.0. Overview

The chapter is concerned principally with the display of data according to the Miles and Huberman (1984) model. Each teacher subject is discussed as an individual case study. The interviews are reported approximately in relation to the research questions and in accordance with the major themes and trends that emerged from the data. Participant observation and document analysis data were used to verify the interview data. Attributional analysis (King, 1979) of selected interview data was applied as an additional means of providing causal explanation for some teacher planning behaviours. Each case study includes a summary.

5.1. Case Study 1: Annabel

Annabel had taught mainly junior grades since graduating with a Diploma of Teaching in 1982. She was teaching at School A for her sixth year at the commencement of the study. Annabel received a transfer to School C at the end of 1993, where the second interview took place. She taught split year one/two classes at both schools.

Annabel's written planning consisted of daily (daily workpad), weekly (daily workpad and timetable) and unit plans (programmes). She submitted three social studies programmes and one sheet containing a

week's daily workpad entries to the researcher. Document analysis revealed that the largest proportion of these written plans was devoted to outlining activities. Annabel reported that she still programmed as she did prior to de-regulation, although she admitted that she was possibly not using as much written detail. Her programmes appeared to follow a conventional, rational model, including objectives, activities, resources and evaluation. Of these categories, activities made up 59% of the entries, objectives 23%, resources 0.07% and evaluation 0.1%. Of Annabel's daily workpad entries, 50% could be directly related to activities while a further 45% related to instructional routines (see Appendix E). The use of instructional routines were most evident for "skill" subjects such as mathematics, phonics and spelling. Lesson outlines included more details about instructional procedures when concerning "content" subjects such as social studies and science.

Annabel's planning since de-regulation

Annabel was a teacher who felt she needed to be thoroughly planned in order to be "organized". To be planned was to be organized and to know what she was doing. She regarded her planning as essential to her teaching success as revealed by this excerpt.

A: I don't like not being organized. I have to be organized. I just feel more confident and I know what I'm doing ... I just feel more confident. (Interview one).

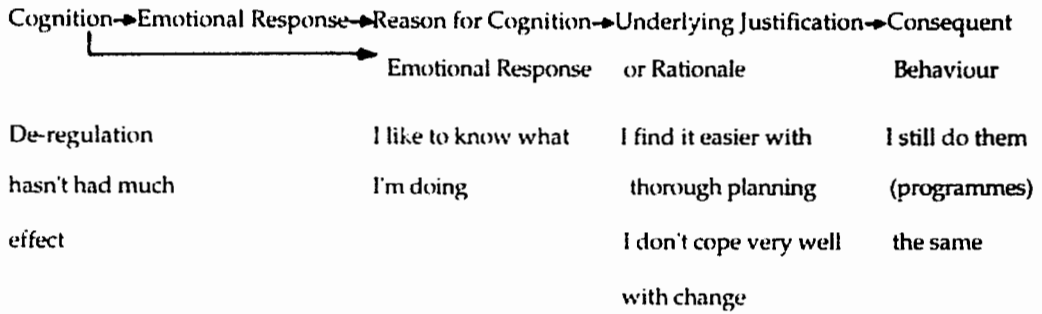
Despite being prepared to be accountable, de-regulation was a relief for Annabel. To Annabel the practice of submitting programmes had been demeaning and the cause of some anxiety. Some principals had commented on her programmes with written notes. Annabel felt this lowered her dignity. She also believed the assessment of her teaching had been based to some extent on her programmes.

A: I used to feel nervous and ... just the fact that you know, you had to hand programmes in ... around that time I used to get really nervous. (Interview one).

After de-regulation, Annabel continued to use programming, despite the unpleasant connotations from the past. Her belief in the importance of planning, particularly programming, was profound. She felt "secure with organization" and admitted in the second interview that she probably did not cope very well with change. Programming made Annabel feel secure.

A: I don't think I could get by without my programmes.
(Interview one)

Attributional analysis (King, 1979) was applied in order to attempt to explain Annabel's apparent reluctance to change her planning practices. By examining several statements made by Annabel in the two interviews a common causal explanation was discerned, as exemplified by the following generalized line of reasoning.



The above example appeared to indicate some of the basis for Annabel's continued use of programmes and seemed to relate to the "comfort level" she felt with her habitual methods and her need to feel organized.

According to Annabel, programming thoroughly meant providing more written detail while using a rational planning model. After ten years of teaching, programming was well established as one of Annabel's executive planning routines (Yinger,1979). She would only vary the content of her plans, not the planning method, if confronted with a new planning problem. Evidence of her executive planning routines appeared several times in the data.

A: I still need to write down what I'm doing step by step.

With health and social studies I only do that once a week so that's week by week but reading I like to do that day by day so I know what I'm doing. (Interview one).

Annabel's planning thoughts

McCutcheon (1980) found that the most significant aspect of teacher planning was mental planning. Annabel provided evidence that written

planning represented only a fraction of the whole planning process and that mental planning was the most significant form of planning for her teaching. As was described above, Annabel's daily workpad consisted mainly of memory "joggers" such as topic titles, content, page numbers from books and brief notes which suggested an activity. In this extract from the second interview, Annabel described the thoughts which were represented by this brief daily workpad entry:

Yr1 : Introduce take-away

Yr2 : Bbd Work (daily workpad entry)

A: I think I've got to keep the year 2's quiet because I'm doing introductory work with the year ones. I've got to make sure they're at their seats doing something that doesn't require me. And they're working independently so I look at that first of all. Next I think about the things I need for the lesson, resources. What concrete materials , especially in the junior grades. I look and see what sort of concrete materials, what resources I have. Thorough preparation; I look in my programme and see what else I've got to do, like I've done addition so then like following on from that I'll do the take-away. Um and just how I'm going to teach it, what steps I'm going to use, what strategies ... mainly just um ... working with concrete materials on the mat ... say putting out five marbles or counters or whatever, right , take-away three, how many have you got left ... so it's very basic. And once they've mastered that then I'll start doing some sums on the blackboard, like ... you have

five take-away four equals ... so you sort of introduce them to concrete materials and when they're doing that OK. then you'll go to the actual algorithms so that then they're associating the two.

This example revealed the complexity of Annabel's mental planning which culminated in a brief entry in her daily workpad. The written plan represented the "tip of the iceberg". The excerpt also revealed the significance of previous experience in Annabel's planning thoughts. Annabel's previous experience provided her with the basis for most of her planning decisions.

A feature of Annabel's planning was her concern for providing suitable resources and the necessary familiarization with content and syllabus documents. This stage of Annabel's planning appeared to involve a process of elaborating on an initial instructional idea or proposing temporary solutions to a given planning problem. When asked how she would approach planning for a topic for the first time she replied:

A: I'd look for resources. Well I'd get the syllabus for background information. Look up the skills that need to be taught, resources, activities, things like that ... have a look around the school.

(Interview one).

Activities, classroom management and student learning

Annabel made significant use of routines in her teaching. Of the

material submitted to the researcher, approximately 45% of her daily planning involved some form of routine. The use of routines appeared to be linked to concerns about classroom management.

R: How much use do you make of routines?

A: With the younger kids it's really important because without routines they're not confident with what they're doing. So we have a timetable ...When they become familiar with what they're doing they become quite happy but when things are sort of wishy washy (not organized) they don't like that ... they don't really like change.

R: Does that cause behaviour problems?

A: Yea, they like their routine. (Interview one).

Classroom management also appeared as a major concern in the second interview. A "good" day at school was in part defined in terms of the students' behaviour.

A: ... they waited quietly today. So it depends how you start off the day as to how things go, it sort of shows the pattern of the mood of the kids and if you're going to have a good day or not.

(Interview two).

Annabel's concerns about classroom management were linked closely to learning. According to this teacher, learning could not occur unless management was achieved. Annabel appeared to be very task

oriented in her teaching. To a significant degree, teaching for her involved the setting of activities or tasks for her students. In this excerpt, learning and management were related to an academic task.

A: ... without good management skills the kids aren't on task.

They're not learning properly, they're deviating away from the set task. (Interview two).

Interviews with Annabel suggested the notion that the classroom is an uncertain, unpredictable place. Annabel described an instance where her planned activities could not be carried out. External interference could disrupt even her best plans. The example further highlights this teacher's concerns about tasks and their relationship to classroom management.

R: How much do you stick to your plans?

A: Sometimes it's really hard, like I had symmetry-blob paintings and I was going to get the kids to go out with the aide and do blob painting but I couldn't do that because she hadn't done the work from yesterday, she was busy with something else so that sort of went by the wayside and we had a long news session and then that carried over and we did something else and so that sort of went out of the way but also like with the kids whether or not they're behaving. If they're totally off task you might as well not teach them something new.

Annabel's accountability perceptions and her reaction to the School Development Plan

There was confusion as to the definition of outcomes statements. Annabel appeared to relate outcomes statements to learning objectives.

A: ... I look on those (objectives) as the outcomes statements because that's what you want to achieve. (Interview one).

Annabel was aware of the relationship between outcomes statements, planning and accountability. At the time of the first interview, the Education Department outcomes statements were not widely available so Annabel was not in a position to evaluate their applicability to her planning.

Annabel found the notion of accountability "a bit scary". She related accountability to formal assessment of teachers, which she felt would undermine her confidence. Annabel was not particularly concerned about being held accountable for her planning because she maintained that she did her planning mainly for herself so that she could be "organized". This teacher was prepared to be professionally accountable through meetings with the principal. The teacher accountability practices at School A and School C appeared similar although meetings at School C had been scheduled and not carried out. Annabel reported that she had taken her programmes to her initial meetings with the School A principal and had engaged in informal discussion about her students' progress. Annabel preferred this informal

kind of approach to accountability because these meetings had been free from the pressures associated with the practice of submitting programmes.

Despite the emphasis in recent years on School Development Planning and participative decision making, Annabel gave little direct emphasis to school priorities in her planning. The existence of priorities served to heighten her awareness of the school-wide needs of students.

R: How is your planning influenced by the SDP?

A: ... it makes you more aware of what you have to concentrate on. You can do it incidentally or you can do it as a formal lesson.

Summary

1. After de-regulation, Annabel continued to use a daily workpad for short term planning and programmes for long term planning although the volume of written detail had diminished. The majority of Annabel's written planning was related to learning activities or tasks.
2. Annabel regarded planning as crucial to her teaching effectiveness. To be "planned" was to be organized. Annabel did not believe she coped very well with change.
3. Daily workpad entries were the "tip of the iceberg" of Annabel's mental planning. A few words represented a host of thoughts, images of previous lessons, concerns about management, students' abilities and resources acquired over her years of experience. This confirms McCutcheon's (1980) findings that mental planning is a rich and complex

aspect of the teachers' mental life.

5. Annabel appeared to elaborate on the conception of a new planning problem by searching for resources and checking her own content and curriculum knowledge.

6. One of Annabel's most significant concerns was classroom management. Having students engaged in activities assisted classroom management. As with Yinger's (1978) study routines formed an important part of Annabel's teaching day.

7. Accountability for planning did not concern Annabel because she planned so that she could be prepared for her teaching but she was concerned about accountability in the form of teacher assessment or appraisal.

5.2. Case Study 2: Beth

Beth taught for six years after graduating, left teaching for eight years for family purposes and was in her fourth year of teaching since returning when she agreed to be involved in the study. Beth had completed a Graduate Diploma in Special Education in addition to her Diploma of Teaching. During her career she had taught in tandem teams and had spent time in a library specialist role.

Beth's written planning consisted of daily planning (daily workpad), weekly planning (daily workpad and timetable) and unit planning (programmes). Evidence from interviews and observation suggested that syllabus documents and resource books provided by the

education system at times formed the basis of Beth's planning. Beth submitted a mathematics programme and two half days of her daily workpad to the researcher. The mathematics programme appeared to be based on a rational model . Objectives were supplied in this format (Appendix F) and the teacher was required to supply learning activities, resource lists and evaluation procedures to complete the programme. Of the teacher supplied entries, 72% were devoted to learning activities. Beth's daily workpad entries were coded according to the categories created from Annabel's documents. Of these entries, 17% related to the administration/scheduling categories, 39% related directly to activities and 43% related to instructional routines.

Beth's planning since de-regulation

Although she had sometimes found the deadlines difficult to meet, Beth did not feel particularly threatened by the practice of submitting programmes because she had not met an intimidating principal. She was teaching in a country school at the time of de-regulation. Beth found that de-regulation caused uncertainty and had led to little change in teachers' planning. She attributed the lack of change to the relative inexperience of the staff of the country school.

B: ... most people were new graduates or early teachers and the principals tended to treat everybody as though they were beginners so we still basically did programmes. (Interview one).

Despite being "a lot of work" and involving repetitive transcription of elements such as objectives from syllabus documents, Beth found that writing programmes helped her focus on what she was going to do. By the time of the study, Beth was using a range of methods to avoid the repetitive aspects of planning, such as using the programming formats supplied by the education system (see Appendix F). Beth felt confident with her programmes but believed they did not necessarily reflect what was happening in her class. There was evidence that Beth used her programmes as a general guide rather than a script to follow closely.

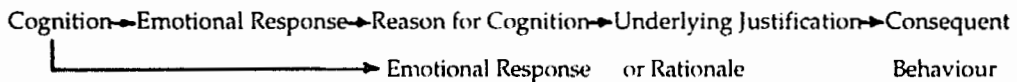
B: From the programmes I'd probably use the general directions but then I'd alter things as I was going, if things worked ... did not work. And if other things came up I'd probably go off on tangents and not stick to what I'd written anyway. (Interview one)

Written planning was carried out in Beth's own time away from school because she found the daily classroom and administrative demands distracting. The commitment of her own time suggested that she held strong beliefs about the importance of planning. Beth saw herself as an organized person and tended to define planning in terms of how organized she was for each teaching situation. She believed her teaching was "better if I'm organized". To Beth, planning was essential for giving her the confidence to teach and she regarded her daily planning as the "bare minimum". Planning was one of the few times when Beth

could reflect quietly about her teaching. Despite its repetitive nature, planning was a reflective, problem solving process for Beth and not simply a routine task to be completed as quickly as possible.

B: ... but I rarely do it at school because I'll often find I'm caught up with admin. and bits and pieces; so I need time to think so I do it at home. (Interview one).

In order to attempt to explain the "do it at home" feature of Beth's planning, attributional analysis was applied to several interview statements. The example below represents a general line of reasoning discerned over both interviews.



I need time	I like to feel	The bare minimum	I can't live without	I do my planning
to think away	organized	is the daily workpad	the daily workpad	at home
from school				

Beth's planning thoughts

The reflective nature of Beth's planning was further indicated by her willingness to adapt and modify her planning to new teaching situations. Planning for her was not simply a case of repeating the same plans each year. Each new class was treated as a new planning problem even if the same year was being taught again. The awareness of each class as a group of individuals appeared consistently in the data and Beth's

concern for the students' interests and needs became apparent in both interviews. Beth considered she had planned well when she had catered for the individual needs of her students. This teacher's completion of a Special Education Diploma some years prior to the study was consistent with her stated belief in the needs of students.

The significance of mental planning was highlighted when Beth demonstrated how her daily workpad operated and described her thought processes during one interview. As with Annabel's daily workpad entries, considerable experience and thought had culminated in a brief written entry. Beth found that the act of writing her daily planning entries helped her clarify more precisely in her mind what she was going to do. This excerpt confirms the significance of mental planning and the existence of the executive planning routines described by Yinger (1978).

B: ... if I write down my times and what I'm doing and when I go through the whole process of thinking it through every day. So instead of it being ruled up on a page and just filling in bits I sit down and think ... I sit there and write down 8.30-9.00 o'clock-fitness and then I have to think what am I doing on this particular day. (Interview two).

For Beth, the pre-active planning phase often involved the selection and evaluation of resources. She also used her time away from students to ensure her subject knowledge was adequate, particularly when teaching unfamiliar topics. The selection of resources and checking of the

teacher's own knowledge base suggested a significant phase early in the planning process. This appeared to be part of a similar process also carried out by Annabel.

B: Although I often have ideas and I need the background or extra information so it's not so much resources for the kids to use as for my own background. (Interview one).

Activities, classroom management and student learning

A relationship between teaching, learning and classroom management, noted in interviews with Annabel, appeared consistently in both interviews with Beth. When asked to define "good teaching", Beth's initial response was "classroom management" before elaborating with statements relating to gearing teaching to the current needs and interests of students. Beth believed learning could not occur without adequate classroom management. In impromptu situations, Beth focussed on activities to provide her with the time to plan more thoroughly.

B: ... I resort to my tried and true activities while I give myself time to be thinking ahead. (Interview one).

In these situations the priority was to keep the students occupied and to create a controlled behaviour setting. In common with Annabel, Beth made significant use of routines which appeared to have management and instructional functions. When asked what routines did for her teaching, Beth's response revealed one of the functions of

routines and further highlighted her concern for catering for individuals.

B: ... They free me from always having to give the instructions.

The kids know what to do and take responsibility for themselves in their learning and free me to go and work individually with the kids. (Interview two).

Despite becoming increasingly flexible with greater teaching experience, Beth believed that the classroom was an uncertain place where plans could be disrupted by influences beyond the control of the teacher. According to Beth, some students were pre-disposed to creating behaviour problems before they entered the classroom. These students created disruptions to the teacher's plans and disruptions to student learning. Observation confirmed that these external factors caused concern for Beth.

B: Things that come with the kids from home ... problems or things that have happened to them at home before they get here.

So their readiness to learn is affected ... other things that happen during a normal day ... interruptions for various reasons...

Problems in the playground that you need to sort out in class time.

(Interview two).

Beth's accountability perceptions and her reaction to the School

Development Plan

Beth's concerns that her students' readiness to learn was affected by

influences outside her control related to her beliefs about accountability. She was prepared to be accountable for planning and outcomes but she resented the pressures placed on her by students' external and personal factors. The effects of events in the school yard are cited in this excerpt.

B: ... the parts that get me down are the ... taking responsibility for things that happen outside the classroom ... problems before they come to school and what goes on at lunchtimes and things like that ... those niggly little things where ... you're held responsible as the teacher of that kid that they're not getting on or they're getting into trouble or something but they're not ... my area. (Interview two).

Beth believed that a return to the submission of programmes would not be beneficial for accountability purposes. She believed her written plans were working documents for her own use and she would rather have the opportunity to discuss her planning with a superordinate in an informal interview setting. In her planning discussions with the School A principal, Beth found her written documentation did not figure prominently. The principal appeared more concerned with outcomes.

Despite being aware of the shift to an outcomes emphasis in the education system planning policy, Beth did not focus her planning directly on outcomes. There was evidence through the life of the study that Beth was preparing to modify her planning procedures based on a model first suggested to the School A staff by the principal. This was the

same "outcomes" approach developed and trialled independently by the researcher (Appendix G). Beth's willingness to experiment provided further evidence of the reflective nature of her planning and the exchange of ideas which can occur within a school.

Beth's response to planning and the School Development Plan was similar to Annabel's in that she was aware of school priorities but did not directly apply the School Development Plan to her planning. The SDP raised Beth's awareness of priority issues but did not appear in her documentation.

Summary

1. Beth was still programming after de-regulation although she had minimized repetitive aspects of the task by using planning formats and syllabus guides supplied by the education department. Beth liked to plan to be "organized" for teaching. Her programmes were only a guide to what might happen in her classroom.
2. Beth's written plans focussed most attention on activities. Activities had a management function as well as a learning function. Beth also used routines which served instructional and management functions.
3. Written planning represented the culmination of thoughts, images etc. similar to data gathered from Annabel. Writing even a brief entry in the daily workpad helped Beth clarify her planning thoughts.
4. Beth was a reflective planner, spending substantial after hours time on planning. She preferred to plan away from the pressures of face to face

contact with students.

5. A distinctive feature of Beth's planning was her repeated reference to the students' individual needs. Beth modified previous plans to suit new groups of students. Planning appeared to involve the elaboration of an initial idea and the repeated modification of previous plans.

6. Beth highlighted the uncertain nature of classrooms. Well laid plans were often put at risk by student behaviour caused by factors outside the classroom. This teacher felt a sense of "ownership" for her students' behaviour, despite being unhappy to be held accountable for elements beyond her control, such as students' personal factors. Beth was happy to be accountable for elements she could control, such as her planning.

7. An "outcomes" approach to planning was being trialled by Beth.

8. The SDP was not formally acknowledged in Beth's written plans.

5.3. Case Study 3: Caroline

Caroline had performed a variety of roles during her seven years of teaching. She had taught predominantly middle primary grades as well as performing specialist roles as an art and physical education teacher. Her experience included sharing a class in tandem with another teacher. Caroline held a Diploma of Teaching.

In common with Annabel and Beth, Caroline's written planning comprised daily planning, weekly planning (daily workpad and timetable) and unit planning (programmes). She also used various resource files as

the basis for her planning, particularly in Physical Education. There was also evidence of term planning and the formation of a mental overview of the entire year. Caroline believed that when working in the role of Physical Education Specialist throughout the entire school she needed to plan more globally.

Caroline submitted programmes for social studies, science, health education and physical education and a week's daily workpad for analysis. Caroline normally used a version of a rational planning model except with the physical education programme which was based upon a resource file. In the physical education programme, objectives were not listed and activities were usually written in terms of skill headings and page references with 39% of the entries devoted to activities, 29% to resources, 3% to evaluation and 28% to organization. These results were consistent with the pattern reported for Annabel and Beth. The pattern of "activities" entries dominating the written content was more pronounced for the social studies, science and health programmes where 52% of the entries were within the activities category, 23% objectives, 9% resources, 9% organisation and 6% evaluation. The emphasis on documentation of activities was also very evident from the daily workpad material Caroline provided. Of these entries, 70% related to activities, 27% to the "other scheduling" category and 2% to routines. The apparent low incidence of the use of routines is explained by Caroline's teaching of physical education only in the mornings at the time of data collection. In her (tandem) classroom, instructional routines (involving mainly skill

areas) were scheduled entirely in the mornings.

Caroline's planning since de-regulation

Caroline had not significantly changed her approach to planning after de-regulation although there was evidence that the volume of written detail of her programmes had changed and her programmes had become working documents for personal use. After several years of teaching, this teacher felt comfortable with her approach to planning. She was confident that her planning method was successful for her and that she felt "comfortable with it". Programming was seen as an essential task that she would do regardless of whether or not programmes were required by the school administration.

C: ... I feel to be prepared and organized you have to know what you're doing so you do them (programmes) anyway. (Interview one).

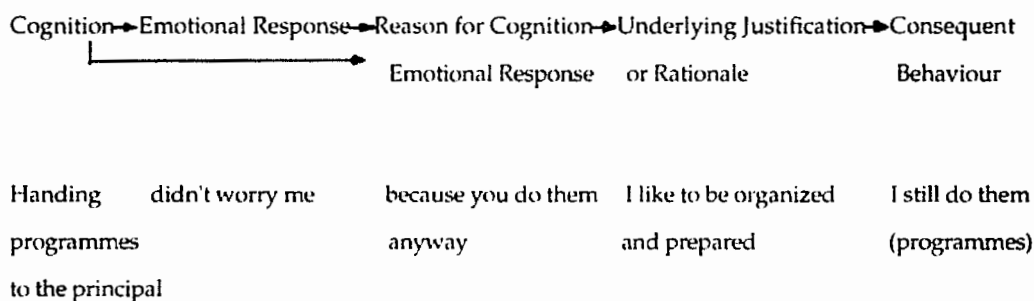
The theme of a need to be "organized", identified in interviews with Annabel and Beth, was also a prime motivation for Caroline. This teacher partly defined the success or otherwise of a day's teaching in terms of the "smoothness" of her activities. A determining factor of this smoothness was the organization of equipment necessary as a physical education specialist. In both interviews, Caroline described her need to arrive at school sufficiently early in order to prepare her equipment. Like Beth, she spent substantial after hours time on planning, often a week in

advance. The desired outcome of her planning was a "smooth" day.

C: ... it's been a very busy day but things have flowed smoothly because when you're organized they flow smoothly.

(Interview two).

Several interview statements were examined simultaneously and attributional analysis was applied in order to attempt to explain Caroline's continued use of programmes after de-regulation. The example below illustrates this teacher's general line of reasoning and suggests that her planning behaviour after de-regulation can be in part explained in terms of her need to be "organized".



Although Caroline defined "thorough" planning in terms of using rational models, she did not always apply an objectives-first model in her written planning, particularly in her daily workpad. Caroline felt objectives were "really in your mind" or a part of the mental planning which could be assumed by teachers. Writing objectives into programmes was sometimes seen as unnecessarily repetitious.

Although she did not always document the learning objectives of her lessons, Caroline was consistent in her concern for her students'

learning. For Caroline, activities were only relevant in the context of the objectives. Student learning was the first consideration and "everything else follows from that". Caroline's attitude to writing objectives reflected a common theme among the study participants which was developed in subsequent interviews.

Caroline's planning thoughts

Mental planning was a very significant aspect of Caroline's teaching. Evidence of her mental planning appeared several times in the interview data and was verified by document analysis and observation. The use of written plans as memory joggers was apparent in the daily workpad. Entries in the daily workpad reminded Caroline of the weekly mental plans she had made. Her weekly plans provided her with a mental picture of how her lessons should develop for that week, including mental notes about provision of materials in her dual roles as art and physical education specialist.

C: ... I've already planned it at the beginning of the week, it's just really a reminder. (Interview two).

In common with other study teachers, Caroline described a well of previous experience which could be applied in solving planning problems. Caroline described how she would cope with an impromptu teaching situation by referring to a repertoire of previous lessons. This example further highlighted the significance of mental planning.

C: You refer to things you've done before, then obviously you can't do a lot of planning. (Interview one).

According to Caroline, teachers should make use of student performance data in their planning. Caroline routinely followed each teaching cycle with an evaluation cycle which then led to the next planning and teaching cycle. Like Beth, Caroline was careful to modify and adapt her plans according to the needs of her students. In addition, some activities did not have the expected outcomes or did not unfold as planned (Zeuli & Buchman, 1988). Caroline believed teachers should frequently assess the success or otherwise of their teaching. Evaluation of learning outcomes and taking appropriate action were very significant for this teacher.

C: If you aren't accomplishing your objectives then you've got to follow up, evaluate and re-do it, maybe go back and do the lesson again and maybe try a different tack. (Interview one).

Coverage of the curriculum was also a concern for Caroline. She believed that programming was essential for her so that she could be sure she was covering the curriculum adequately. There were concerns that "you know where you're heading and are teaching the right things". This teacher was concerned that students' academic time was spent profitably covering the curriculum and not simply to filling the available time with irrelevant activities.

C: ... you've got a plan of what you're doing through the year and you're not just doing anything. (Interview one).

Activities, classroom management and student learning

Caroline's emphasis on a well organized day suggested a concern for classroom management. This teacher returned to the classroom management theme in both interviews. She believed that successful teaching and learning could not occur without classroom management. In common with Annabel and Beth, there was evidence of the use of routines as an aid to classroom management. As was explained above, Caroline did not make much use of routines in the first phase of data collection (1993), but in the following year these were re-introduced as she adopted a different (tandem year 5/physical education) teaching role. Caroline believed students benefited from routines because they knew what to expect but the main purpose of routines was to enhance students' learning.

C: ... it's good for the children as well because they know what day they're doing this and that ... it's good for their learning. (Interview two).

There was evidence that Caroline's plans were interrupted frequently. Like Beth, these interruptions were caused by factors beyond Caroline's control such as the school administration and the behaviour of students outside the classroom. She had come to regard interruptions of

this type as part of her normal school day. According to Caroline, schools were becoming increasingly uncertain places. Interruptions from student behavioural problems created outside the classroom were also a cause of serious concern for Caroline because she had little direct control over these events.

Caroline's accountability perceptions and her reaction to the School

Development Plan

Caroline did not feel threatened by the notion of accountability. Her perception of accountability was geared to accountability for student learning rather than a fear of teacher performance appraisal. Teacher performance was mentioned only in the context of student learning.

C: I think you need to be accountable these days for children's learning and you need to be accountable for what you're doing. (Interview two).

Caroline was concerned with professionally evaluating her own performance, including her planning. She felt accountable primarily to herself and was in the habit of self-evaluation. Although she was not thoroughly familiar with the Education Department's accountability policy, interview statements and observation confirmed an outcomes emphasis in her thoughts about planning.

Caroline believed she would need to alter the content of her programmes to meet the demands of administration if the practice of

submitting programmes was re-introduced. This teacher shared a belief with Beth that submitting programmes was of limited value for accountability purposes. Caroline also believed that the need to write programmes for another audience would cause some anxiety and unnecessary work, including the translation of objectives from syllabus documents.

Caroline was aware of the School Development Plan priorities but, in common with Annabel and Beth, did not formally acknowledge them in her planning. According to this teacher, the SDP would lead to a heightened emphasis on priority areas.

Summary

1. Caroline still used programmes because she felt the need to be prepared and organized. She used her own version of a rational model and defined thorough planning in terms of the application of a rational model. Caroline felt "comfortable" with her planning. This teacher's written planning showed a heavy emphasis on outlining activities.
2. Caroline defined a good day in terms of how "smoothly" it went.
3. Caroline was very concerned with student learning and the use of outcomes for the next cycle of planning and teaching.
5. Mental planning was highly significant for Caroline. She often planned mentally a week in advance. Written plans acted as memory joggers. Previous experience could be drawn on in impromptu teaching situations.

6. Caroline felt the need to cover the curriculum and to engage students in activities which dealt with the curriculum.

7. The uncertainties of classrooms caused Caroline concern.

Interruptions were becoming the "norm".

8. Caroline felt accountable to herself for student learning and her own performance.

5.4. Case Study 4: Donald

Donald was in his tenth year of teaching at the commencement of the study. Since graduating with his Diploma of Teaching he had taught mainly middle and upper primary grades, including several years in country schools. Donald also held a Bachelor of Education degree.

Donald's written planning comprised daily planning (daily workpad), weekly planning (timetable and daily workpad) and unit planning in the form of a bank of previous programmes and checklists of learning objectives. Donald submitted a social studies programme and a literature programme for analysis. The literature programme seemed to apply a rational model and followed the pattern noted with the previous teachers. Activities dominated the volume of written material (objectives, 24%; activities, 54%; resources, 12%; evaluation, 10%). For the social studies programme, Donald used one of the Education Department (1988) programming formats. The teacher supplied component of the programme was entirely dedicated to activities. These programmes came

from Donald's bank of programming material which had been developed during his career. He found that his previous programmes were sometimes all he needed. The programmes bank appeared to act as memory "joggers" for Donald, freeing him from the necessity of repetitive transcription.

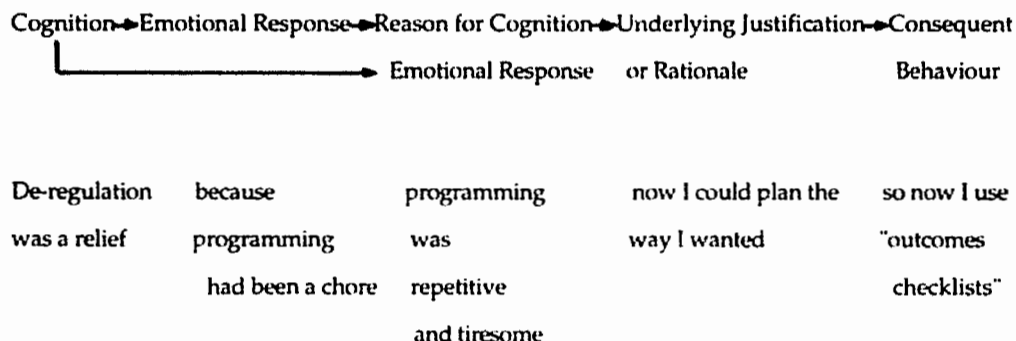
D: ... you can rely on old programmes and you don't actually write anything down. (Interview one).

Donald's planning since de-regulation

Donald's initial attitude to de-regulation had been one of relief. He described programming for another audience (i.e. the principal) as a "chore" and "a little demeaning". Donald believed submitting programmes was tiresome because he was forced to transcribe "stuff that had been written out before". He regarded this as inefficient. Donald found that he was able to "plan the way I want to" after de-regulation and he was encouraged to experiment with planning procedures which led to his use of "outcomes" check-lists. Donald's check-lists involved the listing of learning objectives and the evaluation of the extent to which the objectives were achieved. Results were recorded in the form of a rating scale for each student. Notations relating to remediation and extension activities were included. An outcome as defined by Donald's approach was the discerned achievement of the student (see chapter 2).

Attributional analysis of several of Donald's interview statements was applied in an attempt to provide causal explanation for his planning

experiments. Donald's line of reasoning can be discerned from the paraphrased example below.



Apart from the researcher's own planning, the check-lists used by Donald represented the only instance in the study where a teacher had departed significantly from well established executive planning routines. All other teachers had continued to use daily workpad and programmes for their written planning after de-regulation. Donald was aware of the potential difficulties in attempting to change established planning behaviours and departing from his programme bank. These excerpts represent examples of Yinger's (1978) executive planning routines.

D: ... every time you change something it's going to take a longer time just to settle into a new system. (Interview one).

D: I suppose it's ambitious to expect I could change it overnight which is virtually what I was trying to do and that is the work habits of close to ten years. (Interview two).

Donald found his experiments with "outcomes check-lists" were workable. Where possible, he related his check-lists to the student

outcome statements despite being unclear as to the definition and intended use of the statements (see chapter 2). Data from both interviews indicated a consistent focus on learning objectives, which was against the trend noted in all other teachers. Experiments with an outcomes approach to planning would seem a logical extension of Donald's interest in objectives. Donald reported that his first concern in planning a new topic was for the concept or idea to be taught, followed immediately by the resultant objectives. For Donald, minimal planning involved outlining objectives.

D: I feel obliged to at least sketch out a few of the objectives I'm trying to achieve. (Interview two).

Donald had begun to question his planning practices when industrial action occurred which led to a teachers' union ban on after-hours work (see chapter one). He found that the industrial action significantly limited his ability to plan satisfactorily which in turn affected his teaching. The interview statement below highlights the relationship between effective planning and effective teaching.

D: It meant I was virtually doing no planning outside the classroom ... which meant that my planning was restricted and that made it (teaching) difficult. (Interview one).

Data from both interviews revealed the importance of planning to Donald's teaching. He appeared to relate the success or otherwise of his

teaching to the quality of his planning. Donald, like the other teachers in the study, placed great importance on "having a good day". This was related closely to planning effectively.

D: I think it (planning) is very important and I can tell because the better I plan the more efficient the teaching. (Interview one).

... the better planned I am, the more likely I'm going to have a successful day. (Interview two).

Donald's planning thoughts

Despite his objectives focus, Donald still regarded the choice of activities as pivotal in the planning process. Document analysis (see above) of written plans other than the experimental checklists confirmed that activities formed the most substantial component of this teacher's written planning. Donald usually described objectives in the context of an activity.

D: What I do depends largely on the activities I've got in mind. But I think the essence of good planning for me is the understanding of what it is I hope to get out of the day for each activity. (Interview two).

After thinking about outcomes, Donald's next step in the planning process was to check for the availability of resources and to ensure adequate content knowledge. The teacher's subject knowledge was a significant factor for Donald. He believed primary school teachers needed

to ensure their subject knowledge was adequate. Interview statements by Donald supported Deschamp's (1985) finding that teachers' knowledge and interests can have a significant impact on what is taught in the classroom. According to Donald, a teacher's knowledge and interest in a subject was related closely to their ability to teach a topic. Considering the current academic level of students (student entry characteristics) and recalling his past teaching experiences were also significant at this point in the planning cycle. The pool of teaching experience was very significant for Donald when teaching any topic and was particularly important in impromptu teaching situations when he would "reflect on experiences with similar kids".

The importance of previous experience also became apparent when Donald realised how much of his planning processes had become second nature to him. Much of what Donald had written down previously was now a part of his mental planning. Working with a student teacher revealed to Donald the extent to which this process had occurred.

D: ... having to spell out exactly what she had to do in regards to the planning process made me realise how much I took for granted. (Interview one).

In common with Beth, Donald regarded planning as an opportunity for quiet reflection about his teaching and as an opportunity for drawing on previous experience. Reflection of this type could involve the recall of past successes or a well known routine as well as planning

new activities. Mental planning again emerged as a significant aspect of planning. Often, Donald's planning was purely mental and did not appear on paper. For Donald, the essence of planning was "understanding what it is you're hoping to achieve". Written plans were usually not referred to since they had been "internalized". Donald reported that he did some of his mental planning while driving to school. He used mental planning as a means of planning daily and longer term activities.

D: ... It's more in my head. If I've got an idea for say a semester programme, then it's something I've got in my mind but I don't necessarily write it down. (Interview one).

Activities, classroom management and student learning

Donald in part defined a good teaching day in terms of the students' behaviour. This was a trend noted with all the study teachers. When asked whether he had had a "good" day, Donald's first thoughts were for classroom management issues and student behaviour.

D: Today was good. I think to start with I had to bring the kids back from fitness early and that had a marked effect on their behaviour... (Interview one).

Donald's management concerns were also revealed by his response to questions about his use of instructional routines. Routine lessons were described as ones which were among the "better lessons" which caused

"fewer headaches for me and the students". In the second interview, Donald described how activities were sometimes used as a means of achieving order in the classroom. Some tasks had a predominantly management function, occupying one group of students so that low achievers could receive additional teacher attention.

D: ... you have to have the children doing something that is not going to interfere with the other students that need that extra work. (Interview two).

According to Donald, learning could not be achieved without sound planning and classroom management. His belief that good planning was related closely to successful classroom management was further revealed by his response to an interview question about how he dealt with interruptions to his plans. The excerpt below revealed a desire to ensure adequate work was provided for students and highlighted the frequency of interruptions in the contemporary classroom.

D: ... I tried to get my planning done a week in advance and I think I took about a month to get through a week's DWP due to interruptions. (Interview two).

Donald believed that when teachers had not planned adequately "the best thing that can happen is an interruption". On these occasions, the interruption helped fill the available time. The theme of interruptions to planning and teaching was explored further.

Interruptions normally caused Donald some irritation, particularly when his more innovative lessons were affected.

Donald's accountability perceptions and his reaction to the School

Development Plan

Donald described several accountability perceptions which were consistent with those of other study teachers. He felt comfortable with the notion of accountability. Donald believed accountability was a "contractual obligation" for teachers and principals and that despite uncertainties with current approaches to planning and accountability, a return to the previous practice of submitting programmes would not be beneficial. He described the suggestion as a "backward step". According to Donald "planning doesn't have to involve a lot of written preparation". Therefore the submission of written plans was not particularly beneficial for accountability purposes.

Donald was very active in the school development planning process at School A. His interest in this aspect of school life was apparent in the first interview when asked how school priorities were incorporated into his planning. In common with the other study teachers, school priorities identified in the SDP did not appear directly in Donald's written documentation. However, interview data confirmed that this teacher altered his regular planning practices in order to accommodate school priorities. Donald believed that the School Development Plan raised teachers' awareness about school needs, highlighting "areas that are

identified as places or areas at risk".

Summary

1. Donald had an "objectives" focus in his planning. This had resulted in experiments with an outcomes approach to his planning after de-regulation. Donald was the only study teacher who had made significant changes to his planning since de-regulation.
2. De-regulation was a relief for Donald because it enabled him to experiment with his planning procedures.
3. A bank of past programmes were an important part of Donald's planning. Most attention was placed upon activities in his written planning.
4. Mental planning was highly significant for Donald but very little of his planning appeared on paper. Donald's mental plans focussed on objectives as well as activities.
5. Donald thought of objectives early in the planning process. This was followed by considerations about resources, teacher content knowledge and the student academic level. Donald drew heavily on past experiences in his planning. The pool of past experience was a constant reference point for any new planning problem.
6. Donald was aware of the management function of activities. A "good day" was initially defined in terms of student behaviour.
7. Donald highlighted the frequency of interruptions to the school day.
8. This teacher described the need for accountability in terms of a

"contractual obligation" on teachers.

9. The SDP served to raise Donald's awareness of school priorities but did not appear in his planning formally.

5.5. Case Study 5: Elaine

By the end of 1994, Elaine had taught for nine years. After graduating with her teaching diploma, she worked for several years as a drama specialist. In some cases, Elaine taught drama in more than one school. As a regular classroom teacher, Elaine had mainly taught junior grades. She was appointed to the staff at School A in 1985.

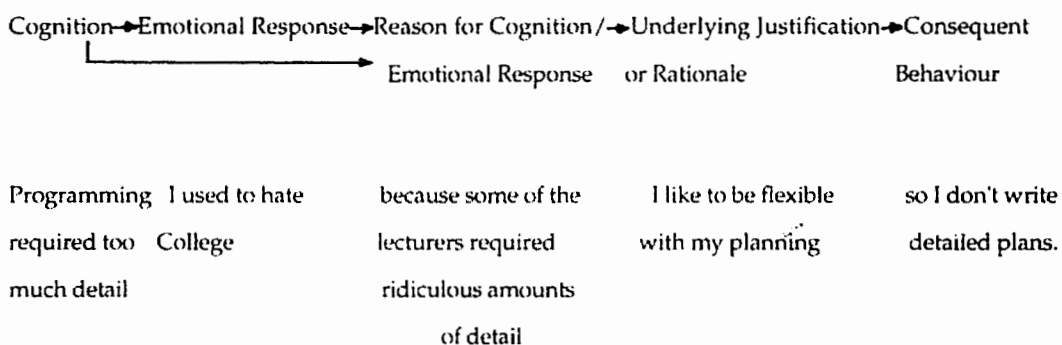
Elaine's planning since de-regulation

Elaine still appeared to plan according to rational models acquired during her teacher education. This was confirmed by observation but could not be confirmed by document analysis because Elaine did not submit planning documents to the researcher. She was including less detail in her written documentation than in her early years of teaching. The issue of detailed written plans caused Elaine some resentment. University requirements for detailed plans while on teaching practice were regarded as unnecessary and repetitive. Too much written planning may have been unnecessary for Elaine because of her need for flexibility. She believed that planning should be flexible enough to allow for spontaneous teaching situations. Elaine liked to provide a balance of learning experiences for her students so that they were not always

engaged in seatwork tasks and students were given the opportunity to pursue their interests. According to Elaine, teachers should be prepared to capitalize on students' high motivation when they were exploring their interests.

E: If you discover the kids are interested in something and the topic comes up and you follow that for maybe a week or whatever you get much more value out of it because the kids are interested. (Interview one).

Elaine preferred to use less detail in her written planning. Attributional analysis of data from both interviews was applied in order to attempt to explain this phenomenon. The following example represents a line of reasoning condensed from several interview statements.



Elaine's beliefs, attitudes and thoughts about planning

Elaine's conception of "detailed" written plans involved applying rational models. She believed that detailed written plans were mainly necessary when teaching an unfamiliar topic or grade. A part of the

planning process with new material involved ensuring that the teacher had sufficient subject matter knowledge. The teacher's content knowledge was very significant for Elaine. An initial conception of the planning problem was followed by a search for resources. The resources search was related to ensuring adequate teacher content knowledge.

E: I really like to know my topic thoroughly. But I also like good resources, so I spend quite a bit of time hunting those up.

(Interview two).

Planning was important for Elaine because it gave her the confidence to teach effectively. She believed that planning well did not necessarily mean detailed written plans but she needed to feel she knew what she was doing. Elaine's planning produced a mental picture of how her day would proceed. For Elaine, being planned meant being organized and being organized was related closely to having a "good day".

E: I have to be fairly well organized to have a good day ... you don't have to have written out your lesson plans ... but as long as you know in your own mind what things you're doing (Interview two).

Flexibility was also important for this teacher because it allowed her the opportunity to catch up areas which had not received sufficient attention. Weekly planning could be rearranged to provide sufficient time for subject areas which had not been emphasized sufficiently. Elaine

preferred to plan in less specific detail because of her belief in reacting to student needs and interests.

Student interests were not the only factor which might cause Elaine to modify her plans. There were times when Elaine's plans were altered significantly in order to cater for the special needs of her students. This extract from the second interview reveals Elaine's readiness to respond to perceived areas of deficiency in her students.

E: ... They can't sequence things properly (in writing) and to me that was a need ... so we've been doing a lot of sequencing.

Reacting to student needs also related to outcomes data collected by teachers. Each cycle of evaluation was followed automatically by the next planning cycle. Elaine believed she did not think in terms of objectives, but in terms of outcomes. She emphasised outcomes in her planning as illustrated by this excerpt from the first interview.

E: ... if they haven't done well then I'm going to be saying , ... the outcomes aren't good so I'm going to have to go back and re-teach that. (Interview one).

Elaine's accountability perceptions

In the era before de-regulation, Elaine reported that there were inconsistencies in the assessment of teachers' programmes. Elaine had not been very anxious about submitting programmes. She believed the level of anxiety was dependent on the teacher/principal relationship.

Elaine found that some principals did not scrutinize her written plans very closely and in some instances would initial the programmes and hand them back immediately. Elaine's evidence suggested that inconsistencies existed in the previous system and that submission of programmes to some principals may have been of limited use as a means of accountability.

Elaine had found that what constituted a "programme" was interpreted differently by principals. Some principals allowed Elaine to save herself considerable time by re-cycling parts of old programmes. Re-cycling saved her the repetitive transcription which she had found so irritating as an under-graduate. Some principals insisted on the production of "new" programmes. Elaine related an anecdote concerning one principal's reaction to another teacher's efforts at re-cycling programmes. Elaine's colleague had intended to use another teacher's programme. The principal claimed this would constitute plagiarism and insisted on the teacher producing her own programme.

E: So she went away and she whited out the teacher's signature and gave it back and he was quite happy then. I don't think he even realized. (Interview one).

Elaine described the reaction of some of the teachers at School A when the first outcomes reviews with the principal were scheduled in 1993. The teachers' reaction indicated the depth of the accountability mind-set regarding programming and the extent to which the

programming tradition had created anxiety in teachers. Four years after de-regulation, concerns about programmes were still apparent.

E: But everybody ran around and did all their programmes.

Once they'd been through it they realized it wasn't as threatening as it sounded ... and it did sound threatening to begin with.

(Interview one).

Elaine also expressed concerns about the uncertainty of the current system of accountability. She was worried about her own accountability and whether a consistent approach was going to be developed to reflect an outcomes emphasis. From Elaine's perspective, concerns about accountability were linked to rumoured changes to teachers' employment conditions including the possible replacement of tenured positions with individual contracts.

E: You have visions of somebody coming around, checking all your kids results and being pretty specific about it. (Interview two).

Summary

1. Planning gave Elaine the confidence for teaching. To be planned was to be organised.
2. Elaine had unpleasant memories of the amount of detail required, in written planning, by some university lecturers. There appeared to be a link between this and her attitude to planning in the post-memorandum era. Elaine used less "detail" and placed more emphasis on mental

planning and flexibility. "Detailed" programming was defined in terms of using rational models.

3. Elaine focussed attention on collecting resources and developing her own content knowledge early in the planning process.
4. Elaine reported an "outcomes" approach in the sense that she reacted to the measured performance of her students in her next planning cycle.
5. Elaine reported inconsistencies in the assessment of programmes prior to de-regulation. Some principals returned the programmes without reading them. Other principals insisted on teachers transcribing material which appeared elsewhere. Teacher anxiety about having their programmes checked persisted into 1993.
6. Elaine expressed anxiety about accountability interpreted in terms of performance appraisal.

5.6. Case Study 6: Felix

Felix, a teacher at School B, was the most experienced teacher involved in the study. He had taught for two years in a remote rural school after graduating and then subsequently taught for a further fifteen years in two urban schools. Felix completed his bachelor's degree in 1984. He was approached for interview because his teaching experience, qualifications and year level taught matched closely those of the researcher making comparisons possible between Felix's planning methods and those employed by the researcher as a participant observer.

The researcher was also concerned with examining if planning changed with advancing experience. Data provided by Felix assisted with cross validation of data gathered at School A and also contributed materially to the generation of categories and theory from this study.

In addition to interview data, Felix provided substantial written planning documentation for analysis. The documents consisted of two weekly timetables, three weeks of daily workpad entries and programmes for formal english, writing, reading, spelling, mathematics, science and social studies. The weekly timetables consisted simply of scheduling of times and subject headings. Scheduling outside the teacher's control was highlighted.

Felix submitted daily workpad entries from November 1993 and March 1994. The volume of written detail of these entries did not vary significantly, suggesting that Felix maintained the detail in his daily planning consistently throughout the year. The daily workpad consisted of brief notes outlining activities and teacher behaviours. These were expressed in a kind of personal code. Felix appeared to use more written detail than the other teachers in the study (Annabel, Beth and Caroline) who had submitted daily workpad entries to the researcher. Skills based subjects (eg. reading, mathematics) were documented in less detail than content based subjects (eg. science, social studies, health) or those involving a creative component (eg. art). Skills based subjects appeared to involve some form of routine which needed little or no documentation. Content based subjects elicited more detail, with notes about content and

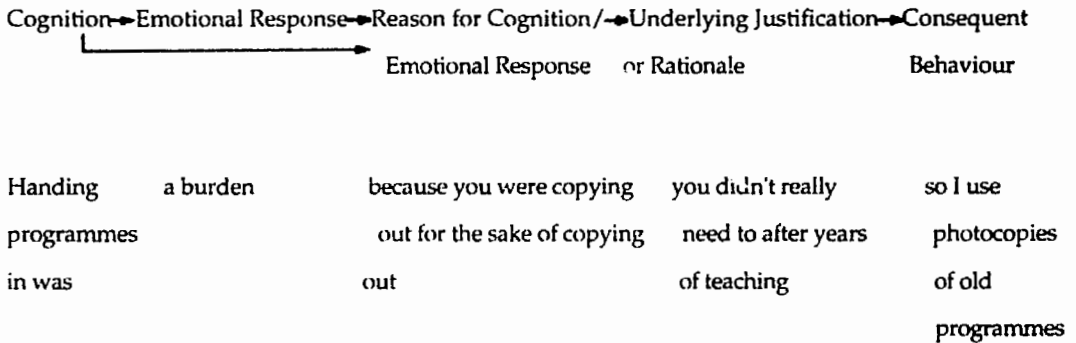
lesson procedure such as "Social Studies: view the slide strips of Holland and observe while listening to the audio tape". In common with the other study teachers, Felix devoted the majority of his daily plans to describing activities, (lesson/content outline 46%; book/page reference 29%; instructional routines 6%) representing a combined total of 81% of entries which related to activities.

Like Donald, Felix used a bank of previous programmes for longer term planning. He submitted three distinct classes of programmes for analysis; programmes written by Felix entirely, programmes using the "Programming Ideas" formats (Education Department, 1988; see Appendix F), and programmes which used formats produced for the Bunbury Education District (Dillon, 1988). In each class, activities remained the major focus in the documents (Activities, 71%; Objectives, 8%; Resources, 7%; Evaluation, 13%).

Felix's planning since de-regulation

Felix believed that prior to de-regulation the submission of programmes had been "a burden" causing some anxiety. Programming had been a "stressful task" for Felix, occupying a substantial amount of after hours time. Felix believed his time was now better spent on monitoring his students' progress. Felix's belief that submitting programmes had been stressful may explain his efforts to reduce the mundane aspects of the task by developing a bank of programmes which were photocopied for the principal. As with the other members of the

study group, various interview statements made by Felix relating to his planning practices were collated and condensed. Attributional analysis was applied in order to attempt to provide causal explanation for Felix's use of a bank of programmes.



The above analysis demonstrates Felix's reluctance to document his planning simply for its own sake. He regarded traditional programming practices as repetitious, particularly when documenting some components of the programme such as objectives. For Felix, objectives were assumed or considered almost unconsciously, but always in the context of an activity. In one section of the first interview he described considerations about objectives as a "mental thing". Objectives were included in the programming formats he was using so he saw little point in transcribing them.

Since Felix's approach to programming had been agreed to by his principal, de-regulation had not led to significant change in Felix's programming. The practice of experienced teachers and principals negotiating accountability for planning was common before and after de-regulation. This is confirmed by participant observation data and

statements by Felix such as the following comment from the first interview.

F: My reaction was that (at the time) I didn't do anything different. I kept on doing the same. (Interview one).

Felix's planning thoughts

Felix used his bank of programmes as a mental stimulus. He explained his planning procedures to the researcher pointing out that he did not "write" programmes in the usual sense but used his large store of previous programmes and other planning material as a reference point or memory jogger. Reference to the programme bank did not mean Felix taught the same material in the same manner each year. He continually modified his plans based on "what I remember from last year not being successful" and the needs of each new group of students. The memory stimulus function of previous programmes was a theme developed in the second interview. The example below indicates that Felix was beginning to question his planning habits, being one of three subjects (with Beth and Caroline) who expressed an interest in examining the researcher's experimental programming methods (see chapter six).

F: I suppose I should be trying to thin it (programme bank) out. ... They could be more streamlined. They could be less complicated, there's so much in there. (Interview two).

Felix also reported that his planning acted as a mental organizer.

He related planning to time management and sequencing of classroom events. Planning was likened to "plotting a course". This teacher believed his mental preparation by reference to previous programmes and written plans in the daily workpad were the minimum requirement for teaching successfully.

F: ... I could not teach without a daily planner. I could not teach without the mental preparation, I could not teach without the viewing of my programmes. (Interview one).

A broad repertoire of knowledge and experience was important to Felix's planning. Teaching in an impromptu situation involved a concern for the current status (student entry characteristics) of the students. Felix would draw on his substantial repertoire of knowledge and experience to develop expectations about the students and plan accordingly. There were times when Felix's repertoire was not adequate such as when teaching a new or unfamiliar topic. After many years of teaching the same material, he had assimilated much of the curriculum content, making reference to curriculum documents unnecessary. In some cases, Felix's main planning decision revolved around choosing a suitable text. In his planning for mathematics, for instance, selection of a text represented a considered judgement, based upon a substantial repertoire of experience, not an "easy" way out of planning.

Felix held strong beliefs about the importance of planning to his teaching. Planning provided Felix with the guidance necessary for him to

produce a "constructive day" for his students. An absence of planning would mean Felix would be in less control of his teaching situation. To be well planned meant that children would be engaged in meaningful learning activities. Felix liked to have the "work that I need at my fingertips". Planning was also necessary as a means of covering the curriculum to "achieve what I am supposed to achieve". Felix felt that although his written plans were significant they were only a guide as to what would happen in the class. With increasing experience it was no longer necessary for Felix to refer to his programmes daily. A considerable amount of his planning had become routinized so that even reference to his programmes was unnecessary.

When teaching new material Felix's initial reaction was to refer to curriculum materials which further indicated his concern for covering the curriculum. Felix's next step was to find suitable resources for the topic and to develop activities based on the available resources. This process assisted the teacher to gain the necessary knowledge of content and the curriculum, thereby contributing to his repertoire.

Activities, classroom management and student learning

In common with the other study teachers, Felix reported that a function of learning activities was to assist with the achievement of order in the classroom. When asked what he had done to produce a "good day", Felix's comments about planning and preparation appeared to have a predominantly management function. A good day was again defined in

terms of student behaviour.

F: So by being fully prepared there was nothing that I couldn't handle coming my way ... They'd do what I asked, when I asked, how I asked and basically fully co-operative. (Interview two).

Felix's concern for classroom management extended beyond the need to merely keep his students occupied. He held definite beliefs about the link between learning and management. According to Felix, learning could not occur unless successful management was in place. In this example from the second interview, Felix described management in terms of a pre-requisite for learning.

F: Primarily activities are there for learning but then to get to that learning successfully you have to manage it well. Planning well allows for good management and learning is a spin off from good management. (Interview two).

In common with Beth and Caroline, Felix provided evidence of the uncertainty of the classroom. He described a number of factors, outside of his control, which could disrupt a teacher's plans. Planning well did not guarantee good teaching and learning because of the uncertain nature of the classroom. Student behaviour, especially when affected by the home situation, was the major cause of uncertainty. The uncertainty of the classroom was explored in the second interview. Extra-curricula demands from outside the classroom were frequently placed upon

students. Timetables were often disrupted. Felix reported that thorough planning acted as a framework against which the school day was set. Interruptions could create chaos in the absence of this framework.

Felix's accountability perceptions and his reaction to the School Development Plan

Felix related his use of a programme bank to a concern for accountability issues. In Felix's view, his bank of programmes acted as a form of insurance against potential accountability difficulties. In common with other study teachers, Felix was concerned with rumours relating to greater accountability demands on teachers. Since his planning worked well for him, Felix was reluctant to change.

F: ... I'm a bit reluctant to do that (change programme bank) because of accountability because if I've got it there I feel like I've got more ammunition should the situation arise. (Interview two).

Although accountability was a source of anxiety for Felix, he described accountability as a professional duty. Felix was prepared to be open to public scrutiny. On one occasion he had made his programmes available on request to a parent. In Felix's view, teachers were accountable for student learning "just as an engineer is accountable for a bridge if it fails". Although Felix had not read the Education Department accountability policy Felix believed he was still accountable for planning although the accountability was to himself and parents rather than to the

principal.

F: I'm accountable to myself, but I also feel I'm accountable to parents. (Interview two).

Felix believed a return to the system of submitting programmes would not be beneficial as a means of accountability because time spent on monitoring his students would be taken in preparing documents for another audience. Felix described accountability meetings with the School B principal where the principal was concerned mainly with student outcomes. These meetings appeared similar in structure and purpose to those at School A. Meetings at both sites were held each school term. In each case the main focus was on student outcomes and not on teacher planning. The major qualitative difference between the meetings at the two sites was that the School B principal required specific information about individual students whereas the School A principal was concerned with school and class trends. The School A principal used data gathered at the outcomes meetings to generate school priorities. Discussions at School A centred around school-wide and classroom data where discussions at School B were based upon classroom data and teacher observations. Felix expressed a concern that his student outcomes discussions did not require documentation.

F: ... he's taking my word for it ... there's no documentation ... I show him my test books and say have a look at this ... (Interview one).

The School A principal used information gathered from outcomes meetings to monitor school priorities and to generate new priorities for the next School Development Plan. In common with all study teachers, the School Development Plan was not directly incorporated into Felix's plans or documented but served to heighten his awareness of certain planning issues.

Summary

1. Felix's written plans consisted mainly of activities. A bank of old programmes was used, combined with a detailed daily workpad. The programme bank served as a memory stimulus, rather than a guide to which Felix adhered closely. Felix modified his plans according to past successes and failures and the needs of his current students.
2. Felix was using his programme bank prior to de-regulation. The programme bank removed the unnecessary clerical exercise that programming had become. Programming had been a "stressful task" and a "burden". De-regulation had not lead to any change in this teacher's planning habits.
3. More written detail was included for content based subjects. Felix regarded his planning methods as the minimum required for successful teaching. His planning "worked" for him.
4. A "good" day was described in terms of student behaviour and "constructive" activities for students. The management function of

activities was acknowledged by Felix.

5. Planning new topics meant reference to curriculum materials to ensure adequate teacher content knowledge. Felix's next step was to evaluate the available resources and assess his students' needs.

6. Felix was very concerned with adequate coverage of the curriculum.

This concern was related to accountability and student needs.

7. Felix felt accountable to himself and to parents. He regarded accountability for student learning as a professional obligation.

CHAPTER SIX

CROSS CASE ANALYSIS

6.0. Overview

This chapter describes the major findings generated from the data and addresses the research questions directly by discussing them sequentially. The study has provided some important insights into teachers' planning methods, particularly into the mental processes involved. Due to the small number of cases in this study, caution should be exercised before generalizing the findings.

6.1 The values, attitudes, assumptions and beliefs which underpin teacher planning.

The present study has highlighted the importance of teachers' thought processes to teaching. The Clark and Peterson model (Fig.9., chapter 3) conceived teacher planning and teacher theories and beliefs as within the domain of teachers' thought processes, depicting an inter-relationship between these components of teacher thoughts. This study has provided some verification of the model by showing some of the effects teacher values, attitudes, assumptions and beliefs had on planning among the study group. These effects are discussed in this section.

The data illustrated the importance the teachers placed upon planning. The teachers were willing to invest a considerable amount of their own time on planning, indicating that it was a high priority for

them. The study group usually preferred to do their planning at home because this freed them from the distractions of the classroom, suggesting that planning is one of the few times when teachers can reflect rationally and problem solve. "I need time to think so I do it at home"(Beth).

During the industrial action of 1989, teachers were instructed by their union to carry out all of their work during school hours. This created difficulties for teachers accustomed to planning out of hours. They found that their planning was not as efficient, creating detrimental effects on their teaching. "My planning was restricted and that made it (teaching) difficult."(Donald). Observation confirmed that teachers at School A, other than those involved in the study, routinely spent their own time on planning. Time for duties other than teaching during school hours was also spent frequently on planning and lesson preparation.

Several teachers expressed the belief that they could not teach successfully without their planning. "I don't think I could get by without my programmes" (Annabel). "I could not teach without what (the planning) I do" (Felix). The teachers often described planning in terms of "being organized". To these teachers, to be planned meant to be organized so that "things could flow smoothly"(Caroline). The feeling of being organized was related to being able to teach with confidence. Planning well gave them the confidence to teach. "I feel more confident if I've planned well" (Elaine). The teachers believed a close relationship existed between planning and teaching effectively. The relationship between planning and teaching efficiently was seen as self evident. "I

think it (planning) is very important and I can tell because the better I plan the more efficient the teaching" (Donald).

One interview produced anecdotal evidence that teachers had responded to the first of the new School A principal's "outcomes reviews" by ensuring their programmes were complete in the event the principal may have wished to see them. There had been no history of this type of review under the previous principal so there existed an uncertainty as to the new principal's expectations. The memory of being required to submit programmes had not diminished in some teachers. Some needed reassurance that the outcomes reviews were not simply another means for the principal to examine teachers' programmes. Observation verified that the notion of submitting programmes had caused a degree of acrimony and concern in some teachers. Teacher attitudes to programming were further indicated by the response of several staff to the principal's advice concerning long term planning. An objectives-outcomes approach (see chapter eight and Appendices G & I) was suggested at a staff professional development day early in the school year and one teacher was observed to draft new planning formats in response to the advice. This teacher was concerned with accountability and was preparing to adapt her planning methods in order to comply with a perceived requirement of the principal.

A line of enquiry which emerged from participant observation was the importance teachers placed upon having a "good day" (see chapter four). This was often the topic of conversation in the staffroom away

from students and at social events among the staff. All subjects described the close relationship between planning and a good day. Beth and Donald typified the teachers' beliefs:

Beth: I find the better days are the days I plan for best.

Donald: The better planned I am, the more likely I'm going to have a successful day.

In most instances "having a good day" meant having a day which consisted of fewer classroom management problems. Many of the teachers referred to management issues first when discussing the "good day" question, suggesting these matters preoccupied their thoughts. Student behaviour was a very significant factor for all subjects in determining a good day. "I had a good day today... because the kids were good" (Annabel).

For the teachers in this study, planning meant activities. Planning provided the activities, particularly written tasks, which satisfied the teachers' personal work ethic and provided tangible evidence of learning for the school administration and parents. There was evidence of a need to "cover" the work or the course and to complete tasks. All teachers were very concerned with ensuring activities were adequately planned so that students were seen to be working and not interfering with others. The activities had an important management function. Students were kept on task not only for the sake of their learning but also to provide a structure for the school day and to assist with the maintenance of order in

the classroom. Did the teachers plan activities because they wanted students to learn or was the main function of activities to keep students busy and minimize behaviour problems? This question was explored in the second round of interviews.

Successful classroom management, including the use of various types of routines, was seen as a necessary pre-requisite to learning and part of the teachers' task of creating an environment conducive to learning. Although there were times when activities were given to students to keep them occupied, these instances were rare. The teachers were not concerned with classroom management as an end in itself. It was not simply a means of exerting control over students so that the teacher could have a successful (i.e. peaceful) day with student learning as a side benefit. Student learning was the principal teacher focus. The teachers believed strongly that without classroom management learning could not occur. Caroline described learning as her "first consideration" and Beth believed management "allowed the learning".

The teachers described the classroom as a complex, uncertain place. Many events occurred which were not within the teacher's direct control such as problems encountered with other children, problems which stemmed from home and the demands of administrators. These often affected the students' behaviour and readiness to learn. The uncertainties of the classroom caused the teachers anxiety. At times they felt powerless to overcome these external pressures. "So even the best planning in the world can't account for all the things that are going to

happen" (Beth).

The teachers' concern for the unknown elements of the classroom was further highlighted by their tendency to over-plan. Over-planning ensured that all contingencies were allowed for during the day. Planning was seen as one of the few things over which the teachers had control. This "control" aspect of planning may further explain why teachers in the study preferred to plan at home and out of school hours. In a setting away from children, the teacher was able to develop an outline of how the day could be expected to unfold. Planning provided the teachers with a framework for coping with the uncertainty of the classroom. There was some evidence that the predicted behaviour of students in certain types of activities influenced the choice of activity, consistent with findings by Bullough (1987). Activities which were likely to create behaviour problems were not planned. Planning was essential to prevent the teaching day becoming chaotic. Felix's comments were typical of the teachers' concern for management:

Felix: So by being fully prepared there was nothing that I couldn't handle coming my way.

The teachers in this study regarded student learning as their principal responsibility. Therefore, according to rational (objectives first) models of planning, the teachers should have been very concerned with planning learning objectives and perhaps have used a rational model in their planning. It appears logical that if teachers are concerned mainly

with student learning, learning objectives would be a planning priority. As is the case with several previous studies (Zahorik, 1975; Yinger, 1980; McCutcheon, 1980; Thomson et al, 1988; Bullough, 1987; Sardo Brown, 1988;) the teachers in this study rarely thought of objectives as their prime consideration in planning. When they did think about objectives they only considered them in the context of an activity.

In the past, objectives had often been written because they were required by principals but this was regarded as one of the repetitive, unnecessary tasks of planning. The study teachers regarded the writing of objectives as unnecessary for two reasons. First, the teachers did not feel they needed to write objectives because these were assumed, almost as second nature. The teachers knew what the objectives were unconsciously or intuitively. According to Caroline "the objectives really are in your mind". To write them in their planning documents was stating the obvious and wasting the teachers' time. This attitude confirmed the findings of other researchers (Bullough, 1987; Gage & Berliner, 1992). Second, objectives were often written in curriculum and departmental planning documents so copying them into programmes was seen as unnecessarily repetitive. Where possible, many of the teachers used photocopies of previous programmes or departmental planning documents (see chapter five and Appendix F) in order to save themselves from the repetitive aspects of planning.

The departmental planning documents (Ministry of Education, 1988), used frequently by the study teachers, were based on rational

models. These documents were developed in response to teachers' requests for additional guide-lines for programming (Ministry of Education,1987). They supplied objectives and required the teacher to complete the activities, resources and evaluation sections. The widespread use of these documents and interview statements by the study teachers suggests they were popular because the teachers were able to concentrate on their main planning priority (activities) rather than be as concerned with objectives. Teachers were being saved from what they saw as the time-consuming clerical exercise of writing objectives which they believed they knew implicitly. Several other publications which included checklists of objectives were also used by the study group (Dillon, 1989).

The teachers believed they would use "more detail" or "plan thoroughly" if planning a topic for the first time or if planning as part of a team. By "detail" they meant they would include objectives as well as other elements of the rational model. Many of the teachers defined planning "thoroughly" as programming using rational models.

The data indicated clearly that the teachers held strong beliefs, values and attitudes about the importance of planning. Not only did planning have the function of providing the basis for teaching and learning in the classroom but it also performed the ancillary function of helping to create a controlled behaviour setting which then allowed learning to occur. Teachers in the study were very task oriented and they appeared pre-occupied with the management function of activities. Does

planning have the "hidden agenda" of providing tasks to keep children occupied and allowing teachers to have a "quiet" day? This question will be addressed in the next chapter.

6.2 The cognitive processes of teacher planning

If the ultimate goal of teacher planning is to develop an activity or task for students to complete so that learning can occur in a controlled setting, what cognitive processes do teachers undergo in order to translate instructional plans into tasks?

The data suggested that a number of significant cognitive processes occurred during planning. A critical factor was the application of the teachers' previous knowledge and experience. The teachers' repertoire of knowledge and experience included the values, attitudes, assumptions and beliefs described in the previous section. Of most significance among the values/beliefs component of teachers' thought processes was the deep concern the teachers had for successfully managing the behaviour of their students, as described in the previous section. These management concerns were at the core of all planning decisions. Some planning ideas were accepted or rejected on the basis of their applicability to the classroom. A key criteria for applicability was whether the activity could be successfully managed.

The knowledge and experience repertoire also involved teacher subject knowledge, pedagogical knowledge, implicit theories, all previous teaching experiences, knowledge about students and specific aspects of

planning such as learning objectives. As was discussed above (section one) the teachers appeared to have an intuitive knowledge of the learning objectives for a given activity. To document aspects of the teacher's repertoire (such as objectives) was seen as unnecessary. This repertoire was the major influence on the teachers' solution to a given planning problem. The teachers in the study ranged in experience from six to seventeen years. Even the relatively inexperienced Caroline demonstrated a substantial repertoire of experience in her comments about impromptu teaching situations: "You'd refer to things you've done before". Beth's repertoire acted as a safety net in impromptu situations allowing her time to plan more thoroughly: "I resort to my tried and true activities while I give myself time to be thinking ahead".

In most instances, planning began with the realization that a group of children were to be taught a particular topic or subject. This realization engaged the teacher's repertoire of experience and knowledge. The repertoire was used to test the feasibility of initial plans. These may be accepted or rejected on the basis of past experience (see chapter seven). In some instances planning did not begin with realization. The data indicated that teachers sometimes developed instructional ideas from moments of inspiration. These ideas were usually geared to activities the teacher thought would be successful for a given group of children and may have stemmed from observations made by teachers in their daily lives. Several teachers in the study recounted examples of ideas they had developed for application in the classroom. In one example, a specific

idea for an art activity was elaborated into a complete integrated topic. Some ideas may be conceived in general terms while others may be conceived in near finished form. This phase of planning again involves the teachers' previous experience.

Having conceived an idea or recognized a planning problem, the teachers began a process of development. The idea was mentally rehearsed and tested against the teachers' repertoire. The data indicated that this phase also involved determining whether adequate resources or materials were available. The development phase was in part a case of determining what planning was possible given resourcing constraints of the education system, school and classroom. "I spend quite a bit of time hunting those (resources) up"(Elaine).

The teachers' concern for resources again highlighted their preoccupation with providing activities for students because many activities stemmed directly from the resources. In these instances, the teacher used the resources as the major source of activities with minimal modification. Some of the teachers' planning decisions solely involved the selection of a suitable text book. Such a decision was based on substantial experience and curriculum knowledge accumulated over many years of teaching. Text books were accepted or rejected on the basis of their coverage and application to the existing curriculum. Curriculum coverage was a prime concern in these cases.

The development phase also involved ensuring the teacher possessed sufficient subject knowledge to be able to teach the topic.

Several teachers commented that their first action when planning a topic they had not taught before was to consult curriculum documents in order to see what content was to be covered. The teachers regarded this type of background knowledge as crucial to their planning. In some respects this phase involved evaluating the feasibility of the new instructional idea against the capacity of the teacher to be able to deliver what had been planned.

The data also illustrated the importance of continual modification, adaptation and refinement. The teachers were frequently engaged in modifying their plans for different groups of students. An activity which worked for one group of children would not necessarily work for the next group. "Even if it's the same year level it's still a different situation" (Beth).

In most cases the study teachers completed the pre-active planning phase with some form of written plan, usually consisting of a few brief notes in the daily planner. Analysis of teachers' planning documents revealed that in most cases a few words were sufficient to unleash the teachers' vast experience and knowledge repertoire (see Annabel, chapter five). There were times when the teachers did not feel the need to write down their plans. Mental planning was seen as the most important aspect of planning. The written plan was only the "tip of the iceberg" as indicated by this excerpt from Donald: "If I've got an idea for say a semester programme, then it's something I've got in my mind but I don't necessarily write it down". Written planning represented the smallest

proportion of the total energy invested in planning supporting findings by several other researchers (McCutcheon, 1980; Yinger, 1978). Interview data suggested that the study teachers expended most mental effort when planning new topics and predictably, less effort when planning familiar topics. The latter may become so familiar that the only planning decision related to scheduling.

The final phase of the planning process involved the development of an activity or task for children to carry out and the implementation of the task. This phase involved interactive planning and evaluation of the success or otherwise of the task. The teachers' evaluation of the task was then included into the repertoire of knowledge and experience. Future planning problems of a similar nature would then be solved in part by the use of this newly acquired information. Over time, instructional ideas, were modified and refined to the point where they became so effective that the teacher included them in the repertoire in the form of routines (Yinger, 1980). The planning phase in these instances may involve little more than the repetition of these "tried and true" activities.

Planning among these teachers was a continual process of arriving at temporary solutions to planning problems, testing these against the repertoire of teacher knowledge and experience, implementing and evaluating the task. Planning solutions were subjected to an on-going process of modification, adaptation and refinement. The process of alteration was in part necessitated because activities were not always carried out as planned and students did not always achieve the desired

outcomes (Zeuli & Buchman, 1988). The above findings generally support the Yinger (1980) model of teacher planning. However, a planning model which more effectively describes the data from this study is proposed in the next chapter.

6.3. The extent of change in the teachers' planning after de-regulation

Immediately following de-regulation, the teachers continued to plan according to well established habits. Over time the teachers had gradually altered their methods but despite some minor variations, planning among the study group had stayed fundamentally the same after de-regulation. The teachers developed personal approaches to planning but displayed many similar traits in the content of their plans. They all used some form of daily and weekly planning in the form of the daily workpad. Observation verified that all teachers in School A used a daily workpad suggesting that some form of written short term planning was regarded as essential. Teachers regarded the daily workpad as their "bare minimum" planning. It was often undertaken at home, the night before and in some cases was completed a week in advance. Documentation in the daily workpad forced the teachers to think about what they wanted to achieve for the day. It engaged their repertoire of experience and activated their mental planning, culminating in a brief written entry.

Annabel, Caroline and Felix were still carrying out their long term planning in the same manner after de-regulation. Annabel still used

programming although she conceded that the level of written detail had diminished. After de-regulation, Caroline had found her programmes had become working documents for own use but repeated in both interviews that she still programmed because she needed to feel "thoroughly planned". Both Annabel and Caroline appeared to use rational models in their programming, although they sometimes avoided repetition by photocopying components such as objectives. Caroline's apparent use of a rational model may be partially explained by her relative inexperience. She was also particularly careful with her written plans because she was teaching as a specialist in an unfamiliar role. Both Annabel and Caroline used detailed daily work pad entries in order to operationalize their programmes.

Beth used the programming documents supplied by the education system described in section one (Appendix F). These documents came into common use prior to 1989 in response to teacher requests for clearer guide-lines for planning (Ministry of Education, 1987). Beth was one of the teachers who found it was a waste of her time to copy planning components such as objectives. Beth predictably used an approach which saved her from this "clerical exercise".

The need to document planning appeared to diminish with additional experience to the point where teachers such as Felix only required memory jogging references to a programme bank combined with a detailed daily workpad. Felix's planning had not changed with de-regulation because of an arrangement he had made with his principal.

Felix's bank of programmes included many of the departmental planning documents. He had used them originally for the same reason as Beth; they saved him unnecessary work. Felix demonstrated several times that he often had no need to refer to his planning (programme bank) or curriculum documents because of his substantial knowledge of the curriculum and the academic requirements of his students. Felix's repertoire of knowledge included a sense of where children should be and what they should be learning at given times of the year.

Among the study group, only Donald gave serious consideration to objectives in his planning (see chapter five). Prior to 1989, Donald had used a bank of programmes in a similar manner to Felix. After de-regulation, Donald began experimenting with his planning, culminating in the objectives-outcomes approach he was trialling during the study. There was also evidence that Donald planned mentally on a term basis, particularly in very familiar areas. Observation of Donald showed that he tended to be an innovative teacher in other areas of school life.

Even in an era where the sometimes odious task of submitting programmes for the approval of the school principal had passed, teachers continued the content and structure of their planning much as they had before de-regulation. In several cases the only significant change in teacher programming was the streamlining which occurred because these documents were now being prepared for the teacher's own use rather than for an outside audience.

Despite the similarities among the teachers' planning, it was clear

from the data that they had all developed a personal approach to their documented planning. All teachers in the study group believed their planning system was working effectively. Some (Caroline, Donald and Felix) expressed interest in different approaches. Beth trialled the planning formats used by the researcher which were designed along similar lines to suggestions made by the School A principal. De-regulation had not significantly affected the executive planning routines (Yinger, 1978) of the study group. The teachers appeared unwilling to change their planning habits unless better systems could be demonstrated or unless they made a professional decision to change. Consistent with findings by Weatherley & Lipsky (1977), Tuckwell (1980) and Berman (1986), change often meant an increased work load or a "settling in" period (see Donald, chapter 5) which in part explained the teachers' preference for well established, successful work practices.

6.4 The extent to which planning reflected an outcomes emphasis

Few teachers in the study had read the State education system's accountability policy (Ministry of Education, 1992). Several had been made aware of the outcomes emphasis by their principals. This had occurred either through discussion with the whole school staff during professional development or individually during teacher/principal outcomes reviews. At a professional development day at School A, the new principal outlined the changed emphasis in accountability and focussed on a section of the accountability policy (see Appendix H). This

section related to planning and accountability. It appeared that the principal regarded the planning and accountability issue as highly significant. At the same session the principal suggested an objectives-outcomes approach to planning similar to those the researcher and Donald were already operating (Appendix G).

That so few teachers had read the accountability policy appeared as an area requiring investigation. Although observation suggested that the teachers in the study group were effective classroom practitioners, the researcher noted that the teachers either did not have time to read the accountability policy or felt an apathy towards Education Department initiatives. Interview data suggested that the teachers' principal concern was for survival in the classroom. The daily rigour of this task preoccupied their thoughts so that they tended to rely upon their principal to acquaint them with changes in policy direction. The researcher observed feelings of apathy, mistrust and cynicism towards the Education Department among the teachers at School A and Felix at School B. This may partly explain the teachers' apparent lack of interest in the policy document.

Despite a lack of direct recognition of the outcomes emphasis in the accountability policy, the teachers in the study showed they were very aware of the importance of responding to students' needs. The teachers routinely gathered data in a variety of ways, including teacher-made tests, observation and the collection of work samples. Examples often occurred in the data where the teachers taught at the point of need. In this sense,

the teachers were responding to their students' learning outcomes. "If the kids haven't learnt something then you go back and do it again" (Caroline).

The teachers showed they were prepared to alter their plans if they believed the students' needs demanded it. In one example, Elaine had based her whole language programme for several weeks around her students' perceived difficulties with sequencing events in their writing. The study group displayed an acute awareness of the individual capabilities of their students and were able to structure their instructional procedures to allow for these differences. "While we work on the same thing they tend to work at their own rate" (Felix). Beth defined good planning in terms of the extent to which she had catered for the students' individual needs.

The teachers' habits included the regular assessment of students' performance against a criteria of their class work. School A and School B also had management information systems in place which required regular review of students' progress. In the case of School A, the principal and teachers discussed the students' progress based on standardized testing in Mathematics, Reading and Spelling carried out in February and November of each year. The principal of School B was concerned with the individual progress of each student, based on classroom data. These reviews of student performance focussed the teachers attention on outcomes.

Among the study group, only Donald had attempted formally to

apply an outcomes emphasis to his longer term planning (see chapter five). He believed this approach was working satisfactorily for him after a settling in period. The researcher also experimented with a planning format which attempted to link objectives directly to outcomes (see Appendix G and chapter eight). Although the teachers, with the exception of Donald, had not formally acknowledged the change in accountability emphasis, they did respond to the measured outcomes of their students. Despite their over-riding concern for planning activities, these teachers demonstrated a thorough understanding of the Plan-Teach-Evaluate cycle. Several teachers argued that their emphasis had always been one of evaluating outcomes. Each new round of planning was a direct result of the previous round of evaluation. Donald was unusual in that his first concern was for objectives and their subsequent outcomes. Although the other teachers appeared most concerned with developing a manageable activity, they continued to adapt and modify their plans with reference to their students' needs.

The teachers appeared satisfied with an outcomes emphasis because this was consistent with their established planning, teaching and evaluating practices. It appeared likely that since none of the teachers had read the 1992 policy document, the momentum for creating an outcomes emphasis in accountability meetings had come from the principals of Schools A and B. The intention of these meetings was the same in School C. Observation confirmed that this practice was common. Accountability for outcomes was being attempted by the professionalism

of teachers and principals who recognized and addressed their obligations.

6.5 Teacher perceptions of accountability

The study group felt that although they were not held directly accountable for planning they were accountable to themselves for this important aspect of their teaching. This form of accountability was related to the degree of confidence with which they could approach their teaching. The teachers believed they were obliged to be accountable for student learning and needed planning for the sake of their teaching performance. Caroline's comments typify the whole study group.

Caroline: I think you need to be accountable these days for children's learning and you need to be accountable for what you're doing.

Accountability had the potential to cause stress and anxiety among teachers. The task of programming was not as stressful after de-regulation but the teachers were concerned that the previous system might be replaced with a less palatable alternative. Of particular concern for the study group were rumours of a system of teacher performance appraisal. Close scrutiny of classroom performance was discussed as a serious concern for these teachers. The distinction between performance appraisal and performance management was not well appreciated by the study group. Teachers also appeared concerned with rumours circulating

about loss of security of tenure and individual contracts. The concern with one teacher was that she would be put under intense scrutiny in such a situation. This caused anxiety because this teacher believed she was doing a good job.

Despite these concerns, the study teachers often demonstrated a commitment to their accountability obligations by adopting their own accountability measures. Individual accountability for planning had been negotiated by some of the study teachers prior to and after de-regulation. The School A principal encouraged a negotiated accountability with teachers. The teachers were asked to outline their preferred options for demonstrating accountability. In several cases, the teachers included their planning in an accountability package, making their planning documents available for scrutiny in their outcomes meetings. Other teachers showed the principal samples of their students' work. These work samples included student test books in the case of Felix at School B, which were submitted to the principal after each round of testing. Work samples such as these provided tangible reminders of learning in the classroom and hence, outcomes for students. The willingness of these teachers to demonstrate their accountability highlighted their belief in their professional accountability obligations.

The teachers' obligation even extended in one case to a teacher making his programmes available for the scrutiny of a parent. While examples such as this are extreme, it demonstrates the depth of the obligation the teachers felt. The teachers' perceptions on accountability

were further revealed by the reaction to the first "outcomes reviews" held at School A (see chapter 5, Elaine). At this time accountability meant "programmes" to these teachers.

Several teachers expressed their frustration with feeling accountable for events outside their control. Although their planning was something they could control, plans could be significantly affected by events outside the classroom. Beth in particular commented on the effects outside influences could have on her classroom. In common with many primary school teachers, Beth felt a sense of responsibility or ownership for her students. She felt she was held accountable for her students' actions even when these occurred outside the classroom. The study group appeared very alert to the personal problems faced by students which mediated between teacher effects and student learning. The teachers believed it was necessary to make students accountable for their learning.

Uncertainty about future accountability procedures caused more anxiety than the actual thought of being accountable. The teachers believed a return to the past system of submitting programmes would not be beneficial saying they would prefer to explain their planning verbally rather than document their plans for someone else. The teachers all believed their planning was working well for them and having to prepare their plans for another audience would cause unnecessary work.

Teachers had spent a considerable amount of out of hours time on programming before de-regulation. This time was being used more

effectively since de-regulation. According to Felix, the time spent on programming for another audience was better spent on monitoring student outcomes. Felix's monitoring became his means of accountability in his outcomes meetings. Accountability for planning was being replaced with accountability for outcomes.

The data indicated that although there was an expectation and perception of accountability among these teachers, means of accountability were not standard among schools and even from one "outcomes review" to the next. Uncertainty existed among teachers and the principal of School A as to how to approach accountability. The principal remarked on several occasions to the researcher that he was not sure of the wisdom of de-regulating the submission of programmes for accountability. He believed some teachers had responded to de-regulation by abandoning their long term planning. According to this principal, some teachers were possibly not planning at all. Data from this study suggest the latter statement was not true in relation to the study group but it raises the question of the most appropriate approaches to accountability. The data suggested the previous system was not effective in ensuring the quality of planning. There had been inconsistencies as to how programmes were assessed. According to one teacher, her programmes had received only cursory attention from some principals.

Elaine: I mean some guys I'd give it to and they'd sign it then and there and hand it back.

The data indicated that the study group perceived their accountability in terms of both planning and outcomes. Accountability was accepted as a professional obligation although it was not regarded without anxiety, particularly where teacher appraisal styles of accountability had been mooted. In some respects, accountability came automatically to the teachers because their work frequently involved the measurement and evaluation of student performance. It could be also be argued that teachers are accountable every time they teach their class. The study group repeatedly described the need to be adequately prepared for teaching, implying accountability for planning. There appeared to exist a willingness on the part of principals to tailor accountability to the individual teacher. The opportunity now exists for teachers and administrators to work in a professional partnership to negotiate mutually acceptable systems of accountability which could include planning documentation as one of its features.

6.6. Accountability for planning within the Management Information System (MIS)

As was indicated above, the approach to accountability in the three study schools had some similarities. The system used in School A was most closely observed as this was the researcher's school and the outcomes meetings were experienced first hand. Data on the MIS at the other sites were gathered by interview only.

Each school principal scheduled meetings with teachers at various

key times during the school year. The purpose of these interviews in each school was to examine student outcomes. At School A, the principal provided an outline of his expectations for the meetings. The principal suggested that planning documents be brought to the first meetings for the year. These were to become the basis for discussion. The teachers' reaction at School A was described in chapter five. The first year of this study coincided with this principal's arrival at School A. Anecdotal evidence suggests that there had been no similar system of accountability in place under the previous principal.

During the first interview, the School A principal showed only a passing interest in the researcher's programmes. His concern appeared to be the extent to which planning was reflecting an outcomes emphasis in accordance with the accountability policy. The principal commented that most of the teachers at School A were "still in programming mode". Interviews confirmed that the above was a common experience among the study group. The bulk of the time during the first and subsequent reviews was spent examining and discussing student outcomes. The outcomes discussions were based on school-wide data and classroom data such as test results and work samples. Interviews with Felix indicated that the School B principal was concerned only with specific outcomes of all students. This principal was not concerned with examining planning documents, relying upon the teacher's perceptions in order to obtain an impression of student progress in any one classroom. Felix was concerned that the principal was "taking my word for it ... there's no

documentation". Evidence from School C was inconclusive because at the time of the second interview, Annabel had had limited opportunities to be involved in the MIS process at that site.

Although planning was regarded as essential by teachers and principals, teachers were not being held accountable for planning because of an outcomes emphasis which reflected the education system accountability policy. Principals assumed adequate planning was being carried out. This was not necessarily the case beyond the study group. The pre-memorandum system was not effective (see section five above) at maintaining a preferred quality of planning and nor was the present system. Should a system of accountability include accountability for planning? This question will be addressed in chapter eight.

6.7 Teacher planning and the School Development Plan (SDP)

Since the advent of the Better Schools Report (Ministry of Education, 1987) the major emphasis in school improvement has been on a collaborative approach based on consensus and devolution. The cornerstone of this approach has been that each school express their directions and priorities through the School Development Plan (SDP). The process of creating a SDP was observed only at School A. Interview data from Felix at School B focussed on the impact of the SDP.

Research question 7 sought to investigate how teachers related their planning decisions to the SDP. Since the SLP was developed with a collaborative approach, it was assumed that the teachers would "live" its

vision and priorities. The researcher contended that if teachers were committed to the SDP, its key features would appear in some written form in the teachers' planning documents. This proved not to be the case. Interview data were gathered which showed that teachers at School A were aware of the SDP and its priorities but that these were not documented. No documentation relating to the SDP was observed. The major effect the SDP appeared to have was that teachers' awareness about the school priorities was heightened.

The lack of documentation could suggest lack of commitment to the plan. This question was not explored by the researcher because it was not within the scope of this study but it does raise further questions. To what extent does a teachers' documentation indicate commitment to a course of action? Interviews suggested that under the previous system of accountability teachers' classroom intentions were not necessarily documented in the programmes. There was a sense of writing the programmes merely to please the principal. Teachers often reported that they did not follow their programmes but that they served mainly as a guide to a possible course of action rather than a script to follow closely. This phenomenon was confirmed by anecdotal evidence. Perhaps documentation does not equal actions? Given that the teachers of a school are heavily involved in the school planning process, their degree of commitment to the plan they have helped to create could be in doubt. Are teachers really committed to the SDP process or are they once again preoccupied with the daily problems of survival in the classroom?

6.8. Summary

Question 1. The values, attitudes, assumptions and beliefs which underpin teacher planning.

1. The teachers stated planning was crucial to successful teaching. The teachers placed a high value on planning.
2. The programming "mind-set" was still apparent among the study group.
3. The teachers related a "good day" to adequate planning (i.e. good planning=good day).
4. Achieving suitable classroom management was a predominant concern for the teachers. A managed classroom was a pre-requisite to student learning (i.e. good classroom management=good learning).
5. A "good day" was also defined in terms of student behaviour. Therefore a good day was related to classroom management (classroom management=good student behaviour=good day).
6. In written planning, the teachers focussed most attention on activities where their concern for learning would suggest they should have concentrated on objectives. Objectives were assumed or part of the teachers' mental planning.
7. The teachers used the departmental planners because they were saved from some of the tedious tasks of planning, particularly the transcribing of objectives. However, the teachers were not necessarily applying rational models in their thought processes. The teachers defined

"thorough" or "detailed" planning in terms of rational models.

8. Concentrating on activities achieved the dual purpose of student learning and a degree of classroom management.

Question 2. The cognitive processes of teacher planning

1. The basis of all planning decisions was the teachers' repertoire of knowledge and experience.
2. Pre-active planning began with the recognition of a planning problem (i.e. these students have to be taught this subject at this time) or with an idea which occurred to the teacher in a moment of inspiration.
3. The next phase of planning involved the further development of initial solutions to the planning problem. This phase included the search for resources which often led to ideas for activities. At this phase the teachers also ensured that their knowledge of the subject and the curriculum were adequate.
4. The next planning phase could involve some form of written plan such as brief notes in the daily workpad. These brief notes were the culmination of a great deal of mental planning and a considerable teacher repertoire.
5. Plans were translated into activities or tasks for students. These were implemented and evaluated. If successful, activities became part of the teachers' repertoire.
6. A continual process of modifying, refining and adapting occurred during planning. This involved planning ideas already in the teachers'

repertoire and new planning problems. Activities eventually become routinized and may be applied to a planning problem with no modification.

7. These findings support Yinger's (1980) model although a model which describes the data more effectively is proposed in the next chapter.

Question 3. The extent of change in teacher planning after de-regulation.

1. Immediately after de-regulation little change to the teachers' planning occurred, apparently because the teachers were satisfied with their present methods. Over time, some variation had occurred and several teachers appeared to have made professional decisions to effect more substantial changes to their planning methods. The momentum for these changes appeared to have come from needs perceived by the teachers rather than external influences such as the accountability policy.

2. The study group all used some form of daily and weekly planner. The daily workpad was regarded as the "bare minimum". Most teachers still used programmes in some form.

3. Donald was the only teacher who had significantly changed his planning focus. He experimented with attempting to measure student outcomes against his stated objectives. Donald used a bank of previous programmes for some of his planning. Some of these were based on the departmental planners.

4. At the time of the study, Felix used a bank of programmes as a mental reference combined with a detailed daily workpad. Prior to de-regulation

he had submitted photocopied programmes to his principal. This had been negotiated between Felix and the principal.

5. Annabel, Beth and Caroline used less detail than before de-regulation but were still in "programming mode". They used some photocopied material from the departmental planners and other material which they produced. Beth and Caroline used curriculum and other resource files as a basis for their plans.

6. Beth and Felix appeared ready to change their planning methods. Both were showing signs that they were modifying their programming approach. Beth trialled the planning formats used by the researcher. Felix had begun to express doubts about using his programme bank.

Question 4. The extent to which planning reflects an outcomes emphasis.

1. Few of the study group had read the accountability policy. Their principals had drawn their attention to the outcomes emphasis.

2. Teachers had no argument with an outcomes emphasis because they were in the habit of assessing student performance and basing their next round of planning on the outcomes.

3. Donald was the only teachers involved in the study who had experimented with an "outcomes" approach to planning. The researcher also trialled an outcomes approach (see chapter eight and Appendix G).

Question 5. Teacher perceptions of accountability

1. The teachers felt accountable to themselves. Planning gave them the

confidence to teach and ensured students' academic needs were met. A strong sense of responsibility towards student learning was observed.

2. Accountability had the potential to cause significant stress and anxiety among teachers. Concerns were expressed about performance appraisal as a means of accountability.

3. Teachers and principals had negotiated accountability packages.

Several teachers were independently demonstrating their accountability because they regarded this as a professional obligation.

4. Factors beyond the teachers' control, such as the students' home environment, often affected learning. Several teachers perceived an accountability for these factors. This appeared to relate to the sense of responsibility or "ownership" felt for their students by primary school teachers.

5. A return to the system of submitting programmes would not be beneficial. Time spent on better monitoring of students' performances would have to be spent on preparing programmes for the principal. The previous system had limited use as a means of accountability or for ensuring the quality of planning because there had been inconsistencies in the way programmes had been assessed.

Question 6. Accountability for planning within the Management Information System.

1. Accountability policy was being addressed by principal/teacher meetings.

2. Meetings with the principals at Schools A and B focussed on student outcomes and not on teacher planning as per the education system policy.
3. School A discussions centred around school-wide data, classroom data and work samples.
4. School B discussions were based on teacher reported student progress. The teacher at School B expressed doubts as to whether this system was appropriate as a means of accountability because it lacked documentation.
5. If planning is so important, should it be part of an accountability package?

Question 7. Teacher planning and the School Development Plan.

1. The teachers did not formally acknowledge the School Development Plan. Priorities were not documented.
2. Teachers reported that the SDP raised their awareness of school priorities.
2. The researcher questioned whether the lack of documentation indicated a lack of commitment to the SDP. Did documentation=commitment?

CHAPTER SEVEN

DISCUSSION

7.0. Overview

The present study has confirmed and added to the findings of several previous studies of teacher planning. The types and function of planning appear consistent with research by Yinger (1978 & 1980), Clark & Yinger (1979b) and Clark & Elmore (1979). The apparent paradox in teachers' planning practices, identified by several previous studies (Zahorik, 1975; Clark & Yinger, 1978; Yinger, 1980; McCutcheon, 1981; Shavelson, 1983.) was also indicated by this study. There was a discrepancy between how teachers should plan in theory and how they planned in practice.

The first section of this chapter describes the paradox of teacher planning where teachers use neither the rational (objectives) models of their pre-service education nor an outcomes model suggested by the present system level policy. A possible explanation for teacher reliance on an "activities" model is described in section 7:2. Accordingly the researcher attempted to develop a naturalistic model of teacher planning which would describe the teachers' planning more closely. As data were collected and analysed, teacher planning appeared to be a dynamic, evolutionary process, requiring a pre-requisite teacher repertoire of knowledge and experience (Yinger, 1978) and based upon continual modification, refinement and adaptation of tentative solutions to

planning problems. A naturalistic planning model, grounded in the data, is proposed in section 7.3. of the chapter.

7:1. The Planning Paradox

Despite the wide acceptance of rational models in teacher education institutions, several important studies of teacher planning (Yinger, 1980; McCutcheon, 1980; Shavelson & Stern, 1981; Brown, 1988;) have shown that experienced teachers rarely applied the rational models from their pre-service teacher education. Studies by Zahorik (1975), Yinger (1978 & 1980), McCutcheon (1980), Sardo Brown (1988) and Bullough (1987) found that most of teachers' planning energy was expended on planning activities.

In several respects this study supported the previous findings although the study suggests that rational planning models were not entirely overlooked among the study teachers despite a strong activities emphasis in their planning. Short term planning was principally activities based, consistent with Leinhardt's (cited in Sardo Brown, 1988) findings but when undertaking term or unit planning the study teachers used some of the elements of the rational model in a different order (i.e. not objectives first). The study teachers accepted that rational models were suitable in some circumstances such as when planning in greater detail than usual and when planning in a team or for relief teachers. The popularity of the Education Department planners (Ministry of Education, 1988 & Appendix F) appeared to have derived from a perception among

the study group that planning based on rational models represented the most thorough, detailed form of planning and because the formats relieved the teachers of repetitive aspects of planning, particularly the writing of objectives. The selection of the Education Department supplied planners may have allowed the teachers to concentrate on their main planning priority (activities) and did not necessarily indicate that the teachers applied rational models in their planning thought processes.

This study supported findings by Zahorik (1975), McCutcheon (1980) and Sardo Brown (1988) that teachers rarely considered objectives early in the planning process. Teachers did not concentrate on selecting learning objectives as a first planning step (as in a rational model), but concentrated on preparing activities for their students and scheduled these into the available time (Doyle, 1983; Brown, 1988). Although objectives were not planned first, the teachers in this study did think about them, though mainly in the context of an activity. All other planning thoughts and decisions were set in that context.

In view of the previous research discussed above it was not surprising that the study teachers focussed most of their planning energy on activities. That the outcomes emphasis of the Education Department accountability policy was overlooked by the a majority of the study teachers was unexpected. The teachers did not plan as they "should" in two respects. They did not apply rational (objectives) models from their pre-service education despite using formats based upon rational models and they did not apply an outcomes approach as suggested by the system

accountability policy.

If objectives were not the major focus of planning, why did teachers focus on activities? What benefits did an activities focus gain for the teacher? In attempting to answer these questions, another question will be examined in this chapter, namely, why has teachers' planning not changed significantly with de-regulation? Section 7:2. of this chapter examines the above questions and attempts to explain teacher behaviour in view of the changing task demands which have occurred as a result of de-regulation and the changed emphasis in accountability policy.

7:2. Planning in the Real Classroom

One explanation as to why teachers do not use the rational model in its conventional form is that it was designed as a curriculum model, principally for planning *new units or topics*.. Sardo Brown (1988) found that teachers were more concerned with revising and up-dating previous plans than with creating new lessons and activities. The teachers in this study operated as curriculum implementors and not curriculum planners. Brophy (1982) contended that the demanding, complex nature of the classroom limited the degree to which teachers could be expected to become curriculum innovators. Brophy highlighted the dependence teachers had on existing curriculum materials and teacher's guides. Although there was some evidence from this study that new planning was occurring and that planning for new topics could mean application of a rational model, the teachers were mainly repeating lessons tried before

or implementing the syllabus and not creating new lessons or solutions to curriculum problems. Much of their work consisted of presiding over routine activities which had been developed and streamlined over a period of years. In many cases, the routine lesson was the one which "went smoothly". Yinger found that planning for the teacher in his study meant the "selection, the organization, and the sequencing of routines"(1980, p.243). The routinization of the work of teachers was supported by this study. Routines occupied a significant place in the teachers' planning process which suggests a number of issues for discussion.

The importance of routines may be explained partially by the difficulties of coping with survival in the "real classroom". The real classroom is a complex, unpredictable setting where rational decision making may be precluded by the fast pace and immediacy of the teachers' interactions with students (Yinger, 1980; Shavelson, 1983; Doyle, 1983; Smith & Lovat, 1991.). The study teachers used planning to provide the framework for their classroom interactions and deviated from their plans as necessary. Preparing activities and presiding over routines gave the teachers the confidence to function successfully and assisted in the creation of a classroom behaviour setting which was manageable. In the managed classroom learning could occur.

Developing routine approaches to various aspects of the teachers' work may simplify this complex environment and make it more manageable and controllable. Teachers may be forced to deal with

problems which are beyond their control (see chapter 5, Beth). Therefore, routines are created for instruction, classroom management, evaluation and planning (Yinger, 1980). Does this mean that teachers never try new instructional ideas but merely repeat old favourites? How does the newly graduated teacher learn to cope with the difficult, new classroom environment by developing a portfolio of activities? How does the novice teacher plan for classroom management?

Assuming graduate teachers have been equipped by their pre-service education with a rational, objectives first model of planning, data from this study can be used to describe how a teacher develops an individual approach to planning (see Fig.12.). The data provided ample evidence of the unpredictability of the real classroom. Teachers found their carefully laid plans were often disrupted by student behaviour, administrative demands and a range of other factors beyond their control. To survive in the real classroom, the teachers were faced with coping with a multitude of problems in the complex, unpredictable classroom on the one hand and the complex task of planning on the other (top of Fig.12. i.e. Complex unpredictable classroom--Complex task of planning using rational models).

According to an information processing model of learning, the individual possesses a limited capacity to solve problems (Shavelson, 1983; Woolfolk, 1990; Gage & Berliner, 1992). The real classroom requires the teacher to rapidly solve a bewildering array of problems. "Teachers are continually bombarded with information and stimuli and are

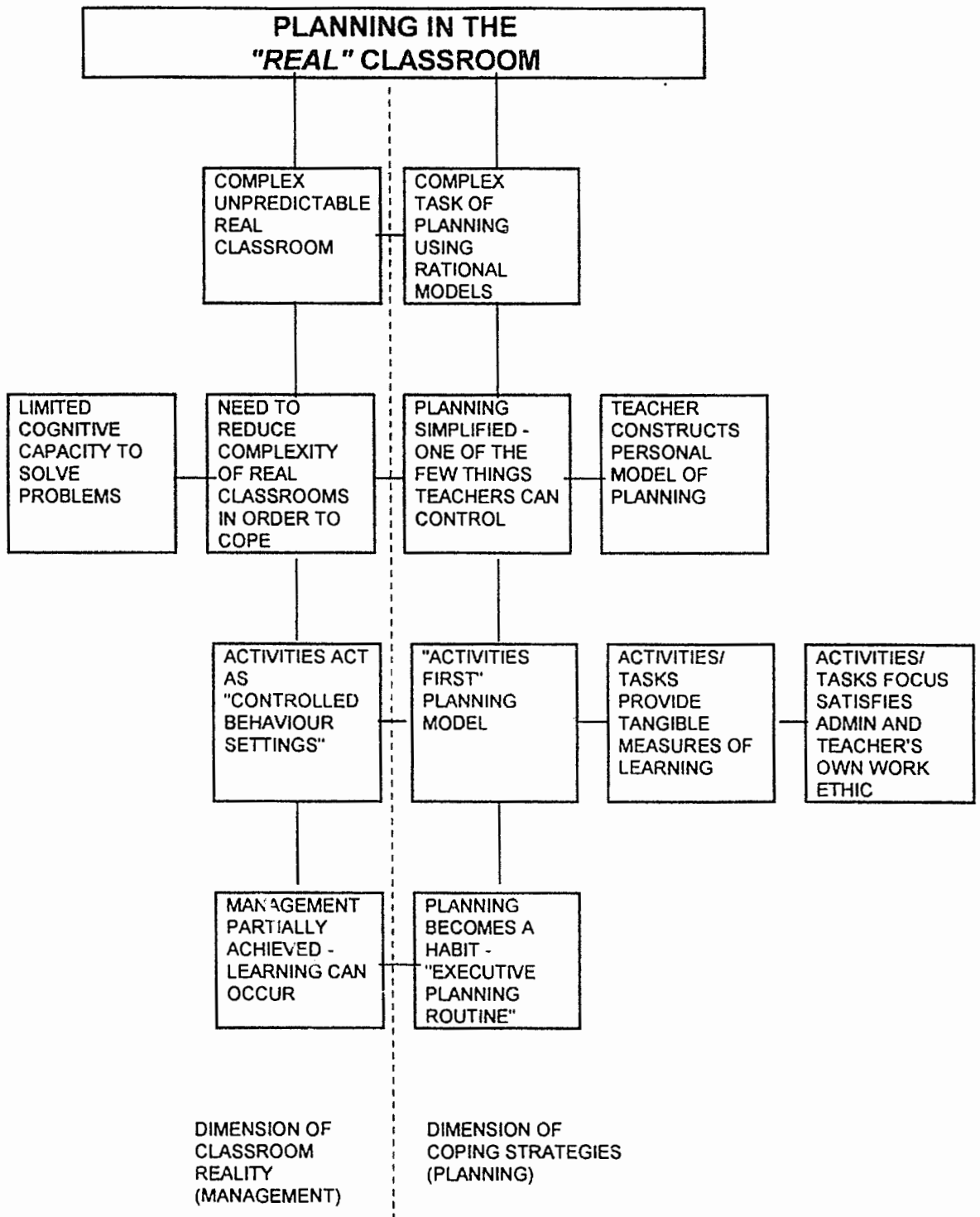


Fig.12. Planning in the Real Classroom

constantly making decisions" (Smith & Lovat, 1991,p.117). Therefore, there exists a need to simplify the complexity of the classroom so that the teacher is able to cope. Simultaneously, the teacher constructs a simplified model of planning (Shavelson, 1983; Bullough, 1987) because from the teacher's point of view, planning has the attraction of being one of the few things which can be controlled. This "construction" of a personal planning model is consistent with generative or constructivist learning theories (Wittrock, 1989; Gage & Berliner, 1992) which describe how the individual applies previous knowledge and experience to solve problems and create their own meaning from a learning situation. The teacher is engaged in learning to plan in order to cope with classroom reality. The active involvement of the teacher in finding solutions to the planning problem results in a personal construction which may differ from the rational model the novice teacher studied as an under-graduate (see next stage of Fig.12. i.e. Limited cognitive capacity to solve problems--Need to reduce complexity of real classrooms in order to cope--Planning simplified-one of the few things teachers can control--Teacher constructs personal model of planning).

The teacher's priority is to bring the classroom under control (Bullough, 1987) and the activity or task is seen as a means of creating a controlled behaviour setting (Yinger, 1980). As a consequence, the teacher quickly develops a personal planning model based on an activities first focus (next stage, Fig.12. i.e. Activities act as "controlled behaviour settings--"Activities first" model etc). The activities planning model was

remarkably consistent among the teachers in this study including Donald. Despite this teacher's reported interest in objectives and outcomes he still demonstrated an activities focus in a number of interview statements and in his planning documents. Activities also assisted the teacher by providing tangible examples of student work for the benefit of administrators and parents and to satisfy the teachers' personal work ethic. Completed tasks could be sent home for parental comment and approval or shown to the principal as part of an accountability process (see chapters five, six and eight). The teachers' work ethic emerged in several instances during the interviews, most notably where the teachers expressed a desire to "cover" the syllabus or to complete tasks.

All teachers in this study believed that learning could only occur in a "managed" classroom (see final stage, Fig.12. i.e. Management partially achieved-learning can occur--Planning becomes a habit-"executive planning routine). Activities assisted in achieving the managed classroom and hence allowing learning to occur. The potentially chaotic classroom was, to some extent, brought under control. As was established earlier, what most concerned the teachers in their planning was the activities they intended to initiate. The data supported the notion that the teachers endeavoured to maintain a flow of activities or risk management problems, particularly behavioural problems. Management concerns appeared to be of paramount importance. Other researchers have confirmed the management function of planning (Yinger, 1980; Shavelson, 1983; Doyle, 1983). Activities in this sense are analogous to

the control rods in a nuclear reactor. The removal of the "control rods" (activities) may result in an explosion.

Over time, the teacher develops personal planning routines or executive planning routines (Yinger, 1980) which require minimal new in-put. The activity not only exerts some influence over the students but also will affect the behaviour of the teacher during the lesson. Thus the complexity of the classroom and the planning task are both reduced by the emphasis on activities. The activity provides the framework for student/teacher behaviour and interaction. The teacher's executive planning routines, once established, become deeply embedded into the teacher's belief and values system. They become part of the basis for all planning in the future (see section 7: 3).

The de-regulation of teacher accountability for planning and the outcomes emphasis in accountability policy had not led to substantial change in the planning practices of these teachers partly because of the deeply embedded teacher planning habits (executive planning routines). The existence of these planning habits was the most significant factor in explaining the limited change in teacher planning behaviour at the time of de-regulation and in the ensuing years. The teachers' planning habits had served the purpose of simplifying the planning component of their work and since the study teachers believed their planning practices worked successfully for them they saw little reason to change. Since the teachers in this study appeared to be able to cope successfully with the real classroom, the assumption can probably be made that their planning

methods were effective. Some individual teachers in the study group admitted they did not cope well with change but this was not a widespread observation and cannot explain the minimal change since de-regulation.

Some signs of change had been present prior to de-regulation but the momentum for these changes had come from teachers and principals and not from the system level. Several teachers had already negotiated accountability for planning which departed from traditional programming practices. These teachers tended to continue their planning practices as before after de-regulation. Some of the study group were beginning to modify their planning habits but these changes were driven more by the teachers' professional concern for improving their work practices than by a change of policy. It appears that providing the setting for change (de-regulation) did not guarantee that change would be adopted unless consensus with the participants was achieved.

According to Shavelson (1983) teachers act rationally "within the constraints of their information processing capabilities"(p.393). Since the research shows that rational models are not widely practiced their relevance requires examination. Research by Neale et al (1983) found that teachers displayed positive attitudes towards rational models but only believed they were relevant for novice teachers. The study teachers had used these models prior to de-regulation and still regarded them as relevant indicating that, at least in theory, the rational model had survived within the teachers' planning mind-set (see section 7:3).

Planning "thoroughly" was in part defined in terms of applying a rational model.

In most circumstances the teachers tried to minimize the repetitive aspects of written documentation. Components such as objectives were photocopied where possible and avoided at other times. Checklists of objectives were often used as reminders but were not necessarily related directly to an activity. Predictably, daily plans *never* included objectives because knowledge of these had been internalized to the extent described in the previous chapter. The teachers thought about objectives but, as was discussed above, the majority of their planning energy was expended on activities.

7.3. The Cognitive Processes of Teacher Planning--A Naturalistic Planning Model

Introduction

The ultimate goal of teacher planning seemed to be one of developing an activity or task for students to complete so that learning could occur in a controlled setting with minimal management problems. This study has confirmed findings by several researchers (Morine-Dersheimer, 1976 & 1979; Morine-Dersheimer & Vallance, 1976; Smith & Sendelbach, 1979; Yinger, 1978; McCutcheon, 1980) that the richest and most prevalent form of teacher planning is mental planning. What cognitive processes does the teacher undergo in order to translate

instructional ideas into a task? Analysis of the data from this study suggested that the Yinger (1978) model approximated the way in which teachers plan but also revealed several instances of divergence from Yinger's model. This section describes a naturalistic model of the cognitive processes of teacher planning grounded in the study data (Fig.13.).

The Planning Platform

The Yinger model depicts planning as a sequential process, progressing from Problem Finding to Problem Formulation/Solution and finally to an Implementation, Evaluation and Routinization phase (see chapter three). While the study data supported the basic components of Yinger's model some variation appeared in its process and structure. The data suggested that the teachers arrived at planning decisions in a *non-sequential* manner. Planning solutions appeared to evolve from a large base of previous knowledge and experience. In the proposed model the teachers' previous knowledge and experience is termed the *planning platform*. The planning platform to some extent parallels Yinger's "problem finding" stage (1980, p.248) and Walker's (1971) curriculum platform. The planning platform includes several additional elements to those described by Yinger, comprising four broad, inter-locking components; *teacher habits, teacher beliefs, teacher knowledge and teacher experience*. The data indicated that the teachers' planning platform was the principal factor which determined the final

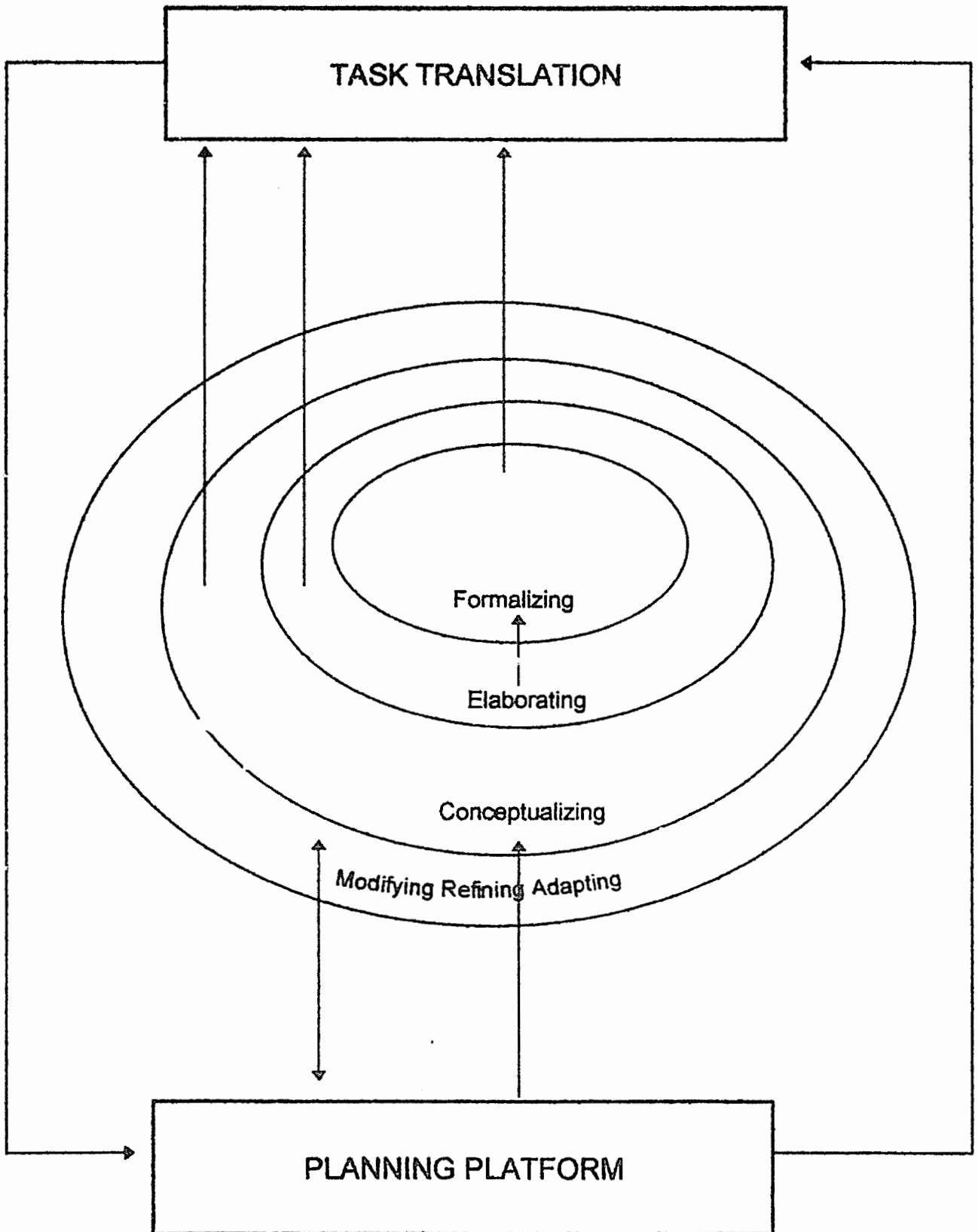


Fig.13. The Cognitive Processes of Teacher Planning

A Naturalistic Model

form of plans. All planning decisions were made with reference to the planning platform. The planning platform included the teachers' customary planning habits or executive planning routines. These had been developed over time and involved considerable experience. The executive planning routines were deeply established and only likely to change if the individual teacher perceived that change was necessary. There was evidence in the data of other teacher habits which dealt with other aspects of their work such as their classroom management systems, their instructional habits and their evaluation techniques. Yinger described teachers' instructional habits as another example of teacher routines (see chapter three). It appears teachers routinize several aspects of their work, other than planning, in order to simplify their complex work environment (see previous section). Other teacher routines may warrant investigation.

The teachers in this study had well developed planning habits but at times they used an eclectic approach to planning, including using quite novel approaches. This flexibility suggested that the teachers were able to call on a wider range of background knowledge, other than established executive planning routines, to solve a given planning problem. The teachers indicated they would revert to rational planning models if they perceived the need (see section 7:1.).

The planning platform included the values, attitudes, assumptions and beliefs described in the previous chapter. These were also acquired over time and were normally resistant to change, except where a need

was perceived. In some circumstances, the teacher's belief system may work against change if sufficiently challenged. The beliefs component of the planning platform also included pedagogical knowledge. The researcher assumed that these beliefs were acquired initially from the novice teacher's own schooling and from teacher education programmes and were developed and enhanced by professional development and experience over the teacher's career.

The planning platform also involved teacher subject knowledge. In the early years of teaching the subject knowledge may be limited but will develop as further planning experiences are added to the teacher's repertoire. The teachers in this study were concerned with maintaining adequate subject knowledge particularly when dealing with unfamiliar topics. There was also evidence that the teachers believed their own subject interests and knowledge were likely to result in different outcomes in the classroom, confirming Deschamp's (1983) findings. For example, a teacher with a particular interest and expertise in Mathematics was more likely to give this subject additional emphasis. Teachers with particular knowledge were also likely to teach the subject more effectively.

An important aspect of the teacher knowledge component of the planning platform was the teachers' knowledge about their students, equivalent to some degree to Yinger's *teaching goal conceptions*. The teachers all reported that student characteristics such as year level, ability, home background and interest level were crucial factors in their

planning. Two teachers consistently referred to the student characteristics as a prime consideration. One teacher altered her plans from year to year, despite at times teaching the same year level because of her beliefs about individual student characteristics. Another teacher was prepared to alter her current plans in order to cater for her students' interests. All teachers reported the need to be sensitive to student achievement when beginning a new planning cycle. Knowledge of appropriate expectations for various age groups is also applied in the planning process. This essential knowledge about students was a key component of the planning platform.

Teacher knowledge of the curriculum emerged as another significant factor influencing the planning platform. The study teachers all demonstrated thorough knowledge of the curricula for their year groups. It was apparent that some of the teachers knew the curriculum so thoroughly that they required only a brief reference to their planning documents to recall a host of past experience teaching each subject. Felix had refined his planning in Mathematics to the point where his principal decision was to select a suitable text which formed the basis of his programme. This teacher had been through a more conventional planning process so often and knew the curriculum material so well that the selection of the appropriate text was a deft decision, representing the accumulation of many years of experience and knowledge. With such a demonstrated knowledge of the curriculum it is not surprising that Felix saw little merit in transcribing some planning components such as

objectives when they appeared elsewhere in his bank of programmes.

Where possible all study teachers avoided the repetitive documentation of their planning. As was described in the previous section, the teachers regarded the documentation of some planning elements, particularly objectives, as unnecessary because of the intuitive knowledge described in the previous chapter. This intuitive knowledge of objectives is another element of the planning platform.

Teachers also drew detailed knowledge of the available resources and the school environment from the planning platform. Several study teachers reported that one of their earliest actions in the planning process was to search for suitable resources. This involved obtaining resources from outside the school at district resource centres as well as resources available within the school. There was evidence that teachers constructed their own resources when they could not find suitable material. These resources, often in the form of worksheets, had the additional advantage of being tailored to the needs of the teachers' current class. In some instances the resources constructed one year were also used in subsequent years, albeit with some modification.

Another significant component of the planning platform which emerged from the study was the deep seated concern that teachers had for establishing and maintaining appropriate behaviour in their classes. As was discussed in section one, the concern for classroom management appeared consistently in the data among all teachers. A superficial analysis of the data may have suggested that this was the teachers' main

concern, not their students' learning as would ideally be expected. As was discussed previously (chapter five), the teachers often described a "good day" in terms of the students' behaviour. Probing during interviews revealed that student learning was regarded as the desired instructional *end*, while the management of the class was regarded as one of the essential *means*. Management concerns are included in the planning platform because no planning decision was made without reference to the manageability of a given planning solution and because the study teachers believed learning could not occur without management.

The planning platform functioned as the foundation for all planning decisions. Solving a planning problem may have involved no more than the selection of a task directly from the planning platform (see Fig.14.). This was one of the most common "pathways" through the planning model.

In these instances, the teachers drew on a bank of previously trialled, successful activities and translated them into a task without entering the cycle of modification, refinement and adaptation. This pathway (Fig.14.) through the planning process is depicted as an arrow passing directly from the planning platform to task translation. This was the simplest example of the process of solving a planning problem but normally, drawing a task directly from the planning platform involved some degree of modification. Even a previously trialled task may have been modified to some degree for different groups of students. The teacher drew on their planning platform to carry out

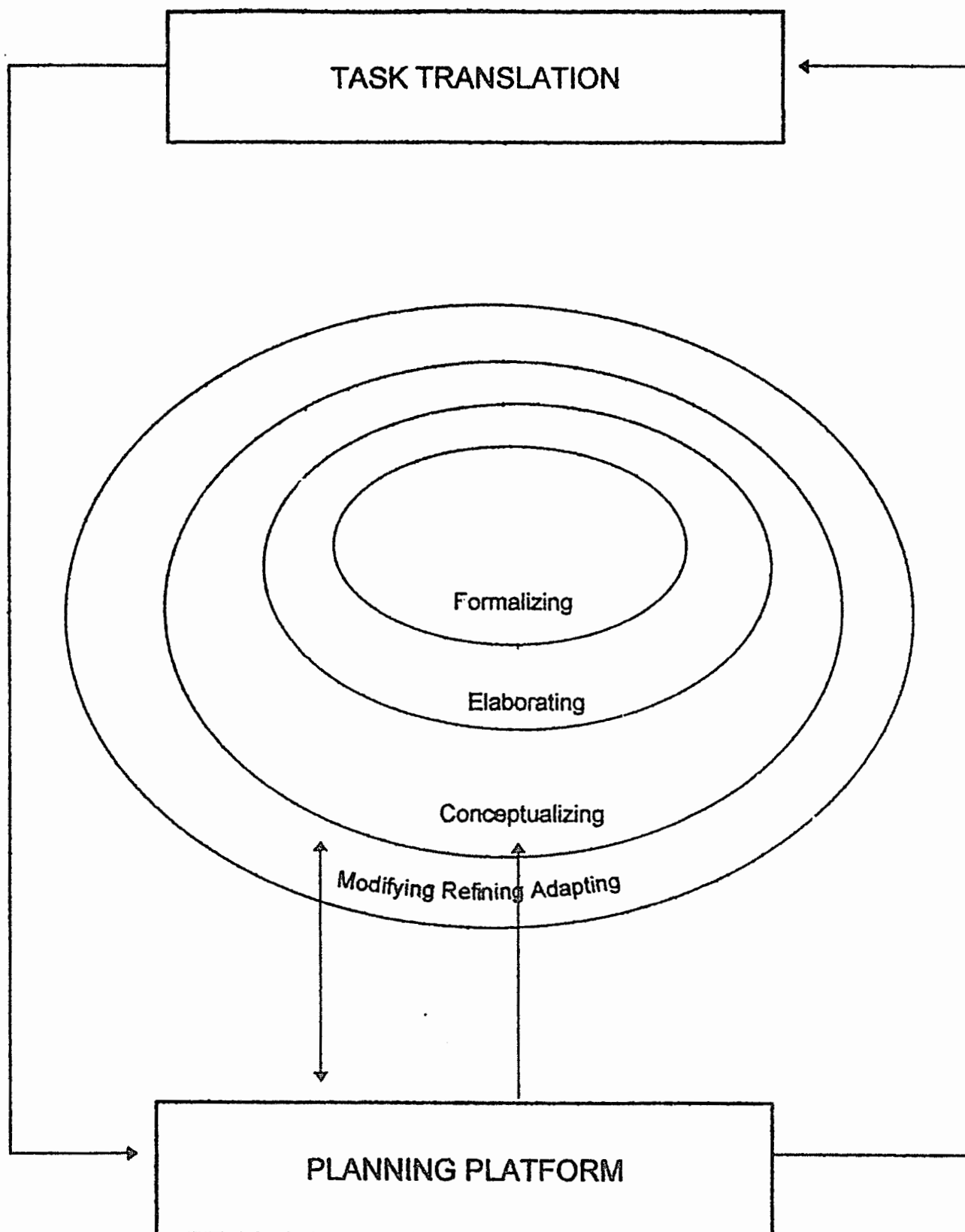


Fig.14. Task translation directly from the planning platform

these modifications.

Modifying, Refining and Adapting

The model depicts the other processes (conceptualizing, elaborating, formalizing) as emerging from a pool of modifying, refining and adapting. This aspect of the model is crucial to the whole planning process. It is dependant upon constant reference to the planning platform. This was seen as an on-going process engaged in continually by the study teachers regardless of their previous success with an activity or whether or not they were teaching the same year level.

Conceptualizing

The planning process usually began with the realization that a particular group of students were to be taught a particular topic or subject. This is part of Yinger's "problem finding" stage. A planning problem is identified which Yinger (1980) characterised as "Here is your classroom. Here are your students. Teach them." (p.247-248). The present study showed that in some instances planning did not begin with the realization of a planning problem. Instructional ideas sometimes developed in isolation from a specific planning problem. In these cases the teachers developed instructional ideas from moments of inspiration. This is termed the *conceptualizing* phase of the planning process. It involves the teacher's inspiration as well as the realization of a planning problem.

The instructional ideas generated from teacher inspiration may be geared to activities the teacher believed would work for a given group of children or may be stored in the planning platform for future reference. Some innovations were conceived in general terms and developed deductively into a range of specific activities. In other cases the teacher thought inductively, developing an integrated topic from a specific idea for one activity. Some activities were conceived in near finished form, requiring little modification and others developed spontaneously from the interests of the students. The former instance is depicted (Fig.15.) as a planning pathway leading directly from the conceptualizing phase to the task translation phase. This pathway through the model was not common among the study group but merits description because of its highly innovative nature and because it is in part by these means that new planning solutions were added to the planning platform.

The conceptualizing phase of planning may also draw on the planning platform, particularly the teacher's management concerns. Successful innovations become part of the planning platform. Teachers will develop differing conceptions of planning problems because of their differing planning platforms. This is particularly true in relation to divergent teacher interests and knowledge (Deschamp,1983).

Elaborating

Having conceived an idea or a planning problem, the teachers began a cycle of *elaborating*, similar to Yinger's (1980) "problem

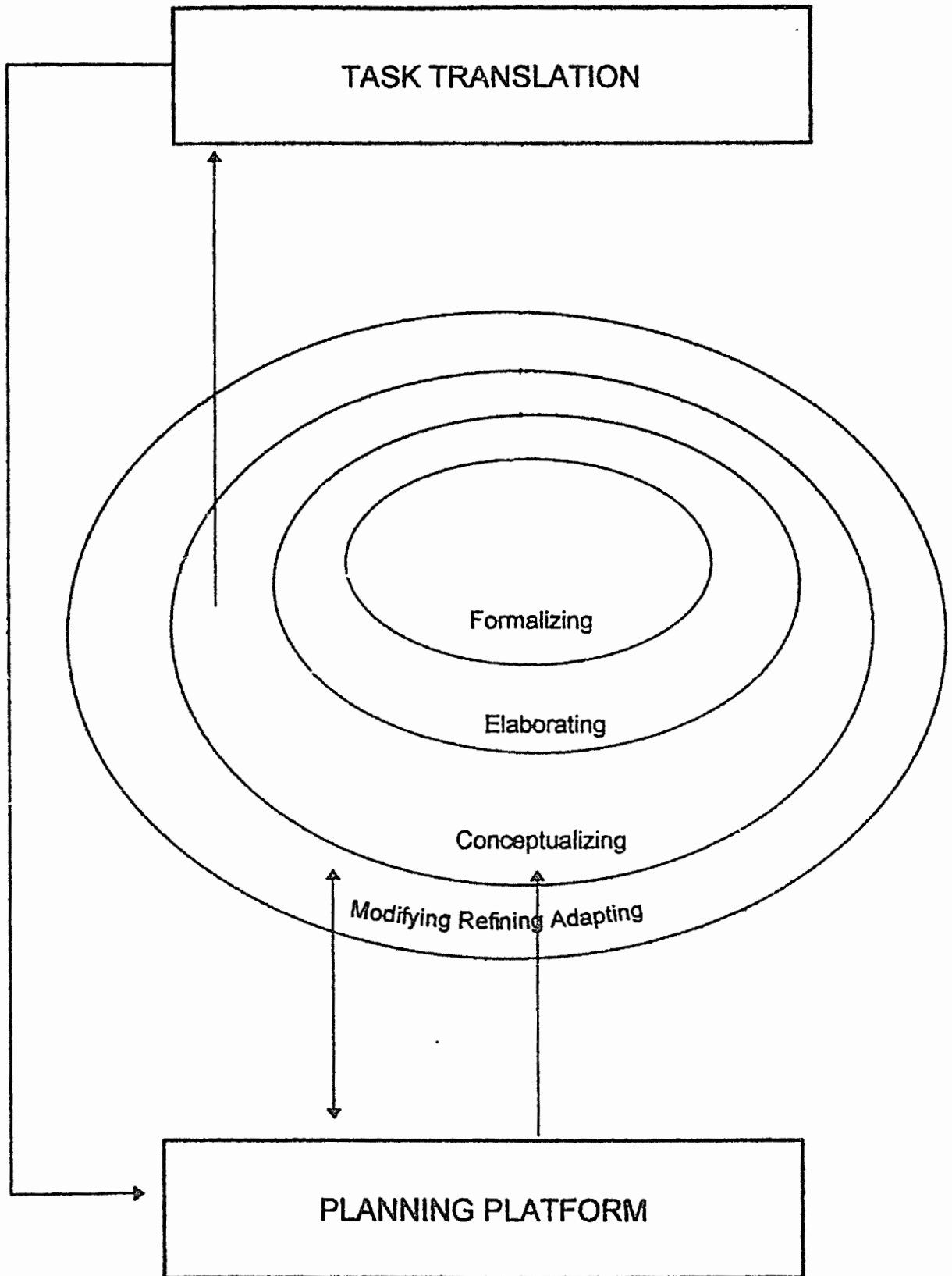


Fig.15. The conceptualizing pathway

formulation/solution (design)" phase. The planning idea was mentally rehearsed and tested against the planning platform. Yinger described the cycle of elaboration as a process of arriving at tentative solutions to the planning problem. The solution may evolve or emerge through a process of mental rehearsal or by trial and error. In this phase, the teachers referred frequently to their planning platform and accepted or rejected new instructional ideas based on the perceived chance of success. The elaborating phase was the stage where serious modifying, refining and adapting occurred. As with the Yinger model, elaborating may take from a few moments to several weeks of teacher thinking. Some ideas may require considerable modification while others may be readied rapidly for the next phase.

The elaborating phase can be regarded as a form of feasibility study. The teacher applies the base of knowledge from the planning platform and determines what is "possible". Instructional ideas may be rejected because they are not feasible. One significant criteria for the rejection of an activity may be its manageability. Consistent with Bullough's (1987) findings, activities which the teacher believes may lead to behaviour difficulties may be rejected on that basis alone.

The elaborating phase also involved the selection and evaluation of resources. Availability of resources was a prime consideration in determining the feasibility of an instructional idea. The study teachers expended considerable energy ensuring adequate resources were provided. The teachers would often develop their own materials when

suitable resources were not available. The focus on resources is further indication of the concern the teachers had for managing the class by keeping students occupied. Seatwork activities, especially those involving various types of worksheets, were a preferred means of occupying students. The teacher's knowledge of students was also applied in the elaborating phase. Some instructional ideas were rejected as not feasible when the teacher considered the students' interests and abilities. Again, student interest levels related to their predicted motivation during a lesson, which in turn may have affected the students' behaviour.

It was also during the elaborating phase that the teacher ensured adequate personal curriculum and subject knowledge. Teaching an unfamiliar topic or year level involved the study teachers in this process. This may have consisted of an examination of the available teacher resources, reference material and curriculum guides. No teachers reported that they would refer to colleagues for assistance at this phase although there were instances observed where teachers exchanged ideas and resources. This could be explained in terms of the independence of the study group and their relative level of experience.

The elaborating phase was also included as a distinct pathway through the planning model (Fig.16.). Planning solutions went through an elaboration phase and proceeded directly to the task translation phase. In these instances, the teacher was seeking to modify previous plans or refine tentative ideas for new planning problems. Written planning did

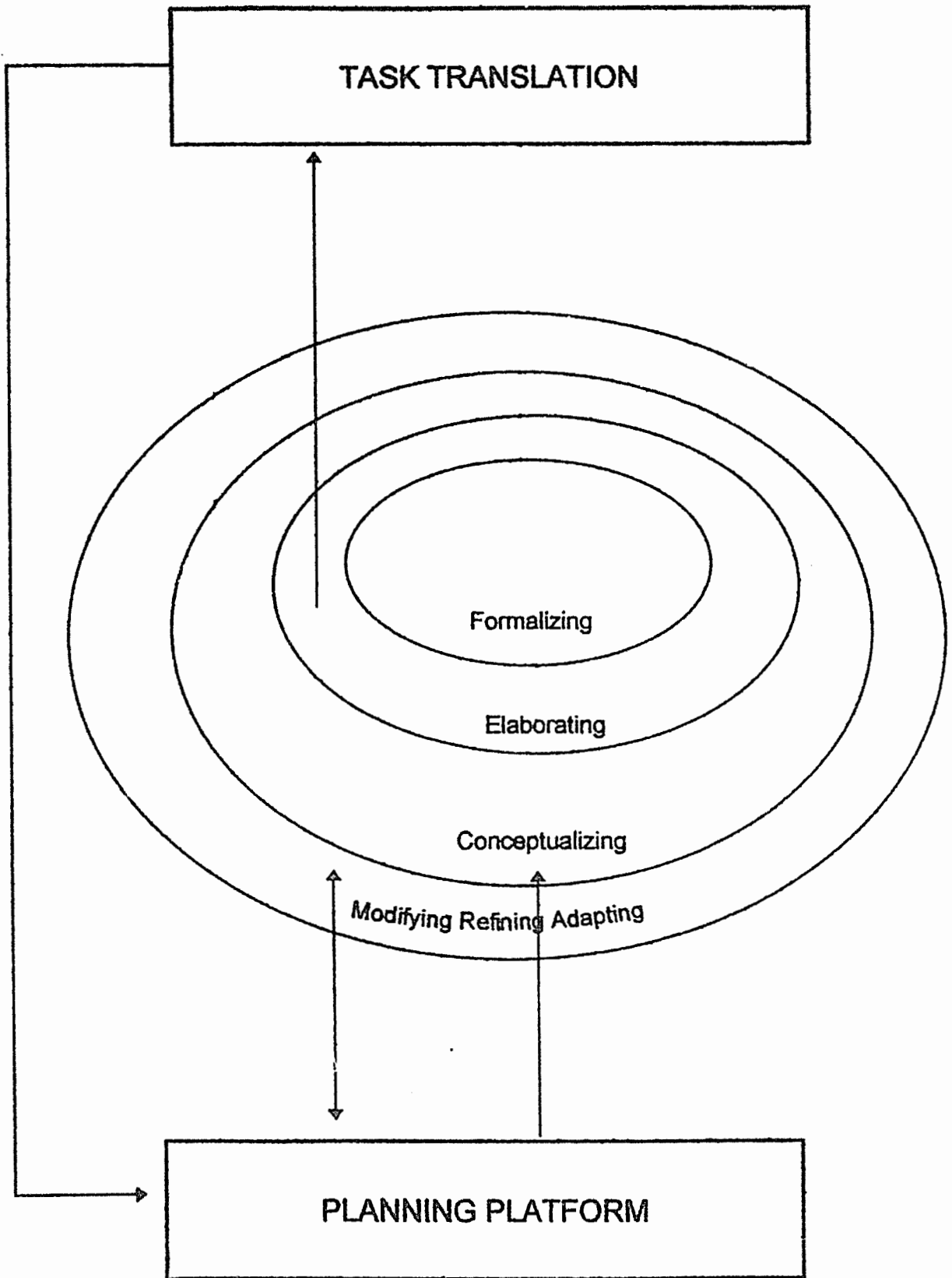


Fig.16. The elaborating pathway

not appear in this pathway. This process was observed as a common form of planning, applied by all of the study group. The elaboration pathway was most applicable in cases where the teacher wished to modify a planning solution from the planning platform and was so familiar with the idea that it did not require formalizing and could be translated into a task after modification for the present group of students.

Elaborating concluded either with entering the formalizing phase of the model or when instructional ideas were translated directly into tasks following elaboration.

Formalizing

Pre-active planning with most of the study teachers usually culminated with the production of some form of written plan. This phase is termed *formalizing* in the model. The teachers' written planning was usually entered in the daily workpad as brief notes relating to an activity. When longer term planning was used, the "programming" format was preferred, either via banks of old programmes used as references or new programmes as described in the previous chapter. The teachers' written planning also included daily and weekly timetabling of subjects, instructional periods and events. The formalizing phase was significant because although it consisted mainly of brief notes, the teachers usually believed they needed to write something down in order to assist the organization of their thoughts. As was seen in chapter five (see Annabel), a brief note in the daily workpad represented

the culmination of a considerable volume of thoughts, beliefs, knowledge and experience invested by the teacher in solving the planning problem. By formalizing these thought processes, even as brief notes, the teachers felt "organized", thoroughly prepared and therefore, more confident. The notes functioned as the key to the teacher's array of knowledge and experience contained in the planning platform.

The formalizing pathway (Fig.17.), involved the teacher proceeding through all stages of the model. This pathway was most likely to occur among inexperienced teachers or where the experienced teacher was teaching an unfamiliar topic or working as part of a team. Teachers often sought to minimize the formalizing phase of planning but it was still regarded as significant because the brief notes assisted with mental preparation.

Task Translation

The teachers completed the pre-active stage and entered the interactive stage of planning with the *task translation* phase. Activities were designed, mentally tested and modified in the previous phases of the model and now the teachers' instructional ideas were converted into tasks for the students to complete. Teachers in the study regarded this phase as the most crucial because it was the phase which provided the tangible reminders of student achievement. Student work could be collected or observed and outcomes evaluated, allowing the next planning cycle to begin. The teachers' concerns about classroom

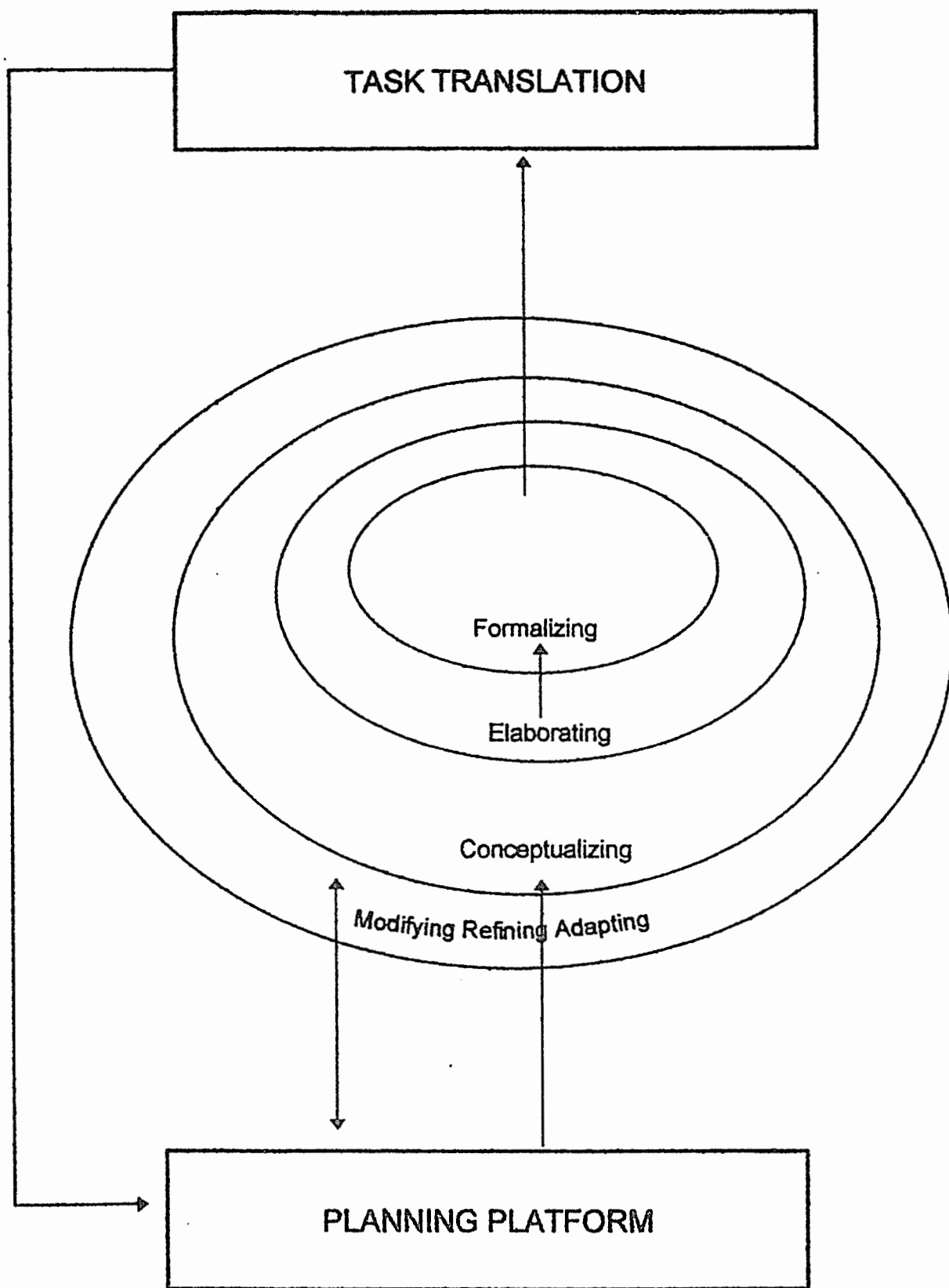


Fig.17. The Formalizing Pathway

management were again prevalent in this phase. The task must be managed well for it to be successful.

The task was implemented and the teacher was engaged in evaluation of its success or failure. The study teachers all reported that they spent considerable effort on evaluating student achievement. In doing so, they were also evaluating the effectiveness of the tasks they had given their students. The success or failure of the task was then consigned to the planning platform and would exert substantial influence over future planning decisions. Successes may be used again in their original form or may proceed through the modification process as described above. Some activities may become routinized, as also described by Yinger (1980), and be used as immediate solutions to planning problems such as in impromptu situations. Failures may also be included in the planning platform. The teacher may decide that the activity was fundamentally sound and that it was not successful because of other factors such as student interest and behaviour. In these instances the activity may be retained for future modification.

7.4. Summary

The apparent lack of attention to objectives did not mean these teachers were unconcerned with students' learning. This study has shown that the teachers were very aware of student learning but that they had chosen a planning model (activities first) which was most likely to allow learning to occur because it performed the ancillary function of

assisting classroom management. The teachers had recognized the realities of the real classroom and had constructed their own solutions to the planning problem. At the same time they had simplified a complex environment and a complex problem (planning) so that other problems outside their direct control, such as student behaviour, could be managed. Over time the teachers in this study had developed planning routines which were effective for them. These routines ranged from the use of banks of previous planning documents which acted as reminders to the application of more traditional rational models when planning new topics. It was the effectiveness of these planning routines which made it less likely that the teachers would quickly adopt new approaches such as an outcomes emphasis.

Considering the potentially chaotic real classroom, the complexity of the planning problem and the teachers' own planning constructs, the teachers in this study behaved "reasonably" (Shavelson, 1983, p 393). In a de-regulated work environment where, superficially, teachers could choose not to plan at all if they wished, planning remained one of the most significant aspects of the teachers' work and one of the teachers' most significant cognitive processes.

The present study highlighted the significance for planning of the teachers' repertoire of knowledge and experience, termed the planning platform. This component of the teachers' mental lives was the basis of all planning decisions and was a constant reference point throughout the modifying, refining and adapting process. In some instances, plans

developed from moments of inspiration as well as through means similar to those described by Yinger (1980). Ideas generated from inspiration could be translated into tasks with minimal alteration.

Some plans stemmed directly from the planning platform and were translated into tasks with no modification. Other plans were modified through a process termed elaboration. Elaboration did not necessarily result in written plans. The formalizing pathway (involving written plans) was most common when teachers were teaching new or unfamiliar topics or when working as part of a team. This pathway included all phases of the model.

CHAPTER EIGHT

CONCLUSIONS AND IMPLICATIONS

8.0. Overview

The present study has resulted in a number of implications for teachers, administrators, education systems and teacher education institutions. The chapter addresses these implications and includes recommendations in each section. Some of the content of this chapter may contribute to a notion of what constitutes "best practice" for teachers and administrators.

8.1. Conclusions relating to planning

Implications for teachers

Teacher planning in the pre-active phase remains a complex, decision making task for teachers representing rationality set against the potentially non-rational system of the real classroom. This study showed that the classroom was a highly complex setting where teachers were confronted daily with a succession of problems which were often beyond their direct control. A teacher's intervention was required in order to maintain an appropriate learning environment. Given the limited cognitive capacity of individuals to solve problems, the demanding environment in which teachers work and the requirement that a measure of order be maintained so that learning may occur, it was not

surprising that teachers developed personal planning models which differed from the rational models they acquired during their teacher education. These models provided them with the additional benefits or comfort perceptions of a managed class and learning opportunities for students. The activities-first planning model, employed predominantly by the study teachers, was perceived as an efficient, effective solution to the planning problem which delivered benefits to the teachers and simplified the relatively complex task of planning according to rational models.

Despite the apparent benefits of an activities-first model, an objectives-outcomes approach may be more appropriate given that teachers will probably be held accountable for student outcomes in the foreseeable future. As well, additional attention given to objectives in the pre-active planning phase combined with the collection and analysis of data on actual student outcomes may have the potential to improve the effectiveness of teacher planning with accompanying benefits for student learning.

A possible obstacle to the acceptance of an objectives-outcomes approach is the need to alter the "activities mind-set" which formed part of the study teachers' planning platform (see model, chapter seven). The study teachers appeared to require justification or to perceive a need before change would be effected. Their attitude to change could be characterized as "if it's not broken, why fix it?". This did not imply that the teachers were necessarily apathetic or reactionary in their attitudes

towards change. The study showed that the teachers' were often prepared to alter their plans if the need arose. Planning not only involved a number of habitual thought processes and routines and but also involved substantial reflection and modification at various stages of the model (see chapter 7). Attempting to change a fundamental teacher task such as planning would not necessarily be met with resistance if teachers could be encouraged to apply the same readiness to be reflective and to modify their practices that they regularly applied to the planning process. Planning of all types involved a process of frequent modification and there was evidence from the study that some of the teachers would question and then alter their usual methods as a result of professional decisions which they made about their work. By capitalizing on teachers' willingness to reflect when making professional decisions and their willingness to modify their plans, the activities mind-set could be replaced gradually with an objectives-outcomes approach to planning.

Altering a well established mind-set from an activities oriented approach to an objectives-outcomes approach would likely be a slow process involving a period of "settling-in" and may not occur at all with some teachers. A change of this magnitude would not necessarily involve the abandonment of old, workable habits. Habitual practices such as the use of banks of programmes and rational models, were part of the teachers' planning platform (see chapter seven). This part of the naturalistic model formed the basis of all planning decisions. In the transition towards an objectives-outcomes approach, teachers could be

encouraged to continue to apply some of their habitual practices as they became accustomed to new planning routines and habits. A gradual process of change such as this would be more likely to succeed, particularly when teachers were required to re-learn familiar practices.

A management function for activities is not precluded under an objectives-outcomes approach although under this conception, management assumes a more secondary role. As can be seen in chapter seven, the teachers' pre-occupation with the task and the management of the task was a component of the planning platform. Teachers should be encouraged to place tasks and management into a more appropriate perspective and view them as means to an end and not ends in their own right. The manageability of an activity remains an important consideration but teaching and learning would probably benefit from teachers re-directing the focus of their planning to student learning.

Recommended short term and long term planning procedures

Few teachers would argue that successful teaching can be carried out without some form of planning. This study showed that the pre-eminent form of planning continued to be the mental processes engaged in by teachers. It can be expected that teachers would develop individualized approaches to mental planning similar to the model described in chapter seven and that many teachers would regard some form of written planning as desirable.

Although the study group varied in their approaches to written

planning after de-regulation, several commonalities emerged which suggested recommended procedures. Short term planning in the form of a daily workpad (or day book) and weekly planning in the form of daily workpad and timetabling was regarded as essential by the study teachers. These forms of planning were practiced by all teachers in the study group and observation showed that some form of short term planning was common among the other teachers at School A. The daily planner was an essential component in the PLAN-TEACH-EVALUATE cycle (Barry & King, 1988). The function of the daily planner was to clarify and organize mental plans and to operationalize longer term plans.

Longer term plans represented documentation of the teachers' broader vision of how the school term would unfold and how the curriculum could be reduced and covered in the available time. Longer term planning, in the form of unit or term plans, was also be regarded as essential. It was anticipated that some teachers would continue to use programming in a traditional manner indefinitely but that an attempt should be made to document student outcomes more effectively than was the practice prior to de-regulation. The study showed that the evaluation section of traditional programmes had often been neglected, leaving teachers open to questions of accountability. The objectives-outcomes approach trialled during this study (Appendix G) appeared to function efficiently with the School A principal describing this form of planning as "working smart". An advantage of the objectives-outcomes approach was that it appeared to strengthen the evaluation component of

the PLAN-TEACH-EVALUATE cycle (Barry & King,1988). Using formats similar to those included in Appendix G allowed the teacher to evaluate student performance for each objective and to include this evaluation in the next planning cycle. By documenting expected outcomes and including provision for collecting data on student performance, the teacher could improve the evaluation of students' progress and demonstrate accountability more effectively. Inexperienced teachers may need to continue to document activities (Appendix G) until they developed sufficient confidence with their planning platform. It was anticipated that experienced teachers could dispense with documentation of activities (learning experiences, Appendix G) and develop an enhanced role for the daily planner.

Implications for teacher education

The rational planning models taught in many teacher education institutions are quickly modified or abandoned by novice teachers. This is potentially a cause for concern for teacher educators. Do the rational models perform a useful function in the development of teachers' planning practices or are they redundant in the contemporary setting?

The present study has shown that these models are generally regarded as appropriate by experienced teachers, becoming the basis for further developments of teacher planning habits and forming an integral part of the planning platform. Experienced teachers returned to the rational model at times when more "thorough" planning was required,

such as when planning as part of a team. The teaching of rational models can be justified on the basis of their function in the development of teachers' planning habits. What may be more relevant is the emphasis teacher educators place on preparing neophyte teachers to cope with the demands of the real classroom. The pressures of dealing with management problems appeared to be the principal reason the novice teacher adopted an activities-first planning model. If additional pre-service emphasis was placed on coping with management problems, inexperienced teachers may be more inclined to adopt planning models which focus greater attention on student learning. An emphasis on management should include a focus on workable, soundly based routines which can assist the novice teacher to reduce initial management concerns. An objectives-outcomes approach to planning appears more likely to be applied where teachers have a genuine interest in student learning and where management problems are minimized. This kind of approach to planning may be more likely to contribute to the development of reflective practitioners.

Greater attention should also be given during teacher education to the development of the planning platform, particularly in the areas of subject, curriculum and pedagogical knowledge. The student teacher should be exposed to a wide variety of teaching situations over an extended time, possibly through some form of distributed professional practice. In addition to knowledge gained while on teaching practice, student teachers should be encouraged to develop their knowledge base

in particular areas of interest. This may produce benefits for their classroom teaching.

8.2. Conclusions relating to accountability

Implications for school administrators

School administrators have demonstrated a concern for student outcomes during this study which implies a concern for teacher planning. According to the study teachers a definite relationship existed between the quality of planning and the perceived quality of teaching. Improving the quality of planning was regarded by the teachers as a desirable outcome because of the potential to produce improved teaching (defined in terms of improved student performance). If the previous system had not ensured the quality of planning because of inconsistencies in application, the present system of vague accountability for planning is unlikely to produce an improvement in teacher planning. Given the teachers' commitment to planning and accountability revealed by this study, it is recommended that teachers and school administrators negotiate accountability processes which are mutually acceptable. This could include discussions about teachers' planning as a part of an accountability package, although a return to the submission of programmes is not seen as beneficial. It is also recommended that discussions relating to planning and outcomes require the teacher to demonstrate that "best" practice has been applied and that such

discussions be conducted in a climate of professionalism and mutual trust while remaining cognisant of the effects of student mediations on student performance. The eventual goal of these discussions should be improvement in student outcomes and teacher performance.

A simple case of self-reported accountability is not recommended. The emphasis in accountability processes should be on the collection of high quality data from a number of sources, which should include teacher documentation. Kogan (1988) reported some misgivings about teacher self-reported performance. Where accountability was used to control teachers and principals, teachers may "find ways of disguising their departures from detailed prescriptions to which they feel little commitment." (p.49). The concern was expressed during the study that the trend towards accountability based upon the Education Department Student Outcome Statements might lead to the fabrication of results because teachers already felt pressured to complete their existing duties without the imposition of a significant additional workload. It is recommended that student outcomes discussions between the teacher and principal be geared to the kinds of student performance data usually collected by teachers, such as tests and work samples, rather than on the Student Outcome Statements. The researcher contends that this approach, already present in schools, is more likely to produce accurate profiles of student achievement than attempts to apply profiles generated by the Student Outcome Statements and is more likely to lead to improved outcomes for students.

Implications for Education Systems

The present study has highlighted that educational change can be a slow process. Almost six years have elapsed since teacher planning was de-regulated in Western Australia but although some evidence of change was becoming apparent, the process had been generated from the teachers' own beliefs that change was necessary, rather than from policy changes or directives. If administrators and education systems seek to implement change which may impact on teachers' well established work habits, they can expect minimal progress unless there occurs a genuine commitment from teachers. Administrators should be aware that teachers' principal concern is for daily survival in the classroom. If teachers perceive that their existing work practices are successful they will be reluctant to change, particularly if substantial re-learning processes are required. Significant change may require the allocation of suitable resources such as funding for professional development but such measures may not guarantee that change will be implemented.

Successful change and the long term improvement of the education system is more likely to occur in a climate of professionalism and trust. The trend in countries such as the United Kingdom towards linking teacher accountability to student achievement may be flawed because of the number of variables involved. This study has suggested that many student variables mediate between teachers' plans and actual outcomes. Many of these variables are beyond the direct control of teachers. Therefore, comparing school and teacher performance based on

standardized instruments may not be valid and may cause high levels of stress and mistrust among teachers. Working professionally towards mutually agreed goals may be more likely to produce better performance from schools and teachers and achieve better outcomes for students.

8.3. Recommendations for further research

Although this was a case study and as such was not concerned with generalizability, further research involving a larger sample may assist in validating the findings.

The present study has highlighted several features of teacher planning which may contribute to a concept of "best practice". Identifying best planning practice may be beneficial for teachers' professional development, for contributing to a professional conception of teaching and for improving existing accountability procedures. In order to confirm the findings of this study, the planning methods of a larger sample of teachers could be surveyed.

Research into the relationship between planning and teaching may be beneficial. Several of the study teachers expressed the belief that better planning resulted in better teaching. Research could attempt to establish a causal link between planning, teaching and student outcomes.

The naturalistic model (see chapter seven) has the potential to assist teachers to understand their planning thought processes from a meta-cognitive perspective. Duplication of this study or the use of a wider sample could help to validate the model.

The objectives-outcomes approach to planning recommended in this study requires further trialling. The emphasis of further trials should be on whether a focus on objectives and outcomes as opposed to an activities-first model results in perceived or measured improvements in teaching and learning.

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Appendix A
Regulation 177

REGULATION 177

"1. A teacher shall divide the programme of work pre-scribed for each grade into monthly assignments which shall be shown in the programme forms supplied by the Department.

2. Each programme shall be kept in the classroom and be signed both by the principal and the class teacher." (Education Department of Western Australia, 1971).

Appendix B
Covering Letter and Consent Form

August 28, 1993.

Dear _____,

I am currently engaged in research for my M.Ed degree and would like very much to include you as a subject. The study is entitled *Teacher Planning in an Era of Accountability for Student Outcomes*. I am trying to find out how teachers' planning has changed now that submitting of programmes to the principal is no longer required and how teachers see their accountability responsibilities. A copy of my research questions and an introduction to the study is enclosed.

Your involvement would be in the form of allowing me to interview you and later to "walk" me through your written plans to help me to further understand the thought processes teachers use in their planning. At this stage I expect the data collection will mean two interviews of up to one hour and one session of discussing your written plans with you. Of course, interviews would be arranged at mutually acceptable times and places. I expect the results of the study to be of use to schools, the education ministry, teacher education institutions and the wider academic community.

I am looking at planning purely from an academic point of view and am not seeking to make judgements about individual teachers planning. Therefore, I give you my personal guarantee of confidentiality and anonymity should you consent to involvement in this study. In addition, you have the option of withdrawing from the study at any time.

Yours sincerely,

Scott Zehnder

CONSENT FORM

I _____ give my consent to be a subject in Scott Zehnder's study on teacher planning. I understand that data will be treated in strict confidence and anonymity and that the study is not judgemental of individual teachers' planning. I retain the right to withdraw from the study at any time.

Signed _____ Date _____

Appendix C
Interview Guides

Appendix C

Guide for Interview One

1. What was your reaction to the deletion of regulation 177?
2. How did the deletion of the regulation affect your planning?
3. How did you feel about handing programmes in?
4. What processes do you go through when planning?
 - (a) what do you think about?
 - (b) when do you plan? where?
 - (c) do you plan the same way each time?
5. What types of planning do you do?
6. Does your planning vary when teaching new or familiar content or year groups?
7. What is the first thing you think about when planning
 - (a) new topics? (b) familiar topics?
8. How much use do you make of instructional routines in your planning/teaching?

9. Are you familiar with the Department's (1992) accountability policy?
10. How important is planning to your teaching?
11. What planning do you regard as essential?
12. What do you do if for some reason you haven't been able to plan? e.g. if you have to improvise?
13. Why do you continue to programme since it's no longer required to submit them to principals?
 - (a) do you use the same programmes each year?
 - (b) do your plans always work out?
 - (c) are your programmes different after de-regulation?
14. How are you accountable for planning now? (MIS)
15. To what extent are you accountable for student outcomes?
16. How do you feel about being accountable?
17. How do you link your planning to the SDP?

Guide for Interview Two

1. Describe a "good" teaching day. What have you done to make it happen? What have the students done?
 - (a) what do activities and routines do for you?
 - (b) what is your main concern with activities and routines?
 - (c) what is your purpose in timetabling?
 - (d) when do you do your planning?
 - (e) what sort of planning is most important?

2. Does planning well guarantee teaching well?
 - (a) do you stick to you plans?
 - (b) what do you mean by "good" planning?
 - (c) what do you mean by good teaching and learning?
 - (d) do you regard your written planning as "good"? Why?

3. In what ways do you feel accountable? Are you accountable for planning/outcomes?

4. How happy are you to be accountable?

5. Who are you accountable to?

6. How would you feel if you had to hand programmes in again?

Appendix D
Codes for Analysis of Interview Data

Appendix D

Analysis Codes for Interview Data

The following codes were generated for analysis of the interview data. In several instances the codes overlap and inter-relate. For example, the codes "Management Concerns" and "Routine/Activities" could be included under the broader category "Real Classrooms".

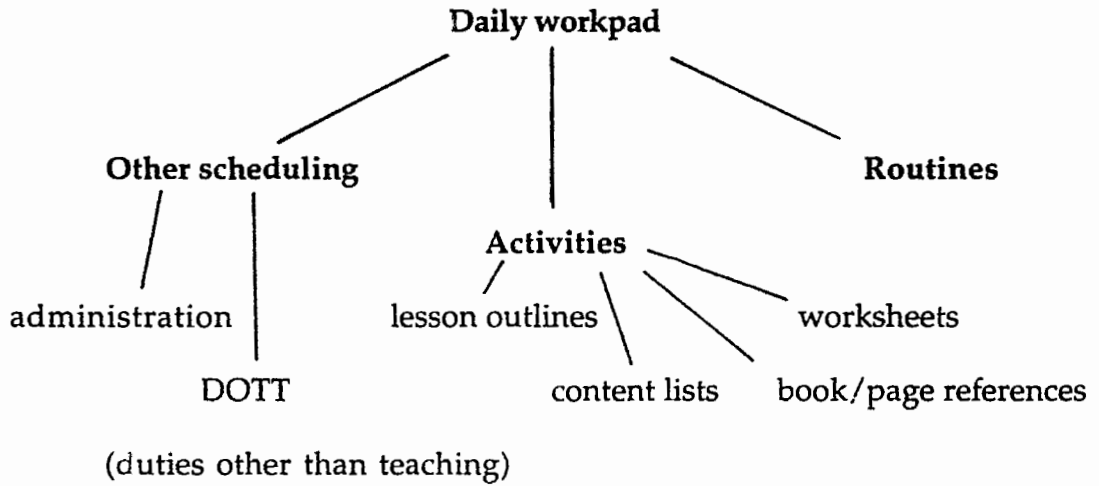
1. Attitudes/beliefs about planning
2. Types of planning
3. Function of planning
4. Written planning
5. Mental planning
6. Objectives versus Outcomes
7. Management Concerns
8. Routines/activities
9. Real Classrooms
10. Student Entry Characteristics
11. Teacher Knowledge
12. Accountability perceptions
13. Attitudes to de-regulation
14. Management Information System
15. School Development Plan
16. Planning Model

Appendix E

Daily workpad analysis categories

Appendix E

Daily workpad analysis categories



Appendix F

Samples of Education Department Planning Forms

TOPIC

OBJECTIVES		C	S	A	LEARNING ACTIVITIES	RESOURCES	EVALUATION
11 Some animals may be cared for by humans, kept as pets, studied or used. 12 Animals of the same species may vary in size. 13 Animals grow and change at different rates. 14 Most animals can move from place to place. 15 Some animals construct shelters, others use natural cover. 16 Some animals live in water, some on land. 17 Animals have special adaptations which assist them to survive. 18 Animals, because of their activities, cause changes in their habitats. 19 Animals respond to seasonal change. 20 Some animals depend on other animals for food, protection....							
Observing	1.7	o To identify observations that are relevant to a particular investigation.					
Communicating	2.6	o To construct data tables and graphs.					
	2.7	o To select for communication only that information which is relevant.					
Classifying	3.5	o To identify similarities and differences among similar objects and situations.					
Measuring	3.6	o To identify common patterns in events.					
	4.5	o To make reasonable efforts in comparing quantities or sizes.					
	4.6	o To measure with reasonable accuracy, i.e. accurately enough to make fair comparisons.					
	4.7	o To use measuring to confirm estimation.					
Inferring	5.5	o To distinguish between observations that support an inference and those which do not.					
Predicting	6.3	o To anticipate potential problems, safety factors, etc., when conducting an investigation.					
Using Space and Time	7.5	o To recognize symmetry in objects.					
Relationships	7.7	o To compare events in terms of rate of change, e.g. rate of growth, rate of movement.					
Controlling Variables	8.2	o To identify a group of factors which may have caused a change.					
Interpreting Data	9.4	o To read data tables, graphs, keys....					
	9.5	o To identify objects, substances, organisms, etc., from previously recorded data.					
Defining Operationally	10.1	o To recognize ambiguity of the word 'best' and point out the need for rules in selecting the best paper, plane, the best bridge, etc.					
	10.2	o To suggest ways of defining the properties to be tested, e.g. strongest bridge, runniest liquid, hardest rock.					
Designing Experiments	11.1	o When given a question to be investigated, to devise a way of finding an answer.					
1. CURIOSITY _____							
2. PERSISTENCE _____							
3. INVENTIVENESS _____							
4. CRITICAL THINKING _____							
5. CARE FOR THE ENVIRONMENT _____							

MINERAL RESOURCES

OBJECTIVES		FOCUS QUESTIONS	LEARNING ACTIVITIES — RESOURCES	EVALUATION
KNOWLEDGE — VALUES	SKILLS			
2.2 Recognize that mining communities are composed of mine workers, families of mine workers and all those connected with the provision of other goods and services.		<ul style="list-style-type: none"> o What goods and services do mining companies need? o Who provides these goods and services? 		
2.3 Recognize problems that may be encountered in establishing mining communities in the Pilbara Region of Western Australia.		<ul style="list-style-type: none"> o What problems may mining companies face in establishing communities in the Pilbara Region of W.A.? o What problems may people face in living in mining communities in the Pilbara Region of W.A.? 		
3.1 Distinguish between surface (open-cut) and underground methods of extracting minerals.		<ul style="list-style-type: none"> o What is the difference between open-cut and underground mining? o Which method of mining is better suited to the use of large-scale machinery? 		

STAGE FIVE

MATHEMATICS PROGRAMME

MATHEMATICAL OVERVIEW				TEACHER'S NOTES		
GENERAL OBJECTIVES	RESOURCES (DEPARTMENTAL AND OTHERS)	PROGRAMME CHECKLIST	MATHEMATICAL IDEA SPECIFIC OBJECTIVE	LEARNING ACTIVITY	EVALUATION	
PART THREE — Volume and Capacity						
1) Measures in litres and millilitres to: a) ascertain capacities of container b) compare capacities c) order containers by capacity. Selects appropriate unit.	98 100					
2) Measures to compare and order volume of solids by displacement.	100					
3) Constructs three dimensional shapes using cubes to investigate and compare volume.	100					
4) Relates volume to: a) length b) area c) mass	100					
PART FOUR — Mass						
1) Compares and orders by hefting, suspending, balancing. Selects appropriate unit.	100	RB 37 TN 27				
2) Measures, compares and orders by mass using kilograms and grams.	100	RB 28:72 TN 22:68				
3) Relates measurement of mass to: a) length b) area c) volume	100	RB 48 TN 39				
PART FIVE — Time						
1) Solves problems based on calendar Recalls: 365 days = 1 year 366 days = 1 leap year 52 weeks = 1 year.	102	RB 29:31:58:67 TN 22:23:54:63				
2) Reads all types of clocks to a) nearest five minutes b) to nearest minute.	102					

Appendix G
Trial Planners

Year Group _____

Planning in _____

OBJECTIVES

**LEARNING
EXPERIENCES**

**DATA
COLLECTION**

STUDENT OUTCOMES

The student will be able to:

Year Group _____

Planning in _____

OBJECTIVES

EVALUATION

OBJECTIVES MEASURED / OUTCOMES

The student will be able to:

Names

Term _____ Planner in _____

Topic/Theme _____
 Year Group _____

Teacher _____
 Date _____

OBJECTIVES

DATA COLLECTION

DATA ANALYSIS

--

--

GIRLS YEAR 07	
Chaire	
Carolyn	
Archie	
Carman	
Stacey	
Angela	
Olivya	
Helaine	
Candice	
Amada	
Chaire	
Kelby	
Kirsty	
BOYS YEAR 07	
Ben	
Aali	
Timothy	
Ben	
Chang	
Tia	
Hartin	
Daniel	
Rhan	
Vayna	
Heary-Rian	
James	
Bong	
Kathw	

Appendix H
Accountability Policy Extract

Accountability Policy Extracts

"Process of accountability within the school

The shift in emphasis from an inspection of teachers' programs to a demonstration of the effectiveness of the learning program, with a focus on student outcomes, acknowledges the professional responsibility of teachers. Teachers have the authority, and are expected to take responsibility for, planning for improvement as part of the exercise of their professional responsibility." (Ministry of Education, 1991, p.4).

"What is expected of teachers?

Teachers are expected to implement teaching strategies aimed at achieving the specific student outcomes derived from the performance indicators and to monitor the effectiveness of these strategies in terms of the outcomes achieved." (Ministry of Education, 1991, p.6).

Appendix I

Samples of other documents relating to planning

WHAT I HOPE TO ACHIEVE

Programme in Mathematics

(Please state name of subject)

Class or Group

HOW I WILL MEASURE WHAT I ACHIEVED

LD 21-001

MONTHS.

The students will be able to:
(syllabus page)

JAMES OBJECTIVES BEHAVIOURAL P2.

Objectives	Evaluation
<p>SPACE</p> <p>1. Find positions from directions (including degrees of turning.)</p> <p>b) locate and plot points on a grid with a mid-point. (p1)</p> <p>2. Interpret position and layout in the environment using road maps, atlases, scale drawings etc. (p3)</p> <p>3. identify similarities and differences in shapes (vertices, faces, edges, symmetry) (p9)</p> <p>4. Classify shapes. (p11)</p> <p>5. Make models and drawings of 3-D shapes. (p15)</p> <p>P3 b. use attributes of a shape (sides, angles, diagonals, symmetry, dissection) to solve problems (p19)</p> <p>P4 7. Locate symmetry in shapes (reflectional/rotational) p33</p> <p>MEASUREMENT</p> <p>P1 8. measure to the nearest metre, cm & mm. (p1)</p> <p>9. Estimate large distances (km) (p5)</p> <p>P2 10. compare regions (in formal measurement of area) (p15)</p>	<p>1. observe-chn. giving verbal directions</p> <p>1) Make and use a simple map.</p> <p>2. Diagrams and model Use of language - scale, region, route.</p> <p>3. Complete a table label shapes etc.</p> <p>4. use Venn/Carroll diagrams to record results.</p> <p>5. Construction/labelling shapes using nets.</p> <p>6. Discussion, diagrams, tables, graphs, numerical records.</p> <p>7. Diagrammatic representation.</p> <p>8. observation-chn. measuring.</p> <p>9. Describe orally and in written form.</p> <p>10. Recorded measurements & comparisons</p>

COMMENTS RE STUDENT OUTCOMES

Objectives	1a	b	2	3	4	5	6	7	8	9	10	11	12
Michael Carter		X	/			/							
Steven Conduit		ESC											
Gavin Decorsey		X	/										
David Filov		X	X										
Tim Harris		X	X										
Steven Harrison		X	X										
Mark Hewett		X	X										
Garth Hoglin		X	/										
Eric Ladyman		X	/										
Nathanael Luxford		X	X										
Goran Rastankovska		/	/										
Ryan Riddell		X	/										
Luke Thomas		X	/										
George Whyte		ESC											
Klara Babic		X	X										
Amanda Baines		X	/										
Kristy Chircop		X	X										
Juliana Feleppa		X	X										
Hollie Milton		X	X										
Amanda Page		ESC											
Shandi Stevens		X	/										
Fiona Sullivan		X	X										
Amy Weir		X	/										
Daniel JOYCE		X	X										

NUMBERS CORRESPOND TO OBJECTIVES

Michael & Amanda B. have difficulty numbering the axis correctly.

KEY
/ attempting
X achieving
* achieved

KEY (COULD TIE TO SCHL REPORTING SYSTEM??)

PLANNING : STUDENT OUTCOMES

The following is an example of how teachers might plan to report on the performance of the students in their class. It is assumed that student outcomes can only be gauged effectively if teachers have clearly articulated learning objectives. The logical next step then necessitates measuring the achievement of each student against the planned learning objectives. This information should then be recorded in a manner that enables or easily facilitates reporting re. performance levels. It is assumed that individual teachers will want to do this in their own way. However whatever the particular format used it should clearly include:

- 0 Learning objectives
- 0 Evaluation statements
- 0 Records of student performance

The following is a suggestion of how these three basic planning requirements can be incorporated into a simple format which will complement the school's Management Information System.

Eg. 1st Term plan for SCIENCE YEAR 5

OBJECTIVES

* Under this column teachers might list the objectives of the programme under headings such as:
 Knowledge
 Attitudes
 Skills

EVALUATION

* This column might include statements describing the various evaluation techniques to be used eg. Formal tests, assessment of workbooks, etc (nb. It may be more meaningful if eval. statements were directly linked to the objectives.)

RECORDS

* This would take the form of a checklist of some type. It may be diagnostic, anecdotal, etc This will vary from subject to subject.

EXAMPLE ONLY

<u>Objective</u>	<u>Evaluation</u>	<u>Records</u>
1.Heat is transmitted through different substances at different rates	1.Teacher assesses conclusions chn make following experiments.	Billy- failed to grasp concept Tom- well known Mary- etc

Nb. Whether this is on a single A4 page or kept in separate files entirely is the prerogative of each individual teacher.