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Massey University

PRINCIPLES FOR TEACHING PRACTICUM
AND THEIR
PARTICULARIZATION BY ASSOCIATE TEACHERS

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ABSTRACT

An apparent lack of substantiated guide-lines for carrying out school based teacher education sessions was perceived by this author. This concern motivated the present investigation of those practical aspects of teacher education frequently known as practicum.

Following a review of relevant literature, commonly held principles were derived. It is argued that these principles, if followed by student-teachers, teacher educators and associate teachers, should result in effective practicum.

Forty professional educators recorded how they put the seven principles for practicum into practice. These teaching practices were analysed and grouped into generic categories each with supporting criteria. Results provided potentially useful reference material for those involved in teaching practicum.

Validity for the principles was established in terms of Ashcroft's learning determinants and Burke's model of teacher development. Results of this analysis indicated that the listed behaviours had potential to maximize student-teacher learning.

The study concluded that the seven principles, behaviour categories and criteria provide student-teachers, teacher educators and associate teachers with a valid tool for directing practical aspects of teacher education.

DEDICATION

This dissertation is dedicated to Sharon, Sarah and Rebecca whose support and understanding sustained my motivation to complete this project.

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Chapter 1

The Study

1:1 Introduction

Impetus for this study has been generated by several inter-related factors:

- a. The changing role and nature of education and society in New Zealand and the associated issue of preparing teachers,
- b. The accountability debate in relation to education,
- c. The nature of the practicum in the professional preparation of pre-service teachers.

This has highlighted the need for practical guidelines to assist student-teachers and teacher educators in their respective roles. Such a handbook could enable these people to apply credible literature to changing social and educational demands in the classroom. In so doing, teacher educators could be in a position to justify their behaviours which should result in relevant student-teacher learning.

In modern society, change and challenges to change are common. Questioning the values and the activities of social institutions such as the judiciary and education are part of the process of change. Society uses the process of change to improve the relevance of social institutions. Through demands for accountability, society facilitates change. Such demands lead training institutions to analyse their delivery systems, organization and structure in order to determine whether these lead to accepted attitudes, values and beliefs in the people who move through the institutions.

Recent studies of education in New Zealand (The Curriculum Review, 1987; Administering For Excellence, 1988; Tomorrow's Schools, 1988) have questioned the effectiveness of the traditional

structure and content of education. Off-shore authors such as Popkewitz (1987) and Burke (1987) have taken this accountability debate further by challenging the training institutions to re-evaluate their philosophical perspectives in order to provide more effective, efficient and equitable opportunities for children.

It is generally believed that education can assist in changing society. One way for this to occur is, through staff training and development to change the way in which teachers perceive their task. This may occur at the pre-service level. Identifying ways by which the practicum can be improved may provide teacher educators and student-teachers with practical tools with which to construct effective learning environments for pupils.

The professional environment of this author has provoked concerns about practicum. These concerns have led to questions concerning the relevance, practicality and efficiency of the practicum as a learning event in the preparation of teachers as currently practised.

Zeichner (1981/82, p5) summarizes when he states:

...it is essential that every experience in a pre-service program serves to enrich rather than impede the capacity for further growth. We should be examining all our efforts in teacher education....

1:2 Aim and Focus Questions to be Investigated

This study is directed at the derivation and synthesis of principles that could guide practicum planning. It also aims to provide guidelines as to how these principles may be expressed and demonstrated by associate teachers. The study is concerned with neither how well the student-teacher performs the various tasks during the practicum nor with stating an operational definition of effective learning or teaching.

Rather it concerns ascertaining the extent to which associate teachers perceive the derived principles as valid and express them in action.

From this aim two focal questions are generated:

- a. What principles are thought to contribute to effective practicum?
- b. How do associate teachers particularize these principles?

1:3 Significance of the Study

The significance of this study lies in the belief that principles synthesized from the literature and integrated within established conceptual models can be used to derive evidence on which to plan and structure the practicum. If this can be established, then this planning structure can replace current intuitive approaches.

The study gathers data from a variety of international research studies on teacher education, especially in the field of on-site teaching or practicum. These represent a variety of philosophical views including neo-Marxist, humanist and behaviourist perspectives and are detailed in Chapter 3. These studies will be analysed to derive principles that should be used in the practicum.

Associate teachers will provide practical examples as to how they perceive each principle operating in their practicum environment. These detailed descriptions (particularizations) will then enable teacher educators to view practicum from a perspective of student-teachers as learners. In adopting this perspective founded on empirical principles, teacher educators may be enabled to structure more practical, useful practicum. In summary the study is directed at:

- a. Enabling teacher educators to use validated principles to facilitate student-teacher learning,

- b. Motivating effective evaluation of the practicum assignment,
- c. Providing a resource for student-teachers and teacher educators.

1:4 Overview of the Study

Following, in Chapter 2 operational definitions are given as reference points and used throughout the study. Chapter 3 reviews relevant literature and concludes by suggesting seven principles for the practicum. A model for the practicum is detailed in Chapter 4. A paradigm for learning and teacher development both associated with action research form the basis for this chapter. The descriptive survey approach used in the study is defined and discussed in Chapter 5. A large number of categorized associate teacher behaviours are reported in Chapter 6. Detailed discussion of the results provided in Chapter 7 and the study concludes with a number of relevant observations and implications for practical teacher education in Chapter 8.

Chapter 2

Operational Definitions

Throughout this study the following operational definitions will be used.

1. Associate teacher (A.T.)

A qualified full-time teacher who formally supervises a student-teacher during on-site teaching.

2. Behaviour Category

A classification unit comprising several similar Behaviour Criteria. (See Appendix H)

3. Behaviour Criteria

Teaching behaviours that can be used to put various Principles into practice during practicum. (See Appendix H)

4. Particularization

Refers to the process where associate teachers describe in detail how they put principles for practicum into practice. For example, an associate teacher may report 'Treat the student-teacher as an equal' to show how they illustrate the principle 'Practicum is more appropriate for student-teacher learning when conducted in a collaborative environment'.

5. Practicum

For this study 'practicum' will refer to a time span during which student-teachers are under the supervision and direction of an experienced associate teacher(s), a principal, and teacher educator(s) from the training institution, in order to practise appropriate teaching

behaviours. During this time, the student-teacher will operate within a total school/community environment. The practicum will be perceived as having three phases (Turney, 1982):

- a. Briefing and orientation provided initially by the teacher educators and then the associate teachers,
- b. On-site teaching which involves the student-teacher being intimately involved in the teaching and learning process with pupils, school and community members for a set span of time. As on-site teaching continues, the principal and the associate teacher must supply all the necessary support and supervisory systems in order to fulfil the requirement of the practicum. During this time the student-teacher may be visited by teacher educators as well as the principal,
- c. Debriefing, reflection and evaluation in which the student-teacher, associate teacher, principal and teacher educators have direct and indirect input.

Practicum includes the inter-related behaviours of the student-teacher, pupils, principal, teacher educators and associate teachers during the previous three phases (a, b, c).

6. Principle

- a. Law or rule based statements that demonstrates a relationship between concepts. For example, 'Sensitization of the student-teacher must occur prior to entering any classroom' and 'Formative feedback must occur between the associate teacher and teacher educators after classroom experience.'
- b. One of the seven Principles for Practicum

7. Pupil

A student in a primary school.

8. Student-teacher (S.T)

An individual registered in a recognized teacher education institution who is preparing to be a primary (elementary) school teacher.

9. Teacher educator

A person from a teacher training institution who teaches and supervises student-teachers.

Chapter 3

Literature Review and Emergent Principles.

3:1 Practicum: History and Paradigms

3:1.1 Inappropriate Apprentice Based Models

The training of teachers has traditionally included a practical apprenticeship experience (Boothroyd, 1979) which in Zeichner and Liston's (1987) view restricts the desirability of individually determined professional growth in student-teachers. Boydell (1986, p.115) in quoting Morris (1974) notes that the earliest recorded college based practicum occurred in the fifteenth century. Since that time the basic assumption has been that a 'good' teacher learns by carefully imitating the master.

Turney (1982, p. xi) identified three phases that practicum has passed through since the mid-nineteenth century.

Firstly, there was the pupil-teacher phase from 1850 to 1900 during which student-teachers were apprenticed to able teachers for up to four years. Zeichner (1981/2, p1) confirms the presence of formal programmes during this period. The concept of a universal worthwhile norm inspired 'Masters of Method' to reproduce the stereotype in model schools until the 1930's when different points of view about teacher education began to develop (Wragg, 1985, p.199).

Secondly, the period 1900 to 1960 saw the development of the training college phase. Student-teachers were encouraged to pursue academic subjects often at the expense of the practical training typical of the previous phase. Eventually the practical and the academic components were seen as rather mutually

exclusive. Monroe (1952) analyses this time period more specifically and arrives at similar conclusions to Turney with regard to teacher education becoming institutionalized for specific social reasons in colleges and universities.

Thirdly, the reconstruction phase from 1960 to 1982 (time of Turney's publication) has been a period during which relatively autonomous colleges and universities have critically evaluated teacher education programmes and developed a variety of 3-4 year courses. Accompanying this reconstruction has been a re-emphasis on the pivotal role of the practicum as it relates to the integration of theory and practice. Bone (1987, p389) emphasizes that during this period training institutions continued to provide skills, knowledge and attitudes in training programmes but focussed specifically in such areas as skill competency training. Goodman (1986a) believes this has led to an erroneous assumption by some teacher educators that the more hours spent in practicum the better teachers they will be. Practicums in such cases are geared more to management, on-task activities and administrative duties as students learn to conform with the status quo.

In spite of increased investigation and reporting on practicum that has to a greater awareness by educators at all levels, little has been done to improve practicum and provide it with a sound theoretical basis (Turney, *ibid*, Boydell, *op. cit*, Taggart, 1988).

A growing body of evidence points to the need to carefully evaluate the traditional methods of practicum and in order for the student to experience quality learning, to move towards

practicums based on critical and reflective skills (Boydell, op. cit., Goodman, op cit, Zeichner, op cit).

The apprenticeship model for practicum was based on the student-teacher acquiring the behaviours of the master. Perlberg et al (1979) have identified four further paradigms that have influenced and shaped practicum within the context of traditional teacher education programmes all of which include academic preparation, some kind of theoretical preparation in professional education and student teaching.

Firstly, the *progressive* model based on the educational perspectives of educationalists such as Dewey, provides opportunities in practicum for the student-teacher to identify and solve problems and learn how to create knowledge. Secondly, under the *academic* model student-teachers are enabled to think and act as scholars in order to practice the disciplines with the children. The uniqueness and dignity of the individual are hallmarks of the *personalistic* model for practicum. The practicum is a time for de-emphasizing student learning outcomes and allows for the student-teacher to create an environment from which the pupils as learners can choose. Lastly, objectives and criteria lists provide a measure of performance in *competency* based practicum by which teachers as well as student-teachers encourage skills that enable educational goals to be reached.

Similarly, Zeichner (1983) analyses four models of teacher education. His *behaviouristic* model is similar to Perlberg's criteria based model but emphasizes that the student-teacher is a passive recipient of knowledge and has little opportunity for input into practicum preparation. Zeichner emphasizes the

traditional craft model in which knowledge can only be found in the wisdom of experienced teachers. His *personalistic* model is similar to Perlberg's in that the student-teacher is encouraged to value, search for and organize perceptions and beliefs in order to provide sensitivity towards pupils to assist mature, appropriate learning. This notion is challenged by an earlier work by Zeichner and Teitelbaum (1982) which asserts that personalistic, apprentice based models for practicum are misguided and therefore socially and economically inappropriate because they encourage inequalities. Alternatively, Zeichner (1983) and Zeichner and Teitelbaum (1982) argue for an *enquiry* oriented model where student-teachers can develop critical inquiry skills and become agents of and for their own development to shape direction through reflective action. This reflective activity can assist student-teachers to make sense and structure the social environment. An important result of this is that student-teachers can view their teaching environment empathetically. Perceiving the learners world view enables student-teachers to structure practical, realistic learning and teaching tasks. Practicum is appropriate because it can allow student-teachers to become actively involved in the school community by confronting questions they must ask and then answer. This is the doing involved in practicum.

3:1.2 The practicum: an essential component of teacher education

The idea of 'doing' teaching has been a part of teacher education since antiquity. Contemporary writers reinforce the value of the practicum as a necessary component in preparing

teachers (Boothroyd, 1979; Boydell, 1986; Evans, 1986, 1987a, 1987b).

More specifically, Battersby and Ramsay (1988) express the benefits of the practicum in terms of student-teachers being able to practice, apply and appreciate practical applications of theory and be influenced by role models. Clark (1987) reinforces the value of the practicum as a learning event during which a range of factors interact that can be harnessed to provide a learning model for adults. Feiman-Nemser (1987) agree that the practicum is a time for student learning. Cohen and Manion (1983) see the practicum as an opportunity for practical teaching to meet reality. Taggart (1988) perceives student teaching as part of credible pedagogy while Evans (1986, 1987a) reports benefits gained from practicum but also cautions regarding unanticipated consequences as well as raising questions about its value. In his review of current literature Zeichner (1986) concludes that the practicum as part of the teaching continuum, is a significant time for student to gain knowledge, skills and dispositions.

3:1.3 Collaboration in the practicum: inter relationships between the student-teacher, the associate teacher, principal and teacher educator.

To acquire these perspectives and abilities student-teachers inevitably must work with people. Consistent with the move from traditional models of practicum is a trend towards the establishment of a practicum based on inter-relationships (Cohn, 1981). For example, Cairns and Eltis (1982) report the need for more collaboration between teachers colleges, universities and schools to establish practicum expectations. They warn that

unless this occurs student-teachers will be caught between the demands of several institutions. Collaborative relationships are dependent on a mutual and collaborative acceptance by a number of participants representing a variety of roles. All people and roles involved, either directly or indirectly, are regarded as part of the total school team (Brown et al, 1982).

This concept of collaboration is supported by a variety of contemporary writers who identify a range of accompanying characteristics.

Firstly, Bone (1987) conceives the practicum as a co-operative, school based venture: a notion similar to co-operation, one of the fundamental process of action research (McAlpine, 1988). This idea is consistent with but developed further by Burke (1987) who advocates development through the inter-related factors of induction, renewal and re-direction. *Secondly*, Low's (1988) view extends the earlier idea that only educational personnel be involved in collaborative practicum. He expands the concept of collaboration to include the community. *Thirdly*, Tickle (1987) views teacher education as a partnership and uses a research based framework to accomplish this. Clift and Say (1988) provide further support for partnership and collaboration with their C.T.E. (Collaborative Teacher Education) which involves the concept of equal partnership through the joint efforts of universities, teacher's colleges and schools to design and provide opportunities to improve teaching and teacher education.

Fourthly, Hord (1988) and Brown et al, (1982) reinforce the pivotal role of the principal. As a teacher educator, the major job of the principal is to provide continuing education for staff members and to improve their professional competencies. Hord

reports the findings of Leadership in Educational Administration Development (LEAD) and Southwest Educational Development Laboratory (SEDL) programmes in the United States. These programs focus on eight skill areas that have relevance for principals as participants in practicum. The skill areas are:

- a. Increasing learning and achievement chances for students by developing school environment.
- b. Curriculum development and assessment.
- c. Evaluating standard of instruction.
- d. Student evaluation.
- e. School development by applying a thorough knowledge of research results.
- f. Resource management.
- g. Control and discipline.
- h. Inter-personal relations skills.

One implication of these studies for practicum is that the principal has a clear role in developing, maintaining and modifying a professional research based climate for student-teacher learning. The principal becomes an integral participant collaborating with the student-teacher. From this perspective the successful principal, reports Hord (Ibid, p11) is one who uses:

...a model of shared leadership and a collaborative approach where teachers have important roles.

To improve practicum from the student-teachers perspective, associate teachers need to be prepared by careful training (Briggs, 1984). This is based on the assumption that associate teachers are the closest source and often have the greatest influence (Pearson, 1987, p10) on the student-teacher who needs to operate successfully within the context of an integrated

practicum (Taggart, 1988; Evans, 1986). This conclusion is supported by Zeichner (1986) who observes that there is often uneven supervision by associate teachers who are ill prepared for their role. Two skills involved in the role of associate teachers are the maintenance of expectations and the ability to hold student-teachers accountable (Taggart, 1988). Another skill involves the improvement of communication between all practicum participants. The reason for this is to clarify goals, make sure that assessment procedures are consistent and to ensure there are congruent perceptions of supervision behaviours especially if these factors need modification (Boothroyd, 1979). This need for training is supported by Courts' (1983) study indicating that effective teaching behaviours are imitated by student-teachers.

Associate teachers, within the complexities of the practicum's social environment, provide interaction that helps or hinders opportunities for the student-teacher to change behaviours, attitudes and values. Change is due to complex social arrangements which need to be understood by all personnel (Gebhard, 1985). Rohe (1984) notes that in such a complex environment the student-teacher is both learner and teacher as associations with other practicum personnel develop.

As learning and teaching occur the student-teacher becomes involved in the teaching processes of assessing, planning, implementing and evaluating which can then guide cognitive, affective and psychomotor learning tasks. Both Gebhard's and Rohe's theses support the need for close collegial relationships during practicum. This continual process of development and revision should occur within a research based context (Solomon, 1988).

To summarize, collaboration is viewed as an essential activity in all aspects of the practicum assignment. Zeichner (1986) emphasizes this need to develop collaboration and move away from the restrictions of technocratic rationality where roles are narrowly defined and problems seen in terms of people rather than in systems. Zeichner views reflective collaboration as a credible solution.

3:1.4 Reflection in the Practicum

Another consistent move is the development of various perspectives about reflection and its value as a component for practicum. Reflection as a process is perceived as a habit activity which involves the integration of attitudes and skills that individuals use to critically challenge existing perspectives in society. It includes a search for alternative, worthwhile educational encounters for specific social groups. The reflective process involves practicum personnel in the activity of providing a practicum curriculum (Goodman, 1986b; Zeichner, 1981/1982). Dewey (1933, p9) concludes that reflection is:

Active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and further conclusions to which it tends...

More recently, Van Manen (1977) has refined reflection to include three levels. *Firstly*, reflection allows for the efficient and effective application of knowledge to achieve goals. At the *second* level reflection involves the explication and clarifying of assumptions and predispositions. Consequences are assessed and action is linked to value commitments. *Finally*, critical reflection

occurs when goals and experiences are evaluated in terms of deciding which one(s) lead to a life of justice and equity.

An analysis of contemporary work in the field reveals a variety of specific views about reflection. On the one hand, Schön (1987) presents the need for professionals to be reflective thinkers because training institutions such as law and engineering schools have largely failed to develop in students skills that will equip them to meet the rigorous demands of non textbook problems. Schön calls for reflection-in-action at the training level where students can act definitively after solid principle-based thinking has been established. On the other hand, Solomon (1987) supports this concept of reflection but concludes that it should follow action in the practicum.

Such activity needs to be encouraged and mediated by practicum personnel as students are encouraged to formulate generalizations about their role as teachers. Zeichner and Teitelbaum (1982) suggest this can be done by using an 'inquiry' approach to practicum. For Solomon, such activity will help student-teachers make sense of experiences especially if those experiences occur over a greater length of time. They will be able to construct a reality of their teaching environment and behaviour which has been based on holding out their ideas to others and hearing and acting on their responses. In relation to the teaching environment, Day and Wren's (1987) contribution centres around student-teachers' learning governed by psychological and organizational factors. These in turn are dependent on reflection and self-confrontation. Day suggests that during practicum student-teachers need critical colleagues who can assist in developing skills such as systematic classroom

enquiry in order to help students move from an intuitive to reflective level of professional behaviour.

In terms of preparing professional, autonomous teachers, Dow (1979) supports the concept of reflection as self-evaluation; a process aimed at helping student-teachers think and act independently. On-site scholarly problem solving enables practicum to become a personal, relevant experience for the student-teacher. Student-teachers in learning to teach also learn to learn. They become less self-centred as they use experience to anticipate appropriate responses to teaching and learning demands.

In further support of reflection as part of the process for teacher preparation Fieman-Nemser and Buchman (1987) clearly state that the practicum is not an end for teaching. Rather it is a time for the reflective activities of extending, probing, questioning, justifying decisions and actions and viewing experience as a starting point. One result of this activity is that teachers become responsible for their own professional development (Bone, 1987). His assumption is that teachers are not just performers but that they need to be flexible, reflective thinkers. They should therefore develop the idea in practicum that professional teacher education is a lifelong process. Achieving excellence throughout a teaching career can be achieved by researched based partnerships that rely on teachers asking and answering their own questions (Tickle, 1987).

In another approach to raise professional awareness, Ellis (1986) describes methods for consciousness raising through reflective teaching strategies. He argues that there are two inseparable factors in practicum. On the one hand there is

experiential activity that involves teaching. On the other hand there is the process of increasing student-teachers understanding of principles that lie at the basis of learning and teaching.

Kemmis and Hughes (1979) develop this perspective of theory and practice as it relates to reflection as part of the process of student evaluation.

Evans (1986) sees this increased understanding being fostered by the associate teacher challenging the student-teacher's interpretation of events and generalizations resulting from reflection. She reinforces this concept in her (1987a) model for practicum in which student-teachers must proceed from stages of improved insight to increasingly more complex activities. This may be done by student-teachers being able to identify the sequences involved in change, perceiving alternative ways of thinking and being self-directed through planned activities.

Self-direction is supported by Britten's (1988) incremental approach that uses the three factors of scale, integration and autonomy. In becoming reflective and creative, teachers move from being trainer dependent to being dependent on a group and finally to being self-reliant.

Being self-reliant as a teacher can allow a teacher to make reasonable judgements about the social environment of the school. Goodman (1986a) postulates then argues for practicum that enable student-teachers to be experimental, active and reflective in defining the social environment they are required to teach in. Student-teachers must learn how to challenge the socially constructed nature of school life (Zeichner, 1981/1982, p3). Goodman (1986a) asserts this will reduce the de-skilling of teachers and strengthen control of their craft.

Traditionally, teachers have experienced low status as active reflective inquirers. Zeichner (1986, p20-24; Beyer, 1988, p34-39) refers to attempts at reform by the Holmes Group (1986) and Research in Teacher Education projects (R.I.T.E.) (Hoffman and Edwards, 1986) to enhance teacher status by improving practicum. Specifically, these programmes attempt to do this by restructuring practicum in three ways that provide for inquiry oriented reflective teaching.

Firstly, by viewing the teacher as a professional decision maker. *Secondly*, by encouraging 'inquiry oriented' teachers who make rational decisions balancing the need for change with teaching-learning stability. *Thirdly*, by restructuring teacher education to include 'laboratories of teacher education' that emphasize the importance of the school in practicum.

These directions are consistent with the concept of reflection as a part of the practicum activity. Zeichner's (1987) work complements these projects when he suggests that the practicum needs to include action, research, ethnography, writing, supervision techniques, reflective thinking and reflective teaching.

The studies discussed above provide a powerful conceptual base which includes reflection as an essential component for practicum. In addition, Gore's (1987) critique of Cruickshank and Zeichner supports reflection as part of student-teacher preparation. Zeichner and Listons (1987) review of the University of Wisconsin's programme of preparing students to be reflective teachers provides a positive example of the current trend towards self-determined growth of student-teachers. This programme is consistent with the move away from rigid objective based

practicum curriculum in which student-teachers take a passive role in teaching. Currently the move is towards a creative, dynamic, critical role through participation in reflection resulting in a practicum curriculum that is 'imbued with the spirit of critical inquiry' (Tom, 1985, p43).

3:1.5 Specific Practicum Curriculum

The need for a specific practicum curriculum involving reflective oriented activities is evident in recent literature. For example, Zeichner (1986) views many contemporary practicum sessions as lacking in specific curricula. In his view these instrumental programmes seriously inhibit student-teacher learning. In extending this idea, Turney (1988) advocates reflective analysis of the practicum programme. Any change should follow careful clarification of the goals of teacher education (Colvin, 1987). Such activity will assist in developing a curriculum relevant to particular social contexts in terms of the class, the school and the community. Student-teachers are enabled to focus their attention towards and assist in developing realistic goals and objectives for the practicum (Zeichner, 1986, p 17). Turney further advises that the practicum curriculum needs to encourage flexible planning for learning where associate teachers initiate and guide student-teacher learning towards independent functioning based on sound theoretical and empirical knowledge. Similarly, Goodman (1986a) states that student-teachers need to be creators of their own curricula in order to relate to a real social situation for learning. This would involve student-teachers developing the skill of knowing how to understand the socially constructed nature of school life. He calls

on universities to do this by developing curricula that will include more 'what' and 'why' courses rather than just 'how to teach' courses. Bellah's (1986) contribution to this debate recommends that practicum must include continuous modification and long range planning of courses aimed at developing critical skills in student-teachers. Bellah also advises continuous evaluation of those involved in teacher education.

In developing specific practicum curricula the role and position of supervising personnel involved in the practicum will be effected. Lourie (1982) advocates analysing these roles to discover ways in which that position can help or hinder the transfer of knowledge. It is necessary to consider a variety of factors that influence learning such as power base, methods of student-teacher socialization and rules for role behaviour, as practicum planners develop curricula.

It is posited that, ideally, student-teachers need to be provided with a specific reflective based practicum curriculum. This will increase their chances of learning appropriate professional strategies and processes. Such a curriculum should enable them to operate on an increasingly independent level. To do this student-teachers should be able to incorporate ideas generated by research (theory) with practical behaviours (practice). Developing a curriculum on this basis will help avoid the 'tinkering' approach to curriculum planning typical of many contemporary approaches (Bassett, 1973).

3:1.6 Unify Theory and Practice.

The transition from the traditional apprenticeship-master model for practicum has included a re-appraisal of the roles of, and inter-relationships between:

- a. Theory (a conceptually rational and tested perspective or framework) and,
- b. Practice (doing the theory) during practicum.

Dewey (1904, 1933) perceived the relationship and importance of the connection between theory and practice in terms of providing growth and power for the individual. Concentrating on practice only would have a shackling effect for student-teachers rather than enabling them to be thoughtful or alert to whatever essential issues confronted them.

More recently, Percival and Ellington (1984) state that a thorough grounding in theory and practice is a necessary component of practicum. Whilst advocating a models approach to teacher education, Brady (1985) considers the integration of theory and practice as essential. Turney et al (1988) describes the practicum as an activity involving the inter-play between theory and practice. In reporting on programmes to improve teacher behaviours Dow (1979, p.3) views the relationship as an essential cross fertilization process by commenting:

Experience was the spur to better academic endeavour and academic behaviour became a further spur to better practice...

In a similar vein, Taggart (1988) supports the idea of an objective based approach to practicum. A practicum based on a theoretical perspective is preferred rather than one based on the whims and fancies of subjectivity that are all too common in

practicum assignments. Tickle, (1987) like Taggart, argues for a researched approach to teacher education including practicum. Teitelbaum and Gitlin (1983) develop this idea by arguing for the inclusion of ethnographic methodology in practicum. In their view, theory and practice can be integrated. Several benefits accrue. For example, student-teachers can examine the nature of teaching in specific contexts. It provides them with viable ways of viewing and critiquing practices and helps them become aware of the influence of the hidden curriculum.

Cohn's (1981) supervision model summarizes the direction the preceding authors are heading. Using a team approach her situational teaching paradigm combines theory and practice in simultaneous 'recurring instructional encounters' (p26) involving coursework and field experience. Cohn's approach revolves around establishing a direct link between the associate teacher's focus and coursework. It teaches associate teachers how to reintroduce previously learnt principles to student-teachers by asking questions that probe so that relationship between past ideas and problem situations are stimulated.

The literature strongly suggests that it is essential to participate in the overt activities of a theoretical perspective. Such a relationship will assist in re-direction and renewal as student-teachers reflectively contemplate their role as increasingly skilful professionals.

3:1.7 Specified Professional Competencies

Warnings have alerted educators to the over emphasis of technocratic rationality as seen in the traditional master-teacher model of practicum (e.g. Battersby and Ramsay, 1988). However,

writers in the field of teacher education agree that student-teachers need to acquire professional competencies (skills) during practicum. For example, Gower and Walters (1983) argue that student-teachers need to do teaching to learn the variety of skills involved. Johnson's (1985) research based study reports skill acquisition ratings are higher after the practicum but are influenced by three inter-related factors: the actual experience, the course work covered at the educational institution and the completion tasks required by the practicum assignment. Competencies generally need to cluster around attitudes and skills within an inquiry-reflective context. Zeichner (1981/82) reinforces the need for these two characteristics to be highly developed in student-teachers.

The type and range of competencies by contemporary authors are varied. For example, Brady (1985, 1986) describes five models of teaching ranging from most teacher centred to most pupil centred in which student-teachers should become competent. Evans (1987b) supports student-teachers developing the competency of being aware of the many variables at work that influence learning/teaching sequences. Other competencies involve one perceiving the effects of ones teaching behaviours and generating concrete examples of previous theoretical experiences to assist with teaching sequences. Evans (1987a) also suggests that students need to develop competency in preparing well designed lesson plans that have a strong content base and relevant learning resources.

Within the same framework, Goodman (1986a) advocates professional competencies when he supports the idea that student-teachers need to be creators of their own classroom

curriculum. For example, they need to develop the ability to articulate their philosophical perspective through content and method (Yoder, 1985). Through critical and retrospective thinking they may develop specific techniques to reach objectives, establish relationships between educational principles and actual practice. They must also identify various ethical and political issues at work in school and society that affect pupils. Beyer (1984) supports these views and states that by using the classroom as an ethnographic cultural laboratory student-teachers can make sense of the social context and then develop and justify an education to serve that context. This process will help minimize the negative effects of social reproduction through education.

In addition to the skills and competencies of planning and preparation, Percival and Ellington (1984) see the ability to use educational technology as an essential component of a teacher's repertoire of skills. Within this discipline future teachers need to develop skills in handling various items of educational technology in order to provide systematic and efficient learning for all pupils.

The preceding analysis of literature has highlighted a variety of desirable components that should constitute any practicum. The necessity of practicum as part of a student-teacher's preparation has been discussed. A specific and effective curriculum needs to be developed to maximize student-teacher learning. The advantages of collaboration and reflection as part of the practicum have been established. In considering these factors it has been strongly suggested that such activity occur with reference to theory integrated closely with practice (and vice

versa). All of the above will assist in the development of professional competencies in student-teachers.

3:2 Emergent Principles

The literature in the preceding review has been generated through a general discontent with the traditional apprenticeship model for teacher preparation. The review has focused on a variety of authors concerned with improving the practicum experience of student-teachers. Whilst important peripheral issues are included to demonstrate inter-relatedness of factors, each study centres on one main issue such as reflection, practicum curriculum or collaboration. A way to move away from traditional perspectives is to derive a variety of principles for practicum. Taken collectively, the studies reviewed give rise to the following seven principles which can provide a basis for the planning, implementation and evaluation of practicum.

Principle 1

Student-teacher professional development during practicum should not be based on apprentice models. (3:1.1)

Principle 2

In terms of student-teacher learning, the practicum is an essential component of teacher education. (3:1.2)

Principle 3

Practicum is more appropriate for student-teacher learning when conducted in a collaborative environment. (3:1.3)

Principle 4

Student-teachers can increase professional skills by using critical reflection as their base for action during practicum.

(3:1.4)

Principle 5

Specific practicum curricula are essential for maximum student-teacher development during practicum. (3:1.5)

Principle 6

To increase competent professional behaviours student-teachers need integrate theory and practice during practicum.

(3:1.6, 3:1.7)

Principle 7

Practicum will be perceived as relevant when professional competencies are clearly specified. (3:1.7)

In summation, there is direct and implied criticism of practicum in the past not providing effective learning for student-teachers. For example, Beyer (1984) comments on practicum sessions replicating problems by the student-teacher imitating 'acceptable' behaviour. Zeichner (1981/1982, p1) criticizes practicum organizers because they have not until very recently considered '*the nature or quality of the experience itself.*' Practicum-is-better-if-it-is-longer has been the criterion for evaluation. Biott (1983) has observed that in spite of practicum, teachers teach the way they were taught. Boydell (1986, p115) reviews the current situation rather forcefully by stating:

Mounting evidence concerning the relative influence of teachers and supervisors on student, raise serious implications for the traditional types of teaching practice supervision.

Studies reviewed strongly indicate that practicum will be more effective when the various principles are put into practice. This study has highlighted these principles as a set that can be used in practicum. To increase the power these principles can have for learning and challenge in practicum, an integrated conceptual context must be established. From this a practical model for practicum may be developed.

Chapter 4

A Model for Practicum

The role of the professional teacher is to create learning for pupils and students (Ashcroft, 1978;1982). Stenhouse (1975, p156) challenges teachers to improve teaching and learning through the systematic and critical examination of individual practices that demonstrate responsibility for personal development.

In a practicum situation the associate teacher is responsible for creating learning for the student-teacher. Teacher development in this sense is dependent on establishing and developing practical abilities through systematically applied habits of critical reflection. Rudduck (1985, p122) calls this doing behaviour research. This idea can be traced back to the philosopher Aristotle who was interested in a practical morality involving shared human morality (Elliott, 1984, p 2).

The literature reviewed indicates the importance of action research whether it is collaborative, reflective, development of a carefully planned curriculum, integration of theory and practice or promotion of a variety of professional competencies. In these examples practicum participants work within particular social situations to address specific issues aimed at improving specific problems. Action research provides a basis for this view of practicum. It has great explanatory power and is able to provide a context for Burke's (1987) model which will be discussed later.

Kurt Lewin (1946), called the 'father' of action research by Morrow (1969), holds that this perspective of investigation has two main dimensions. *Firstly*, it has the dimension of change. People such as teachers involved in practicum participate as a group to determine and define common questions that need resolution. *Secondly*, there is no

distinction between the idea to be researched and the process of researching it; both are reflexive and dynamic. For example, a student-teacher and the associate teacher implementing an educational idea to solve a problem in a classroom are involved in action research (Elliott, 1984, p2; Kyle & McCutcheon, 1984, p172).

Using this close relationship between the concept and its practice Lewin developed a four point spiral approach to research:

- a. Planning the research project by isolating the question to be investigated,
- b. Developing a course of action and observation aimed at resolving the professional dilemma,
- c. Evaluating the proposed action after it has been completed,
- d. Revising and modifying the plan to meet new needs followed by re-implementation of the plan.

Although Lewin's work was mainly in non-educational social settings such as those relating to Jews and Blacks his model of research is appropriate for the present study because it allows problem situations that may result in conflict to be solved (Ebutt, 1985, p151).

In the late 1940's and 1950's Corey (1949a, b and 1959) developed action research. He demonstrated its professional dynamic nature to improve education by harnessing a variety of perspectives through action.

Since that time a number of developments in this research approach have taken place. For example, Stenhouse (1975) developed the idea of a process model for research that teachers can use. This model results in information that can be used to make decisions and point the way for consistent improvement and change. Stenhouse argues that much of what is valuable in learning cannot be predetermined. This response to the objectives model holds that ideas

and concepts of knowledge are open to interpretation and are best perceived as truth by those involved with them. The objectives model distorts one's view of knowledge.

Another contribution to action research has been made by the development of critical theory associated with the Frankfurt School. Critical theory attempts to allow a researcher to investigate a social condition and reflect critically about it without the shackles of an existing theoretical structure. The researcher is able to juxtapose the reality of a situation with what might be if some form of social action takes place (Codd, 1989, p3; Calderhill, 1989, p44; Elliott, 1988a, p161).

These ideas have been developed and refined by Habermas whose model of epistemology involved the three inter-related dimensions of work, interaction and power (Codd, 1989, p3; Calderhill, 1989, p44). These ideas have to do with the way people survive, translate individual perceptions into commonly acceptable ways of behaving leading to relationships involving domination or subordination. At a higher cognitive level technical interest (connected with work), practical interest (connected with interaction) and emancipatory interest (connected with power) generate social science disciplines pertaining to analytical empiricism (work), interpretive disciplines (interaction) and critical science (power). The value of this structure is that through critical science group participants can empower themselves to transcend problems and move towards enlightenment and freedom (Codd, 1989, p4-5).

More recently, authors such as Schön (1983), Elliott (1978, 1981, 1984, 1985, 1988a,b), McTaggart (1984), Kemmis and McTaggart (1988), Kyle and McCutcheon (1984), Burgess (1985), Kelly (1985) and McAlpine (1989) have developed action research further. For example, Elliott posits his action research work on a revised model originally based on

Lewin's work (1981, p2). Tickle's (1987) work has applied action research to teacher education facilities. In this context, Tickle (p2) argues for a researched-based approach to teacher preparation:

Researched-based initial teacher education assumes that from the start of a professional career student-teachers should, together with their tutors and practising teachers, be committed to the ideals of a unified research model.

Holley and Smyth (1989) argue that teachers can theorize about teaching by writing about practice. They point out that teachers can focus on constructing and reconstructing experience and so become their own researchers generating their own data. Specifically, Biott (1983) reports how the principles of action research can be used in helping student-teachers with their own studies and providing a basis for their own professional behaviour.

These principles of action research are integrated by Burke (1986) into a theoretical framework of teacher development which captures the essence of where the literature is pointing. The model provides for a variety of professional principles for continuous teacher development that can be subsumed within three general inter-related themes.

Firstly, induction is viewed as a broad concept that includes: ...all the activities and experiences appropriate to the new expectations and opportunities continuously confronting professionals in education. It includes all the conditions and resources by which individuals gain direction and encouragement through increased understanding.

Secondly, renewal as viewed by Burke involves the unshackling of ones commitment to design and the planning of new more appropriate ways of perceiving a task or event. It may also involve

reactivating competencies that have lain dormant for any length of time and for any particular reason.

Thirdly, redirection stands as an opportunity for action of a different kind. Redirection allows a teacher to pursue another perspective. As a process it can assist in stimulating excellence and authenticity. It can vitalize and generate assurance towards personal and professional programmes for excellence.

Burke justifies his model (and by so doing demonstrates that it can involve action research) by showing that the acquiring and development of abilities is essential for teacher power. This power can protect self-sufficiency in teachers and help develop the professional teacher; a person who can 'enable' students by providing appropriate learning activities. This is essential because of the inherent dynamic nature of the model.

Burke's model applies to teacher development from initial professional contact throughout their professional career. However, for the purposes of this study the model will apply to pre-service teacher induction; specifically the practicum. The model is able to accommodate and harness within a coherent whole the concepts discussed earlier. It has great explanatory power and is relevant for a number of reasons.

On the one hand, induction for student-teachers is an inevitable process. How this occurs will very often determine future professional behaviour. The literature cited above indicates ways in which induction may take place. It sensitizes practicum personnel to what may be appropriate and inappropriate during the induction process.

On the other hand, Burke's perception of renewal is consistent with the concept of reflection discussed earlier. Reflection enables the practicum personnel, especially the student-teacher to develop more

and more appropriate ways of approaching problems perceived during practicum.

Finally, the concept of re-direction is appropriate for practicum because it can involve personnel assisting the student-teacher to choose alternative directions in teaching and learning. The idea of investigating and attempting new strategies based on evidence and evaluation is consistent with the principles derived from the literature.

Burke's concept of continuous development will be retained and applied to the practicum. In terms of his model the practicum will be viewed as a microcosm of the total teacher development scene as perceived by Burke. In so doing the focus of the modified model will be to provide a structure for a student-teacher to participate in activities such as:

- a. Charting an increasingly 'independent' rational course for the practicum,
- b. Setting personal demands which will become the basis for improvement during practicum,
- c. Pursuing the inherent rewards associated with accountability,
- d. Participating in and setting collective policy statements based on personal contributions to the total teaching environment,
- e. Allowing other people to influence and support them in order to establish them as unique teachers.

What is required now is to determine how associate teachers embody the principles discussed earlier into professional behaviours during practicum. Responses will then be analysed using Burke's model to provide a basis for comment.

Chapter 5

Methods

5:1 Introduction

The preceding literature review has served to identify and illustrate seven essential principles on which to base effective practicum. Focus was provided by looking towards the practical demonstration of these principles.

Associate teachers were asked to carefully consider the principles then record how they exemplified them in the practicum setting. The data provided a variety of behaviours that were categorized into sets of behaviours having similar characteristics. This allowed the author to gather ideas about how principles are particularized in schools and later to share these ideas with all participants. Additionally, hypotheses relating to teacher behaviours during practicum were generated.

5:2 Methodological Structure and Process

The idea of teachers 'doing' research underpinned the methodological foundation in this study. Working through an action-research orientation enabled associate teachers to become intimately involved in the project. For example, participants, including the author were involved in the 'thematic concern' (Kemmis and McTaggart, 1988, p9-15) of providing more efficient and effective learning for student-teachers during practicum. Working together as colleagues meant that participants had a small but potentially significant part in a cyclical process that could lead to desirable change in their schools.

Other facets of action-research were found to provide a methodological focus for the study. *Firstly*, the idea of structured behaviour was adopted. For example, this planning concept was used to prepare the structured induction session administered prior to completion of the survey. *Secondly*, doing the job involved action. This was the logical result of the first step of preparing a structured behaviour plan. Looking at the results and ensuing data relating to the 'thematic concern' discussed earlier, involved the *third* factor of observation. The *fourth* focus of reflection involved making sense of what had been observed. For example, consistent with earlier work (See Chapter 4) Burke's model was used to make sense of associate teacher responses by categorizing their behaviours as inductive, renewing or redirecting. These behaviours were eventually incorporated into practical suggestions concerning the 'Criteria' for effective practicum.

To give potency to the evolving research tool for gathering, analysing and making sense of data, the descriptive survey approach was used. This method met the needs of this study because it allowed the investigator to look '...with intense accuracy at the phenomena of the moment and then describe what the researcher sees....' (Leedy, 1974, p79). This meant placing a representative population of associate teachers under scrutiny, recording and making sense of responses. This method had the advantage of helping facilitate potential policy statements that could assist in improving the role of associate teachers during practicum. Another advantage was that accurate results were able to be obtained using only a relatively small sample population (Kerlinger, 1979, p151). In view of time and money constraints this proved to be a major consideration.

Other advantages of the descriptive survey approach in meeting this study's needs were able to be used. *Firstly*, direct relationships and rapport was established with associate teachers. This enabled relevant and reliable data to be gathered because it was obtained directly from the participants. *Secondly*, having direct access to participants meant that concepts used in the study could be clarified immediately during the training session. Focusing participants thinking during this time allowed more efficient and reliable responses. *Thirdly*, direct access to participants provided 'colour' for responses made on the survey as participants elicited their own reasons and explanations for individual actions and responses. Collection of surveys in person from individual participants provided an opportunity for them to make additional comments on their responses.

To summarize, this study used two significant characteristics of the survey approach as part of the methodological process. *Firstly*, it adapted the interview method to gather information. *Secondly*, it modified the questionnaire approach by devising a survey instrument that could be administered directly to the participants. Methodology was strengthened by combining and adapting these two significant factors.

By combining these two approaches the study sought to capitalize on the combined strengths and avoid potential pitfalls. On the one hand the interview method usually involves painstaking and difficult work devising and implementing such an instrument. Time and sound financial support is needed.

On the other hand, selecting a smaller and mostly local population sample meant that a mail questionnaire, with its potential for a poor response rate, need not be used.

This survey methodology based in action-research met the needs of the study and is supported by major authorities in the field (See Kerlinger, 1965, 1975; Leedy, 1974; Elliott, 1978, 1981). In addition, the methodological approach of this study was similar to recent work by Lovett (1989) who investigated practicum in a New Zealand school. Points of conceptual convergence between the two studies cluster around the related concerns of supervisory practices and the student-teacher as an independent professional decision maker. Methodology was such that there was time set aside to meet associate teachers, establish rapport, generate questions, clarify task approach and record responses. This enabled participants to be reassured by providing appropriate answers to their questions during collection of responses.

The methodological process had three main components.

5:2.1 Data Collection

Stage 1 Population Selection

Because of funding and travel constraints the target population for this study was limited to forty associate teachers from four primary schools in the Manawatu area and several private primary schools scattered throughout the North Island

In addition, a population of eight teacher educators was used to trial the survey instrument. These results, where relevant, were included in the data.

Stage 2 Organization

Principals of the selected institutions were contacted by letter (Appendix A) to gain co-operation. Reasons for the study were outlined as well as the potential advantages of the study for the school and the associate teachers. For example, a five page

summary of the principles, teacher behaviours relating to the principles and general conclusions of the study was made available to all participants. Time was arranged for the survey instrument (Appendix B) to be administered at a specially called staff meeting. This served to reinforce the professional significance of the study.

Stage 3. Implementing the Instrument

Several significant phases constituted this process.

a. Pilot study.

Personnel from two teacher education institutions were used to pilot the study. At this stage the instrument was modified and then administered to the other populations.

b. Preparing participants.

At the initial meeting with the associate teachers rapport was established and co-operation gained by outlining the advantages of the study for participants both professionally and personally. Next it was necessary to ensure that all population members understood what the instrument was attempting to achieve. This was done by developing and presenting an induction programme to help ensure that all associate teachers perceived the survey process and concepts in a similar way.

Part of the induction programme involved presenting principles as a set of true and valid statements about practicum to participants. The

principles were justified by drawing briefly on current literature that strongly supports their importance for practicum. Participants evaluative comments about the principles were not encouraged.

Following this, participants were given an explanation to help define each principle. In addition, several exemplars were used to clarify the explanation and definition. Such exemplars were practical in nature. For example, for the principle '*Practicum is more appropriate for student-teacher learning when conducted in a collaborative environment*' an explanation was made in terms of the associate teacher and the student-teacher working together closely to address commonly perceived needs in the classroom. When this is done student-teacher learning during practicum becomes more relevant to the student-teacher.

An example of a practical exemplar for the above principle was:

'At the end of a day the associate teacher and the student-teacher meet for at least 30 minutes to analyse a class need and together evolve a strategy to supply that need.'

To reinforce and ensure that important ideas are well established and clarified, key words and phrases were emphasized. In the above principle words such as 'practicum', 'more appropriate', 'student-teacher' and 'collaborative environment' were discussed and clarified. Questions for this purpose were encouraged

and examples from participants experience used to elucidate queries.

c. Responding to the instrument.

After initial explanations, participants were given the instrument to complete in their own time. The instrument required them to record their personal behaviours that illustrated the principles. Responses were recorded on a grid (See Appendix B). On the horizontal dimension participants were asked to record:

- i. How they put the principles into practice and,
- ii. Other behaviours that they would be comfortable with.

On the vertical dimension two questions were used to categorize responses in answer to the following:

- i. How do associate teachers' demonstrate the principle in professional behaviours and,
- ii. How do they assist student-teachers to demonstrate those principles.

Participants were asked not to collaborate in the completion of the instrument. Completed instruments were collected within 24 hours.

5:2.2 Data Analysis and Categorisation

Initially, survey responses were scanned to identify phrases and ideas indicating similar particularization of the principles. The resulting data were analyzed, accepted or rejected by categorizing responses into Ashcroft's (1982) 'Determinants of Learning' (Appendix 3). Inappropriate and unclear responses not

categorized according to the 'Ten Determinants' were recorded in a separate category as part of the relevant data.

Justification for using the determinants was found in their consistency with Ashcroft's generic idea that the teacher must be effective. That is, the teacher must cause learning to occur. The associate teacher must be more than a custodian of student-teachers or a master for the apprentice to imitate. In the present case, the associate teacher is responsible for enabling active, relevant student-teacher learning. On this basis, it was reasonable to assume that responses recorded did cause learning and could be categorised accordingly so long as associate teachers were effective professional.

After this initial analysis, Burke's model was used to determine whether associate teacher behaviours in each of the 'Ten Determinants' were inclined towards the task of 'induction', 'renewal' or 'redirection'. This emphasis allowed this study to determine whether associate teacher responses complemented the learning emphasis of Ashcroft with Burke's concept of teacher development. For Burke, learning is essential but it must be seen in terms of the three-fold specific criteria mentioned above if it is to contribute fully in teacher development.

On this basis, associate teachers' particularization of the principles for practicum may be validated. It can be argued they cause student-teacher learning and encourage further teacher development by processes of induction, renewal and redirection.

The Ashcroft and the Burke models are consistent with Kerlinger's (1965, p606-610) comments regarding data categorisation. For example, this study has categories for

organizing data and those categories meet the demands of the research problem and aim.

5:2.3 Data Rejection

Again at the initial level dealing with the development of behaviour categories, Ashcroft's 'Determinants of Learning' were used as a basis for rejecting data. Associate teacher responses that could not be categorized into any of the ten determinants were put into a rejection category but still included in results.

Behaviours in this category were assumed not to contribute to student-teacher learning. The model for teacher development outlined by Burke above was used as the final adjudicator to determine whether a particular teacher behaviour could be part of the inter-related notions of induction, renewal and redirection. Justification for this course lies in the fact that the notion of teacher development is inextricably bound up with the concept of learning. This notion deals with changes in behaviour and professional perspectives summarized earlier in the literature review.

Any associate teacher response not able to meet the criteria for learning as outlined in the ten determinants of learning or teacher development through induction, renewal or redirection was rejected as an inappropriate particularization of that principle. However, these data was useful in analysing other possible trends in practicum. For example, evidence of a lack of appropriate or any responses may generate questions that beg to be answered.

Chapter 6

Results

6:1 Data Survey

6:1.1 Introduction

Data were gathered from fourteen educational institutions. Twelve of these were primary schools and two Colleges of Education which provided a total of eight volunteers to pilot the survey instrument. Five schools within the city limits of Palmerston North were used. The remaining seven schools were distributed throughout the North Island. These schools constitute part of the Seventh-day Adventist primary school system.

Forty five survey booklets were distributed to volunteers who had all trained as primary teachers. Participants represented a wide range of teaching experiences and backgrounds. All current primary teachers were associate teachers who had been teaching for a minimum of five years. All eight teacher educators involved in the pilot study had recent contact with primary schools either as teachers or as C.O.E. staff.

Table 6:1 shows the analysis of participants according to sex and age.

Table 6:1
Sex and Age Range of Participants

Age Range	Male	Female	Total
21-30	1	3	4
31-40	3	13	16
41-50	9	9	18
51+	1	1	2
Total	14	26	40

Due to financial and time restraints the population sample was confined to the forty responses received and included in the data. Three surveys were lost and two participants did not complete the survey. This represented an 88% return rate.

6:1.2 The Induction Programme

Prior to surveys being completed each participant completed an induction programme. (Appendix D). A total of fifteen induction sessions were conducted with groups ranging in size from one to eight volunteers. Time taken never exceeded the planned thirty minute period. All stages of the induction programme were completed except for Part 3, d-f. No major problems were experienced. Minimal minor queries and questions were experienced and quickly solved. As perceived by the participants, a major strength of the induction programme was its ability to clarify the terminology in each of the principles. It may be concluded that the programme appeared to assist participants to relate to the survey in the same way.

One feature of the induction programme was the positive interest that it generated in terms of assisting student-teachers

during practicum. Secondly, the emphasis on teachers participating in their own research to produce their own data to address practical problems was seen as valuable.

6:1.3 Pilot Study

After negotiation with the principals of Palmerston North College of Education and Longburn Adventist College and the respective Heads of Department eight people were invited to volunteer to participate in the survey trial. Participants were selected using the following criteria:

- a. Recent successful experience as associate teachers,
- b. Academic expertise,
- c. Primary teaching expertise,
- d. Involvement in C.O.E. practicum programmes.

Whilst all met the above criteria some had greater or more recent experiences in one or several of the areas.

Pilot volunteers were asked to provide feedback on two aspects. *Firstly* they were asked to comment on whether the induction programme:

- a. Sensitized them to the aim and worth of the study,
- b. Clarified the seven principles involved in the study,
- c. Clearly set out their role in completing the survey.

Secondly, participants were asked to critically evaluate the survey booklet in terms of:

- a. Layout,
- b. Clarity of directions, vocabulary and sentence structure,
- c. Appropriateness of principle exemplars,
- d. Any personal recommendations and suggestions.

The pilot sessions were an opportunity for the researcher to practice, clarify, evaluate and refine his own skills as induction leader as well as implement and evaluate suggestions made by pilot study participants.

For this reason the first four participants were interviewed singly. After each interview results were evaluated and modifications made. After four such interviews the survey was trialed with a group of four. This procedure enabled the researcher to refine one-to-one and one-to-many interpersonal skills necessary for future anticipated similar situations.

The pilot study indicated that:

- a. Researcher's dialogue had to be more concise and precise to fit into allotted 30 minute time slot. It had to be practised like a script in a play to effect a better flow from one idea to the next.
- b. More appropriate words had to be chosen to assist in 'a' above and in the actual booklet.
- c. Modifications needed to be made to wording in the booklet and changes to layout to assist comprehension of task. For example, it was suggested that the 'How I...' appear in the extreme left hand column and 'Teacher Behaviours' in column A (a clean swap).
- d. For maximum spread of concentration over the even principles by all intended participants, the pages of the booklet be tumbled so that not all books include principles 1-7 in ordinal order.

With these modifications made the survey was presented to the target population

6:1.4 Target Population

As reported above, school principals were approached to negotiate access to their staff. A significant feature of this negotiation was suggesting to principals the potential value of the project to the school and to the individual participants. It was accepted that results from the study could assist associate teachers perform their roles more effectively. Principals were keen to protect their staff in terms of additional commitments and needed assurance that this study was relevant enough for them to participate in. Access to staff appeared strongly dependent on this point. Final organizational arrangements were confirmed. Teachers were invited to participate if they met the following criteria:

- a. Participants needed to be volunteers.
- b. Participants needed to be currently employed as associate teachers.

On this basis, thirty seven teachers from the schools selected volunteered to participate in the study.

A schedule to collect data from the various volunteers was developed, agreed upon and then implemented. Induction programmes were conducted and surveys completed and collected within 24 hours

In spite of the desire to collect surveys the day after presenting them to participants, negotiation about collection time did occur. This was due to pressing school related events that had to be attended to. The methodological component for the researcher to be present to collect the completed surveys was directly instrumental in the 88% (32 responses) return rate. Of the

five surveys not returned two were lost at the school prior to the researcher returning to collect them, two were not completed and one was 'lost' in the mailing system.

6:2 Survey Results

6:2.1 Overview

Thirty two associate teacher furnished over 500 claimed-behaviours that described how they particularized the seven principles. These responses were then analyzed and categorized according to key words, phrases and concepts. A grid (Appendix F) was used to record this initial analysis.

These results were scrutinized further. Similar claimed-behaviours were combined and put into 'families' by colour coding. Appendix E is a condensation of this raw data an example of which appears as Table 6:2.1

Table 6:2

Categorized Raw Data

Column A

Principle 1

Student-teacher professional development during practicum should not be based on apprentice models.

State, use and provide a variety of teaching approaches and styles.

State and demonstrate personal style that works.

Plan for observation of other teachers.

Associate teacher to accept other teachers ideas about teaching.

Avoid telling the student-teacher 'This is the way'.

Associate teacher explains reasons for their own behaviour.

Associate teacher and student-teacher accept advice from other teachers.

Associate teacher presents well planned, rehearsed and attainable models of teaching.

Encourage student-teacher to use associate teacher approaches as a base then adapt to meet own needs.

Assist student-teacher to develop personal style by experimenting and trial.

Highlight professional behaviours that the student-teacher is comfortable with.

Encourage, affirm, commend and praise student-teacher for attempting a variety of teaching approaches.

Encourage student-teacher to try out different ideas.

Allow student-teacher to make choices.

Allow student-teacher autonomy.

Encourage the student-teacher to use own initiative and imagination in teaching.

Praise and welcome 'new' ideas.

Praise individual strengths and effort.

Allow student-teacher to teach according to individual strength but justify behaviours.

Teach each others lessons.

Associate teacher to state how they have learnt from the student-teacher

Evaluate associate teacher lessons with the student-teacher

Ask for and listen to student-teacher views on teaching.

Participate in co-operative planning.

Develop a mutual relationship re planning and preparation.

Solicit opinions and advice from the student-teacher

Work with the student-teacher as a team.

Share with the student-teacher teaching tasks equally.

Associate teacher defines the role of the student-teacher

Associate teacher to be flexible and open minded.

Evaluating a variety of teaching approaches with the student-teacher

Provide for problem solving during practicum.

Use a lot of higher order question ('Why' and 'How').

Use problem solving situations.

Provide time for student-teacher to prepare for reflection and evaluation.

Provide time for reflection and evaluation after the lesson.

Encourage questioning of lessons.

Encourage enquiring behaviour of student-teacher

Provide exploratory sessions for student-teacher

Provide time for critical analysis as a base for conferences.

Observe and evaluate individual student-teacher lessons.

Associate teacher to elicit alternatives in student-teacher behaviours.

Associate teacher to supply constant feedback as observer.

Associate teacher to support what the College of Education has taught.

Prior to practicum associate teacher evaluate own teaching and strategies.

Convey idea that associate teacher may be viewed as resource person.

Associate teacher to communicate idea that teaching is a dynamic activity and so one is always learning.

Get the student-teacher to outline the College of Education tasks and requirements.

Identify with the student-teacher specific elements of teaching from the College of Education

Associate teacher to introduce the student-teacher to colleagues as a fellow teacher.

Treat student-teacher as a fellow teacher.

Associate teacher to get the student-teacher to focus on their role as if they were in their own real classroom.

Assist the student-teacher to approach other staff members in a non threatening way.

Let student-teacher work under 'normal' class conditions.

Associate teacher to develop a sequence of activities for student-teacher development.

Associate teacher to admit that they can still learn from the pupils and the various class activities.

Column B Results

Principle 1

Student-teacher professional development during practicum should not be based on apprentice models.

Use colleagues style and approach.

Read widely regarding professional growth.

Share ideas with colleagues.

Discuss many perspectives regarding meeting objectives.

Allow student-teacher to try various methods.

Allow student-teacher to observe many other successful teachers.

Allow student-teacher to observe many other successful styles.

Give time for student-teacher discussion of associate teacher's styles.

Student-teacher suggest behaviours other than associate teacher's ideas.

Try out on class and get feedback re strategies.

Work with and plan alongside student-teacher.

Look at practicum from different perspectives such as a child's.

Out of school relationship with pupils.

Suggest possible ways of behaving.

Get other associate teacher to address student-teacher.

Ask student-teacher for possible solutions to problems then implement and evaluate.

Provide feedback regarding performance.

These 'families' gave rise to generic descriptors for the 'families'. Appendix G reports these findings by showing generic descriptors, phrases for claimed behaviour and frequency. Table 6:3 is an example of this information.

Table 6:3

Generic Descriptors, Claimed Behaviours
and Frequencies for Principle 1

Student-teacher development during practicum should not be based on apprentice models			
<i>Coded Generic Descriptors for Claimed Behaviours</i>		<i>Coded Examples of Claimed Behaviours</i>	<i>No</i>
1a	Expose student-teachers to a range of teaching behaviours	a1 State, provide and use a variety of attainable teaching strategies a2 State, demonstrate & explain personal style a3 Avoid 'This is the way' attitudes a4 A.T. show acceptance of other teaching ideas a5 Provide observation of other teachers a6 Encourage use of A.T. behaviours as a teaching base	13 8 5 4 4 2
1b	Actively involve the student-teacher in 'higher order' thinking	b1 A.T. elicits alternative behaviours b2 Evaluate a variety of approaches observed b3 Use feedback using 'How' and "Why" questions b4 Use problem solving b5 Encourage questioning and probing of behaviours b6 provide time for reflective critical analysis before and after teaching	1 2 5 3 4 6

1c	Work co-operatively with the S.T.	c1 Evaluate A.T. lessons with S.T. c2 A.T. states how they have learnt from S.T. c3 A.T. solicits, listens and uses S.T. teaching concepts c4 Team teaching c5 Teach each others lessons c6 Equal sharing of educational tasks	2 2 7 7 1 2
1d	Provide specific support behaviours	d1 Prepare a 'real' environment d2 Support C.O.E. teaching programme d3 prior to practicum A.T. evaluate own teaching behaviours d4 Encourage S.T. to see other teachers as resource people d5 Avoid giving menial (apprentice) tasks d6 Treat S.T. as a colleague d7 Encourage S.T. to see teaching as a continual chance for personal learning d8 Develop sequential learning tasks for S.T.	2 3 1 3 1 2 3 1

1e	Allow S.T. flexibility to pursue professional individuality	e1 A.T. open mindedness to allow S.T. choice and autonomy	3
		e2 Assist and encourage S.T. style through experiment and trial	14
		e3 Recognise and praise S.T. appropriate individuality	11
		e4 A.T. highlight behaviours S.T. is comfortable with	3
		e5 Praise S.T. experiments with various teaching approaches	9

This analysis became the basis for the final Principle, Behaviour Category and 'Behaviour Criteria relationship (Appendix H).

6:2.2 Column A Results

Results for each of the seven principles are shown in table form in Appendix G (i). It is intended that this study does not wish to rank claimed-behaviours as being of more or less worth or importance. For example, isolate behaviours with only one response could be more significant because they may represent a particularly reflective, creative perspective.

Principle 1

Student-teacher professional development during practicum should not be based on apprentice models.

Results show 31 different claimed teacher behaviours representing 134 responses. Of all of the behaviours reported, none indicated that the student-teacher must copy the associate teacher's behaviour to become appropriately

prepared as a teacher. The reverse was the case. Associate teachers indicated a strong bias towards an eclectic approach to teaching in which they encourage the student-teacher to consider a range of options for teacher behaviours and become involved in working with their associate teacher as they think about their behaviours rather than just copying the model. Support for this latter point may be seen in the 40 responses indicating associate teacher willingness to allow student-teachers to evolve and refine their individual teaching styles.

Associate teachers reported 37 behaviours that actively promoted working with and supporting student-teachers as they developed appropriate individual styles. Evidence highlights the willingness of associate teachers to encourage the use of cognitive processes that do not result in replicating the behaviours of associate teachers.

Results suggest strongly that associate teachers do not subscribe to apprentice models as the basis for student-teacher development.

Principal 2

In terms of student-teacher learning, the practicum is an essential component of teacher education

22 different behaviours representing 96 responses are reported. The evidence strongly indicates that teachers claimed-behaviours centre around the concept of active participation by the student-teachers in 'doing' teaching. Associate teachers reported 6 behaviours representing 18

responses in which the practicum was perceived as an opportunity to demonstrate professional behaviours.

A feature of these results is the indication that associate teachers see practicum as an important time to assist student-teachers actively link theory and practice. See examples a1 and b1.

Results indicate strong associate teacher support for the student-teacher to be actively involved in the practicum and to have access to modelling behaviour. Of the 62 responses in these areas there is an emphasis on co-operative relationships. Associate teacher support behaviours and their willingness to encourage flexibility and reflective thinking is a consistent feature of results.

Principle 3

Practicum is more appropriate for student-teacher learning when conducted in a collaborative environment.

Associate teachers claimed-behaviours cluster around three generic descriptors that deal with developing a collegial approach (90 responses) and modelling collegial based behaviours (26 responses). These behaviours are supplemented by support strategies aimed at maintaining and developing the collaborative relationship (43 responses).

The 159 behaviours reported indicate that associate teachers strongly support the notion of co-worker and mentor in their relationship with student-teachers rather than a relationship of master and apprentice. This tendency is consistent with similar data found in results for other principles.

Principle 4

Student-teachers can increase professional skill by using critical reflection as their base for action during practicum.

Associate teachers reported a strong preference for behaviours that could allow critical reflection to occur. 73 responses were recorded that were represented by three behaviour examples. Results show that associate teacher behaviours deal with ensuring that student-teachers participate in critical reflection, modelling critical reflection processes, supporting student-teachers as they participate in the process and suggesting how they may 'do' critical reflection.

Associate teachers reported support behaviours and suggested strategies for critical reflection. This willingness to help student-teachers is consistent with other results.

Principle 5

Specific practicum curricula are essential for maximum student-teacher development during practicum.

The way associate teachers reported they demonstrated this principle was by actively supporting the College of Education (C.O.E.) practicum assignment (63 responses). Other reported behaviours dealt with a range of activities to assist in student-teacher development.

One associated teacher reported that there was no specific practicum curricula operating in the school in spite of student-teachers visiting and C.O.E. assignments being available. This response may be significant in that most associate teachers may not recognise that particular

practicum curricula are different from subject curricula found in schools. This position is more tenable because of the apparent emphasis coming through responses that the C.O.E. assignment is the curricula and that primary school curricula are important for the student-teacher and are therefore specific practicum curricula.

Principle 6

To increase competent professional behaviours student-teachers need to integrate theory and practice during practicum.

Responses gathered (108) yielded 5 examples of associate teacher behaviours. These behaviours indicate that associate teachers integrate theory into their teaching by using it to support the teaching and learning act and by providing support for the student-teacher as they attempt to combine theory and practice in their teaching.

These results show that associate teachers are keenly aware of the value of integrating theory and practice.

Principle 7

Practicum will be perceived as relevant when professional competencies are clearly specified.

Associate teachers' claimed-behaviours indicate a strong emphasis on direct behaviours to 'tell' student-teachers what competencies are desirable. Critical thinking skills (15) were represented. Reinforcing appropriate professional competencies was used. To assist in specifying competencies, positive reinforcers along with corrective feedback were used (27 responses).

The evidence reported shows several trends:

- a. Associate teachers claim to accommodate individuality and flexibility in their behaviours.
- b. They are willing to demonstrate possible ways for student-teachers to behave.
- c. Support and praise behaviours are part of associate teachers' behaviours as student-teachers develop various skills.
- d. Associate teachers encourage higher order thinking processes.
- e. The notion of collegialism is apparently strong among associate teachers.
- f. The use of theory to assist with practice (and vice versa) is considered important.

6:2.3 Column B Results

The same process was used to analyse the raw data in Column B ('Other behaviours that may be used that I am comfortable with'). Responses are shown in Appendix G (ii). In comparison with Column A responses very few behaviours (130) were recorded. The responses are consistent with the categorization found in Column A responses. No differences were perceived in these claimed intended behaviours and the actual claimed-behaviours found in Column A. These results suggest that teachers are not aware of or do not wish to dramatically change behaviours from those they already perform.

6:3 Principles, Behaviour Categories and Behaviour Criteria

The preceding results provided a basis for the development of a coherent synthesis of data. For practical purposes, the data was

presented in a logical fashion so that teacher educators, student-teachers and associate teachers could use the material in their professional activities (See Appendix H). To do this the following process was devised and applied to all seven principles.

From the analysis reported above it has been demonstrated there are several areas that summarize how associate teachers particularize each principle. These general behaviours were labeled as 'Behavioural Categories' of the principle. For example, Appendix H portrays each Principle, the various Behaviour Categories for each Principle and the accompanying Behaviour Criteria lists. An example of part of Appendix H is shown in Table 6:4

Table 6:4

Principle 1 With Behaviour Categories and Behaviour Criteria

Student-teacher development during practicum should not be based on apprentice models	
<i>Coded Generic Descriptors for Claimed Behaviours</i>	
<i>Coded Examples of Claimed Behaviours</i>	
1a	<p>The A.T. may expose student-teachers to a range of teaching behaviours by...</p> <p>a1 Stating, providing and using a variety of attainable teaching strategies.</p> <p>a2 Stating, demonstrating & explaining personal style.</p> <p>a3 Avoid 'This is the way' attitudes.</p> <p>a4 A.T. show acceptance of other teaching ideas.</p> <p>a5 Provide observation of other teachers.</p> <p>a6 Encourage use of A.T. behaviours as a teaching base.</p>

1b	The A.T. may <i>actively involve the student-teacher in 'higher order' thinking</i> by...	<ul style="list-style-type: none"> b1 Eliciting alternative behaviours. b2 Evaluating a variety of approaches observed. b3 Using feedback using 'How' and 'Why' questions. b4 Use problem solving. b5 Encouraging questioning and probing of behaviours. b6 Providing time for reflective critical analysis before and after teaching.
1c	The A.T. may <i>work co-operatively with the S.T.</i> by...	<ul style="list-style-type: none"> c1 Evaluating A.T. lessons with S.T. c2 Stating how they have learnt from S.T. c3 Solicits, listens and uses S.T. teaching concepts c4 Team teaching. c5 Teaching each others lessons. c6 Equal sharing of educational tasks.

1d	The A.T. may <i>provide specific support behaviours</i> by...	d1 Preparing a 'real' environment d2 Supporting C.O.E. teaching programme. d3 Evaluating own teaching behaviours prior to practicum. d4 Encourage S.T. to see other teachers as resource people. d5 Avoiding giving menial (apprentice) tasks. d6 Treating S.T. as a colleague. d7 Encouraging S.T. to see teaching as a continual chance for personal learning. d8 Developing sequential learning tasks for S.T.
1e	The A.T. may <i>allow S.T. flexibility to persue professional individuality</i> by...	e1 Being open minded to allow S.T. choice and autonomy. e2 Assisting and encouraging S.T. style through experiment and trial. e3 Recognising and praising S.T. appropriate individuality. e4 Highlighting behaviours S.T. is comfortable with. e5 Praising S.T. experiments with various teaching approaches.

To assist data organization a coding system was devised and used throughout the study. For example, Principle 1 had five categories of behaviour coded 1a, 1b, 1c, 1d and 1e. The code 1e therefore refers to the Behaviour Category:

The A.T. may allow S.T. flexibility to persue professional individuality by...

Whilst each Behaviour Category may give direction to how the principle could be put into practice, there is no practical check that intended specific professional behaviours are relevant and appropriate. To assist focusing behaviour the examples of claimed descriptors were renamed 'Behavioural Criteria' and coded similarly to the Behaviour Categories. For example, a1, a2, b1, b2, b3, c1 et cetera. Therefore the code 1e2 refers to a Behaviour Criteria for 1e:

Assisting and encouraging S.T. style through experiment and trial.

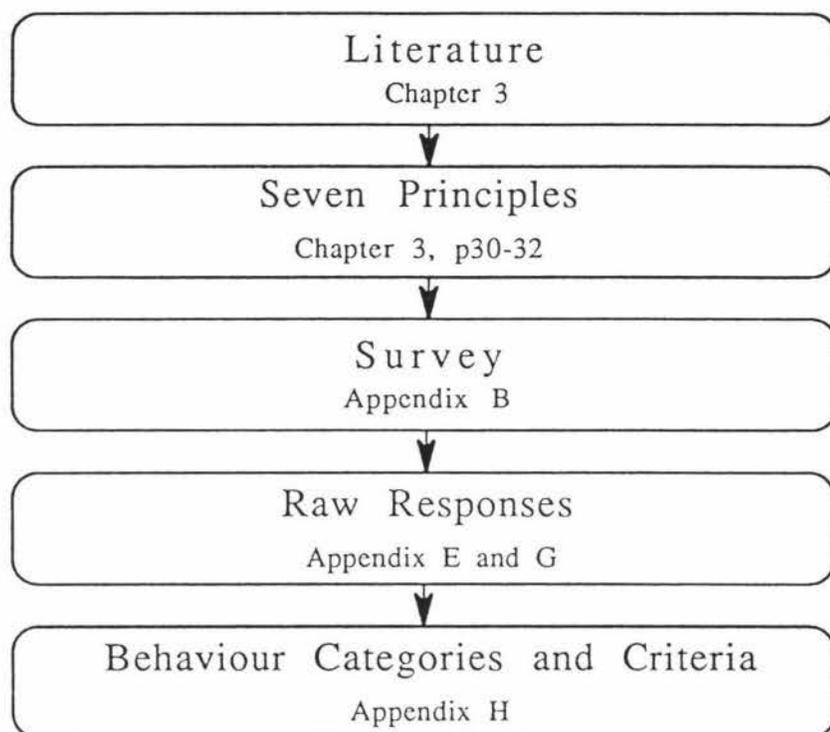
Behaviour Criteria provide specific ideas for teachers wishing to particularize Behaviour Categories. In addition they provide a check that Behaviour Categories are being operationalized appropriately. Potentially a person such as an associate teacher may be assured that Principles for Practicum are being implemented reasonably.

This study aimed to synthesize several principles that could be used as a basis for teaching practicum. This has been done and the list of principles reported on pages 30-32. A survey instrument was developed and used to collect responses associate teacher said they put the principles into practise. Analysis of this data resulted in the development of Behaviour Categories and their supporting Behaviour Criteria (Appendix H) which can act as a 'ready reference' for those involved in practicum. The power of information in Appendix H lies in the fact that student-teachers, associate teacher and teacher educators may have a practical comprehensible guide to assist them in practicum.

Final results are summarized in Figure 6:1 which captures the essence of this study and outlines the practical application of the data collected.

Figure 6:1

Summation of Results



The next chapter will now consider these results in the light of Ashcroft's (1978, 1982) learning determinants and Burke's (1987) model for teacher development. By doing this the potential professional credibility of this model for practicum will be enhanced and confirmed.

Chapter 7

Discussion

On its own, the reported data would not necessarily have credibility in terms of its relevancy as appropriate teaching and learning strategies for practicum. What is needed is a comparison between the data and a model for learning and teacher development to establish relevancy of teacher behaviours.

Ashcroft's (1978, 1982) Determinants of Learning (Appendix C) provides a practical model to assist determining whether the reported teacher behaviours are legitimate in terms of student-teacher *learning*.

Ashcroft asserts that for teachers to be more than custodians and providers of educational support systems they must be professional instructors. As 'enablers' they *must* be able to create learning in students. Student learning can occur by the teacher focussing on three cycles of instructing.

Firstly, the 'Orientation Cycle' aims to motivate and focus student attention and activity towards the desired learning outcomes.

Determinants of Learning involved in this cycle are:

- a. Ensure objectives are understood,
- b. Ensure that objectives are relevant to the learners,
- c. Create optimal learner arousal,
- d. Generate a positive learning environment.

Secondly, the 'Instructional Cycle' is characterized by the instructor giving information, student responding to or asking questions, the instructor providing feedback and reinforcement and further information giving. Elements of the Determinants of Learning in this cycle are:

- a. Ensuring that feedback is provided for the student and used,

- b. Reinforcing appropriate learning behaviours,
- c. Giving a wide range of examples to illustrate ideas and principles to be learnt.

Thirdly the 'Involvement Cycle' is characterized by the focussing of learners' attention on specific objective based activities. Learning determinants involved in this cycle include:

- a. Ensuring that students experience active participation,
- b. Ensuring a range of senses are involved,
- c. Focussing attention and eliminating distractors.

Using the three cycles of instructing and the 'Determinants of Learning' as a base, the Behaviour Categories were analysed to see whether there was evidence of behaviours that would cause student-teacher learning during practicum.

Table 7:1 summarizes these results.

Table 7:1

Frequency Distribution of Principles and Behaviour Categories in Relationship to the Ten Determinants

Instructional Cycles and Determinants	Principles						
	1	2	3	4	5	6	7
<i>Orientation Cycle</i>							
A. Objectives are Understood							
B. Objectives are seen as Relevant							
C. Optimal Arousal					5a		
J. Positive Learning Climate	1d	2c	3a,b c	4c	5b,c	6b	

Instructional Cycle

D. Feedback is provided and Used				4d			7a,d
E. Reinforce Correct Learning Behaviours							
F. Provide Multiple Examples	1a	2e		4b		6a	

Involvement Cycle

G. Trainees Participate Actively	1b c,e	2a, d		4a			7b,c
H. A Range of Senses are Involved							
I. Focus Attention and Minimize Distractors							

The following conclusion may be drawn based on the evidence reported above:

- a. Six 'Determinants of Learning' are represented in the Behaviour Categories.
- b. Of the category placements made;
 - i. 9 were placed into determinant J (Positive Learning Climate),
 - ii. 8 were placed into determinant G (Active Participation),
 - iii. 4 were placed into determinant F (Provide Multiple Examples),
 - iv. 3 were placed into determinant D (Provide and Use Feedback),
 - v. 1 was placed each into determinants C (Optimal Arousal) and H (Use a Range of Senses).
- c. There is an apparent lack of other determinants.

On closer examination of the Behaviour Criteria it is possible to identify a greater range of examples of determinants. For example, for each learning determinant that follows, the accompanying coded Behaviour Criteria illustrates and supports it

- a. 'Ensure correct learning behaviour is reinforced'

Praise student-teacher when they experiment with various teaching approaches (1e5).

Provide induction, feedback, pre and post practicum contact and praise (2c3).

Avoid negative criticism. Rather show trust and praise (3c3).

Use positive reinforcers (4c1).

Provide a reward system for attaining competencies (7d1).

- b. 'Ensure that objectives are seen as relevant by the learner'

Ensure that C.O.E. requirements are clarified, integrated and met (5a1).

Use, monitor and evaluate clear simple objectives (7a3).

Plan for individual needs (5b5).

- c. 'Attention is focussed and distractors are eliminated'

This learning determinant is implied in those behaviours that require the student-teacher to focus attention on any particular professional issue. The use of *problem solving strategies (1b4)*, 'How' and 'Why' questions (1b3) and *higher order questions (4a1)* assist in focussing behaviours.

- d. 'Ensure objectives are understood'.

Planning co-operatively (2a6).

Share planning and teacher tasks in an open and mutually consultative way (3a1).

Show student-teacher pre-planning (3c5).

(A.T.) Modelling critical evaluation of own lessons (4b2).

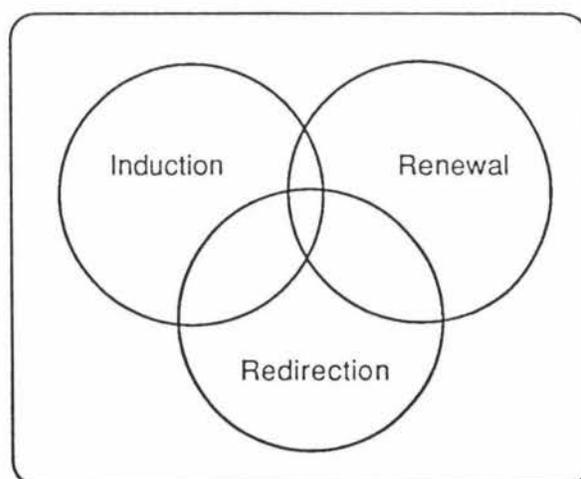
Insist on using behavioural objectives (5b7).

From this evidence it is justifiable to conclude that there are examples of all Determinants of Learning in both the Behaviour Categories and Behaviour Criteria. All three instruction cycles are represented. This means that the reported behaviours representing particularization of the Principles appear to be appropriate and credible in terms of assisting student-teacher learning.

As reported above, Burke's (1987) integrated three factor model (See Figure 7:1) for teacher development has powerful relevancy for practicum.

Figure 7:1

Burke's Model of Teacher Development



With regard to 'Induction' Burke embraces the importance of pre-service experiences such as '*...formal studies related to educational programmes...*' and '*directed observations of classroom situations...*' (p

viii). In addition, Burke notes the following experiences together make up his notion of induction:

- a. Changing task requirements,
- b. Gaining experience in different roles and environments,
- d. Procuring new strategies and resources for instruction,
- e. Modifying school policy and social expectations.

To summarize, Burke defines induction as:

...all the activities and experiences appropriate to the new expectations and opportunities continuously confronting professionals in education. It includes all the conditions and processes by which individuals gain direction and encouragement through increased understanding. Induction is a continuous process, and as such becomes an extremely important development effort. In this context, induction is as important to the experienced teacher as it is to the beginner.' (p. ix). (Italics and emphasis supplied)

Secondly, Burke emphasizes that 'Renewal' is concerned with leading a teacher to new ways of perceiving because a concept has been extended and not allowed to limit investigation or inquiry. Such a process can forge new ways of planning and behaviour in terms of efficient and effective learning and teaching. Renewal can enable a teacher to reemplace previously learnt competencies. It can involve a teacher returning to the study of a process aimed at assisting them to develop some professional area.

Thirdly, 'Redirection' occurs when a teacher can use their creative abilities to elucidate educational, teaching and personal purposes, modify teaching approaches and apply competencies to cause appropriate, relevant change in behaviour.

These three factors combine and inter-relate to produce the concept of 'Development'. Burke comments:

Development is continuous improvement which occurs via many avenues, including expansion, advancement, maturation, elaboration, conversion, evolvement, and progression. Each of these avenues traverses one or more of the components of induction, renewal, or redirection.' (p. xi).

Whilst concerned primarily for practicing teachers, his model does accommodate and can be applied to the pre-service phase of a teachers career.

In terms of this study, it is reasonable to assume that if the reported behaviours of associate teachers can fit into Burke's model of teacher development then those claimed-behaviours, Behaviour Categories and Behaviour Criteria supporting Principles for Practicum are credible. In terms of practice they can be viewed as reasonable behaviours to implement during practicum.

An analysis of results in terms of Burke's model can be seen in Table 7:2

The evidence presented strongly supports the belief that the claimed-behaviours reported in the survey, and the Behaviour Categories and Behaviour Criteria illustrative of the Principles for Practicum are appropriate to include in practicum. Burke's model supports these behaviours as being relevant for induction, renewal and redirection.

Both the Burke and the Ashcroft models can accommodate the reported associate teacher behaviours, development and learning. It is highly likely that student-teacher learning can be enhanced in terms of the processes involved in developing appropriate professional attitudes, values, beliefs, knowledge and skills.

Table 7:2

Frequency Distribution of Principles and Behaviour Categories in
Relationship to Burke's Development Model

Teacher Development	Principles						
<i>Induction</i>	1	2	3	4	5	6	7
Student-teachers:							
• Acquire professional baggage	1d	2a	3a	4b	5a		7a
• Participate in formal studies							
• Experience direct classroom observation	1a	2b	3b	4d	5c		7c
• Make employment decisions							
• Modify assignments, policy and expectations	1c	2c	3c	4c		6a,b	7d
• Experience a range of environments and roles.	1a,b e	2a	3b		5b		
<i>Renewal</i>							
Student-teachers:							
• Revigorate purpose and processes	1b	2e		4a	5c	6a	7b
• Not bound by structure			3c			6b	7c
• Develop new design						6b	
• Reactivate old structures				4d			

Redirection

Student-teachers apply creativity and ingenuity to:							
• Try out other possibilities	1e	2d		4a	5c	6a	7c
• Stimulate excellence	1b				5b		
• Restructure and adapt			3c				
• Progress professionally						6b	7d
• Increase expertise	1c,e	2c,e	3a				7a-c

Chapter 8

Conclusions, Implications and Final Observations

In Chapter 1, reference was made to the aims and significance of this study. The following points summarize the focus of that section:

- a. Following a review of the relevant literature, principles that could guide practicum were to be derived and synthesised.
- b. The principles developed were to be presented to associate teachers who were to particularize them in behavioural terms.

The significance for doing this lay with the fact that a review and synthesis of current conceptual approaches to teacher education should and should result in a practical planning structure for practicum to replace current intuitive approaches.

The outcome of further development of such a structure could be used as a practical guide for student-teachers, teacher educators and associate teachers involved in teaching education. Recorded behaviours could assist associate teachers particularly, in the selection of appropriate behaviours for use in practicum. For example, the Principles, Behaviour Categories and Behaviour Criteria recorded in Appendix H can be used in the following ways:

- a. Firstly, teacher educators may ask the question 'What principles can guide me in preparing practicum for student-teachers?' *Principles for Practicum* can supply that information.
- b. Secondly, *Behaviour Categories* are available for the teacher educator for inclusion into the practicum.
- c. Finally, to ensure that Behaviour Categories are operating in the practicum the teacher educator can refer to *Behaviour*

Criteria. If these are evident then it is reasonable to assume that Behaviour Categories are operating. If Behaviour Categories are operating the Principles are being applied in practice.

The evidence cited may be used as support and conformation for existing approaches to practicum. As an evaluation tool, it could provide a spur to eliminate and replace inappropriate behaviours and strategies currently in use.

The literature review has resulted in the development of a list of several principles appropriate for use in practicum. The principles have credible support and have been additionally validated by a model for learning and a model of teacher development.

Associate teachers have indicated a wide range of professional behaviours demonstrative of how they put the various principles into practice. These behaviours are consistent with the literature in terms of the cited models for learning and teacher development and the literature review, embodied in the seven principles.

Therefore, on this basis this study concludes that Principles for Practicum, the Behaviour Categories and the Behaviour Criteria do provide a practical, credible approach to practicum. The behaviours reported in Appendices F and G can assist associate teachers for example, to formulate realistic practical behavioural strategies to help student-teacher learning.

Several important implications can be drawn from this study:

- a. Personnel involved in teacher education, in particular practicum, now have access to a practical guide that can assist in the development of practicum.

- b. Student-teachers can be assured that practices based on this study are credible and if followed should lead to efficient learning.
- c. This study has the potential to give teacher educators and associate teachers confidence that what they may have been doing in the past was legitimate in terms of the current literature and models of learning and teacher development perspectives.
- d. On the other hand, this study has the power to assist teacher educators and associate teachers to reject or modify behaviour to conform with current valid perspectives.
- e. The pedagogical benefits gained from this study enable those involved in education to be more accountable for student-teacher and pupil learning. Social, economic and political forces can be served in a positive way.
- f. The results of this investigation can be used by individuals in their attempts to improve professional behaviours. Increased potential for independent learning may mean that any gains in practicum efficiency are not entirely dependent on expensive in-service courses and seminars. Independent learning means that an associate teacher for example can apply the principle at times when they are most meaningful and relevant.
- g. Comment was made by a number of participants indicating appreciation at being able to participate in practical research that had direct benefit for them thus underscoring the value of the action-research emphasis integrated earlier.
- h. Several teachers expressed appreciation for the challenge the survey gave them. The task of reporting behaviours became

the basis for reflective, critical personal analysis. For participants this was seen as positive, not only reinforcing the practical potential of the study as mentioned above (f) but also reinforcing the value of the study in terms of personal teacher development (renewal and re-direction).

Some unanswered questions are raised by this study. One such question has to do with whether or not the claimed-behaviours do in fact occur in practice. Objective validation in this area would be a useful further step to extend this study. The issue as to how representative the claimed-behaviours of those in the total population is another question that may strengthen this present investigation.

If practicum is to become more effective and justifiable then in all practicum sessions the seven Principles must be overtly demonstrated through the supporting Behaviour Categories and their related Behaviour Criteria.

Appendix A

Initial Letter to Principals

Day and Month, 1990

The Principal
School
Street
District

Dear Principal,

At present we are involved in research aimed at developing principles for practicum and investigating how associate teachers put them into practice. To help us do this we are appealing to you for help in the form of a time commitment.

With your permission, we would like to have access to your staff of associate teachers. We request your support by suggesting to them that they volunteer to participate in a data collecting process that has two parts. Part one will be an induction session of no longer than one hour. In the second part staff members will be invited to complete a survey booklet in their own time of no longer than 30 minutes. Anonymity will be carefully maintained and participants will be given a summary of relevant results.

There are a number of exciting developments overseas relating to practicum and we would like you to participate in this advancing area. With your help practicum in N.Z. may become more effective in terms of student-teacher development.

Because of schedule constraints an early reply in which you may indicate your willingness to participate would be appreciated.

Thank you for any assistance you are able to provide.

Yours faithfully,

D.E.Brownie
Programme Co-ordinator

Dr. E.R. Ashcroft
M.Ed. Co-ordinator

Appendix B

Survey Instrument

PRINCIPLES FOR TEACHING PRACTICUM
AND THEIR PARTICULARIZATION
BY ASSOCIATE TEACHERS

A Survey To Investigate Practicum
In New Zealand Schools

Dennis Brownie
1990

03

PLEASE READ THE FOLLOWING VERY CAREFULLY

Thank you very much for participating in this study which can, with your help, make a positive contribution to education in New Zealand.

We now have completed the introductory stage. It is time for you to record what your actual and probable behaviours are as an associate teacher.

A review of how you can participate may be useful.

You will be given seven principles for conducting practicum. These principles are to be regarded as true and valid. On each new page a principle is stated. Underneath the principle there is a grid for your responses. In **Column A** please record:

1. how you demonstrate the principle as an associate teacher and
2. what you do to ensure that student-teachers will demonstrate that particular principle in their professional behaviour.

Please do not feel that you have to fill in a column. A blank column is an answer. What is important is that you make a thoughtful response to the questions.

After filling in **Column A** refer to **Column B**. Fill in the grid completing the 'Other behaviours that may be used that I am comfortable with' sections for both rows. If you feel that you have nothing to contribute in **Column A** consider **Column B**. Your ideas here will be appreciated. Should you need more space turn the page over and write on the back.

You may take your time to consider and respond to these questions but try not to spend more than 30 minutes on the task.

Thank you.

PRINCIPLE 1

Student-teacher professional development during practicum should not be based on apprentice models.

EXEMPLAR

How do/can I avoid the apprentice model?

	COLUMN A	COLUMN B
HOW I...	TEACHER BEHAVIOURS	OTHER BEHAVIOURS THAT MAY BE USED THAT I AM COMFORTABLE WITH
...demonstrate this principle in my professional behaviours.		
...behave to assist the student-teacher to demonstrate the principle		

PRINCIPLE 6

To increase competent professional behaviours student-teachers need to integrate theory and practice during practicum.

EXEMPLAR

How do/can I demonstrate the integration of theory and practice during practicum?

	COLUMN A	COLUMN B
HOW I...	TEACHER BEHAVIOURS	OTHER BEHAVIOURS THAT MAY BE USED THAT I AM COMFORTABLE WITH
...demonstrate this principle in my professional behaviours.		
...behave to assist the student-teacher to demonstrate the principle		

PRINCIPLE 5

Specific practicum curricula are essential for maximum student-teacher development during practicum.

EXEMPLAR

How do/can I ensure that specific practicum curricula are operating in my classroom?

	COLUMN A	COLUMN B
HOW I...	TEACHER BEHAVIOURS	OTHER BEHAVIOURS THAT MAY BE USED THAT I AM COMFORTABLE WITH
...demonstrate this principle in my professional behaviours.		
...behave to assist the student-teacher to demonstrate the principle		

PRINCIPLE 4

Student-teachers can increase professional skills by using critical reflection as their base for action during practicum.

EXEMPLAR

How do/can I increase student-teacher use of critical reflection?

	COLUMN A	COLUMN B
HOW I...	TEACHER BEHAVIOURS	OTHER BEHAVIOURS THAT MAY BE USED THAT I AM COMFORTABLE WITH
...demonstrate this principle in my professional behaviours.		
...behave to assist the student-teacher to demonstrate the principle		

PRINCIPLE 3

Practicum is more appropriate for student-teacher learning when conducted in a collaborative environment.

EXEMPLAR

How do/can I establish and use a collaborative environment?

	COLUMN A	COLUMN B
HOW I...	TEACHER BEHAVIOURS	OTHER BEHAVIOURS THAT MAY BE USED THAT I AM COMFORTABLE WITH
...demonstrate this principle in my professional behaviours.		
...behave to assist the student-teacher to demonstrate the principle		

PRINCIPLE 2

In terms of student-teacher learning, the practicum is an essential component of teacher education.

EXEMPLAR

How do/can I demonstrate the practicum is an essential component of teacher education?

	COLUMN A	COLUMN B
HOW I...	TEACHER BEHAVIOURS	OTHER BEHAVIOURS THAT MAY BE USED THAT I AM COMFORTABLE WITH
...demonstrate this principle in my professional behaviours.		
...behave to assist the student-teacher to demonstrate the principle		

PRINCIPLE 1

Student-teacher professional development during practicum should not be based on apprentice models.

EXEMPLAR

How do/can I avoid the apprentice model?

	COLUMN A	COLUMN B
HOW I...	TEACHER BEHAVIOURS	OTHER BEHAVIOURS THAT MAY BE USED THAT I AM COMFORTABLE WITH
...demonstrate this principle in my professional behaviours.		
...behave to assist the student-teacher to demonstrate the principle		

Appendix C

Determinants of Learning

Determinants of Learning

ESSENTIAL PERFORMANCES

NECESSARY CRITERION COMPETENCIES

Instructor Ensures:

- | | |
|---|---|
| A. Objectives are understood | <ol style="list-style-type: none"> 1. Stating objectives clearly 2. Discussing objectives with the trainees 3. Providing simple 'focussing problem' 4. Having trainees state or write objectives in own words 5. Using behavioural objectives during learning sequences <ol style="list-style-type: none"> a. Stating, discussing and clarifying emergent objectives b. Planning and activating 'Hidden Agenda Objectives' methodically |
| B. Objectives are seen as relevant by the learner | <ol style="list-style-type: none"> 1. Allowing trainees participation in selection or formulation of goals 2. Framing objectives around trainee's interests and experiences 3. Demonstrating relevance of objectives 4. Using realistic situations wherever possible 5. Pretesting to establish perception of need |
| C. There is optimal arousal | <ol style="list-style-type: none"> 1. Reactivating relevant past experiences 2. Creating curiosity 3. Involving trainees' in problem based activity 4. Using trainees areas of concern 5. Using eye contact and trainees' names 6. Ensuring objectives are attainable in terms of time and difficulty 7. Reducing debilitating anxiety |
| D. Feedback is provided and used | <ol style="list-style-type: none"> 1. Indicating correctness of response objectively and giving feedback 2. Giving feedback as soon as possible 3. Providing ongoing review of key ideas |
| E. Correct learning behaviour is reinforced | <ol style="list-style-type: none"> 1. Provide regular social reinforcers for correct attainments 2. Extinguish incorrect responses 3. Observing and using individual reinforcers 4. Requiring demonstration of attainment and reinforcing it 5. Reinforcing 'On Task behaviour |

F. There are multiple examples of and principles

1. Stressing the obvious and concentrating on key concepts and ideas
2. Providing a range of examples for each concept or principle
3. Requiring a range of examples as proof of on-going understanding
4. Providing time for clarification and consolidation
5. Summarizing and providing a simple overview

G. Trainees participate actively

1. Providing opportunities for trainees to discuss and question
2. Ensuring trainees hypothesize and question
3. Using trainees' relevant ideas and questions
4. Allowing trainees to use equipment themselves
5. Allowing time for useful participation
6. Providing time for trainees to record or explain their ideas

H. A range of senses are involved

1. Planning for multi sensory stimulation
2. Interrelating physical, verbal and intellectual activity
3. Ensuring that trainees use a range of media
4. Using simulation actively
5. Providing a range of learning experiences

I. Attention is focussed and sensory distractors are eliminated

1. Eliminating potential distractors
2. Eliminating cognitive distractors
3. Using undirected and directed play
4. Providing for learning and practice in the performance situation
5. Keeping media subordinate to the message
6. Preventing divided attention situations

J. There is a positive learning climate

1. Showing trainee they are valued
2. Spending the time necessary to know each trainee
3. Using names in personal and written interaction
4. Eliminating or reducing counter productive threat
5. Providing time and/or space for 'withdrawal'

Appendix D

Induction Programme

(Used by Author)

PRINCIPLES FOR TEACHING PRACTICUM
AND THEIR PARTICULARIZATION
BY ASSOCIATE TEACHERS

An Induction Programme
for Sample Population

Dennis Brownie
1990

Time

30 mins maximum

Aim

To ensure that all sample population members are able to relate to the survey questions in a similar way.

Part 1 Introduction to Author and Study

- a. Brief introduction and professional background.
- b. Outline the significance and purpose of the study.
- c. Define the role of the population sample
- d. Emphasize personal and professional advantages for participants as well as professional implications.

Part 2 Introduction to Principles for Teaching Practicum.

- a. The seven principles will be introduced to the group.
- b. Brief statement reviewing the fact that the seven principles represent significant trends in the literature. Because of this participants are requested to accept the validity of the principles.

Part 3 Definition and Illumination of the Principles

For each principle the following steps will be followed:

- a. Oral reading of the principle.
- b. Key phrases and terminology defined and discussed.
- c. Practical examples provided to illustrate the principle.

If needed, further clarification will occur as follows:

- d. Translation of the principle into specific personal examples provided by participants.
- e. Further discussion for clarification by author.
- f. Application by presenting several multiple-choice questions to clarify and consolidate.

Part 4 Explanation of Survey Task

- a. Inform population of the physical nature of the survey instrument. Show sample booklet.
- b. Familiarize participants with the title page and the page of instructions.
- c. Practice instructions using a mock principle on an actual survey grid.
- d. Summarize instructions and clarify any questions.

Part 5 Data Gathering

- a. Distribute survey instruments.
- b. Summarize key instructions.
- c. Remind participants that surveys will be collected within 24 hours.

Part 6 Conclusion

- a. Thank participants
- b. Remind participants of results that they will receive.

PRINCIPLES FOR TEACHING PRACTICUM

Principle 1

Student-teacher professional development during practicum should not be based on apprentice models.

Principle 2

In terms of student-teacher learning, the practicum is an essential component of teacher education.

Principle 3

Practicum is more appropriate for student teacher learning when conducted in a collaborative environment.

Principle 4

Student-teachers can increase professional skills by using critical reflection as their base for action during practicum.

Principle 5

Specific practicum curricula are essential for maximum student-teacher development during practicum.

Principle 6

To increase competent professional behaviours student-teachers need to integrate theory and practice during practicum.

Principle 7

Practicum will be perceived as relevant when professional competencies are clearly specified.

PRINCIPLE 1

Student-teacher professional development during practicum should not be based on traditional apprentice models.

PRINCIPLE 2

In terms of student teacher learning, the practicum is an essential component of teacher education.

PRINCIPLE 3

Practicum is more appropriate for student teacher learning when conducted in a collaborative environment.

PRINCIPLE 4

Student-teachers can increase their professional skills by using critical reflection as their base for action during practicum.

PRINCIPLE 5

Specific practicum curriculum is essential for maximum student teacher development during practicum.

PRINCIPLE 6

To increase competent professional behaviours student-teachers need to integrate theory and practice during practicum.

PRINCIPLE 7

Practicum will be perceived as relevant when professional competencies are clearly specified.

PRINCIPLE 1

For learning to occur wild animals must not be allowed in the classroom.

EXEMPLAR

How do/can I stop animals from being present in the classroom to facilitate learning?

	COLUMN A	COLUMN B
HOW I...	TEACHER BEHAVIOURS	OTHER BEHAVIOURS THAT MAY BE USED THAT I AM COMFORTABLE WITH
...demonstrate this principle in my professional behaviours.		
...behave to assist the student-teacher to demonstrate the principle		

PRINCIPLE 1

EXEMPLAR

	COLUMN A	COLUMN B
HOW I...	TEACHER BEHAVIOURS	OTHER BEHAVIOURS THAT MAY BE USED THAT I AM COMFORTABLE WITH
...demonstrate this principle in my professional behaviours.		
...behave to assist the student-teacher to demonstrate the principle		

Appendix E

Raw Data

Appendix E (i)

Column A Responses

PRINCIPLES FOR TEACHING PRACTICUM
AND THEIR PARTICULARIZATION
BY ASSOCIATE TEACHERS

Claimed Behaviours

Dennis Brownie
1990

Introduction

Following are lists of behaviours that represent what associate teachers claim they do to put the various principles into practice. These results are based on responses by 40 associate teachers. The behaviours were derived from the 'raw' responses by summarizing key ideas, words and phrases found in the original responses. In many cases, behaviours were reported by more than one teacher.

The behaviours reported here may assist associate teachers, teacher educators and student-teachers translate 'Principle for Practicum' into relevant practicum practice.

For specific discussion of the results, the accompanying documentation should be consulted.

Similar behaviours have been grouped into categories.

Principle 1

Student-teacher professional development during practicum should not be based on apprentice models.

State, use and provide a variety of teaching approaches and styles.

State and demonstrate personal style that works.

Plan for observation of other teachers.

Associate teacher to accept other teachers ideas about teaching.

Avoid telling the student-teacher 'This is the way'.

Associate teacher explains reasons for their own behaviour.

Associate teacher and student-teacher accept advice from other teachers.

Associate teacher presents well planned, rehearsed and attainable models of teaching.

Encourage student-teacher to use associate teacher approaches as a base then adapt to meet own needs.

Assist student-teacher to develop personal style by experimenting and trial.

Highlight professional behaviours that the student-teacher is comfortable with.

Encourage, affirm, commend and praise student-teacher for attempting a variety of teaching approaches.

Encourage student-teacher to try out different ideas.

Allow student-teacher to make choices.

Allow student-teacher autonomy.

Encourage the student-teacher to use own initiative and imagination in teaching.

Praise and welcome 'new' ideas.

Praise individual strengths and effort.

Allow student-teacher to teach according to individual strength but justify behaviours.

Teach each others lessons.

Associate teacher to state how they have learnt from the student-teacher

Evaluate associate teacher lessons with the student-teacher

Ask for and listen to student-teacher views on teaching.

Participate in co-operative planning.

Develop a mutual relationship re planning and preparation.

Solicit opinions and advice from the student-teacher

Work with the student-teacher as a team.

Share with the student-teacher teaching tasks equally.

Associate teacher defines the role of the student-teacher

Associate teacher to be flexible and open minded.

Evaluating a variety of teaching approaches with the student-teacher

Provide for problem solving during practicum.

Use a lot of higher order question ('Why' and 'How').

Use problem solving situations.

Provide time for student-teacher to prepare for reflection and evaluation.

Provide time for reflection and evaluation after the lesson.

Encourage questioning of lessons.

Encourage enquiring behaviour of student-teacher

Provide exploratory sessions for student-teacher

Provide time for critical analysis as a base for conferences.

Observe and evaluate individual student-teacher lessons.

Associate teacher to elicit alternatives in student-teacher behaviours.

Associate teacher to supply constant feedback as observer.

Associate teacher to support what the College of Education has taught.

Prior to practicum associate teacher evaluate own teaching and strategies.

Convey idea that associate teacher may be viewed as resource person.

Associate teacher to communicate idea that teaching is a dynamic activity and so one is always learning.

Get the student-teacher to outline the College of Education tasks and requirements.

Identify with the student-teacher specific elements of teaching from the College of Education

Associate teacher to introduce the student-teacher to colleagues as a fellow teacher.

Treat student-teacher as a fellow teacher.

Associate teacher to get the student-teacher to focus on their role as if they were in their own real classroom.

Assist the student-teacher to approach other staff members in a non threatening way.

Let student-teacher work under 'normal' class conditions.

Associate teacher to develop a sequence of activities for student-teacher development.

Associate teacher to admit that they can still learn from the pupils and the various class activities.

Principle 2

In terms of student-teacher learning, the practicum is an essential component of teacher education.

Allows time for explaining objectives and goal.

Allows time for discussion of ideas.

Relate objectives to some learning theory.

Evaluate personal value of practicum.

Essential for learning (by mistakes).

Essential for learning approaches by example objectives.

Communicating the fact that practicum is essential to all.

Ensure associate teacher puts new strategies into practise.

Associate teacher attends in service course at College of Education

Show teacher pleasure and responsibility of teaching.

Associate teacher draws from experience to help student-teacher.

Giving them whole class while associate teacher goes out.

Demonstrate that the principles work in practice.

Associate teacher demonstrates own enthusiasm in the programme.

Associate teacher demonstrates to student-teacher that practicum is part of own development.

Associate teacher showing they enjoy teaching/practicum.

Give task guide-lines and discussion times.

Associate teacher active in seeking advice and ideas re teaching.

Demonstrate that teaching is an inter related activity with lots of people. e.g. Board of.Trustees, Parent and.Teacher.Association and Parents etc.

Provide for many chances for teaching.

Provide for many chances to practise skills, plans, control etc

Time to link theory, College of Education and practice.

Student-teacher continual awareness of demonstrations.

Aware that all that is going on is valuable.

Immediate practical work with children/relating.

Get student-teacher to do all teaching roles.

Encourage student teacher active involvement in practicum.

Encourage active planning.

Give student-teacher immediate involvement with children

Associate teacher assist student-teacher to see that classroom is where
all must fit into place. Must become a reality. Must work or
practicum is useless.

Don't get student-teacher to do meaningless tasks.

Encourage teaching in less comfortable curriculum areas

Active involvement in co-operative planning.

Get student-teacher involved in meaningful tasks.

Involve in a variety of subjects.

Active involvement in school wide activities.

Encourage student-teacher to take on jobs over what they must do.

Give student-teacher responsibility.

Reinforce with praise and feedback.

Encourage personal development of student-teacher.

Perceiving practicum and student-teacher efforts as having high status.

Visibly welcome College of Education personal to class.

Offer services as associate teacher.

Provides ordered induction to class programme

Provides regular written reports

Warm supportive environment provided by associate teacher and
pupils

Support student-teacher by making associate teachertime and class

available for S T

Associate teacher gives student-teacher as much time for practicum as they need.

At tells student-teacher benefits of various professional development programmes.

Pre and post contract to support practicum as part of student-teacher development continuum.

Discuss all aspects of student-teacher performance without engendering feelings of guilt etc.

Prior reparation of associate teacher's environment.

Associate teacher planning to meet student-teacher needs.

Making school available for practicum.

Oral and written feedback.

Encourage reflection and evaluation.

Provide opportunity to justify action.

Contrasting predictions with results.

Get student-teacher to set goals for practicum.

Encourage autonomy

Latitude to try ideas modify etc.

Flexibility and freedom to experiment.

Observe then do own planning.

Principle 3

Practicum is more appropriate for student-teacher learning when conducted in a collaborative environment.

Emphasize new blood is welcome.

Put student-teacher in decision making role as teacher.

Develop social relationship.

Behave professionally to student-teacher as a colleague.

Show they are a valuable team member.

Encourage first name basis.

Associate teacher share ideas with colleagues.

Be seen to accept advice and guidance from others.

Demonstrate supportive environment with other colleagues.

Demonstrate cooperative attitude to student-teacher.

Get student-teacher to work with as many staff members as possible.

Demonstrate professional rapport with colleagues.

Encourage student-teacher to go to own peers for advice etc.

Ask for, accept and use student-teacher input.

Associate teacher demonstrate syndicate planning.

Independence during shared planning

Collaboration needed to avoid going stale. Teachers always learning.

Collaboration a basis for this.

Teacher collaboration and pupil learning maximised.

Work alongside student-teacher.

Share all aspects of teacher role.

Mutual, open and regular planning and evaluation.

Assume student-teacher is a teacher and treat as such.

Work with them rather than for you.

Encourage a partnership.

Use 'we' and 'us'.

Introduce student-teacher to class as a 'teacher'.

Give student-teacher physical space and desk.

Not interfering while student-teacher is teaching.

Share planning.

Share routines.

Pooled planning from day one.

student-teacher has equal status.

Co operative planning

Consult with student-teacher introduce partnership basis to children.

Involve student-teacher from earliest point.

Inform student-teacher of available resources.

Avoid judgements rather probe, listen and help reflect.

Integrate College of Education tasks.

Discuss student-teacher development with College of Education.

Get student-teacher to communicate on associate teacher behaviours.

Put onus on student-teacher as to how associate teacher may support.

Establish routines, processes, expectations.

Identify with student-teacher. Support and maintain a non-threatening environment.

Encourage self assessment.

Have professional discussion with student-teacher

Giving freedom to discuss ideas and make suggestions.

Giving freedom to try ideas and suggestions.

Post teaching evaluative discussions.

Give time to student-teacher.

Welcome student-teacher.

Give student-teacher chance to demonstrate and state differing ideas.

Use student-teacher interests in programming.

Provide acceptable framework for planning leading to discussion (non-threatening).

Pre plan posting, this shows willingness to invest time in student-teacher

Regular open communication

Be approachable and friendly.

Show respect for abilities and efforts.

Discuss classroom induction and justify.

Define College of Education tasks.

Define personal tasks.

Establish timetable.

Explain 'why' and 'how'.

Use student-teacher strengths.

Show trust in abilities.

Try not to interfere to much in discipline.

Allow some mistakes.

Don't be too critical.

Use praise.

Principle 4

Student-teachers can increase professional skills by using critical reflection as their base for action during practicum.

Using demonstrations as basis for general ideas and problem solving
Associate teacher models critical evaluation of own lesson for student-teacher.

Associate teacher models specific individual evaluation for student-teacher.

Associate teacher models evaluation leads to more aims and objectives.

Self evaluation re own goals.

Associate teacher models 'how' and 'why' lesson went well or poorly.

Demonstrate modification after reflection.

Change planned lessons for a good reason.

Set different goals for different groups etc.

Demonstrate flexibility with for example, children and planning.

Justify own groupings, methods of organization etc

Look for (justify) things that went well.

Model objective based reflection.

Use of higher order questions ('how?', 'why?', 'what?').

Evaluative discussion re lessons and behaviour.

Associate teacher and student-teacher plan and participate in self criticism.

Participating in continual evaluation of behaviour and ideas.

Get student-teacher to find reasons for behaviour and/or outcome.

Participate in specific evaluations.

Contiguity in lesson ends-evaluation.

Pre-teaching evaluation.

Associate teacher prior preparation for student-teacher need to reflect.

Get student-teacher to identify growth area and growth need.

Using prediction task re outcomes.

Using questioning skills.

Allow time for discussion and advice.

Suggest column in plan for evaluation.

Assist student-teacher in pre planning.

Ask open ended question to analyze specific behaviour.

After self evaluation associate teacher give constructive criticism for student-teacher to feed back on next day.

Associate teacher give student-teacher basis for future discussion of a lesson S T to relate to this re evaluation.

Design and agree on plan for student-teacher/associate teacher conference.

Explore various solutions to problems.

Associate teacher returning to points till importance fully appreciated.

Associate teacher constructive discussion and evaluation of reason for outcomes or intended outcomes.

Use critical reflection cooperatively in reviewing associate teacher performance

Have a critical reflection process sequence in place as basis for discussion.

Use video/tape data for evaluation.

Reference to learning theories.

Use problem solving strategies.

Use of diary for data recording then reflection.

Use behavioural and learning objectives as a base.

Include student-teacher in staff syndicate assessment of school programme.

Use objective based reflection regarding student-teacher own evaluation.

Facilitate by non-judgemental approach.

Providing suggestions.

Flexible timetable.

Help student-teacher in flexibility.

Associate teacher gives student-teacher 'settling down' time after lessons.

Allow student-teacher to prepare next step in lesson after critical reflection.

Encourage 'plan-do-plan again' sequence.

Encourage use of reflective based decisions.

Encourage self evaluation to improve behaviours.

Encourage self evaluation by use of higher order questions.

Provide environment that will support results of critical reflection.

Principle 5

Specific practicum curricula are essential for maximum student-teacher development during practicum.

Provide student-teacher with observation of all curriculum aspects.

Associate teacher demonstrate value of curricula.

Ensure lesson plans fit in with curricula.

States specifics of demonstrations regarding curricula.

student-teacher specific behaviour regarding goals.

Have personal work available for student-teacher.

Shows stages in practicum for a variety of tasks.

Student prepare lessons and discuss prior to teaching.

Evaluation of planning.

Provide opportunities for specifics.

Have student teacher move from strong areas to weak.

Identify strengths then together identify next step.

Sequencing contiguity.

Place student-teacher in a situation of few variables move to more complex situations.

Provide a range of learning and teaching experiences across the curriculum.

Keep practicum available for all.

Be familiar with student-teacher selected studies and tasks.

Assist focus skills.

Ensure student-teacher covers areas of need.

Demonstrate curriculum to student-teacher.

Associate teacher to analyze student-teacher behaviours for specific practicum curricula then reflect how specific practicum curriculum can be incorporated.

Associate teacher 'doing' recognized acceptable skills.

student-teacher develop understanding of classroom.

Provide observation.

Teach units across the curriculum.

Focus on specific objectives prior to and after teaching by evaluating.

Observe and record observations and compare with objectives.

Encourage student-teacher to ask questions about curriculum.

Plan practicum curriculum according to needs.

Arrange curriculum according to difficulty of task and sequence.

Associate teacher to demonstrate to student-teacher how daily teaching is related to the national curriculum.

Integrate College of Education requirements with the school.

Discuss with student-teacher requirements of College of Education.

Ensure student-teacher perceives assignment tasks.

Assist with completing College of Education tasks.

Ensure student-teacher is familiar with College of Education tasks.

Associate teacher to be familiar with and check on College of Education tasks.

Associate teacher to check that College of Education tasks are being done.

Associate teacher to be familiar with College of Education and their expectations.

Associate teacher to be familiar with curriculum prior to and during practicum.

Sensitize to student-teacher to curriculum desired.

Develop a link between College of Education and school.

Assist student-teacher to meet all required tasks.

Assist student-teacher to practice teaching behaviours.

Create timetable/checklist to ensure College of Education tasks are met.

Link school curriculum with practicum curriculum.

Support student teacher application of practicum curricula.

Ensure environment and documentation are well prepared.

Get student teacher to visit prior to practicum.

Ensure practicum curricula gets attention prior to practicum starting.

Plan long term to have a balance of curricula to cover in practicum.

Provide time for specific curricula aspects.

Cover cover long term and short term planning.

Interpret curricula into teaching and learning action skills.

Associate teacher personally flexible to allow curricula to operate.

Post practicum assessment of practicum curricula.

Ensure personal planning is done adequately.

Discuss evaluation report prior to practicum.

Organize timetable based on student-teacher perception of practicum curricula.

No practicum operating in school.

Principle 6

To increase competent professional behaviours student-teachers need to integrate theory and practice during practicum.

Attend courses to get ideas.

Try out ideas gained.

Evaluate and modify.

Associate teacher prepares lessons in advance and outlines.

Let student-teacher experiment and evaluate.

Provide opportunities to challenge student-teacher with theory and practice.

Refer student-teacher to readings to support class methods.

Encourage student-teacher to join in staff meetings regarding staff development.

Challenge student-teacher to support behaviour with theory.

Relate College of Education tasks to practice.

Associate teacher to be a positive role model so that student-teacher can see theory at work.

Associate teacher use asides such as 'Piaget says'.

Use 'because x then y' statements.

Provide pre session 'advice'.

Problem solve using student-teacher ideas.

Set specific tasks.

Write practical lesson plans.

Execute practical lesson plans.

Learn by trial and error.

Model different teacher behaviours to meet pupil needs.

Prepare well.

Have planning available for student-teacher with theory back-up.

Associate teacher explains why things are done.

Discuss importance to knowledge base for learning and teaching.

Discuss syllabus and familiarize.

Get student-teacher to pin-point how practical outcomes lead from theory.

In discussions say 'I do x because of theory y'.

Associate teacher to identify theoretical concern before teaching.

Use texts to find theory to solve problems.

Associate teacher to fine out from student-teacher what they have been covering at College of Education.

Demonstrate theory in practice for student-teacher .

Associate teacher demonstrate need for sound reasons.

Demonstrate need for sound theoretical knowledge before practice.

Associate teacher to get student-teacher to focus on theories and ideas for success.

Associate teacher to demonstrate theory.

Associate teacher to be seen by student-teacher to attend in-service courses.

Associate teacher to be seen by student-teacher to read new material.

Provide time for student-teacher to put theory into practice.

Relate College of Education theory with classroom and college tasks.

Associate teacher to follow planned activities.

Associate teacher to show that programmes (theory) are complete.

Associate teacher to let student-teacher see planning.

Associate teacher to make resources referred to available to student-teacher.

Provide readings for student-teacher.

Use evaluation based on a sound theory.

Discuss with student-teacher as many theories that go with various

objectives.

Relate theories with objectives.

Relate theories with practice.

Accept student-teacher feedback.

Assist put theory into practice.

Use theory to evaluate expected results.

Quantify theory and practice in terms of student-teacher behaviours.

Use higher order questions to modify and implement theory.

Discuss theoretical statements that accompany strategies for teaching.

Associate teacher to assist student-teacher plan innovative teaching strategies at the same time read the theoretical background to them.

Associate teacher to encourage modification of theory and practice.

Principle 7

Practicum will be perceived as relevant when professional competencies are clearly specified.

Associate teacher uses a variety of teaching strategies.

Set timetable to state the competencies.

Ensure objectives are being met by pupils.

Show lesson plans and format objectives.

When associate teacher is demonstrating tell what is to be achieved.

Associate teacher assist student-teacher to focus on outcomes before teaching.

Prior to teaching associate teacher to select competencies by observation for discussion.

Identify competencies student-teacher needs to work on then emphasize them in teaching and observation.

Setting clear objectives for the class and student-teacher.

Close observation and then discussion with associate teacher.

Tell student-teacher competencies to observe.

Select competencies to raise level of awareness.

Associate teacher to use direct approach 'tell em'.

Associate teacher uses copious examples.

Frequent observation by student-teacher.

Associate teacher demonstrates specific competencies.

Outline and discuss skills.

Associate teacher ensures lesson plans demonstrate competencies.

Associate teacher familiar with practicum assignment before student-teacher arrives.

Time table competencies early in practicum.

State what is being done and why.

Show lesson objective, teach then get student-teacher to evaluate to see

if learning has occurred.

Set relevant goals.

Use behavioural objectives.

Thorough preparation by associate teacher.

Associate teacher identifying and demonstrating competencies.

Demonstrate effective planning strategies.

Use visual resources to get 'message across to student-teacher '

Associate teacher demonstrating a teachable attitude.

Associate teacher to keep skill objectives clear and simple.

When planning multi-level work make sure student-teacher is aware of stages.

Associate teacher to give student-teacher opportunity to teach range of levels in each competency.

Provide experiences in multi-level teaching.

Encourage development of personal way of doing competencies.

Get student-teacher to identify own strong competencies.

Get student-teacher to identify competencies that need developing.

Get student-teacher to put competencies into practice.

Provide opportunity to practice skills.

Focus on one competency for student-teacher to practice.

After mastery of competency link with next one.

Reinforce by discussion of College of Education competency tasks.

Use College of Education report forms with student-teacher to evaluate 'shaping up'.

Dialogue prior to activity

Associate teacher ensure frequent communication

Associate teacher uses clear guidelines.

Discuss importance of planning and preparation.

Associate teacher assist student-teacher organize.

Associate teacher work through a list of competencies with student-teacher.

Identify competencies with student-teacher.

Relate competency list with practical assignment.

Daily time to discuss competencies.

Associate teacher provides critical feedback.

Pre, during and post discussion regarding competencies.

Ensure student-teacher is clear about assignment.

Clear communication between associate teacher, student-teacher and College of Education regarding competencies.

Discuss student-teacher competency needs.

Ensure and non-threatening relationship.

Plan individual strategies for student-teacher.

Positive reinforcement.

Gentle positive leading behaviour.

Reward system for achieving goals.

Compare behaviour of associate teacher with student-teacher.

Encourage self evaluation through experiment (cause and effect).

Let student-teacher 'fall' and live with mistakes, then support.

Give student-teacher total control so competency will 'leap out'.

Give student-teacher the 'deep end' experience.

Associate teacher discuss own positive and negative competencies with student-teacher and justify.

Associate teacher encourages using College of Education assignment as a basis for self analysis of competencies

Use behavioural checklists

Let students use checklist to identify competencies

Associate teacher to get student-teacher to identify and explain the
need for imposed and self identified competencies

Revise practicum tasks with student-teacher.

Associate teacher to help student-teacher to evaluate pupils position
and then act to meet next learning stage

Use ongoing evaluation

Establish reflective communication process to establish competencies

Appendix E (ii)

Column B Responses

PRINCIPLES FOR TEACHING PRACTICUM
AND THEIR PARTICULARIZATION
BY ASSOCIATE TEACHERS

Claimed Behaviours
Column B

Dennis Brownie
1990

Principle 1

Student-teacher professional development during practicum should not be based on apprentice models.

Use colleagues style and approach.

Read widely regarding professional growth.

Share ideas with colleagues.

Discuss many perspectives regarding meeting objectives.

Allow student-teacher to try various methods.

Allow student-teacher to observe many other successful teachers.

Allow student-teacher to observe many other successful styles.

Give time for student-teacher discussion of associate teacher's styles.

Student-teacher suggest behaviours other than associate teacher's ideas.

Try out on class and get feedback re strategies.

Work with and plan alongside student-teacher.

Look at practicum from different perspectives such as a child's.

Out of school relationship with pupils.

Suggest possible ways of behaving.

Get other associate teacher to address student-teacher.

Ask student-teacher for possible solutions to problems then implement and evaluate.

Provide feedback regarding performance.

Principle 2

In terms of student-teacher learning, the practicum is an essential component of teacher education.

Use teaching practice to prove/disprove theory.

Allow student-teacher to use own theories and styles.

Look at various theories that fit objectives.

Compare past theories with present practices.

Relate C O E theories to objectives.

Give lots of planning sheets.

Involve student-teacher with parent community.

Other teacher styles for student-teacher to observe.

Involve in all aspects of school life.

Have high expectation and standard from student-teacher.

Share associate teacher experience of practicum value.

Discuss reason with student-teacher why they did such and such.

Give student-teacher handy hints.

Associate teacher putting extra work hours/show interest.

Clarify student-teacher practice with student-teacher before practicum.

Comment to colleagues at break times about value of practicum.

Read literature on topic.

Associate teacher actually involve student-teacher.

Evaluate lessons/write reports.

Associate teacher gives early and enthusiastic attention.

Meets task and treats task with respect and importance.

Get student-teacher to be teacher (role).

Principle 3

Practicum is more appropriate for student teacher learning when conducted in a collaborative environment.

Student-teacher plans lessons and discusses with associate teacher.

Associate teacher plans lessons and discusses with student-teacher.

Associate teacher prepared to learn from student-teacher

Associate teacher informal consulting.

Teaching alongside and with student-teacher & vice versa.

Student-teacher work with as many people (speech teacher).

Associate teacher models collaboration.

Get student-teacher and pupils to work with/not for.

student-teacher to attend team/staff meetings-speak on issues to staff.

Support student-teacher decisions. Not associate teacher ones but educational ones.

Participation in out of school functions.

Be consistent in treating student-teacher as professional in own right.

Take care not to be judgmental.

Student-teacher criticises associate teacher who tells what they have learnt from student-teacher

Timetable time for review, planning, counselling.

Associate teacher show how to get parent support.

Establish role relationships.

Principle 4

Student-teachers can increase professional skills by using critical reflection as their base for action during practicum.

Associate teacher engages in critical reflection.

Look at various ways associate teacher has met objectives.

Use videos and tapes to record lessons.

Associate teacher shows evaluation sheets of children. State how it is done.

Associate teacher plans to remedy problems.

Associate teacher provide for reflection if needed.

Associate teacher provide time for observation of staff for student-teacher.

Associate teacher encourage/think aloud.

Gather objective data e.g amount of positive praise.

Neutral in-class supervision.

Decide on skill, discuss and modify.

Model personal mental evaluation.

student-teacher track pupil evaluation as a base for reflection.

Be less threatened about own teaching.

Discuss reasons why regarding own teaching.

Contiguous question and answer after lessons.

Get student-teacher to write report on ideas that may have helped in lessons.

Self evaluation.

Associate teacher encourage student-teacher to do critical reflection together.

Get student-teacher to sit it in with syndicate as they plan 6 weekly blocks.

Student-teacher discusses written reports with associate teacher

Associate teacher states alternative behaviours Associate teacher could use.

Principle 5

Specific practicum curricula are essential for maximum student-teacher development during practicum.

Put specific practicum curricula alongside planning.

Evaluate programme, modify to accommodate deficient areas.

Talk about own practicum experience.

Associate teacher demonstrate they are keeping up with developments in the field of specific practicum curricula.

Get direction from College of Education

Check College of Education tasks are being done.

Get student-teacher to evaluate curricula.

Associate teacher uses guide-lines for curricula.

Associate teacher shows how activities relate to curriculum.

Get student-teacher to spend time with curriculum expert teacher.

Get student-teacher to plan learner oriented teaching links.

Identify and discuss specific parts of curriculum regarding selected studies.

Prepare environment to meet practicum.

Transfer skills to different situations.

Let student-teacher have evaluation form prior to practicum.

Associate teacher to have clearly defined objectives.

Suggest to student-teacher range of methods for specific situations.

Principle 6

To increase competent professional behaviours student-teachers need to integrate theory and practice during practicum.

Associate teacher elicit data relating to theories student-teacher is familiar with.

Associate teacher inside of College of Education practical tasks.

Associate teacher to provide time to discuss and integrate theory to practice.

Associate teacher to put on a specific act to demonstrate a point.

Associate teacher explain theoretical aspect of each lesson stage.

Associate teacher attend in-service courses and be a member of professional bodies.

Discuss strengths and weaknesses of theory.

Associate teacher to brush up on learning theories.

Organize group/individual discussion.

Read student-teacher papers to become familiar with theory.

Associate teacher to make continual reference to social sciences as a credible body of knowledge.

Get student-teacher to analyze theory behind associate teacher teaching.

Plan for it.

Principal 7

Practicum will be perceived as relevant when professional competencies are clearly specified.

Organize meeting for student-teacher, associate teacher and College of Education to 'thrash out' competencies.

Get student-teacher to evaluate observed competencies in terms of observed effectiveness.

Get student-teacher to try out a variety of competencies and assess most effective.

Student-teacher observe associate teacher lessons and discuss relevancy of what was taught.

Compile competency lists.

Analyze student-teacher learning.

Filterate specified College of Education skills.

Associate teacher to demonstrate competencies.

Associate teacher guides by using a check-list.

Associate teacher states who well student competencies are being achieved.

Appendix F

Data Recording Grid

Appendix G

Generic Descriptors, Claimed Behaviours and Frequency

Appendix G (i)

Column A

Principle 1 Student teacher professional development during practicum should not be based on apprentice models.

Code	Generic Descriptors for Claimed Behaviours	Examples of Claimed Behaviours	Nos
1 a	Expose student-teachers to a range of teaching behaviours	a 1 State provide and use a variety of attainable teaching strategies	13
		a 2 State, demonstrate and explain personal style	8
		a 3 Avoid 'This is the way' attitudes	5
		a 4 A.T. show acceptance of other teaching ideas	4
		a 5 Provide observations of other teachers	4
		a 6 Encourage use of A.T. behaviours as a teaching base	2
1 b	Actively involve the student-teacher in 'higher order' thinking	b 1 A.T. elicits alternative behaviours	1
		b 2 Evaluate a variety of approaches observed	2
		b 3 Use feedback using 'How' and 'Why' questions	5
		b 4 Use problem solving	3
		b 5 Encourage questioning and probing of behaviours	4
		b 6 Provide time for reflective critical analysis before and after teaching	6
1 c	Work co-operatively with S.T.	c 1 Evaluate A.T. lessons with S.T.	2
		c 2 A.T. states how they have learnt from A.T.	2
		c 3 A.T. solicits, listens and uses S.T. teaching concepts	7
		c 4 Team teaching	7
		c 5 Teach each other lessons	1
		c 6 Equal sharing of educational tasks	2
1 d	Provide specific support behaviours	d 1 Prepare a 'real' environment	2
		d 2 Support C.O.E. teaching programme	3
		d 3 Prior to practicum A.T. evaluate own teaching behaviours.	1
		d 4 Encourage S.T. to see other teachers and A.T. as resource people	3
		d 5 Avoid giving menial (apprentice) tasks	1
		d 6 Treat S.T. as a colleague.	2
		d 7 Encourage S.T. to see teaching as a continual chance for personal learning	3
		d 8 Develop sequential learning activities for S.T.	1
1 e	Allow S.T. flexibility to pursue professional individuality	e 1 A.T. open mindedness to allow S.T. choice and autonomy	3
		e 2 Assist and encourage S.T. style through experiment and trial	14
		e 3 Recognise and praise S.T. appropriate individuality	11
		e 4 A.T. highlight behaviours S.T. is comfortable with	3
		e 5 Praise S.T. experiments with various teaching approaches	9

Principle 2 *In terms of student-teacher learning, the practicum is an essential component of teacher education.*

Code	Generic Descriptors for Claimed Behaviours	Examples of Claimed Behaviours	Nos
2 a	Provide opportunities for active involvement in teaching	a 1 Provide time to link theory and practice	17
		a 2 Provide episodes to practice skills, planning and control	13
		a 3 Encourage teaching awareness through demonstrations	4
		a 4 Immediate practical work with pupils	5
		a 5 S.T. to try all teaching roles	3
		a 6 Co-operative planning	1
		a 7 Encourage teaching by S.T. in less comfortable areas	1
2 b	Model practical teaching behaviours	b 1 Plan time for and demonstrate relating theory and practice	5
		b 2 Demonstrate that practicum provides a learning environment for A.T. and S.T.	5
		b 3 A.T. demonstrate new strategies in own teaching	2
		b 4 A.T. active in gathering ideas from professional courses	2
		b 5 Demonstrate that A.T. enjoys teaching	3
		b 6 Demonstrate the inter-relationships involved in teaching	1
2 c	Demonstrate professional support behaviours	c 1 Give and encourage S.T. responsibility over expected roles	4
		c 2 A.T. and pupils provide a warm environment	11
		c 3 A.T. provide induction, feedback, pre and post practicum contact and praise	5
		c 4 Giving C.O.E. and S.T. appropriate status	2
2 d	Accommodate flexibility for S.T. practice	d 1 Observe A. T. planning then set own goals	2
		d 2 Encourage autonomy and freedom to experiment and modify	3
2 e	Actively involve S.T. in higher order thinking	e 1 S.T. to participate in reflection and evaluation	5
		e 2 Contrast predictions with results	1
		e 3 Give opportunity to justify behaviours	1

Principle 3 *Practicum is more appropriate for student teacher learning when conducted in a collaborative environment.*

Code	Generic Descriptors for Claimed Behaviours	Examples of Claimed Behaviours	Nos
3 a	Foster professional co-operation with student-teacher	a 1 Share planning and teacher tasks in an open mutually consultative way	34
		a 2 Foster an equal status teaching partnership	40
		a 3 Ask for and accept S.T. input	9
		a 4 State that collaboration is a catalyst for learning	7
3 b	Define and demonstrate specific roles and relationships	b 1 Establish convivial social relationships	5
		b 2 Show S.T. they are a valued team member	6
		b 3 Give S.T. decision making roles	5
		b 4 A.T.demonstrate own collaboration with colleagues and encourage S.T. to participate	10
3 c	Provide a supportive environment	c 1 Adopt non threatening behaviour	12
		c 2 Establish regular communication for analysis, explanation and evaluation	11
		c 3 Avoid being too critical. Rather show trust and praise	3
		c 4 Show respect for S.T. by using their interests, ideas and abilities and allowing S.T. to use them in own programme	6
		c 5 Misc	
		<ul style="list-style-type: none"> • A.T. to be seen as a resource • Set up an induction programme • Show S.T. pre-planning • A.T. to show respect and tolerance • Support C.O.E. • Encourage self assessment • A.T. to give time 	<ul style="list-style-type: none"> 3 1 1 2 3 1 1
	11		

Principle 4 *Student-teachers can increase professional skill by using critical reflection as their base for action during practicum.*

Code	Generic Descriptors for Claimed Behaviours	Examples of Claimed Behaviours	Nos
4 a	Facilitate examination of student-teacher and associate teacher behaviours	<ul style="list-style-type: none"> a 1 Use oral and written higher order questions a 2 Schedule dialogue time and establish a procedure for reflection a 3 Ensure contiguity between lessons and critical reflection 	<ul style="list-style-type: none"> 15 56 2
4 b	Demonstrate examination process behaviours	<ul style="list-style-type: none"> b 1 Use demonstration as a basis for generating ideas and problem solving b 2 A.T. models critical evaluation of own lessons b 3 A.T. and S.T. to show justification of modifications and verify predictions 	<ul style="list-style-type: none"> 4 4 6
4 c	Ensure support for student-teacher when using self examination processes	<ul style="list-style-type: none"> c 1 Use positive reinforcers c 2 Provide the environment to try modifications c 3 Give 'time out' for settling down before dritical reflection c 4 Provide a flexible timetable c 5 Make non judgemental suggestions 	<ul style="list-style-type: none"> 4 2 1 2 5
4 d	Suggest strategies for critical reflection	<ul style="list-style-type: none"> d 1 Use A.V. devices to record behaviour for analysis d 2 Match behaviour with theory d 3 Use a diary for gathering data d 4 Use problem solving processes d 5 Use behavioural objectives as a base for critical reflection d 6 Include S.T. in staff decision making 	<ul style="list-style-type: none"> 1 1 1 1 2 1

Principle 5 *Specific practicum curricula are essential for maximum student-teacher development during practicum.*

Code	Generic Descriptors for Claimed Behaviours	Examples of Claimed Behaviours	Nos
5 a	Actively support practicum curricula	a 1 Ensure that C.O.E. requirements are clarified, integrate and met a 2 Make specific practicum curricula available for all	63 1
5 b	Actively support student-teachers as learners	b 1 Demonstrate competencies b 2 Sequence S.T. learning b 3 Provide S.T. with a wide range of examples and demonstrations b 4 Participate in and encourage enquiry, analysis and evaluation of S.T. teaching b 5 Plan for individual needs b.6 Check lesson plans are consistent with specific practicum curricula b 7 Assist refine and focus skills b 7 Insist on using behavioural objectives	4 6 10 5 5 2 3 3
5 c	Prepare personal professional skill and environment for practicum	c 1 Personal, flexibility and adaptability that allows S.T. to act c 2 Provide adequate planning for a balanced programme c 3 Prepare for pre and post practicum consultation with S.T. c.4 Translate specific practicum curricula into 'craft' skills	2 7 3 1
5 d	No behaviours	d 1 Reported no specific practicum curricula operating in school	1

Principle 6 *To increase competent professional behaviours student-teachers need to integrate theory and practice during practicum*

Code	Generic Descriptors for Claimed Behaviours	Examples of Claimed Behaviours	Nos
6 a	Use theory to support the teaching and learning act	a 1 Discuss explain and use theory to support and modify intended and actual outcomes	40
6 b	Support student-teacher in use of theory and practice	b 1 A.T. a role model for S.T. b 2 Let S.T. experiment with theory and practice b 3 Challenge S.T. with theory and practice b 4 Integrate C.O.E. tasks	48 4 12 4

Principle 7 *Practicum will be perceived as relevant when professional competencies are clearly specified.*

Code	Generic Descriptors for Claimed Behaviours	Examples of Claimed Behaviours	Nos
7 a	Use <i>direct specific</i> communication	a 1 Regularly tell S.T. desired competency (ies) a 2 Model competencies using various approaches a 3 Use, monitor and evaluate clear simple objectives	21 26 10
7 b	Encourage use of student-teacher thinking skills	b 1 Provide sequential experiences to establish, analyse and evaluate competencies b 2 State and justify own competencies then get S.T. to do the same b 3 Use checklists to identify competencies are present	10 2 3
7 c	Actively involve student-teacher	c 1 Give S.T. a range of experiences re competencies	8
7 d	Provide feedback	d 1 Provide a reward system for attaining competencies d 2 Provide frequent 'on target' and corrective feedback	5 22

Appendix G (ii)

Column B

Principle 1 Student teacher professional development during practicum should not be based on apprentice models.

Code	Generic Descriptors for Claimed Behaviours	Examples of Claimed Behaviours	Nos
1 a	Expose student-teachers to a range of teaching behaviours	a 1 A.T. uses colleagues style and approach	1
		a 2 Use trial-modify approach to teaching	2
		a 3 Observe many other successful teachers and styles	2
		a 4 A.T. demonstrating sharing ideas with colleagues	1
1 b	Actively involve the student-teacher in 'higher order' thinking	b 1 Plan for short teaching segments to allow time for reflection	1
		b 2 Use analysis-evaluation-modify mode in own teaching	1
		b 3 Look at practicum from the learners perspective	1
		b 4 A.T. elicit alternative strategies from S.T.	1
		b 5 Encourage all S.T.'s at school to have a group discussion to discuss A.T.'s styles	1
1 c	Work co-operatively with S.T.	c 1 Mutual observation of A.T.'s and S.T.'s work	1
		c 2 A.T. asks S.T. for possible solutions to problem, implications and evaluation	1
		c 3 Co-operative planning and teaching	2
1 d	Provide specific support behaviours	d 1 Read widely to pass on relevant information	1
		d 2 A.T. to suggest possible alternatives	1
		d 3 A.T. to get other A.T.'s to assist S.T.	1
		d 4 Provide feedback	1
		d 5 Establish out of school social relationships	1
1 e	Allow S.T. flexibility to pursue professional individuality		

Principle 2 *In terms of student-teacher learning, the practicum is an essential component of teacher education.*

Code	Generic Descriptors for Claimed Behaviours	Examples of Claimed Behaviours	Nos
2 a	Provide opportunities for active involvement in teaching	a 1 Involve S.T. with parents and wider school community	1
		a 2 Involve S.T. in all areas of school life	1
		a 3 Involve S.T. in copious amounts of teaching	1
		a 4 A.T. to encourage S.T. to be the teacher	1
2 b	Model practical teaching behaviours	b 1 Use teaching practice to support or refute theory	1
		b 2 Let S.T. observe other teaching styles and teachers	1
2 c	Demonstrate professional support behaviours	c 1 A.T. give early and enthusiastic attention to S.T.	1
		c 2 A.T treat C.O.E. tasks with respect and importances	1
		c 3 A.T read professional literature on the topic	1
		c 4 A.T. comments to colleagues about the value of practicum	1
		c 5 Provide lots of support material such as checklists	1
		c 6 A.T. attributes high status to practicum by high expectations and standards of S.T.	1
		c 7 A.T. share personal appropriate experiences to support S.T.	1
		c 8 Give S.T. handy hints	1
		c 9 A.T. shows interest by putting in extra hours for S.T	1
		c 10 A.T. takes time prior to practicum to clarify assignment with S.T.	1
2 d	Accommodate flexibility for S.T. practice	d 1 Encourage S.T. to use own styles and theories	1
2 e	Actively involve S.T. in higher order thinking	e 1 Find theories to justify objectives	3
		e 2 A.T. discuss with S.T. reasons why something was done	1
		e 3 Analyse lessons and reports	1

Principle 3 *Practicum is more appropriate for student teacher learning when conducted in a collaborative environment.*

Code	Generic Descriptors for Claimed Behaviours	Examples of Claimed Behaviours	Nos
3 a	Foster professional co-operation with student-teacher	a 1 Participate in mutual planning	2
		a 2 A.T. learns from and consults with S.T.	3
		a 3 A.T. and S.T. teach together as colleagues	5
		a 4 Invite S.T. to attend staff meetings and speak on relevant issues	3
3 b	Define and demonstrate specific roles and relationships	b 1 Establish convivial social relationships	2
		b 2 Show S.T. how to generate parental support	1
		b 3 A.T. demonstrate collaboration	2
		b 4 Establish role relationships	1
3 c	Provide a supportive environment	c 1 Provide a range of people for S.T. to work with	2
		c 2 Encourage S.T. to work with pupils	1
		c 3 Support S.T. educational decisions	1
		c 4 A.T. not o be too judgemental	1
		c 5 Timetable review, planning and counseling	1

Principle 4 *Student-teachers can increase professional skill by using critical reflection as their base for action during practicum.*

Code	Generic Descriptors for Claimed Behaviours	Examples of Claimed Behaviours	Nos
4 a	Facilitate examination of student-teacher and associate teacher behaviours	a 1 Encourage S.T. to report on alternative ideas that could be used in lessons	1
		a 2 S.T. observes how A.T. does critical reflection	1
		a 3 Participate in mutual critical reflection	1
		a 4 A.T. and S.T. use In-class Supervision process	1
		a.5 Use a decide- do- modify process	1
		a 6 Demonstrate justification for A.T. teaching behaviours	1
		a 7 Ensure there is contiguity between lessons and critical reflection	1
4 b	Demonstrate examination process behaviours	b 1 A.T. demonstrates how critical reflection is used in pupil evaluation	1
		b 2 A.T. invites S.T. to observe syndicate meetings to see critical reflection in action	1
		b 3 A.T. lets S.T. track pupil evaluation and use results as a basis for reflection	1
		b 3 A.T. models personal evaluation	1
4 c	Ensure support for student-teacher when using self examination processes	b 4 A.T. to be less threatened about own teaching	1
		c 1 A.T. provide for re-teaching	1
		c 2 A.T. to provide time for S.T. to observe other staff	1
		c 3 Encourage 'think aloud' processes	1
4 d	Suggest strategies for critical reflection	c 4 Provide feedback	1
		d 1 Use A.V. devices to record behaviour for analysis	2
		d 2 Gather objective data about classroom behaviours for analysis	1

Principle 5 *Specific practicum curricula are essential for maximum student-teacher development during practicum.*

Code	Generic Descriptors for Claimed Behaviours	Examples of Claimed Behaviours	Nos
5 a	Actively support practicum curricula	a 1 A.T. demonstrated they are keeping up with developments in the field	1
		a 2 Ensure direction from C.O.E. regarding tasks and see that they are done	1
5 b	Actively support student-teachers as learners	b 1 Use own experience to encourage S.T.	1
		b 2 A.T. prepared to modify programme to strengthen S.T. deficient areas	2
		b 3 S.T. to evaluate curriculum	1
		b 4 A.T. to use checklist to see that curricula are operating	1
		b 5 A.T. to show relationship of activities with curricula	1
		b 6 Encourage S.T. to spend time with curricula experts	1
		b 7 Encourage S.T. to plan learner oriented teaching links in programme	1
		b 7 Assist S.T. to transfer skills from one curriculum area to others	1
		b 8 Let S.T. have evaluation form prior to practicum	1
		b 9 Suggest a range of strategies for a range of specific curriculum situations	1
b 10 A.T. demonstrate use of curricula guidelines	1		
5 c	Prepare personal professional skill and environment for practicum	c 1 A.T. place reminders relating to curricula in daily workbook	1
		c 2 A.T. to have clearly defined objectives	1

Principle 6 *To increase competent professional behaviours S.T.'s need to integrate theory and practice during practicum*

Code	Generic Descriptors for Claimed Behaviours	Examples of Claimed Behaviours	Nos
6 a	<p>Use theory to support the teaching and learning act</p>	<p>a 1 A.T. justify for S.T. each theoretical stage in a lesson a 2 Discuss strengths and weaknesses of theory a 3 Regular reference to social sciences credible thus supports theory and practice a 4 Get S.T. to analyse theory behind A.T.'s teaching</p>	<p>2 1 1 1</p>
6 b	<p>Support student-teacher in use of theory and practice</p>	<p>b 1 A.T. to be familiar with C.O.E. tasks b 2 A.T. plan to provide time for integration of theory and practice b 3 A.T.uses role model to demonstrate a point about theory and practice b 4 A.T. demonstrated to S.T. interest in a nd participates in professional bodies b 5 A.T. to revise learning and teaching theories</p>	<p>1 5 2 2 2</p>

Principle 7 *Practicum will be perceived as relevant when professional competencies are clearly specified.*

Code	Generic Descriptors for Claimed Behaviours	Examples of Claimed Behaviours	Nos
7 a	Use <i>direct specific</i> communication	a 1 Model competencies	1
		a 2 A.T., S.T. and C. O.E personnel met to clarify competencies	1
		a 3 Reiterate C.O.E. competencies to S.T	1
		a 4 A.T. provide direct guidance via checklists	2
7 b	Encourage use of student-teacher thinking skills	b 1 S.T. evaluate observed competencies for effectiveness	1
		b 2 After observation S.T. questions relevancy of A.T. competencies	1
7 c	Actively involve student-teacher	c 1 Encourage S.T. to try out a range of competencies and assess effectiveness	1
7 d	Provide feedback	d 1 A.T. state how well competencies are being achieved	1
		d 2 A.T. studies and reports process how well competencies are being learned	1

Appendix H

Principles, Categories and Criteria

Principle Student teacher professional development during practicum should not be based on apprentice models.

Code	Behaviour Categories	Behaviour Criteria
1 a	The A.T. may <i>expose student-teachers to a range of teaching behaviours</i> by...	<ul style="list-style-type: none"> a 1 Stating and using a variety of attainable teaching strategies a 2 Stating, demonstrating and explaining ones personal teaching style a 3 Avoiding 'This is the way' attitudes a 4 Showing acceptance of other teachers ideas a 5 Providing observations of other teachers a 6 Encouraging the use of ones own behaviours as a possible base for teaching
1 b	The A.T. may <i>actively involve the student-teacher in 'higher order' thinking</i> by...	<ul style="list-style-type: none"> b 1 Eliciting alternative behaviours from student-teacher b 2 Evaluating a variety of observed teaching approaches b 3 Using feedback involving 'How' and 'Why' questions b 4 Using problem solving strategies b 5 Encouraging questioning and probing of S.T. own behaviours b 6 Providing time for reflective critical analysis before and after teaching
1 c	The A.T. may <i>work co-operatively with S.T.</i> by...	<ul style="list-style-type: none"> c 1 Evaluate ones own lessons with S.T. c 2 Stating how they have learnt from S.T. c 3 Soliciting for, listening to and using S.T. teaching concepts c 4 Team teaching c 5 Teaching each other lessons c 6 Equal sharing of educational tasks
1 d	The A.T. may <i>provide specific support behaviours</i> by...	<ul style="list-style-type: none"> d 1 Preparing a 'real' environment d 2 Supporting C.O.E. teaching programme d 3 Evaluating own teaching behaviours prior to practicum d 4 Encouraging S.T. to see other teachers and A.T. as resource people d 5 Avoiding giving menial (apprentice) tasks d 6 Treating S.T. as a colleague d 7 Encouraging S.T. to see teaching as a continual chance for personal learning d 8 Developing sequential learning activities for S.T.
1 e	The A.T. may <i>allow S.T. flexibility to pursue professional individuality</i> by...	<ul style="list-style-type: none"> e 1 Being open minded to allow S.T. choice and autonomy e 2 Assisting and encouraging S.T. style through experiment and trial e 3 Recognising and praising appropriate S.T. individuality e 4 Highlight behaviours S.T. is comfortable with e 5 Praising S.T. when they experiment with various teaching approaches

Principle *In terms of student-teacher learning, the practicum is an essential component of teacher education.*

Code	Behaviour Categories	Behaviour Criteria
2 a	The A.T. may <i>provide opportunities for active involvement in teaching</i> by ...	<ul style="list-style-type: none"> a 1 Providing time to link theory and practice a 2 Providing practice episodes to practise skills, planning and control a 3 Encouraging teaching awareness through demonstrations a 4 Immediately assigning S.T. practical work with pupils a 5 Allowing S.T. to do all teaching roles a 6 Ensuring co-operative planning a 7 Encouraging teaching by S.T. in less comfortable areas
2 b	The A.T. may <i>model practical teaching behaviours</i> by...	<ul style="list-style-type: none"> b 1 Planning time to demonstrate relating theory and practice b 2 Demonstrating that practicum provides a learning environment for A.T. and S.T. b 3 Demonstrating new strategies in own teaching b 4 Actively gathering ideas from professional courses b 5 Demonstrating enjoyment in teaching b 6 Demonstrating the inter-relationships involved in teaching
2 c	The A.T. may <i>demonstrate professional support behaviours</i> by...	<ul style="list-style-type: none"> c 1 Assigning and encouraging S.T. responsibility over expected roles c 2 Providing a 'warm' environment for the S.T. c 3 Providing induction, feedback, pre and post practicum contact and praise c 4 Giving C.O.E. and S.T. appropriate status
2 d	The A.T. may <i>accommodate flexibility for S.T. practice</i> by...	<ul style="list-style-type: none"> d 1 Encouraging S.T. to observe A. T. planning before setting their own goals d 2 Encouraging autonomy and freedom to experiment and modify
2 e	The A.T. may <i>actively involve S.T. in higher order thinking processes</i> by...	<ul style="list-style-type: none"> e 1 Encouraging S.T. to participate in reflection and evaluation e 2 Helping S.T. contrast predictions with results e 3 Giving opportunity for S.T. to justify behaviours

Principle *Practicum is more appropriate for student teacher learning when conducted in a collaborative environment.*

Code	Behaviour Categories	Behaviour Criteria
3 a	<p>The A.T. may foster professional co-operation with student-teacher by...</p>	<p>a 1 Sharing planning and teacher tasks in an open mutually consultative way a 2 Fostering an equal-status teaching partnership a 3 Asking for and accepting S.T. input a 4 Stating how collaboration can be a catalyst for learning</p>
3 b	<p>The A.T. may define and demonstrate specific roles and relationships by...</p>	<p>b 1 Establishing convivial social relationships b 2 Showing S.T. they are a valued team member b 3 Giving S.T. decision making roles b 4 Demonstrating collaboration with colleagues and encouraging S.T. to participate</p>
3 c	<p>The A.T. may provide a supportive environment by...</p>	<p>c 1 Adopting non-threatening behaviour c 2 Establishing regular communication for analysis, explanation and evaluation c 3 Avoiding negative criticism. Rather show trust and praise c 4 Showing respect for S.T. by using their interests, ideas and abilities and allowing S.T. to use them in their own programme c 5 Misc</p> <ul style="list-style-type: none"> • Ensuring they are perceived as a resource • Implementing an induction programme • Showing S.T. pre-planning • Showing respect and tolerance • Supporting C.O.E. • Encouraging self assessment • Giving own time to S.T.

Principle *Student-teachers can increase professional skill by using critical reflection as their base for action during practicum.*

Code	Behaviour Categories	Behaviour Criteria
4 a	<p>The A.T. may <i>facilitate examination of student-teacher and associate teacher behaviours</i> by ...</p>	<ul style="list-style-type: none"> a 1 Using oral and written higher order question a 2 Scheduling dialogue time and establish a procedure for reflection a 3 Ensuring contiguity between lessons and critical reflection
4 b	<p>The A.T. may <i>demonstrate examination process behaviours</i> by ...</p>	<ul style="list-style-type: none"> b 1 Using demonstration as a basis for generating ideas and problem solving b 2 Modelling critical evaluation of own lessons b 3 A.T. and S.T. justifying modifications and verifying predictions
4 c	<p>The A.T. may <i>ensure support for student-teacher when using self examination processes</i> by ...</p>	<ul style="list-style-type: none"> c 1 Using positive reinforcers c 2 Providing the environment for S.T. to try modifications c 3 Giving 'time out' for settling down before critical reflection c 4 Providing a flexible timetable c 5 Making non-judgemental suggestions
4 d	<p>The A.T. may <i>suggest strategies for critical reflection</i> by ...</p>	<ul style="list-style-type: none"> d 1 Encouraging the use of A.V. devices to record behaviour for analysis d 2 Assisting S.T. to match teaching behaviour with theory d 3 Using a diary for gathering data d 4 Using problem solving processes d 5 Using behavioural objectives as a base for critical reflection d 6 Including S.T. in staff decision making

Principle *Specific practicum curricula are essential for maximum student-teacher development during practicum.*

Code	Behaviour Categories	Behaviour Criteria
5 a	<p>The A.T. may <i>actively support practicum curricula</i> by ...</p>	<p>a 1 Ensuring that C.O.E. requirements are clarified, integrated and met a 2 Making specific practicum curricula available for S.T.</p>
5 b	<p>The A.T. may <i>actively support student-teachers as learners</i> by ...</p>	<p>b 1 Demonstrating competencies b 2 Sequencing S.T. learning b 3 Providing S.T. with a wide range of examples and demonstrations b 4 Participating in and encouraging enquiry, analysis and evaluation of S.T. teaching b 5 Planning for individual needs b 6 Checking lesson plans are consistent with specific practicum curricula b 7 Assisting in refining and focusing skills b 7 Insisting on using behavioural objectives</p>
5 c	<p>The A.T. may <i>prepare personal professional skill and environment for practicum</i> by ...</p>	<p>c 1 Preparing personal flexibility and adaptability that allows S.T. to act c 2 Providing adequate planning for a balanced programme c 3 Preparing for pre and post practicum consultation with S.T. c 4 Translating specific practicum curricula into craft skills</p>

Principle *To increase competent professional behaviours student-teachers need to integrate theory and practice during practicum*

Code	Behaviour Categories	Behaviour Criteria
6 a	<p>The A.T. may <i>use theory to support the teaching and learning act</i> by ...</p>	<p>a 1 Discussing, explaining and using theory to support and modify intended and actual outcomes</p>
6 b	<p>The A.T. may <i>support student-teacher in use of theory and practice</i> by ...</p>	<p>b 1 Being a role model for S.T. b 2 Allowing S.T. to experiment with theory and practice b 3 Challenging S.T. with theory and practice b 4 Integrating C.O.E. tasks</p>

Principle *Practicum will be perceived as relevant when professional competencies are clearly specified.*

Code	Behaviour Categories	Behaviour Criteria
7 a	The A.T. may use <i>direct specific communication</i> by ...	<ul style="list-style-type: none"> a 1 Regularly telling S.T. desired competency (ies) a 2 Modeling competencies using various approaches a 3 Using, monitoring and evaluating clear simple objectives
7 b	The A.T. may <i>encourage use of student-teacher thinking skills</i> by ...	<ul style="list-style-type: none"> b 1 Encouraging S.T. to observe, identify and analyse A.T. competencies b 2 Assisting S.T. develop personal competencies
7 c	The A.T. may <i>actively involve the student-teacher</i> by ...	<ul style="list-style-type: none"> c 1 Give S.T. a range of experiences re competencies
7 d	The A.T. may provide <i>feedback</i> by ...	<ul style="list-style-type: none"> d 1 Providing a reward system for attaining competencies d 2 Providing frequent 'on target' and corrective feedback

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