

**CREATING A CLIMATE FOR CHANGE: A P.D.P. EXPERIENCE**

by

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## ABSTRACT

It has been my observation that the rapidly expanding knowledge base on teaching and learning has had limited impact on classroom practice. In numerous classrooms teachers persist with teaching methods that are unimaginative and tedious. A number of teachers are resistant to change, and inflexible or cynical about change initiatives. Consequently, ineffective teaching practices are perpetuated and learning opportunities for children are limited.

Meanwhile society is becoming more complex and undergoing dramatic changes. Education will become the central focus of society as the conceptualization of knowledge shifts from a prescribed stock of formal knowledge to knowing how to learn and how to continue learning. As teachers, we need to prepare ourselves and our students to engage in a ongoing process of inquiry and renewal in order to keep up with this swiftly changing world.

The study was motivated by my desire to effect change in schools through the preparation of teachers. There is a body of literature, however, attesting to the limited success of teacher education programs in changing the entry perspectives of preservice teachers from transmissive modes of teaching to practices arising from constructivist theory.

This study examines the teacher education program implemented by a module team within the Professional Development Program at Simon Fraser University. This study tested the hypothesis that conceptual change among beginning teachers can occur if the "right" environment for learning is created. The elements of the environment would include: modelling effective teaching, self evaluation, reflection and inquiry.

Seven preservice teachers from the module were involved in the study.

Observation and interview data were collected and documentary evidence was compiled over the course of two semesters. These qualitative data were analyzed to discern if conceptual change had occurred and to determine the factors that contributed to or inhibited conceptual change.

The data from this program indicate that conceptual change occurred, not only in the beliefs of students in the module, but also in those of the module team. A critical factor in promoting these changes was the development of student autonomy. The results of this study may be useful to other teacher educators who seek to change the beliefs of beginning teachers and who also aspire to prepare teachers to participate in school reform.

## **DEDICATION**

**This thesis is dedicated to  
my family: Câm, Erin and Kyler  
with love and gratitude for their support and  
independence.**

## **ACKNOWLEDGEMENTS**

I would like to thank Marv, Liz and Norma for the laughter, the wine, and for their patient belief in me.

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## CHAPTER ONE

### BACKGROUND AND STATEMENT OF THE PROBLEM

I received my initiation to teaching twenty-seven years ago through the Professional Development Program (PDP) at Simon Fraser University. I was taught that teachers are meant to continue to grow and learn and to create better learning opportunities for our students. Graduates of PDP in the sixties understood that we were to be agents of change. We understood that our practice could effect the life chances of children. PDP carried the message that a willingness to change, to risk and to experiment kept one's practice vibrant and alive and enhanced opportunities for children to learn and to flourish.

Since entering the classroom as a teacher, and also as a parent of children in the school system, it has been my observation that a commitment to continued growth in teaching is not universal among teachers. Some seem resistant to change and their practice appears tiresome and boring. Children, in silent rows, complete worksheets or answer questions from the board. Curriculum materials are meagre and learning opportunities are unimaginative and tedious. Classroom walls do not attest to student learning nor stimulate thought. Hands-on activities, interactive teaching strategies, and opportunities to explore rich curriculum experiences are anathema to traditional rituals in these classrooms. The children report being bored or turned off. They drag themselves to school in the morning wishing they could be somewhere else. Parents, feeling powerless to effect change, despair.

Part of this problem originates with the failure of some teachers to modify their practices to reflect the rapidly expanding knowledge base for teaching. (e.g.

Brophy, 1992; Gardner, 1991; Johnson & Johnson, 1992; Walberg, 1990; Joyce, Weil and Showers, 1992) New research on teaching and learning transcends "teaching as telling" to include alternate models of teaching that engage the learner in social interaction and in a process of constructing personal meaning.

In my experience, however, many teachers have not adopted interactive teaching strategies. The research has had little impact upon their teaching practices despite the fact that workshops and materials that are available to assist in creating zestful and vibrant classrooms. For example, Wassermann's (1990) monograph describes ways in which teachers can create opportunities for active learning through play, discovery and social interaction. The work of Johnson and Johnson (1990) and Kagan (1990) present cooperative learning strategies that can be used to enhance, not only mastery of content, but also social relationships within the classroom. While there are rich opportunities for learning in some classrooms, too many in my opinion, remain intellectually boring places.

When members of staff are resistant to change and inflexible and cynical when change initiatives are suggested, tensions between staff members result. These tensions build resentments that dampen enthusiasm and impede momentum and commitment to staff development enterprises. Consequently, ineffective practices are perpetuated and the lives of children, year after year, are affected by lacklustre teaching.

Meanwhile society itself is becoming more complex and undergoing rapid and dramatic changes. Rapid expansion of technology and global economic restructuring have created what Drucker (1994) refers to as "knowledge workers" within a "knowledge culture." Drucker posits that education will become the central focus of society as the conceptualization of knowledge shifts from a prescribed stock of formal knowledge to knowing how to learn and how to continue learning.

As teachers, we need to prepare ourselves and our students to engage in a ongoing process of inquiry and renewal in order to keep up with this swiftly changing world.

But teachers have been slow to respond to adapt their practices in order to reflect the research and to meet the needs of children in a changing world. In support of this observation, Wideen (1987, p.1) writes:

While change in society has become commonplace, the schools remain much as they always were; ...the educational establishment at all levels has shown remarkable inability to implement and maintain more effective ways of teaching, or to create school settings that are productive and exciting learning environments for children.

The reluctance of teachers to revitalize their teaching and to continue learning and growing as professionals concerned me deeply. In search of a way to address my concerns, and in an effort to renew my own practice as a teacher, I chose to return to the Professional Development Program at Simon Fraser University to work with preservice teachers as a faculty associate. I wondered if there was potential for creating lasting impact on schools through the preparation of teachers.

Within PDP, two faculty associates, experienced teachers seconded from the field, and a faculty member work together as a 'module team.' The team plans and implements a program of seminars for the thirty-two preservice teachers assigned to the module. Additionally, faculty associates supervise the student teachers in their practicum placements.

In my first year as a faculty associate, gatekeeping formed a large part of my role. I accepted this role quite happily. I believed that I was contributing to



improved learning conditions in the schools by making sure that preservice teachers, who seemed likely to perpetuate the inertia that characterizes some classrooms, would not continue in the program. As the year unfolded I began to feel, however, that the gatekeeping role was inadequate. Moreover, I realized that the program of seminars which I helped to design with my module team was not compelling and did not sufficiently prepare these beginning teachers to create classrooms that were, as Wassermann and Eggert (1973, p.12) describe "vital, alive, and zestful places." Moreover, they were not passionate about their teaching and their commitment to continued growth. (I elaborate on my story as a first year teacher educator and my changing perspectives in Chapter Two.)

Consequently, I began to reconceptualize my role as a faculty associate and to seek ways to improve my understanding of the process of learning to teach. I enrolled in graduate studies and began to read about constructivism, inquiry-oriented teacher education programs, alternative methods of supervision, and reflective practice. At the same time, I participated with other faculty associates in a series of seminars designed to promote collaborative reflection and inquiry into issues in teacher education. This reflective process, together with my readings, nurtured the reconceptualization of my role as a teacher educator and prompted me to reconsider the elements of an effective teacher education program. Within my new perspective, I hoped to bring about constructive changes in preservice teachers' views of teaching and learning. In short, I began to consider how I might go beyond gatekeeping and prepare teachers to participate in what Grimmer (1995) describes as "revitalized schools."

Grimmett (1995) applies constructivist theory (e.g. Von Glasersfeld, 1987) and describes the school environment from a constructivist perspective. Revitalized schools become student-centered learning communities where active participation

of the learners is emphasized. Teachers in revitalized schools see that their primary purpose is to engage the minds of the learners by centering learning on student interests and their prior knowledge and emphasizing process over product.

Teaching in the revitalized school is not seen as the transmission of information but rather as an act of reaching out to students with care and understanding in order to create opportunities that foster curiosity and a zestful appetite for learning. Passion, commitment, caring and nurturing characterize this teacher's orientation to teaching and to learners. Teachers' care and concern for learners extends into moral and political arenas as well as teachers in revitalized schools become advocates for children.

Ayers (1993, p. 93) shares Grimmett's constructivist learning perspective: ...the teacher has a bigger responsibility to create a dynamic and flexible classroom, and to build challenge and exposure into each school day. Still, youngsters need opportunities to choose, to name, and to pursue their own passions and projects, to develop some part of the class as their own. It is in the interaction of teacher and student, of immediate interest and larger purpose, that a living curriculum can be forged.

Grimmett (1995) and Ayers (1993) describe the type of dynamic teaching and passionate commitment to the study of teaching and learning that I hoped to inspire in my preservice teachers. These were the very dispositions that our program in the first year failed to nurture. Thus I began to consider the elements of a teacher education program that would prepare preservice teachers to understand teaching and learning as a fascinating, interactive process. In my second year as a faculty associate I worked with my module team to redesign our series of seminars within the Professional Development Program. Our intention

was to bring about “constructive change in classroom practice” and to “prepare empowered teachers of deep understanding capable of contributing fully to the culture of a revitalized school.” Grimmett (1995, p. 219)

This type of teaching would bear little or no resemblance to the teaching our preservice teachers would have experienced as pupils and it would not necessarily be reflective of the practices they had seen in university or in the classrooms where they participated as volunteers. For this reason, we believed that they would need to undergo a dramatic re-socialization into the role of teacher and learner. As Kelliopio, Shapson et al (1994, p.99) assert:

Very often students enter teacher training institutions with preconceived ideas about what teaching is, based on a lifetime of conditioning within a traditional model of schooling. Their initial inclination is to teach the way they have been taught...all they really want are a few pointers on how to control the class and a collection of sure-fire lesson ideas.

This perception was confirmed by our observations of our students in the first year. The module team determined that, in order to counter this socialization into schools as they presently exist, the program we envisioned would have to:

...steadily erode some of their deeply-held beliefs about teaching (e.g. teaching is simply a matter of mastering a set of skills, such as lesson planning and using an overhead projector, in line with recitation or transmissive style of teaching) toward a far more complex, open-ended and evolving philosophy of education. (Kelliopio, Shapson et al 1994, p. 99-100)

In short, the module team believed we needed to create conditions for changing the entry beliefs of preservice teachers within a program of seminars and

practicum experiences. We anticipated that students would enter the program with traditional perspectives on the teaching and learning relationship and our program was designed to present a contemporary, constructivist alternative. We believed that if we create the “right” climate and opportunities for learning within the seminar and sustained it throughout the practicum, we would set the stage for this conceptual change to occur.

The conceptual orientation of this program and its results are the central concerns that this study addresses. The following guiding questions form the initial conceptualization for this study:

- 1.) Can we create a context in which conceptual change occurs in the beliefs of the preservice teachers in the program and which is reflected in practice?
- 2.) What factors in the program contribute to or limit conceptual change?
- 3.) What is the lived experience of students in the program?

I examine these questions because I hope that my findings might be informative to others involved in the preparation of teachers. It is not my intention to provide a recipe for teacher education programs, but rather to provide impressionistic insight into the underlying structure of the Professional Development Program, into the curriculum designed by the module team, and into the outcomes of the program. I hope that there are some aspects of our experience that will resonate with other module teams engaged in designing future programs within PDP.

I chose to examine the lived experience of the students in the program because I hoped to gain insight into the students’ perceptions of our teaching. I believed that if students were going to leave the program and go on in teaching to

create positive, supportive environments for their learners, with rich and significant opportunities for learning, they had to have had that experience within our program. By examining their lived experience, I hoped to gain insight into my practice in order to inform my personal and professional growth and development.

Also I hoped that the lived experience of students in this program might provide insight into the lived experience of students in other program settings and thereby inform the practice of others engaged in teacher education. In short, I hoped that this study might, in some small way, contribute to teacher development, student learning, and the reform of schools which was the central motivation for this study.

### **Plan for investigating the problem**

In order to conduct this study, I obtained permission from seven students to collect extensive documentary and interview data. For example, the students were asked to write about their beliefs about teaching and learning on the first day of the seminar. This early writing, followed by interviews for clarification, informed my understanding of their entry beliefs. Students submitted journal summaries on a weekly basis during the introductory semester and on a biweekly basis during the second semester of the program. These summaries described the issues students were considering as their PDP experience unfolded. Additionally, students wrote reflections on formally observed lessons and they were asked to submit feedback on the program of seminars at regular intervals. Students also wrote self-assessments at midterm and at the end of semester (see Appendix B ). All of these contributed to the documentary data.

I took fieldnotes on significant incidents that occurred throughout the two

semesters and interviews were held with each student. In addition to the extensive data collected on seven students, all twelve students I supervised during Education 405 were given a questionnaire (Appendix C) after the semester ended. Ten questionnaires were returned and they formed another source of data.

This thesis is organized into seven chapters. Chapter Two sets the stage for the conceptual framework and intentions of the program by describing the context of the Professional Development Program at Simon Fraser University. The literature on learning to teach and the difficulties encountered by teacher preparation programs in creating conceptual change is explored. Contrasting perspectives on education reform and the philosophical perspectives of the module team within the debate are discussed. The chapter concludes with the goals and emphases of the program under study.

Chapter Three explores the literature on learning to teach and its application to the program. The chapter concludes by raising issues that may impact upon the ability of the program to promote conceptual change.

Chapter Four describes the qualitative research approach used in the study.

Chapter Five presents vignettes of two students in the program. Chapter Six explores the themes arising from the research data and Chapter Seven presents the summary, conclusions and reflections on the study.

### **Limitations of this thesis**

It is evident from Hammersley and Atkinson (1993) and Merriam (1988) that the relationship of the investigator to those being investigated can have an impact on the findings. For example, there is a risk that the researcher in a close relationship with her subjects will "go native." Hammersley and Atkinson (1983:110). Going native, or the development of "over-rapport" limits the study

because “the task of analysis may be abandoned in favour of the joys of participation” and closeness with the subjects may deter the researcher from probing sensitive areas of inquiry. Furthermore the researcher may identify so closely with the subjects that s/he fails to see issues as problematic.

In the context of this study, the relationships between researcher and subject are quite complex. I was researcher, supervisor, teacher and evaluator of subjects in the study. This situation creates an acknowledged imbalance of power and students may have felt reluctant to decline participation in the study and reluctant to be candid with their views.

Additionally, I had a personal investment in the program. Not only was I concerned with the effects of these prospective teachers upon future generations of children, my own values, beliefs and sense of efficacy were invested in this program design. The students’ difficulties with the program became topics of discussion. Students’ problems in their practicum became my problems. I committed thought, energy and emotion to the ‘success’ of the program.

Moreover, students were aware that I was conducting research on elements of teacher education programs designed to promote conceptual change. My enthusiasm for the program and my fervent belief in our goals may have influenced their responses. Since most of the evidence for this study was gathered from documents written by the students, in full knowledge that they were to be read by me as their supervisor, they may have adapted their writing to reflect what they thought I wanted to hear.

Investigator biases and interpretations are not seen as problematic but as part of qualitative research. Lytle and Cochran-Smith, (1994, p. 26) in discussing action research, a form of qualitative research argue:

The goal of the researcher is not objectivity but systematic subjectivity, a

position that leads to new paradigms for research on teaching and to the construction of alternative modes of discourse and analysis.

This view is supported by Hammersley and Atkinson (1993, p.34) who posit

The aim is not to gather 'pure' data that are free from potential bias. There is no such thing. Rather, the goal must be to discover the correct manner of interpreting whatever data we have.

This study is further effected by limited opportunities for data collection during the semester because my primary concern was to support and enhance the students' development in the program rather than to collect data for my own research. Because many students experience stress during their extended practicum, particularly during formal observations and supervisory conferences, I was reluctant to contribute to their stress by taping our conversations or by asking for more of their time to contribute to my research.

The interview data have limited application for this study for two reasons. Firstly, I had an abundance of documentary data and secondly because I conducted the interviews prior to reading relevant literature on the conduct of interviews for research purposes. I am inexperienced with the technique and I found, upon analyzing the transcripts, that I had, on occasion, crossed the line between maintaining a "focus" (Merton and Kendall, 1946) and leading the interviewees to consider particular issues because of my questions.

Qualitative research itself presents certain limitations in its use. Although it provides rich, thick description and analysis of phenomena, it has the potential to become too long, too exaggerated or limited to a particularly narrow examination. As well as the limitations I have cited here, there "are limitations involving issues of



reliability, validity, and generalizability.” (Merriam, 1988 p. 34) that I have attempted to minimize. These limitations are described more fully in Chapter Four.

## CHAPTER TWO

### PROGRAM CONTEXT: TEACHER EDUCATION AT SIMON FRASER UNIVERSITY

Developing a program that would create a climate in which conceptual change could occur requires an understanding of the factors that may inhibit or enhance this goal. Feiman-Nemser and Buchmann (1989, p. 368) note "...learning outcomes in teacher education are a function both of what programs offer and what people bring." This chapter explores both the offerings of teacher education programs and the entry beliefs of preservice teachers. It examines specifically what is offered through the structure and design of the Professional Development Program at Simon Fraser University and its potential to create conceptual change. It continues by examining the literature on the beliefs preservice teachers bring to their teacher education programs. The chapter continues by exploring issues evident in the literature that impact upon the effectiveness of teacher preparation programs and changing theories of learning. The philosophical perspective of the module team is discussed and the chapter concludes with the goals and emphases of the program under study.

#### **Differentiated Staffing**

The Professional Development Program (PDP) at Simon Fraser University began when the university opened in 1965. The program was designed to be innovative and to address criticisms that had been levelled at teacher education programs at the time: namely faculty had suffered a loss of credibility within the research communities of the universities and secondly, faculty were seen as being

“ivory towerish” and out of touch with the field. For this reason PDP employed a differentiated staffing model with experienced teachers, called faculty associates, paired with scholars to form module teams. The module teams would work together to design and implement a program of seminars for the preparation of the preservice teachers.

The creators of the program believed that by combining the knowledge and experience base of both the practitioner and scholar in module teams, a “synergy” would occur. This resultant synergy would enhance the development of the faculty whose theoretical knowledge would be tested by the practical knowledge of the practitioner. Additionally, according to Ellis (1967, p. 426), the temporary appointments of faculty associates and their regular turn-over in the faculty would be “..a built-in way for the faculty to avoid stagnation....a consequent inflow of enthusiasm and new ideas.” Moreover, because the time-intensive task of supervision of student teachers would be assumed by the faculty associates, the faculty would be freed to pursue research and other scholarly activities and thereby regain currency within the academic community. This differentiated staffing was considered to be a “productive division of labour.” (Birch, 1970, p.1)

Not only would the module team format result in benefits for the faculty, the faculty associates would receive considerable benefits through their involvement as well. It was believed that faculty associates would be challenged by the prodding of the professor and their personal practical knowledge would be enhanced by the need to articulate their tacit understandings to students. This opportunity for the faculty associates was thought to offer “powerful in-service training” and that faculty associates would return to the schools having experienced “... a spectacular sharpening of educational insights and broadening of educational horizons.” (Ellis, 1967, p. 426-27)

When PDP is synergistic as it was intended, there is a nurturing of collaborative action and inquiry between professors and practitioners in developing a shared vision for the module program. This synergy presents a potentially powerful model for collaboration and inquiry between faculty associates and their preservice teachers and subsequently between preservice teachers and their pupils. Thus within PDP, there can be a blurring of distinctions between teacher and learner, student and professional, practitioner and professor. Each individual in the program has the potential to be both learner and teacher and to contribute to the understanding of the others.

### **Cohort Groups**

Students in PDP remain together for seminars as a cohort throughout the first practicum semester, Education 401/402. During the second semester, in most cases Education 405, students are placed in classrooms for a twelve week practicum punctuated by intermittent seminars with the whole cohort or in "mini module groups" where half the class meets with their supervising faculty associate. Additionally, every attempt is made to place students in clusters or cohorts during their practicum experience.

Cohort groups, according to Tom (1995, p.127) have several advantages in the preparation of new teachers. They provide an opportunity for monitoring student progress in a caring environment in which there is a social dimension and a potential for developing group norms and support systems. Moreover, cohort groups offer a shared experience and also the powerful effect of a "shared ordeal" that helps mold the developing teacher into a professional ready to assume substantial responsibility with a sense of self-confidence.

### **Extended Practice**

Another innovative feature of the program from its inception was extended periods of practice teaching in schools. Of the three semester program, fully half of the students' time, or six months, is spent in schools. For the first semester, Education 401/402, students' time is divided equally between seminars and practicum experiences designed by the module team to integrate educational theory and classroom practice. Within some teacher education programs, heavy emphasis on practice would indicate an apprenticeship models and a reproduction of existing practice. This is not the case, however, within PDP as noted by Grimmert (1995a, p. 160-161)

Educating teachers in the context of practice is seen to be very different from the apprenticeship phenomenon. It involves collaboration (the mutual negotiation of purposes and interests by partners committed to the common goal of the education of teachers) between university-based teacher educators and competent, progressive-and radical-minded practitioners.

The Simon Fraser model is "built to allow students to learn through scaffolded practice, in the context of classrooms." (Scott and Burke, 1995, p.192) Utilizing the personal practical knowledge of school and faculty associates, the students are led through a process of reflective supervision in the context of practice to greater professional understanding.

### **Module Structure**

An additional factor within the SFU program that contributes to the potential for conceptual change is the module structure. The module structure enables module teams to create their own visions of teacher education without interfering

with other students or faculty within the program, or waiting for their input or approval. This has the effect of facilitating experimentation and the development of pilot projects to test innovations while limiting the negative consequences that may result from these programs to a small number of students. At the same time, all modules are free to adopt practices that have proven effectiveness.

The program, that is the subject of this study, was just such a “pilot project.”. The module team had a vision of a teacher education program that was different in a number of ways from the other modules. We worked with the thirty-two students assigned to our module within PDP to test our theory of conceptual change.

### **Opportunity for Reflection and Collaboration**

Additionally PDP promotes professional interdependence by bringing faculty associates together from around the province to form a community for the purposes of reflection and collaboration. Faculty associates come together for a two week orientation prior to the beginning of the semester and for an additional five weeks interspersed throughout the two semesters of F.A. involvement. Beynon (1996, p.27) argues that

...bringing together teachers who work from similar beliefs about collaboration, reflection and attention to the needs and attributes of the learner, increases the likelihood of shaping a teacher education culture that reflects these beliefs.

Beynon (1996, p.10) depicts the faculty associate community as an “ecological niche” within the faculty. This community, or “niche” is described by Evans (1996, p.10) as having five features that make it distinct from the culture of the schools and from the university:

- the absence of a hierarchical power structure

- the presence of an ethic of caring
- the provision of opportunities to exercise professional autonomy
- the existence of a professional environment that supports and nurtures reflective practice; and
- the existence of a cohesive professional body with shared beliefs

By valuing reflection and collaboration and by devoting time and resources to create opportunities for faculty associates to engage in dialogue with the faculty and with other faculty associates, the Professional Development Program creates both a powerful model for faculty associates to emulate in teaching students and a potent opportunity for professional growth. In this regard, PDP has the potential to be a model of a community of learners.

These regular gatherings of faculty associates not only promote reflection and interdependence, they also have a strong normative influence on the content and structure of the programs in the modules. Faculty associates discuss the content of seminars, assignments for students and expectations for their performance. Indeed the curriculum of PDP is developed within the "niche."

In his reconceptualization of teacher education programs, Tom (1995) argues in favor of a program very similar in design to PDP for its potential to be a transformative experience. Tom argues for compressed programs, like PDP, instead of a gradual ones. He argues (1995, p.118), "The most powerful learning experiences of our lives are compressed and thus are all-encompassing and even transformative events or episodes."

Also similar to PDP, and in keeping with a constructivist perspective, Tom argues for practice before theory. Vertical staffing is favored by Tom in which clinical professors, i.e. faculty associates, work in collaboration with faculty to prepare and supervise student teachers. Additionally Tom (1995, p.127) argues

that students should remain in cohort groups so that they have a shared experience. He posits that significant changes could result from this shared experience in the following quotation, "A shared ordeal and other rites of passage signal an incipient status change of some consequence."

It would appear, from its similarity to Tom's vision of a superior teacher education program, that the Professional Development Program has been structured with a reform agenda in mind. It is my experience, however, that within the desirable structure of PDP, there are instances where module programs have limited success in producing conceptual change. It is possible, within PDP, to fall victim to what Grimmett (1995, p. 210) refers to as "the usual shallow hyperactivity of teacher education programs." I use my own experience during my first year as a faculty associate to illustrate this point.

### My Story

I began my two-year term as a faculty associate in 1994 in a module based off-campus. My faculty associate partner and I were both new to the role and we were teamed with a faculty member who was not well known to either of us. While we may have shared a common vision about learners and teaching, communication was often convoluted and painful. We had working and learning styles that baffled and alienated each other.

The faculty member attempted to guide the conceptualization of the program design through theoretical and philosophical conversations. These interactions left me exhausted and frequently intimidated or impatient. Dawson (1995) paints a glowing image of the complementary roles of faculty members and faculty associates, however, my experience was not as he reports. Dawson speaks of planning for the module four months in advance of the students' arrival. In our



case, two weeks was all we had. Consequently, in planning sessions when the professor asked, "What is our conceptual framework?" I wondered "Where do we get readings? What speakers are available? What is a good activity for.....?"

In frustration, the faculty member retreated from active involvement in planning. In relief, I dived into the binders of methods and materials left by our predecessors, seizing a reading here, an activity there. Following the example of our colleagues, we required our students to write journals and submit them, to video tape lessons and analyze them, to visit schools with lists of questions to focus their observations, and, because the faculty member wanted the students to do action research, we added that too. We developed a module handbook to describe the assignments and experiences we felt were necessary for the students to understand the goals of PDP. A program, designed to "make them into teachers" and to "cover all the bases," was thus pieced together and delivered to students.

During cycles of supervision I took my role as gatekeeper seriously. I directed two students on to continued study in Education 404 rather than permitting them to continue their practica in Education 405 with the rest of the module. These decisions were based on limited data points as the students are only in schools for twenty-eight days during this introductory semester.

Moreover, the student feedback on my teaching was painful to read. Not only did the students express criticisms of me and some elements of the program, but the language they used to voice both their praise and their criticisms was impoverished. I would have been happier if they had been able to condemn me or praise me in language that demonstrated greater conceptual depth. I wondered what, if anything, I had taught them.

In the unremitting pace we had set for ourselves and our students, I had sacrificed all opportunities to reflect. Perhaps if I had slowed down the pace and

taken the time to examine my practice, I would have realized that the students didn't have a voice in our program and were not invited to have input or give feedback until the dying gasp. They were seldom consulted on the content, pacing or delivery of the program. They were not asked about their needs. We delivered the program. They received it.

I believe I abandoned the elements of my teaching that I prized most: the personal and caring connection with the learner, a program designed to be responsive to students' needs, and the opportunity to reflect on my practice. I had not modelled the very behavior I was expecting my students to exhibit.

My metaphor for this initial semester in PDP was a "naked carwash." I felt I had been stripped bare of any sense of competence, hosed down by confrontation with my inability to translate my experiences with children to these adults, battered by my reflections on the gap between my espoused philosophy and my actual practices.

Among the few positive things that survived the semester were the team's growing understanding of each other and pleasure in working together. Permission to work together again as a team for a second year was granted and we began to plan again. This time when the professor asked, "What is our conceptual framework?" I responded with new concerns: "What are the elements of our curriculum that will create a climate for change?" "How can we inspire our learners' desire to continue to learn and grow in teaching?" "What do we need to do differently?"

These are the questions that prompted my reconceptualization of teacher education programs. As Wassermann (1980, p.182) states:

I guess all significant learning comes about as a consequence of the need for resolution of cognitive dissonance. One cannot endure for long a period

such disharmony as is encountered in a clash between a conflict of personal beliefs and discrepant personal behavior. Once you have identified such a conflict, something has to give...

The 'something that had to give' was the inconsistency between my practices and my espoused beliefs and the lack of cohesion in the module program. I theorized that both of these problems were a consequence of my inexperience in this educational setting. I was not conversant with educational issues from a theoretical perspective and I was inexperienced in articulating my practical knowledge. To paraphrase Eisner (1992, p.391), 'I found it difficult to be pedagogically graceful when I was lost in unfamiliar territory.' My discomfort made my teaching more transmissive and my relations with my students was more critical and controlling than I care to admit. This phenomena has been observed by Shulman (1987, p.114) who noted that "teaching behavior is bound up with comprehension and transformation of understanding." In his observation of a teacher working with an unfamiliar curriculum he noted that "the flexible and interactive teaching techniques" that were a normal part of her practice were "simply not available to her" when she did not understand the topic to be taught.

I began to consider how I could transform my role as presenter and expert into the role of facilitator. I wanted to resist problem-solving and facilitate problem-posing. But, if I was going to facilitate conceptual change in my students, I needed to experience it for myself. Sarason (1972 , p.122) captures this sentiment in the following quotation:

The fact is that our primary value concerns our need to help ourselves change and learn, for us to feel that we are growing in our understanding of where we have been, where we are, and what we are about, and that we are

enjoying what we are doing... To help others to change without this being preceded and accompanied by an exquisite awareness of the process in ourselves is "delivering a product or service" which truly has little or no significance for our personal or intellectual growth.

Thus, the second year in the program held the potential for me to experience "the exquisite awareness" of change and to emerge transformed from the "carwash."

The following section examines factors within the Professional Development Program that may contribute to experiences like mine and which may limit the ability of the program to prepare teachers for conceptual change.

### **Factors Within the Professional Development Program that May Inhibit Reform**

I don't believe that my experience as a faculty associate in PDP is unique. My metaphor of the "naked car wash" resonated clearly with my peers and many indicated feeling inadequate and dissatisfied with their teaching and their "student products." Part of this problem lies within the design of the Professional Development Program. One director of PDP has indicated that the "messy" organization of the program is one of its strengths. The absence of formally prescribed curriculum and external direction is thought to enhance creativity and to result in powerful programs. This belief is supported in a report by the BCCT cited in Dawson (1995, p.178) who state the following:

The modules are loosely coupled to a very general philosophy.... There is a set of objectives to guide people who work in the program and to use in the evaluation of students but whether or not those objectives are strictly adhered to seems uncertain. In any case they are broad enough to cover

almost any practice. That appears to us to be both the strength and weakness of the program and why it is so difficult to capture its essence.

...the diversity in practice that is inevitable, is what gives the program its uniqueness and its strength. And if we had to make a stark choice between designing an ideal teacher education program and having great mentors without giving them much direction and less prescription, we know which we would choose.

There are instances, like my own, however, when the messiness of the program can be a detriment. As my experience attests, conditions exist within PDP in which it is possible for students to emerge from the program with their entry beliefs intact, ill-prepared to contribute in substantive ways to the revitalization of schools. A discussion of the conditions within PDP that have the potential to limit the development of preservice teachers follows.

### **Difficulty Developing "Synergy"**

Module teams typically stay together for only one year in the Professional Development Program and then the teams are reshuffled and the participants begin anew the process of accommodation to new visions and personalities. The synergy that was envisioned by the original architects of the program, however, is difficult to build in one year. It is only because of a second term together that our module team was able to overcome communication obstacles undoubtedly common to other teams as well.

As documented by Evans (1995), Clandinin (1993) and Cornbleth and Ellsworth (1994) the role of the clinical professor in teacher education is fraught

with tensions and ambivalence. Because of our common experience in the first year and our ability to stay together for a second year, we were able to overcome some of those tensions. We developed a level of trust that enabled us to reflect critically on our experience and to forge a common vision of our goals for our students. We were able to be innovative and to move beyond the technical and practical considerations and the "binder diving" of our first year's experience, to conceptual clarity for the module program. Moreover, we were better able to critically examine the norms that influenced our decisions in the first year and to choose an alternative course of action. I venture to say that this level of synergy would not have occurred if we had changed partners or faculty members.

### **Oral Tradition**

Another factor within PDP that may limit the opportunity for conceptual change is the oral tradition of the program. There are twelve PDP goals approved by faculty as the guiding principles for module programs. (See Appendix A) According to Dawson (1995, p.178) the module team "has the freedom to structure the experiences for their student teachers within the focus selected by the team." From this quotation, it may appear that PDP has no prescribed curriculum. In my experience, however, the oral tradition of the program has a strong normative influence and module programs do not vary much from each other.

As noted by Croll and Moses (1989, p. 87) the orientation of PDP is not knowledge based but rather it stresses caring and feeling and the development of the teacher as a person. Additionally, inquiry and reflection are valued in the program. This view is reflected by Grimmett (1995a, p. 165)

There is a strong tendency to make problematic the moral and political contexts in which teacher education takes place. Accordingly the program is

framed around a view that knowledge is socially constructed, where research knowledge is used conceptually and metaphorically to inform and transform understandings of practice. There is, therefore, a heavy emphasis on practice and the derivation of craft knowledge in the practice setting. Reflection is seen as central to this operation, being viewed not as a generic disposition but as a primary organizing principle in the program's framework.

Consequently the normative influence of the program emphasizes building relationships between and among faculty associates and students and the development of the students as reflective practitioners. In my experience, faculty associates pride themselves on the degree of specificity and the quantity of reflective assignments required of students. It is also common to hear faculty associates questioning students' commitment to teaching as evidenced by their lack of commitment to their numerous reflective assignments. Moreover, there is a strong resolve within the program to be "gatekeepers" so that standards of professional excellence are upheld.

Within this strong oral tradition, our program was indeed a radical departure from normal practices. In order to accomplish our goals, we felt that we had to break ranks with our colleagues. We were criticized by past and present program directors and other faculty associates expressed concern at our temerity.

Additionally, to the best of my knowledge, there is very little writing done by module teams that describes the conceptual framework for their module and their resulting experiences. One volume, Wideen and Pye (1994) presents the collaborative research of faculty and school associates and faculty members. Efforts at collaborative research seem to have diminished latterly however, and the binders of lesson plans, handouts, readings and activities do not replace deliberate

and systematic description and analysis of programs. Like the experiences of our colleagues, our module experience will evaporate into the ether. No trace will remain of this program. No future module teams will have been informed by our experiment.

### **Two Year Appointments**

Another factor that may limit the opportunity for conceptual change is the restricted term of appointment of faculty associates. Just as we have begun to develop supervisory skills and pedagogical theories adequate to the challenges of a program founded on reflection and inquiry, our two-year term is finished. While it is desirable to have practitioners with recent classroom practice involved with preservice teachers, a two-year term may not be enough. In my opinion, programs founded on reflection and inquiry require expertise beyond a two-year appointment.

The original architects of PDP imagined that the influx of faculty associates would be a way for the faculty to avoid stagnation. While this may be true in some cases, in my observation, the limited term of faculty associates can actually contribute to stagnation. Because of the active presence of faculty associates, faculty members are free to determine for themselves the degree and depth of their involvement in the program. Their commitment to teacher education varies from a few drop-in "workshops" to sustained and substantive involvement in planning and teaching. Without consistent and thoughtful faculty involvement in the program, the program may lose its responsiveness to changing needs of students and the community.

Moreover, in my experience as a participant observer, faculty associates have little formal power to influence changes in the program and we are expected



to accept the university organization, faculty opinions and campus norms. When faculty associates raise issues of concern about the program, our concerns can be readily dismissed because of our limited term appointments and our limited influence on decisions within the faculty.

Additionally, two year appointments may limit the involvement of PDP in other reconceptualizations of teacher education that are emerging in the literature. Many reformers go beyond renovating the existing programs based within the university and advocate collaborative partnerships with other stakeholders within the education community. (e.g. Scott and Burke 1995; Clandinin ,1993; Cochran-Smith, 1991b.) These collaborative partnerships have the potential to engage university faculty, inservice and preservice teachers in joint participation in the process of reform.

One example of a collaborative partnership is the Foxfire program described by Dittmer and Fichetti, (1995.) Foxfire seeks to reconceptualize the roles and relationships within the program by involving faculty, students and practicing teachers in the process of change together. The Foxfire program is founded on the assumption that students will teach in the ways that are modelled for them in their preservice programs. The following quotation from Dittmer and Fichetti (1995, p.168) illustrates this assumption, "We continue to realize that if we give our students choices in how and what they learn, it will naturally follow that they will do the same with their students when they become teachers." That our students will "naturally follow" our modelling as teachers I find somewhat naive, however, I believe they are more likely to be influenced by our teaching if our beliefs and practice are consistent.

Reform initiatives of the Foxfire type may begin to address the problems of modelling effective pedagogy at the school and university level. Moreover,

collaboration may begin to address the socialization problems encountered during the practicum by involving cooperating teachers with faculty and students in addressing issues of change. I believe these initiatives would be facilitated by longer terms for faculty associates, especially those who are placed beyond the contacts of their home school districts.

In the preceding section, I have considered factors specific to the Professional Development Program that may affect the ability of the program to promote conceptual change. Additionally, the literature is replete with accounts of ways in which universities in general fail to prepare preservice teachers for alternative conceptions of teaching and learning. In my experience, many of these factors are evident at Simon Fraser University and apply to PDP as well.

## **Limitations of Teacher Education Programs**

### **Preservice Teacher Beliefs**

The literature contains ample accounts of the limited ability of teacher education programs to prepare student teachers to participate in educational reform as envisioned by their university advisors. These limited results are often attributed to the pervasiveness of preservice teachers' beliefs. Lortie first noted this phenomenon in 1975. He terms this pervasive socialization "the apprenticeship of observation." Since that time, the seemingly robust nature of preservice teacher beliefs has been noted repeatedly in the literature. (e.g. Britzman, 1988; Hollingsworth, 1989; Weinstein 1990; Bramald, Hardman and Leat 1994; Calderhead and Robson, 1991; Stoddart, Stofflett, and Gomez 1992)

According to the literature, preservice teachers enter teacher education programs having been socialized by seventeen years of schooling into traditional beliefs about the teaching/learning relationship. They have been apprenticed in

transmissive and managerial teaching behaviors and, in effect, they already believe that they “know” how to teach. This perception is supported by Britzman (1988, p. 443) who argues that student teachers “bring their implicit institutional biographies--the cumulative experience of school lives--which, in turn, inform their knowledge of the student's world, of school structure, and of curriculum.”

Hollingsworth (1989) reports on a longitudinal study of the beliefs of fourteen preservice teachers. Half of the students in the study entered with the belief that pupils learned by constructing knowledge, and the other half believed in transmissive modes of teaching.

At the end of Hollingsworth's (1989) study all of the students reported to believe that children need to be responsible for their own learning but Hollingsworth reports that the depth of student understanding varied and a number of students stayed at a superficial level. She found that the beliefs of the preservice teachers in the study served as filters for new learning in the program. While some students were able to deepen their understanding and move beyond traditional teaching methods, others were limited in their understanding by the beliefs they brought into the program.

In support of this theory, McDiarmid (1991) suggests that preservice teachers' prior experiences in schools form a “web” of interconnecting beliefs that effectively screen all new information. According to McDiarmid, challenging those beliefs has the potential to be a “quixotic undertaking.” It is also noted as a powerful force in Fuller and Bown (1975).

Complicating this issue students may choose to enter teaching precisely because of their belief in traditional teaching methods and their history of success in such schools. Schools worked for them and they may have chosen to come into teaching to become the person at the front of the room. Being aware of no

alternatives, this transmissive teaching style may have been adopted by students as the “given practice” of school.

### **Implications for the Preparation of Preservice Teachers**

Constructivist theory holds that knowledge is mediated by prior beliefs and experiences. For this reason entry beliefs of preservice teachers must be important considerations for the curriculum in preservice programs. This theme is supported in the literature by Powell and Riner (1992) who assert that entry beliefs and pedagogical understandings must be thoroughly examined and their assumptions made explicit, because like McDiarmid's “web,” they serve as filters for incoming knowledge. Britzman also (1986) presents an argument for exposing student teachers' “institutional biographies” to critical examination. Feiman-Nemser and Buchman (1985) state that the examination of beliefs and how they relate to practice is crucial to growth and change without which student teachers are likely to adopt practices they remember from their own experiences as pupils.

Hollingsworth (1989, p.160) also argues for programs that..

...take preservice teachers' prior beliefs into account in the program design, recognize the value of cognitive dissonance in the practice teaching situation, routinize classroom management knowledge... and academic task as a part of the teaching knowledge base.

As a result of her study, Hollingsworth (1989, p.186) asserts that under the right conditions, preservice teachers can learn ideas that are new and unfamiliar. She argues,

That finding implies that it *might* be possible to educate preservice teachers

who will challenge conservative school models. (emphasis in the original.)  
If these elements are included in a preservice program, teachers who will challenge existing practices in schools may be the result.

The failure of teacher education programs to have positive effect in changing preservice teachers' beliefs is so prevalent in the literature that one wonders why teacher education programs exist. Nevertheless, the program under study is conceptualized on the basis that, as Hollingsworth (1989) argues, it is possible under the right conditions for teacher education programs to have a profound and lasting impact on preservice teachers.

The challenge for the teacher education programs is to find those "right conditions." It is imperative, then, for teacher educators to be conscious of the beliefs student teachers bring with them to the program and provide opportunities for students to identify and examine their beliefs and practices through critical reflection. Without this opportunity it would appear, according to research, (e.g. Goodman, 1986; Korthagen, 1988) that preservice teachers are likely to continue with didactic practices learned from their own experience in schools.

### **Lack of Research**

Until recently, there has been a shortage of research available to inform those involved in the preparation of teachers. For example the persistence of Lortie's (1975) argument in reporting the pervasiveness of preservice teachers' beliefs may be due, in part to the shortage of empirical evidence on what actually happens in teacher education programs. Rarely do studies into belief systems of preservice teachers take into account the quality and content of teacher preparation programs. When they do, it appears that other factors may be at work.

For example, Weinstein (1990) writes about the persistence of didactic and managerial beliefs following a teacher education program in which preservice teachers spent three hours per week for 14 weeks in campus courses and a total of twenty-one hours in practicum. Both components of the course were so brief one wonders even at the expectation of conceptual change from such a program.

Moreover, Lortie's (1975) argument predates many of the new teaching models. It is likely that the students in his study were not exposed to concrete examples of alternative methods of instruction. Twenty years have passed since those early studies and much more is known about effective student-centred teaching strategies. Once again, however, there is little empirical evidence about the intent or effectiveness of teacher education programs to prepare student teachers to use the new technologies. As noted by Wideen, Mayer-Smith and Moon (1996, p.10) "there appears to be little interest among these researchers in examining the counter-hypothesis that the reason beginning teachers do not change their beliefs rests with the ineffectiveness of programs of teacher education." Britzman, (1986, p.454) in support of this hypothesis, argues

...student teachers may very well intend to create a participatory classroom, but are at a real loss as to how to proceed. They possess no comparative perspective, and lack either prior experience in, or institutional support for, challenging the status quo...

It may be that the "institutional support" required to challenge the status quo may be lacking in teacher education programs. It is essential that research into teacher education be expanded to include descriptions of the content, quality, and effectiveness of the programs. This view is supported by Feiman-Nemser and Buchman (1989, p. 366) who argue:

..without systematic descriptions of what is taught and learned in formal preparation and field experiences, we cannot understand what professional education contributes to teachers' learning or the ways that learning can best be fostered. In short, we need to understand the following: (a) what teacher educators teach, (b) how opportunities for learning in the preservice curriculum are structured, (c) what prospective teachers make of these opportunities to learn over time, (d) what happens when student teachers take their learning from university setting into the classroom, and (e) how these different experiences do or do not measure up as preparation for teaching.

Because of the shortage of research that systematically describes teacher education programs, those at work in teacher education do not have a research base from which to inform their decisions.

It is interesting to note that while the debate continues about issues in teacher education, professors of education have, until recently, busied themselves in research pursuits other than teacher education. Fullan (1991, p.208) maintains, "Not only has there been little research on preservice teacher education, but also basic descriptions and analyses of existing programs have been unavailable." This view is supported by Tuinman (1995, p.107) who posits that

...tenure track faculty members are not sufficiently interested in practicalities of teacher education and not sufficiently prepared or knowledgeable. Hence, they tended to absent themselves from the process...

Tuinman (1995, p.112) goes on to say that faculties of education

...basically did not do research on itself, its programs, its successes and the reasons for those...teacher education never was considered a preoccupation quite *de rigueur*....A change will only follow a thorough realignment of values and a rededication to the primary mandate of education faculties: the formation of teaching professionals.

Considering the shortage of research into teacher education, it may be that the failure of teacher education programs to produce conceptual change has less to do with the entry beliefs of preservice teachers and more to do with the ineffectiveness of initial programs of teacher preparation.

In addition to the argument that preservice teachers' entry beliefs limit their ability to change their conceptions of teaching and learning, and the failure of teacher educators to focus on research into program effectiveness, the literature describes other challenges to producing conceptual change.

### **The Culture of the School**

Zeichner and Tabachnick (1981) argue that one reason teacher education programs fail to have significant impact on teaching practices is because the liberalizing effect of teacher education programs is "washed out" by school experience. This point is supported by Feiman-Nemser and Buchman (1989) who maintain "many people believe that teacher education is a weak intervention incapable of overcoming the powerful influence of teachers' own personal schooling or the impact of experience on the job." This view is in accord with Eisner (1992) who argues that the ecology of the school presents challenges to university programs and students attempting to explore alternative teaching models. As Eisner (1992, p.391) says:

When a university teacher education program tries to promulgate a new



image of teaching, but sends its young, would-be teachers back to schools that are essentially like the ones in which they were socialized, the prospects for replacing the old ideas in the all too familiar contexts in which new teachers work is dimmed: The new wine is changed when it is poured into the old bottle.

Eisner (1992) describes schools as “stable systems” because of the persistence of school norms. According to Eisner (1992, p.391), schools define “what teachers are supposed to be, how children are supposed to behave. ” When student teachers are asked, by their university supervisors to explore an inquiry agenda, they are forced into a vulnerable position. By constructing their own theories of teaching, questioning existing practices, writing about their work and avoiding, in some instances, imitation of existing practices, students run the risk of being perceived as being critical of their school associates. It is difficult to teach differently without seeming to criticize existing practice or practitioners. In reference to the difficulty effecting change in schools, Eisner (1992, p.392) posits,

Trying to convert schools from academic institutions--institutions that attempt to transmit what is already known--into intellectual ones--institutions that prize inquiry for its own sake--will require a change in what schools prize.

Denscombe (1984) describes what schools prize as the “hidden agenda” of schools. According to Denscombe, the real world of teaching prizes control of the behavior of children and the privacy of the classroom. From my observation in schools, Denscombe’s “hidden agenda” is not at all hidden. Central to teachers’ effectiveness, as judged by their peers, is their ability to maintain classroom control without outside intervention. This agenda is openly discussed in the hallways and

staffrooms of schools.

Thus the dilemma persists for teacher education programs to prepare students for two conflicting realities. As Sarason (1993, p.129) argues

...the preparation of educators should have two related, difficult and even conflicting goals; to prepare people for the realities of schooling, and to provide them with a conceptual and attitudinal basis for coping with and seeking to alter those realities in ways consistent with what we think we know and believe.

Preparing student teachers to live within the school environment and, at the same time, be instrumental in changing it is a challenge that confronts program design. This challenge is further compounded by additional factors within the university. These factors are discussed in the following sections.

### **The Failure of University Programs to Model Good Teaching**

In another scenario that may explain the limitations of teacher education programs to facilitate conceptual change, Zeichner and Tabachnick (1981, p.9) suggest that schools and universities form partnerships in the development and maintenance of traditional perspectives. It is argued that "the liberal view of the college can only be sustained by looking at its rhetoric and by ignoring its practice."

Teacher education programs, with the expressed outcome of moving students towards more liberal approaches to teaching and learning, are sabotaged by the transmissive teaching at the university. As Zeichner (1982, p.16) argues, "We cannot expect students to see the value in the perspectives we espouse about teaching and learning if our pedagogy forces them into passive, traditional roles."

In support of this argument, Tuinman (1995, p.111) posits "faculties of education are simply not modelling in a sufficient manner good teaching or good education for that matter." Tuinman makes a strong statement but he cites no research to support his contention of ineffective teaching at the university level. One must ask upon what data this assertion is made.

Additionally, education reform is envisioned by faculty members who have little to do with schools and less with the reform of education practices within their own faculties. Fullan (1993, p.14) suggests that "teacher education has the honor of being the worst problem and the best solution in education." By this he means that teacher education is not geared towards continuous learning. He criticizes teacher education institutions for being "laggards rather than leaders of educational reform." He argues

Faculties of Education should not advocate things for teachers or schools that they are not capable of practicing themselves. (Fullan, 1993, p.14)

Wideen (1995, p. 9) suggests there may be a reversal of this trend "...we now see faculties of education having to face the same type of reform that they have been so fondly recommending to others, particularly those in schools."

### **Summary of the issues Impacting Upon Teacher Education Programs**

In summary, teacher education programs designed to promote conceptual change in student teachers have had limited results for the following reasons:

- student entry beliefs about the teaching/learning relationship are believed to be pervasive.

- faculties of education have not made research into teacher preparation a priority
- school norms are persistent and effective in socializing teachers into traditional, transmissive teaching methods
- university programs may fail to move beyond rhetoric to enacting educational reform in their own pedagogy and thereby fail to provide appropriate models and experience for students

### **Philosophical Perspectives on Teacher Education**

Until the last decade or so, the predominant model for teacher education arose from the “neo-classical” (Kemmis, Cole & Dahk 1983) or technical-rational perspective. Within this perspective knowledge is thought to be technical, rational and external to the learner. Olson (1995) explains that within the technical-rationalist view, there is a hierarchical authority of knowledge and it is transmitted from those who know to those who do not. Those in the know have the authority to decide when others know enough to be credited as authorities themselves. Carter (1990, p.72) sums up the traditional perspective in the following quotation:

...for the most part, attention in teacher education has traditionally been focussed on what teachers need to know and how they can be trained, rather than on what they actually know or how that knowledge is acquired. The perspective, in other words, has been from the outside, external to the teachers who are learning and the processes by which they are educated.

Within this perspective, “experts” would provide lectures on educational

philosophy, issues, and methods. The student teachers would listen, take notes and attempt to apply their understanding to practice in the classroom. Wassermann (1980, p.176) recounts her teacher education experience in this mode:

...the style and manner of the courses we took were the same: distinguished professors of education, lecturing to students, with an occasional counterpoint of question and answer. That is how we were taught to teach. Needless to say, what I learned best was how to listen, how to take notes, how to read quickly, and most important, how to take and pass exams with high marks.

This perspective of teacher education contrasts sharply with newer theories about the sources of knowledge and evolving understandings of learning that arise from the constructivist perspective. The perspective of the module team is most closely aligned with this conceptualization.

### **Philosophical perspective of the module team**

Constructivism (e.g. Von Glasersfeld, 1987) is a set of beliefs about knowledge which begins with the assumption that reality exists but cannot be known as a set of truths because of the fallibility of human experience. From a constructivist perspective, all knowledge is constructed by the learner through active and continuous construction and reconstruction of meaning. The meaning that individuals gain from experience is mediated by their prior beliefs. These beliefs adapt and organize experiences so that each individual constructs different understandings.

With the proliferation of constructivist theory, perspectives are shifting from

the view that knowledge is external to the learner towards the view that knowledge is internal. Carter (1995) explains that within the constructivist conception, knowledge is transactional. The authority of knowing “comes from experience and is integral as each person both shapes his or her own knowledge and is shaped by the knowledge of others.” Knowledge is thought to be “personally and socially constructed and reconstructed in situations as people share their ideas and stories with others.” (Carter, 1995, p.123) Constructivism represents a dramatic contrast to the behaviorist / technical-rational assumptions of previous decades and when constructivist learning theory is used as a framework for teaching practice, significant changes in practice result.

The module team holds a constructivist perspective on learning. Moreover, our commitment to the revitalization of education and the reconceptualization of teacher preparation, arises not from the neo-classical tradition but from a socially critical orientation (Kemmis, Cole & Dahk 1983). Within the socially-critical, or “transformation” orientation, the “central value on the role of knowledge is social action.” Knowledge is constructed in social interaction and has its meaning in political, historical and social contexts. The desired student outcome in this view is that students will become “critical and constructive co-participants in the life and work of society.” The student is a “co-learner” in the process of collaborating with others in “socially significant tasks.” (Kemmis, Cole & Dahk 1983)

Carr & Kemmis (1986), Giroux (1994), Gore and Zeichner (1991) and Cochran-Smith (1991a) all write in support of the socially-critical orientation. They argue that practitioners must examine not only technical issues in teaching but also societal matters requiring collective action to be resolved. All aspects of education are to be considered problematic. Every educational act can be considered as a choice that is made from alternatives and is socially constructed against an

historical background.

Tripp, (1990, p.165) sums up the view of proponents of socially-critical orientation as follows:

Because education is a social practice, its techniques are not socially neutral; they produce, reproduce, and transform people's abilities, attitudes and ideas. If teaching is a profession, then it is not enough merely to keep improving the technical expertise of teachers. Teachers need to be more than excellent technicians to be genuinely professional. They need to have some understanding, influence over, and responsibility for the social conditions and outcomes of education.

The perspectives of the module team arise from constructivist learning theory and from the socially critical orientation. It was this perspective that shaped the design of the module program and the method and manner of our teaching.

### **Additional Influences on Teacher Preparation**

Just as the new conceptualization of knowledge suggests alternative structures for teacher education programs, alternative curricula need also to be considered. Shulman (1987, p.102) rests his call for the reform of education on the assertion that there is:

...a knowledge base for teaching--a codified or codifiable aggregation of knowledge, skill, understanding, and technology, of ethics and dispositions, of collective responsibility--as well as a means for representing and communicating it.

The sources for the knowledge base for teaching, according to Shulman are

summarized as knowledge of content in the academic disciplines, general pedagogical knowledge, knowledge of the curriculum and "tools of the trade," knowledge of learners and their characteristics, knowledge of educational contexts and knowledge of educational goals, purposes, values and their philosophical and historical grounds. In addition to these knowledge bases, Shulman argues that teachers must have a particular knowledge of content and pedagogy "that is uniquely the province of teachers, their own special form of professional understanding which he refers to as "pedagogical content knowledge." Shulman (1987, p.105-106)

According to Shulman, teachers must learn first to comprehend the subject matter to be taught, they must transform their understanding through preparation, representation, selection and adaptation in order to enable them to instruct learners. Following instruction, evaluation, reflection and new comprehension informs the process again. From this cycle, "the wisdom of practice" evolves. (Shulman, 1987, p.111)

While Shulman (1987) argues for what teachers should *know*, Zeichner (1982) outlines what student teachers need *to do* in order to come to know. Zeichner argues that when inquiry is part of preservice teacher preparation programs, the classroom becomes a laboratory rather than a model to be replicated. It is in the laboratory of practice that teachers come to know through a process of reflection and inquiry.

Richardson and Hamilton (in press) cited in Richardson (in press) analyzed the literature related to successful staff development programs. This analysis yielded a number of characteristics that have implication for preservice programs as well. The characteristics of successful preservice programs involve the inclusion of teachers' beliefs and understandings as a major element of the



program content. The goal of programs is to facilitate conversations that allow the participants to examine their own beliefs and to consider and experiment with alternatives methods and their implications for the moral dimensions of teaching. Moreover, successful staff development programs promote autonomy and collaboration through placing the control of the agenda, the process and the content in the hands of the teachers. Richardson (in press) contends that when preservice teachers are involved in programs in which they have opportunity to explore their own beliefs and engage extensively in active exploration of classroom contexts and discussion with practicing teachers, they will acquire practical knowledge and conceptual change may be promoted.

Fullan (1993), in keeping with the socially critical orientation, argues that once teachers know, they have to be prepared to take action based on moral purpose. Teacher education programs need to develop not only a knowledge base for effective teaching, they must also prepare teachers to participate in educational change. Fullan (1993, p.16) argues that “the role of faculties of education must be to prepare teachers who have a knowledge base for effective teaching and a knowledge base for changing the conditions that affect teaching.”

For Fullan (1993, p.16), “the new standard of the future is that every teacher must strive to become effective at managing change.” Effective teacher education programs instil in their beginning teachers a sense of their ability to create change.

Fullan’s argument for the preparation of preservice teachers to participate in educational change is consonant with the perspectives of the module team and with other educationalists who argue for a socially critical orientation. This perspective, however, raises issues for examination. Student teachers, the most vulnerable member of the school community, are expected to enact an agenda conceived by senior teachers and tenured professors in the context of schools

where they hope to seek employment. The student teacher may feel caught between the agenda of the university and the more conservative views of education embraced in the school community. The potential exists for the program to be seen by students as exploitive and involving them in situations of high risk. As a result, students may retreat into a protective stance and employ "impression management" techniques. Their ability to take risks may be curtailed. Moreover, the perspective of the team may present such a radical departure from their views of teaching that their ability to learn may be impeded. Whether the agenda of the module team is negatively perceived by students or not, the question of exploitation remains.

Finally, the module team was very clear about the desired outcome of this program. We wanted to involve our students in a program that would present alternatives to direct instruction and create conditions for students to examine and, hopefully, adopt a constructivist perspective on learning. We were convinced that constructivism represented an improvement over student entry perspectives. Have we thus replaced one form of dogma for another? These are questions upon which I continue to reflect and these are questions that I will bring to the examination of the data.

### **Implications of the Literature for the Program Design**

In summary, the literature suggests that effective teacher education programs need to:

- make preservice teachers' beliefs problematic
- create conditions under which conceptual change can occur
- model the type of teaching students are expected to employ

- provide opportunities for students to reflect and inquire into teaching and learning in a supportive environment.
- prepare teachers who commit to continuous improvement
- prepare teachers who will become agents of change

### **The Program Design**

The module team theorized that if we could bring together the 'right' elements for learning and create the 'right' atmosphere and ethos within the module, conceptual change would result in the perspectives of the students in the module.

In creating this climate for change, our first goal was to model alternatives to direct instruction. We wanted to place our students in situations in which they were more likely to construct their own understandings as a result of our teaching. It was our objective that our practice would be closely aligned with constructivist epistemology and it is from this basis that we devised learning experiences for our students. The module team employed teaching approaches that have variously been termed "inquiry teaching, cooperative learning, cognitive processing, active learning, indirect instruction, learner-centred teaching" and so forth. The module team believed that these teaching models were reflective of the goals of PDP and our orientation to the curriculum. These would also be the approaches the preservice teachers would be asked to employ in their classrooms.

Our teaching would take place within the context of an inclusive and caring learning community. We wanted our students to experience the program as a safe, supportive and nurturing environment in which that they would feel able to examine and experiment with alternative teaching practices.

Our second goal was the promotion of autonomous, self-directed learners. We hoped that by promoting autonomy, our preservice teachers would assume a mastery orientation. We wanted them to be driven by internal motivation to strive for the realization of a personal vision and to accept the concept of ever-evolving understanding of teaching and learning. This was essential because, as Zeichner (1982, p. 5) declares:

...no teacher education program, no matter what the orientation and no matter how good, can produce a fully developed teacher at the preservice level. This being so, it is essential that every experience in preservice program serves to enrich rather than impede the capacity for further growth.

and Ellis (1968, p.59) states

...preparatory programs can, at best, only provide a basis for beginning to teach -- for continuing growth. The complete teacher exists only for a moment in time. Hence, preparation for the first job must be complemented and supplemented by a continuous program of personal and professional development.

We believed a sense of autonomy would result in personal empowerment and would set students on the path towards a program of "continuous personal and professional development. To promote autonomy we attempted to remove the sense of "hoop jumping" from the program. We aimed to "...foster an insatiable desire for learning, a zestful curiosity about events, encounters and experiences." (Kohl and Wigginton cited in Grimmert 1995, p. 215) We believed, also, that a sense of autonomy would engender within students a sense of moral purpose and

change agency as individuals capable of acting on their own behalf are also able to act on behalf of others.

Furthermore, we believed that autonomous teachers were more likely to view teaching as problematic, rather than certain, subject to reflection, examination, experimentation and observation: a topic for lifelong learning. In this regard, we hoped that the seminar and the classroom would become social laboratories for the examination of ideas where the students would “analyze a situation, set goals, plan and monitor actions, evaluate results, and reflect on his (her) own professional thinking.” (Colton and Sparks-Langer 1992, p.156)

We believed that if conceptual change was to occur, it had to result from the students' choice, not from blind acceptance of imposed belief. Conceptual change had to be the thoughtful decision of autonomous individuals and a consequence of critical and reflective analysis of issues and alternatives in teaching. With these objectives in mind, we focussed on three interrelated and mutually reinforcing elements to direct our program:

- modelling of effective teaching and care for students in the seminar and cycles of supervision
- student self-evaluation, and
- reflection and inquiry into teaching

It should be noted here that the program under study in this thesis arose from discussions of the module team prior to its implementation and throughout the semester as the program unfolded. Many of these discussions were informal and our decisions, in most instances, were undocumented. It may appear to the reader as though the module team fully understood all of the components of the program, our curriculum, and our goals in advance of its implementation. This was not the case. We did formalize the main emphases of the program and we did agree on

the readings and the curricular strands of the program. But additional aspects of the program became evident to us as the program unfolded. And they became clearer still to me as I continued to read, write and to reflect on our intuition and our explicit and implicit goals in the preparation of this thesis.

### **Summary and Issues**

In summary, there are aspects specific to the Professional Development Program that have the potential to assist and also to impede programs for the preparation of preservice teachers. Compounding this, the culture of the schools where students are placed for their practica may counteract the norms the module team hopes to establish.

There are additional challenges revealed in the literature that hinder many preservice teacher education programs and that apply to PDP as well. Each of these factors poses a challenge to our goal of creating conceptual change.

Chapter Three extends the exploration of the literature by examining the research that informed the three emphases in the module program: modelling effective teaching, self evaluation and reflection and inquiry.

## **CHAPTER THREE**

### **PROGRAM EMPHASES: LITERATURE AND APPLICATION**

This chapter explores the literature for direction in regards to the three emphases of the program: modelling effective teaching and supervision, self-evaluation, and reflection and inquiry into teaching. The application of each of the emphases within the program is described. The chapter concludes by raising issues that may have implications for the success of the program in promoting conceptual change.

#### **Modelling Effective Teaching**

The central consideration for matters of pedagogy within the program was the modelling of the behavior and practices we expected of student teachers. One of the principles of the Foxfire program described by Dittmer and Fischetti (1995), was based on assumption that preservice teachers would teach in the manner they were taught. This does seem to be merely an assumption, however, and not based on empirical evidence. While there is ample documentation to demonstrate that preservice teachers are socialized into transmissive modes of teaching by the modelling of their public school experience, an ERIC search revealed no studies on the effects of modelling in programs of teacher education. Thus, we proceeded on the optimistic assumption that the method and manner of our teaching would directly influence the beliefs and practices of the students in the module. The following sections explore the literature related to effective instruction and its application in the program.

### Effective Instruction

Rowan's (1995) paper on effective teaching emphasizes the limitations of direct instruction and behavioristic practices in favour of cognitive processing models arising from a constructivist perspective. When constructivist learning theory informs teaching practice, whole tasks, multiple forms of knowledge, and indirect teaching strategies prevail. These teaching practices are characterized by high levels of social interaction, metacognitive development, and the importance of students' prior knowledge as a mediator of new learning. Within this conceptualization of teaching and the development of knowledge, the following beliefs, stated by Nolan and Francis (1992, p. 47-48) prevail:

- All learning, except for simple rote memorization, requires the learner to actively construct meaning.
- The teacher's primary goal is to generate a change in the learner's cognitive structure or way of viewing and organizing the world.
- Because learning is a process of active construction by the learner, the teacher cannot do the work of learning
- Learning in cooperation with others is an important source of motivation, support, modelling, and coaching.

Teaching practices that arise from these beliefs are found in Walberg (1990), Onosko (1992) and Brophy (1992). Brophy has synthesized principles and practices of effective teaching common to the research of Anderson, Brophy and Prawat (cited in Brophy 1992, p.72). They are summarized as follows: Effective teaching practices...

- organize content around a few powerful topics or key ideas that are examined in great depth
- create a social environment in the classroom that could be described as a



- create a social environment in the classroom that could be described as a learning community where the active construction of meaning is provided for by engagement in sustained thoughtful discourse centred around important key ideas
- transcend “presenting information” to “scaffold” students’ understanding and “thinking aloud” to demonstrate examination of ideas so that students can come to express their understandings in their own words
- incorporate activities and assignments that feature holistic instruction and authentic tasks that call for students’ ability to reason, explore, problem-solve. Skills are practiced in the context of real life situations.

And, from their study, Porter and Brophy (1988, p.82) wrote:

...effective teachers are thoughtful about their practice: they take time for reflection and self-evaluation, monitor their instruction to make sure that worthwhile content is being taught to all students and accept responsibility for guiding student learning and behavior.

These principles, indicated in the literature to be most effective in promoting conceptual change, were evident in the teaching done by the module team. The following section describes their application to the program.

### **Program Application**

#### **Big ideas for the seminars.**

The module team limited our topics to three strands, or “big ideas,” to explore within the twenty-eight days of seminars in Education 401/402. The topics

were as follows:

Setting the stage for reflection and inquiry

- examining our beliefs and values about teaching and learning
- developing a personal vision
- becoming a reflective practitioner
- the teacher as researcher
- the cycle of supervision
- change, agency, and moral responsibility

Inquiry into teaching alternatives: Models of Teaching

- Information processing family: Inquiry Training
- Social family: Cooperative Learning
- Personal family: Non-directive teaching
- Behavior systems family: Direct Instruction

Interactions with Students

- promoting thinking
- the verbal environment

Examples of learning experiences.

Because we wanted students to examine constructivism, we employed teaching strategies that we believed were consistent with a constructivist perspective to explore every stand of the program. For example, to assist students in understanding the models of teaching, the module team provided readings and demonstration lessons to spark student discussion. Students were then required to

using each of the models of teaching. They helped each other to reflect on the issues that arose in the lesson by conducting pre and post conferences and, on occasion, the lessons were video taped to assist the students to learn from the experience. We employed these practices in order to lower the level of abstraction and to provide tangible ways in which students could align their child-centred beliefs with their practice. Students then went into their practicum placements and experimented with the various teaching models.

Another example of our teaching is the exploration of Eisner's (1987) chapter entitled "Five Orientations to Curriculum." From this reading, students engaged in dialogue about their own curricular orientations and developed pie graphs out of coloured paper to represent their philosophical perspectives. This activity captured their imaginations and they went on to examine the philosophical orientation of the character 'Keating' in the film "The Dead Poets' Society." They developed pie graphs to represent the orientations of Keating, the members of the module team, and new curricula developed by the ministry.

We posted the pie graphs on charts in the seminar room so that students could see the diversity in perspectives and interpretations within the group. This diversity sparked dialogue and debate as students began to understand that educational decisions are founded in the beliefs and values of the participants, that these decisions are subject to examination and challenge and open to exploration of alternatives.

Students continued to reflect on their own orientations to curriculum throughout the semester. Revising the pie graphs became a method by which some students demonstrated their changing perspectives on teaching a learning. A number of students included a changing series of graphs in their portfolio presentation to represent their evolving understandings. This is one example of the

type of teaching done by the module team to engage students in in-depth examination of their beliefs, in critical discourse, and in active construction of meaning within a learning community.

### **Early exposure to classrooms.**

In keeping with Brophy's (1992) assertion that learners need to have real life opportunities to practice teaching skills, our students were sent into schools very early in the semester with instructions to begin to experiment with teaching. We avoided the common practice within PDP of "front-end loading" or piling new information on students in three weeks of seminars prior to their exposure to schools. We wanted the students to experience a "need to know" in advance of the learning experiences in seminars. We believed that in this way, students would have experience upon which to "hook" our teaching and that this would result in more relevant and powerful learning experiences.

### **Modelling reflection in, on and about action.**

Frequently, the learning experiences we planned for students in the module were framed by a demonstration of a cycle of supervision. My faculty associate partner and I would conduct a preconference in front of the class prior to the learning experiences of the day in order to model our own thinking about our teaching for our students. We closed the day with a post conference. We hoped that this practice would demonstrate our openness to examination and change of our teaching practices.

Additionally, after every learning experience, the members of the team debriefed the experience privately in order to be continuously reflective about the implicit and explicit messages we were transmitting to our students. When we

determined that we had made an error in judgment, or had modelled insensitive teaching in any way, we expressed these concerns to the students in the seminar. We invited their response to the content, the method, and the manner of our teaching in whole group meetings and half group sessions so that all voices could be heard. We provided opportunities for students to submit anonymous written feedback at regular intervals in order to ensure that the seminars were meeting their needs.

### **Promoting autonomy.**

The module team made a conscious effort to divest ourselves of power and authority in order to promote student autonomy. For this reason students were asked for regular input into the direction, content, timing and pacing of the seminars. The module team prepared readings and learning experiences in support of our goals for students and their needs determined the content of approximately half of the seminars. Each time students returned to campus from an interlude in schools, we conducted a needs assessment and used it to determine the content of the program. Students had to evaluate their needs and determine the experiences that would enhance their growth at that time. The planning of the module team "rolled" in response to the needs and interests of the students. In support of creating a curriculum that responds to students' interests and needs, Zeichner (1987, p. 27) states:

...a reflexive curriculum does not totally predetermine that which is to be learned but makes provisions for the self-determined needs and concerns of student teachers as well as the creation of personal meaning by students. A reflexive curriculum also includes provisions for the negotiation of content among teachers and learners.

The students asked for the practical aspects of teaching. They wanted to know how to plan a lesson and a unit, how to manage the behavior of children, how to evaluate student learning. We responded by providing some practical information and materials and by continuing to raise issues related to each of their concerns.

Another way in which our curriculum attempted to nurture student autonomy is that part of every day was left unstructured so that students could work on topics of personal interest or reflect on their experiences. As Grimmert (1995, p. 216) states "moments of pausing have to be taken to allow students to absorb insights and ideas, moments of silence have to be afforded to permit them the space to understand their being in the world." Dittmer and Fischetti (1995), Carson (1995) also support times for reflection within curriculum design. During these independent times the module team was available to conference with individuals or small groups.

A final example of the amount of control students assumed over the direction of the program is their input into the module handbook for Education 405. It is common practice within PDP for FA's to develop a handbook outlining students' assignments, due dates and responsibilities for the semester. Typically, the handbook specifies the number of report cards to be completed, the frequency of journal submissions and video tapings and so forth. This handbook is presented to students who are then expected to comply with the directives of the module team. This is the way we used the handbook in our first year together.

In contrast to this familiar pattern, in our second year we asked the students to develop the handbook for themselves. The criteria were that they had to provide evidence of growth towards the goals of the program throughout the semester. This evidence would be used by the student and faculty associate to determine

needs and by the student to substantiate their self assessment in a portfolio conference. The module team explained the range of assignments commonly found in the module handbooks. For example, some modules may require student teachers to complete in-depth report card writing on two pupils and to gather data only on the rest. Other modules may require that students write draft reports on all pupils. There is a full range of possibilities. We provided time and opportunity for the students to discuss the range of alternatives and their relative merits, keeping in mind their anticipated stress and workload during the extended practicum. The result was that the students produced their own a handbook of assignments and responsibilities that would direct their growth during the semester.

In summary, the module team blended our periods of seminar and practica in order to provide regular opportunities for students to integrate their seminar understandings with practical application in the classroom. We focussed on few topics and attempted to deal with them deeply. We provided opportunities for students to engage in lively discourse around significant and often controversial topics and we demonstrated our own thinking about teaching and learning by reflecting aloud and inviting student response. Moreover, we attempted to build student autonomy and self direction by deliberately divesting ourselves of power and authority and by providing opportunities for the students to direct the program in response to their needs.

### **The Ethic of Care**

The students in the module were involved in examination of their own beliefs and inquiry into teaching in ways that could create dissonance, anxiety and self-doubt. We believed if they were going to enter wholeheartedly into this venture, they would need to feel nurtured, supported and cared for in the process.

Teachers in Noddings' (1986) view demonstrate their caring by planning meticulously, presenting lesson materials in a lively and engaging manner, thinking critically, listening attentively, evaluating constructively and demonstrating a lively curiosity. When it comes to adopting a reform agenda for education, the caring teacher places concern for the learner at the center of all decisions. The objective of modelling, from Noddings' perspective is to create teachers who will, in turn, place their students at the center of their decisions. Caring and fidelity also drive teachers to strive for competence and deeper understanding of the teaching and learning process.

### **Program Application**

I believe that it is from the caring relationship between teacher and learner that all else follows. If my student teachers felt supported and cared for, they would feel safe to explore alternatives in teaching and learning. I hoped that they would, in turn, adopt a caring perspective in relation to their own students and that they could be inspired to continue to grow in their teaching throughout their careers.

To promote the sense of the caring community, the module team demonstrated those attributes of the caring professional articulated by Noddings. In order to further convey our caring and to build community, we provided "goodies" on special days, popcorn on movie days, pot-luck lunches on Fridays and laughter and a sense of fun throughout. In this way, we hoped to promote friendships, support and camaraderie within the group. Additionally, we called our students at home in the evenings to keep in touch during their time in schools. We sent notes to encourage and cheer them. We made time to listen. We dismissed them early when they were exhausted and started class late when we knew they were burnt out. We made it safe for them to express divergent points of view. Caring for each



other and for our students was central to the module program. We believed that if our students were going to demonstrate caring for their pupils, it was essential that they experience a caring community.

### Supervision

The literature on supervision presents a number of alternative visions of the relationship between the teacher and supervisor and the goal of supervision. Haggerson (1987) describes the model of supervision promoted by Madeline Hunter in which the norms encouraged are supervisor control and teacher compliance. They are not viewed as equals collaborating to improve in goals set by the teacher. The supervisor is the centre of the activity. He/she collects and interprets the data, tells the teacher what he did wrong and coaches him to bring his teaching behaviors in line with the description of excellence.

This model of supervision is highly judgmental and all of the judgment resides with the supervisor who overtly uses the data to shape behaviors of the teacher. The goal here is not to produce self-directing, thoughtful professionals but rather compliant technicians. This model is designed to increase "instructional excellence". The criteria for instructional excellence, however, have been determined external to the teacher. The context of the class is not considered, neither are the teacher's philosophy, or her goals and objectives for this class or this lesson. This model is not based on enabling teachers to grow according to their own definition and style.

In my opinion, the effects of this approach would be to demoralize and alienate teachers from each other and from the supervisor. In this model, teachers are without a voice in determining their own style or their objectives for professional growth and renewal. Thankfully, this is not the model of supervision employed in

PDP.

One of the models that is favored in PDP is "clinical supervision" pioneered by Cogan (1973) and Goldhammer (1969). Clinical supervision was designed to reflect the principles of client-centred counselling made popular by Carl Rogers. The success of this model is predicated on a high level of insight, self-direction, abstract thinking and problem-solving ability on the part of the student teacher. Additionally, it requires trust and patience on the part of the supervisor. The student teacher who was able to analyze strengths and weaknesses in his teaching, propose numerous strategies for enhancement or remediation, reflect on the outcomes and modify approaches accordingly would feel empowered, autonomous, self-directed and valued with this model.

Faculty Associates in PDP frequently use a monograph by Acheson and Gall (1980) which adapts and refines the work of Cogan (1973) and Goldhammer (1969.). According to Acheson and Gall (1980, p.8) clinical supervision is "interactive rather than directive, democratic rather than authoritarian, teacher centered rather than supervisor centered." Within this conceptualization, the teacher is assumed to have all the knowledge, motivation, insight, interest and ability needed to determine difficulties in their teacher. The teacher is the centre of the activity, not the supervisor.

The goals of clinical supervision within Acheson and Gall's conceptualization are to assist the teacher to make instructional change by providing objective feedback and clarifying any discrepancies between the teacher's ideals and actual teaching behaviors. Further, this model strives to assist teachers in developing skill to diagnose and solve problems.

A number of student teachers in my observation, however, experience difficulty with a completely non-directive approach. Initially, they are lacking in

reflective abilities and see the data and the problems of teaching as overwhelming. They feel they are “drowning” in the complexities that confront them and see no way out of their problems with this model. This can result in feelings of self-doubt, low morale, and resentment.

In my opinion, until student teachers build the reflective skills and the classroom experience needed to consider options concerning difficulties they encounter, more assistance may be provided by the supervisor. This view is shared by Hoy and Forseth (1986) who include a “diagnostic phase” in order to address the shortcomings of a non-directive approach. This is a collaborative problem-solving phase that would help less insightful student teachers to direct their efforts productively, on a short-term basis.

In contrast to Acheson and Gall’s (1980) entirely non-directive model of clinical supervision, Glickman, Ross and Ross-Gordon (1994) present a model of “developmental” supervision. The degree of supervisor control in this model depends on the supervisor’s assessment of the preservice teacher’s motivation and ability to think abstractly. The ultimate goal of supervision for Glickman et al (1994) is teacher autonomy. The following quotation illustrates this point:

Supervision must shift decision-making about instruction from external authority to internal control. As long as decisions are made from authorities away from those who teach, we will have dormant, unattractive work environments that will stymie the intellectual growth of teachers and the intellectual life of students.

The supervisory behaviors used to facilitate teacher autonomy include non-directive, collaborative and directive. Employing this range of supervisory behaviors requires highly developed interactive skills on the part of the supervisor who must be able to listen, clarify, encourage, reflect, present, problem-solve,

negotiate, direct, standardize and reinforce as the situation demands.

The success of this approach to supervision relies on the “goodness of fit” between the selected mode of interaction and the needs of the student teacher. The supervisor must choose a model of interacting that meets the needs and the skill level of the student in order for improved instruction to be the result. The goal of supervision in Glickman, Gordon, and Ross-Gordon’s (1994, p.43) view is to:

...not only respond to current teacher performance but also encourage greater involvement, autonomous thinking, and collective action by teachers...they must have confidence that their collective action will make a difference in their students’ lives.

The model prescribed by Glickman et al. (1994) has application in PDP as well. I have found the non-directive and collaborative phases of this model to be most useful. The directive and controlling supervisory behaviors described by Glickman et al. do not fit within a constructivist perspective and would be used only as a short-term measure to address a crisis situation in the classroom. In my opinion, when the learning situation places children at risk, it is appropriate to employ directive supervision. Students who demonstrate an on-going lack of motivation or inability to think abstractly and who require directive supervisory interventions on an on-going basis, would not be permitted to continue in PDP.

Sergiovanni and Starrett (1993, p.55) further expand the role of the supervisor to include a vision of moral action. They argue this point in the following quotation:

Supervision is supposed to support, nurture, and strengthen the moral ideals embedded in teaching. Supervision as a professional activity, therefore, is

intimately tied to both the knowledge expertise of the teacher and the moral responsibility of the profession of teaching.

Supervision for Sergiovanni and Starratt is supposed to urge teachers to strive for what is beyond their reach within a dynamic, seemingly electrifying atmosphere for change and growth. The role of the supervisor in this conceptualization is to assist teachers to develop instructional skill and insight so that they are able to create learning opportunities that delight children. The model requires sustained and intensive examination and discourse on educational issues.

While I agree that supervisors must participate in examining and presenting moral issues, and that student teachers need to create learning opportunities that delight children, the application of this model to the supervision of student teachers would need thoughtful consideration. For preservice teachers, mastering the most routine of teaching tasks may already appear to be striving for that which is "beyond their reach." This model of supervision has the potential to inspire and energize but also the potential to result in student teacher and supervisor burn-out. Sergiovanni and Starratt's conceptualization of supervision is challenging and inspirational, if somewhat romantic.

### **Program Application**

According to the perspective of the module team, one the roles of the supervisor is to facilitate the active construction of meaning for the preservice teacher. In our view of the cycle of supervision, the supervisor is a co-creator in creating knowledge about learning and teaching. As noted by Nolan and Francis (1992, p.53)

When the supervisor relinquishes the role of critic, conferences become collaborative work sessions in which both teacher and supervisor try to make sense of the almost always messy data that are gathered in the process of relating teacher action to its consequences for learners.

We attempted to diminish the critical role in order to promote a collaborative tone in which issues in teaching are seen as interesting challenges for the participants to address. This type of supervisory conference involves the supervisor in guiding the beginner and “gradually moving him to higher levels of cognitive functioning.” (Colton and Sparks-Langer 1992, p.158) Within this conceptualization, supervision is a process of collaboration that requires the supervisor to assess the students’ developmental level, as in the Glickman, Ross and Ross-Gordon (1994) model, and frame open-ended questions to guide the students’ thinking and to “scaffold” the students’ understanding. This permits the student and the supervisor to “reframe” the teaching situation and examine it so that a new interpretation is possible. Miller (cited in Colton and Sparks-Langer 1992) refers to this interchange as a “co-construction of meaning.” As a result of the supervisory conference, it was our objective that the student would become more conscious of his/her own thinking and also more able to articulate the reasons for his/her pedagogical actions.

In the last stage of the conference, the supervisory team, consisting of the faculty associate, school associate and student teacher, considers ways that the student could set goals and measure growth towards them in the days ahead. It is hoped that the student would feel inspired to strive for teaching mastery and his/her commitment to teaching would be renewed as a result of the conference. In order that this interchange could occur, we endeavoured to conduct the cycle of

supervision in a supportive, non-threatening atmosphere based on a foundation of trust.

Feiman-Nemser and Buchman (1989), like Shulman (1987), argue that the central tasks of teacher education programs is to assist preservice teachers to develop pedagogical thinking. Pedagogical thinking, reflective practice, self-directed behavior and conceptual change are the central objectives of the cycle of supervision within our conceptualization.

### **Self Evaluation**

Kemmis (1987, p.74-75) views self evaluation as the "sine qua non of educational innovation and change...It is the bedrock upon which program evolution rests." He argues that when teachers are self-evaluative, the school has the potential to become a "critical community of inquirers." For Kemmis, change occurs when teachers reflect critically about their own practice.

Zeichner (1982) calls upon teacher-educators to change the current supervisory power imbalance, ie. the method of evaluation, as a means of promoting student reflection and its potential for change. Zeichner proposes that when the power imbalance is changed, students can reflect on their attitudes and skills rather than on their "survival needs." Students are able to move beyond "impression management" to focus their attentions on "critical analysis of classroom and school." Britzman (1986, p.443) argues: "The ways that prospective teachers understand and experience power throughout teacher education shape their acceptance or rejection of the status quo."

An additional point in favour of self evaluation comes from Ames (1990) who states that students who learn for extrinsic rewards, i.e. a passing grade, engage in

different thought process and behaviors than students who want to learn something new about the subject matter or improve a skill. Ames further notes that normative evaluation increases the likelihood that students will choose to avoid challenge. They prefer choices that ensure success.

A further point in favor of self-evaluation comes from the policies of the Ministry of Education. The Ministry is currently advocating self-evaluation for pupils in public schools. Pupils participate in setting criteria for standards of performance. They set goals for achievement, self-evaluate their work, prepare portfolios and direct conferences with parents and teachers. Our students will be using these practices with their pupils. Since this is considered to be best practice for our pupils in schools, logically, it should be extended to and modelled for our student teachers.

It appears, that while educationalists call for redressing the power imbalance in teacher education programs and expound on its potential for enhancing student growth, one wonders precisely what the rhetoric means in practice. I could find no studies on self-evaluation in teacher education programs during an ERIC search. It would appear that self evaluation, then, is limited to a reflective practice and not to a formal grading practice upon which the student teachers' continuation in the program rests.

### **Program Application**

Our module team took the concept of self evaluation a step further than is evident in the literature and we relinquished the gatekeeper role during the first semester of the students' three semester program. Our purpose was to encourage experimentation with alternative teaching practices and to promote the consideration of new perspectives. We believed that students would to go beyond



their comfort zone if we removed the threat of failure. Self-evaluation was intended to remove the power imbalance and create a collegial relationship between these student teachers and their supervisors and place us together on a continuum of professional development. We believed that self evaluation could contribute to conceptual change.

Moreover, self-evaluation allowed more opportunities on the schedule to visit student-teachers for formal observations. With external evaluation, students were threatened by formal observations on Friday afternoons, Hallowe'en, and those transition days when they had returned from seminar and were becoming re-acquainted with the pupils. Because we were coming to help, and not to evaluate, we were welcomed into classrooms regardless of the circumstances. This increased our contacts with students and permitted more opportunities for feedback on their progress and dialogue concerning educational issues.

Another factor in choosing self-evaluation is the difficulty we experienced in employing the gatekeeper function of our roles during the Education 401/402 semester in the first year. As faculty associates, we found we simply did not have enough data to support a withdrawal given the limited number of observations possible during Education 401/2. Furthermore, school associates also found it difficult to determine whether or not a student was meant for a teaching career based on twenty-eight days in the classroom. These factors, that make informed external evaluation difficult during Education 401/402, create an ideal situation for student self-evaluation. By employing self-evaluation, we turned a liability into an asset.

For the introductory semester only, Education 401/402, the students in our module would self-evaluate over and above minimal criteria. Students must meet the following minimal criteria or they would be withdrawn from the program. They

must:

- attend regularly
- read as required
- participate actively
- conduct themselves ethically and professionally
- treat children and peers respectfully.

Beyond these minimal criteria, students were free to determine whether they would receive a “Pass” for the semester, would change their sequence and undertake the academic semester prior to the next practicum, or “Withdraw” from the program and pursue other career options. We would not, in effect, withdraw a student for failure to develop technical competency after twenty-eight days in the classroom.

Student teacher self assessment would be informed by feedback from their school associate and by their faculty associate. Students would articulate their assessment in a final report presented in a student-led conference (see Appendix B) and support it with authentic evidence in a portfolio presentation.

By what criteria would the students self-assess? Once again, the responsibility for defining excellence in the profession fell to the students. After recalling an excellent teacher that had influenced and inspired them, and with the goals of the program in mind, students collaborated to develop descriptors of excellence in teaching that would inspire and motivate their growth.

The concept of self-evaluation appeared to be difficult for some of our colleagues within PDP to accept. The module team was called “irresponsible” and “extreme.” Difficulties a student encountered in the second semester were attributed to the practice of self-evaluation in the first semester. Gatekeeping is valued within PDP and our program of self evaluation ventured beyond the

acceptable norms.

### **Reflection and Inquiry Into Teaching**

"Inquiry-oriented or reflective teacher education has recently emerged as a powerful alternative to conventional approaches to the education of teachers." (Grimmett, 1994, p.161) Grimmett continues (1994, p.178) to justify the emphasis on inquiry into teaching in the following quotation:

...inquiring into teacher education permits all members of the enterprise, but particularly preservice teachers, to experience the heightened sense of respected and responsible professionalism that accompanies the framing and addressing of vital questions about learning. Put differently, they learn that constructively posing and pursuing questions about teaching and learning (what inquiry-oriented teacher education permits preservice teachers and teacher educators to do) represents the essence of being a professional educator.

The concept of the teacher as a reflective practitioner is central to the belief that 'coming to know' is an internal and personal process. According to Elliott (1991, p.9-10) it represents a conceptual shift:

Education is no longer viewed as a process of adapting or accommodating the mind to structures of knowledge. Instead it is viewed as a dialectical process in which the meaning and significance of structures are reconstructed in the historically conditioned consciousness of individuals as they try to make sense of their 'life situations.' The mind 'adapts with' rather

than 'adapts to' structures of knowledge.

The following sections explore the concept of reflection and inquiry, examine levels of reflection and its role in the development of teachers' conceptual understanding of teaching and learning. This section closes with the program application of reflection to the curriculum in the program.

### **What is reflection?**

The concept of reflection has been apparent in the literature for some time. (Dewey 1933, p.17) writes about the importance of reflective thought:

Reflective thought emancipates us from merely impulsive and merely routine activity and enables us to direct our activities with foresight, to plan according to ends-in-view, or purposes of which we are aware. It enables us to act in a deliberate and intentional fashion to attain future objects or to come into command of what is now distant and lacking. It enables us to know what we are about when we act. It converts action that is merely appetitive, blind and impulsive into intelligent action.

Schon (1983) provides a compelling description of the reflective practitioner that is in direct contrast to the technical rationality that had previously dominated educational thought. For Schon, reflection involves "thinking on your feet." He states that the teaching situation informs the teacher, it "talks back" and the reflective teacher takes meaning from the situation that informs present and future actions. Reflection, for Schon brings artistry to teaching and moves the teacher beyond technical rationality. Reflection is grounded in the appreciation system of the teacher, that is, the teacher's repertoire of values, knowledge and theories of

practice.

Eisner (1992) and Shulman (1989, p.181) disputes Schon's notion of the teacher's ability to reflect in action. Shulman argues:

...the ordinary school setting does not lend itself to such reflection. It is characterized by speed, solitude, and amnesia. Too much is occurring too rapidly. One is alone attempting to make sense of the buzzing, blooming confusion of classroom life.

My own experience in survival mode during my first year as a Faculty Associate would support Shulman's argument.

The concept of reflective teaching has been explored in the literature by numerous scholars (e.g. Van Manen, 1977; Tom, 1985; Zeichner and Tabachnick, 1991; Valli 1990; Grimmett, MacKinnon, Erickson & Reicken 1990; Korthagen and Wubbels, 1991.) Proponents of reflective practice advocate that teaching must be made problematic and the focus of inquiry.

The module team noted that reflection was lacking in our students' journals. They persisted in recounting the events of the day but they were not able to describe their new understandings as a result of their experiences nor could they describe in what ways their practice would change as a result of their reflections. In an attempt to remedy this situation, we introduced Van Manen's classifications to the students. Van Manen (1977) classified reflection according to the stimulus for reflective thought. His classifications are: Technical Reflection, Practical Reflection, and Critical Reflection.

The module team recognized that there was overlap between these classifications and that separating them appears artificial and contrived. It was our goal, however, to facilitate our students' reflective abilities beyond "dear diary" and enable them to reflect more substantively on their practice. To this end, we asked

students to consider Van Manen's classifications and attempt, during the course of the week, to reflect on issues within each classification.

### **Technical reflection.**

The first dimension of reflection is referred to by Van Manen (1977) is "Technical reflection." Technical reflection is concerned with the application of educational knowledge for the purpose of attaining given ends. According to Grimmett et al (1990) researchers who espouse this perspective believe that changes in teachers' practice can be bought ab out using this kind of reflection. In this view of reflection, it is only the teacher's methodology that is reflected upon, the source of knowledge is external to the teacher and reflection is used to **direct** practice.

In this mode of reflection, the teacher is viewed as a technician and it is the role of reflection to enhance the teacher's "social efficiency" so that teaching strategies that have been suggested by research in teaching can be enacted efficiently. This view is termed the "applied science" view by Carr and Kemmis (1986). Myers, cited in Lytle and Cochran-Smith (1992) , and Ross and Kyle in Zeichner and Tabachnick (1991 ) argue in favor of technical reflection. However, reflection on technical issues alone is not considered to be enough by many educationalists, the module team included.

The module team agree with Fieman (1979, p. 63) who argues " The tasks of teacher education is not to transmit the solutions that others have devised. The more fundamental task is to develop the teachers' capacity for informed problem-solving." In support of this view, Sarason (1993) argues that professionalism involves application of technical knowledge in ways and for purposes that go beyond technical.

### **Program application of technical reflection.**

Although technical reflection alone is not enough to advance students towards Shulman's conception of "the wisdom of practice," it was considered by the module team to be an important part of the teacher's role. Through a reflective journal, students were required to reflect in the technical dimensions of teaching by:

- consulting the literature on effective teaching practices
- reflecting on feedback regarding the efficacy of their technique in enacting effective classroom practices
- keenly observing and reflecting on the consequences of their actions

### **Practical Reflection.**

Van Manen (1977) refers to the second dimension of reflection as "Practical reflection." Practical reflection involves the examination of underlying assumptions and predispositions and assessing the consequences of educational action. It questions not the means, but the principals and goals of teachers' actions.

Reagan (1993, p. 406) states that the goal of teacher education is "the development of teachers who will engage in reflective practice as an integral and continuous component of their teaching." Like Schon, Reagan assumes that deliberation alone will lead to improved action. Harvey (1986) argues that when teachers deliberate on their beliefs, they are more likely to act in congruence with their beliefs. It is from the personal perspective of teacher beliefs that teachers can examine alternatives in education, make reasoned choices and assess outcomes. To Carr and Kemmis (1986) reflection in the deliberative mode involves reflection

on professional actions and competencies in light of moral principals. Reflection should result in morally defensible decisions about practice.

### **Program application of practical reflection.**

Through a reflective journal the students in the module were required to reflect on the practical dimensions of teaching by:

- making thoughtful observation and spontaneous, flexible decisions in response to the needs of the learners
- making rational choices, providing good reasons for decisions, and accepting the consequences of their actions
- collaborating with other professionals in a learning community to construct personal meaning
- reflecting on their decisions in light of moral principles

While this view of reflective practice calls upon the professional to deliberate on goals and objectives in education and to move beyond technical rationality, it poses many problems for the student teacher. It is difficult to deliberate between alternatives in teaching when one has no clear conception of the options.

### **Critical Reflection**

Van Manen refers to the third dimension of reflective practice as "critical reflection." In this mode of reflection, practitioners examine the moral, ethical, and political principals of education against criteria of social justice, equality, equity, and freedom. According to Grimmer et al (1990, p.35) the third level of reflection reconstructs the experience of teaching in order to come to new understandings of the teaching situation. Taken for granted assumptions about teaching and learning



are “recast, reframed and reconstructed to generate fresh appreciations of the practice situation.” The source of knowledge in critical reflection is internal to the teacher and reflection is used to **transform** the practitioner and the social context. Britzman (1986, p.454), in support of developing teachers' critical capacities states:

Prospective teachers need to participate in developing critical ways of knowing which can interrogate school culture, the quality of students' and teachers' lives, school knowledge, and the particular role biography plays in understanding these dynamics.

Reflection in the critical mode promotes a sense of agency in teachers who become active in educational decisions. This view is supported by Carson (1995, p.151) who argues:

Reflective practice tries to reposition the teacher as having an active voice in educational decision making. It suggests that rather than just being the conduit for change (the person who delivers someone else's mail) teachers, as thinking and acting subjects, can and will bring about what is educationally appropriate through their thoughtful, reflective practice.

Carson's view of the reflective practitioner resonates with the module team and describes our goals in requiring students to reflect critically.

### **Program application of critical reflection.**

Like reflection in the practical mode, however, there is evidence in the literature that suggests that critical reflection may be beyond preservice teachers' understanding. Katz, and Fuller and Bown cited in Zeichner (1982) argue that

students are so concerned with their own ability to function they do not have the capacity to consider the larger issues in education. Katz suggests that the capacity to think critically may take three to five years. Nevertheless, the module team believed that inclusion of critical issues as a focus for reflection was essential to raise student awareness of the larger social, political and historical contexts of schooling.

Through a reflective journal students were required to reflect in the critical dimensions of teaching by:

- engaging in critical analysis of research, fads, curricula, methods, and materials
- participating in informed debate about the role and purposes of education and the societal, historical, and political contexts of schooling
- examining and addressing institutional and societal issues that do not reflect the best interests of children
- participating in inquiry as an integral part of teaching and a critical basis for decisions about practice

The module team implemented several measures in order to promote students' ability to reflect. They include participation in collaborative action research with faculty associates, school associates and their classmates, and experimentation with models of teaching. The following sections discuss these initiatives in promoting reflective practice.

## **Creating a Climate for Inquiry**

### **Action Research**

The preservice teachers in the module were required to conduct 'action research' in order to enhance their ability to reflect and their critical perspective. Action research has also been recognized in the literature for its potential to promote conceptual change. The following section discusses the literature on action research and its application to the program.

Action research arises from the critical orientation to reflective teaching. According to Carr and Kemmis (1986, p.162) it is "a form of self-reflective inquiry undertaken by participants in social situations in order to improve the rationality and justice of their own practices, their understanding of these practices, and the situations in which the practices are carried out." It is frequently seen as a means of "emancipating" teachers and empowering them to contribute to the research base on education and to participate in the process educational reform.

Action research arose from the emphasis on personal empowerment and critical reflection and its inclusion in teacher education programs is widely endorsed. (e.g. Carr and Kemmis, 1986; Noffke, 1995; Cochran-Smith and Lytle, 1990; Tom, 1985; Valli, 1990; Van Manen, 1977; Tabachnick & Zeichner, 1991; Grimmitt et al. 1990; Elliott, 1991; and Gore & Zeichner, 1991)

Proponents of action research argue that students come to view inquiry as an integral part of teaching and the basis upon which their decisions are made. Flake et al. (1995, p. 405-406) defends this perspective:

Research or inquiry is a way of life, and teachers who make good decisions about curriculum are continually involved in the research process.

Research emerging from practice has a natural life in schools because the

questions are more appropriate, the investigations are more natural, and the findings are more credible and valid for school practice than is the case with research conceived, conducted, and interpreted in the clinical setting of higher education.

Goswami and Stillman cited in Cochran-Smith and Lytle (1990, p.8) make a compelling argument for involvement in action research. They report that when teachers are regularly involved in action research:

1. Their teaching is transformed in important ways; they become theorists, articulating their intentions, testing their assumptions and finding connections with practice.
2. Their perceptions of themselves as writers and teachers are transformed. They step up their use of resources, they form networks; and they become more active professionally.
3. They become rich resources who can provide the profession with information it simply doesn't have. They can observe closely, over long periods of time, with special insights and knowledge. Teachers know their classrooms and students in ways that outsiders can't.
4. They become critical, responsive readers and users of current research, less apt to accept uncritically others; theories, less vulnerable to fads, and more authoritative in their assessment of curricula, methods and materials.
5. They can study writing and learning and report their findings without spending large sums of money. (although they must have support and recognition) Their studies, while probably not definitive, taken together should help us develop and assess writing curricula in ways that are outside the scope of specialists and external evaluators.

6. They collaborate with their students to answer questions important to both, drawing on community resources in new and unexpected ways. The nature of classroom discourse changes when inquiry begins. Working with teachers to answer real questions provides students with intrinsic motivation for talking, reading and writing and has the potential for helping them achieve mature language skills.

As I have noted, there is huge support for inquiry through action research in the literature. However, Elliott (1991, p.14) raises a question about the motives of academics in promoting this practice:

...the question is "are the academics transforming the methodology of teacher-based educational inquiry into a form which enables them to manipulate and control teachers' thinking in order to reproduce the central assumptions which have underpinned a contemplative academic culture detached from the practices of everyday life?"

### **Program application of action research.**

We began the process of action research by requiring students to identify an area of teaching or a need within their practicum placement that was a concern to them. They were to follow the model for action research established by Carr and Kemmis (1986) of plan, act, observe, reflect. In the previous year the module team had prescribed the amount of time students should teach, the number of video taped lessons and analyses, the books to be read and critiqued but this time the students developed an individual plan of action based their action research goals. They determined what they needed to read, the amount and manner of their

teaching, the necessary arrangements they need to make to obtain feedback on their progress towards their goals. We required a summary of their reflections on their action research in the technical, practical and critical areas at the end of each week during Education 401/402 and biweekly in Education 405.

While the students in the first year of the program were required to conduct action research, their feedback indicated that this was an irrelevant add-on. In the second year, we made action research and subsequent reflections on it the only assignment for the semester and it formed the structure by which students would self-direct their learning.

The first step in preparing students for action research was to focus their inquiry on the context and culture of their practicum placement. Prior to students' first visit to schools, we gave them a sample of the types of technical, practical and critical questions they might ask about their school community.

Following the first visit, students were asked to identify an aspect of teaching into which they wanted to inquire, or to identify a need within their classroom that they would like to address by means of action research. We asked students to select a "big idea" for example inclusion, meeting the needs of diverse learners, effective teaching in a whole language program, active learning, cooperative learning etc. We believed that by examining one aspect of teaching in depth, all others would become clearer. For example, if a student's topic was 'inclusion of reluctant learners' that student would need to consider teaching practices, modification of curriculum and lesson materials, enabling evaluation methods, building community within the classroom, recognition of diversity and so forth.

The interrelationship of all aspects of teaching was a difficult concept for students in the beginning. They did not understand how their action research, limited to one aspect of teaching, would lead them to greater understanding of all

aspects. Their inquiry began as a leap of faith.

Students began the cycle of plan, act, observe and reflect to direct their inquiry into their topic of interest. Each week, they wrote a one-page summary of their reflections on their action research including reflections in the technical, practical and critical levels. The final self evaluation (see Appendix B) was a summary of their action research and how it informed their understanding of teaching and the goals of PDP.

### **Building a culture for collaborative inquiry.**

The module team attempted to build a culture for collaborative inquiry within the module. In order to achieve this, I also participated in action research and modelled myself as a learner in the process of inquiry and reflection. This master's thesis developed from the action research I conducted with my students in the module. I read excerpts from my research aloud to the students and each time that my inquiry resulted in more clarity about the program, I brought my understandings to our discussions. As Grimmert (1994, p.172-3) notes, collaborative cultures represent "the intellectual ferment within which ideas for educational change can flourish and expand." Thus, the students and I engaged in 'intellectual ferment' together.

In addition to participating with my students in action research, I facilitated a collaborative action research group for school associates who were interested in conducting inquiry into mentoring their student teachers. I believed that collaborative research would result in a number of benefits, not only for the teachers involved, but also for my students, and for Simon Fraser University. Firstly, the teacher participants would enhance their supervisory skills by improving their ability to collect objective data, conduct the supervisory conference

and promote reflective practice. Moreover, they would enjoy the benefits described by Goswami and Stillman (in Cochran-Smith 1990) that adduce to participants in teacher research groups.

The student teachers would benefit from the "collaborative resonance" (Cochran-Smith 1991a) with the module program that would result from the school associates' involvement in continued professional growth and on-going inquiry into teaching. Additionally they would benefit from the S.A.'s increased skill in mentoring their growth. The university would benefit from having school associates who possessed a greater understanding of supervisory skills, insight into action research and inquiry into teaching to mentor future student teachers. Moreover, it is possible that these school associates would be encouraged, through their involvement in the mentoring program, to apply as faculty associates.

### **Models of teaching.**

In support of exposing student teachers to alternate modes of teaching as a means of promoting reflection and conceptual change, Stoddart, Stofflett, and Gomez (1992) discovered that preservice teachers' reliance on didactic models of teaching could be changed by personal experience with teaching practices that are consistent with a constructivist perspective.

Joyce, Weil and Showers (1992, p.13) argue for involving teachers at all levels of practice in utilization of an array of teaching models. Their objective is to "create powerful learners" by increasing students' aptitude to learn. Joyce et al. argue that when teachers employ a variety of teaching models, students are better able to master information and skills. They believe this to be "the core of effective teaching." (emphasis in the original.) Research conducted by Joyce, Showers, and Rolheiser-Bennett cited in Joyce, Weil and Showers (1992, p. 13) supports this by



learn to employ a repertoire of teaching models as appropriate to the content and to students' learning needs. I am skeptical of this position. My experience suggests that teachers prefer models that reflect their orientations to curriculum and do not venture far from them. To do so creates dissonance and results in dissatisfaction with teaching. Nevertheless, for the purposes of the module team in promoting reflection and conceptual change, it was imperative that students be exposed to and experiment with a range of models.

### **Program application of models of teaching.**

As noted previously, if our students were to understand that effective teaching could look very different from the teaching they may have experienced in public schools and university, it was important that the module team employ a range of alternative models of teaching. To this end we demonstrated an array of teaching models particularly those emphasizing active learning and social interaction. We selected a model of teaching from each of the 'families' described by Joyce, Weil and Showers (1992) to emphasize in the module program.

Students were expected to employ each of these models during their practica and reflect on student learning and their own responses to the model. Students were also required to read Harmin's (1994) Inspiring Active Learning. The activities in this book combined with the models of teaching gave the preservice teachers the security of technical "know how" and concrete exemplars of ways in which alternative teaching strategies could be employed. Additionally, they sparked opportunities for reflection on alternative teaching methods and their potential for student learning as well as providing a common vocabulary to use within the cycle of supervision.

ways in which alternative teaching strategies could be employed. Additionally, they sparked opportunities for reflection on alternative teaching methods and their potential for student learning as well as providing a common vocabulary to use within the cycle of supervision.

### **Summary**

This chapter explored the literature surrounding the elements of the program initiated by the module team for the preparation of preservice teachers and the promotion of conceptual change. This examination included the following:

- modelling of effective teaching and its application in the program
- principles of effective instruction and examples of learning experiences
- early exposure to classrooms
- modelling reflection
- promoting autonomy
- ethic of care and examples of its application in the program
- alternative perspectives on supervision and the model preferred by the module team
- self evaluation and its application in the program
- reflection and inquiry into teaching and its application in the program
- creating a climate for inquiry
- action research and its application in the program
- models of teaching and their program application

The chapters that follow describe the research approach used in this study and explore, through the subjective world of the students, what they brought to the program and their response to it.

## CHAPTER FOUR

### THE RESEARCH APPROACH

This chapter explains the qualitative research approach used in this study and its suitability to the purposes of this study. Additionally, the limitations of qualitative research beyond those discussed in Chapter One are discussed. The method of data collection, analysis of the data and the choice of student subjects are explained.

#### **Qualitative Research and its Suitability to this Study**

A qualitative research approach was used in this study to examine the meaning the participants made of the experience of learning to teach within our module. Qualitative research arises from a naturalistic paradigm and as such assumes that there are multiple realities--that the world is not an objective thing but is a function of personal interaction and perception. It is a highly subjective phenomenon in need of interpreting rather than measuring. (Merriam, 1988, p.17) The research takes the form of descriptive ethnography which attempts to provide holistic explanation in order to "...describe and analyze some entity in qualitative, complex and comprehensive terms not infrequently as it unfolds over a period of time." (Merriam, 1988, p.9-10)

For decades, scholars and researchers have debated the relationship of knowledge and teaching. From various perspectives and research paradigms, scholars have asked what it means to know about teaching--what can be known, how it can be known, who has the authority to know, and how knowledge can or should be used for theoretical and practical purposes. In contrast to the naturalistic paradigm, the positivistic paradigm of inquiry, utilized in quantitative research, is

founded on the beliefs that there is a single, objective reality which can be measured and observed (Merriam, 1988). With the emergence of qualitative research, Carter (1993, p.5) suggests "some mourn the lost of quantitative precision and scientific rigour" but others celebrate the emergence of qualitative research as a way of knowing. The following quote from Carter (1995, p. 5) demonstrates this belief:

For many of us these stories capture, more than scores or mathematical formulae ever can, the richness and indeterminacy of our experiences as teachers and the complexity of our understandings of what teaching is and how others can be prepared to engage in this profession.

In my opinion, qualitative research is best suited to the exploration of the program implemented by the module team since our inquiry lies in the subjective reality of the experiences of those involved rather than in measurable outcomes or testable products. This mode of inquiry appears to be desirable in exploration of an innovative program because it "provides a data base for future comparison and theory building." (Merriam 1988, p. 27) Shulman (1986a) further supports the use of qualitative research by positing that the "richly described and critically analyzed cases" that may be found in qualitative research, serve to complement the "scientific knowledge of rules and principles" founded in more traditional forms of research. These two authors reflect a perspective on inquiry into teaching into which this study falls.

This investigation is an inquiry into conceptual change experienced by the students in a teacher education program in order to inform us about the preparation of teachers. Because the module program was developed from a constructivist perspective, presenting the data in the form of student vignettes is complimentary

to the conceptualization of the program and the questions this study addresses. Through the vignettes, the reader can witness the construction and reconstruction of preservice teachers' understanding of teaching and learning.

Furthermore, I chose to include the student vignettes because I believe that the voice of preservice teachers and their stories of learning to teach is informative for those of us who would prepare them for classrooms. In support of this, Lytle and Cochran-Smith (1990, p.2) argue similarly for the inclusion of teachers' voices as a part of the knowledge base for teaching:

Missing from the field of research on teaching, then are the voices of teachers themselves, the questions that teachers ask, and the interpretive frames that teachers use to understand and improve their own classroom practices.

Through this study, it is my hope that the voices of the student teachers in the module program will contribute to the knowledge base for teaching.

### **Limitations of Qualitative Research**

In Chapter One, I outlined a number of limitations to the research conducted in this study. In summary, those limitations include the following:

- My closeness with the subjects may have deterred me from probing sensitive areas of inquiry.
- Furthermore, I may have identified so closely with the subjects that I failed to see issues as problematic.
- The imbalance of power between the students and myself may have made the students reluctant to decline participation in the study and reluctant to be candid with their views.

- My personal and professional investment in the program and its outcome may have led to bias in analyzing the data.
- Finally, as Wideen, M, Mayer-Smith and Moon (in press) argue the students may have indicated conceptual change because it was expected of them rather than from a genuine commitment on their part.

In addition to the limitations cited above, qualitative research itself has a number of inherent limitations in regards to its reliability and validity. Those are discussed in the following passages.

### **Reliability**

According to Merriam (1988, p.170) "reliability refers to the extent to which one's findings can be replicated." This issue is problematic in qualitative research as the researcher is not "seeking to isolate laws of human behavior ...but rather to describe and explain the world as those in the world interpret it." Guba and Lincoln cited in Merriam (1988, p.171) argue that "it is impossible to have internal validity without reliability." It follows for them that if there is internal validity, there must be reliability. For Lincoln and Guba if the results of the data analysis makes sense, and they are consistent and dependable, then the study has validity. (Merriam 1988, p.170)

I have attempted to ensure internal validity and, hence, reliability by:

- explaining my assumptions and theories behind this study and my position in relation to the group being studied.
- confirming the data with the research subjects.
- describing the methods of data collection, the derivation of categories and how decisions were made regarding the data.

### **Internal Validity**

Merriam (1988, p.166) states that “internal validity deals with the question of how one’s findings match reality.” The issue of validity in qualitative research is problematic. One problem lies in the translation and interpretation of the data by the researcher. In order to ensure that the data in this study was accurate, each research subject received a copy of the data set containing the excerpts from documents and the transcript of the interview(s). They were invited to comment on the data and make revisions. In keeping with ethical concerns, drafts of the ethnography were submitted to the subjects before they were included in this report.

An additional problem concerning the validity of qualitative data is based in the possibility that the data can change from day to day. Merriam (1988, p.167) suggests that long-term observation is a strategy to promote validity because “reality” is “holistic, multi-dimensional and every-changing; it is not a single, fixed, objective phenomenon waiting to be discovered, observed and measured.” For this reason, this study includes data taken at frequent intervals throughout the course of two semesters in the program and on into the third semester.

### **External Validity**

External validity, or generalizability, according to Merriam (1988, p.173) “is concerned with the extent to which the findings of one study can be applied to other situations.” External validity has limited application in qualitative research and critics of qualitative research methods fault this mode of inquiry for its lack of generalizability to larger populations.

To counter this criticism, Zumwalt, (cited in Cochran-Smith and Lytle, 1990, p.6) argues that the generalizability that is a part of the positivist paradigm may not

be the most useful for understanding educational phenomenon. Zumwalt continues “it is virtually impossible to imagine any human behavior which is not mediated by the context in which it occurs.” In order to better understand classrooms and learning, we need, not laws about what works generically, but “the particulars of how and why something works and for whom, within the contexts of particular classrooms.”

However, I have attempted to improve the external validity by “providing rich, thick description” (Merriam 1988, p.177), and by “describing how typical the ...individual is compared with others in the same class, so that users can make comparisons with their own situations” (Goetz and Lecompte cited in Merriam, 1988, p.177).

### **Data Collection**

In Chapter One it was noted that the data for this study came from seven sources. An elaboration of the data collection methods follows.

### **Sources of Data**

#### **Documents**

Written documents form the most significant source of data for this study. Documentary data are valuable because, ideally, “the investigator does not alter what is being studied by his or her presence” (Merriam 1988, p.108) The documents in this study, however, were written specifically for the researcher/ supervisor and consequently the documents may indeed be “altered by her presence.”

The documentary evidence for this study was taken from seven sources. For example, students were asked to write about their perspective on teaching and



learning on the first day of the seminar. Two of the questions were:

- what is the role of the teacher?
- what are your beliefs about how children learn?

Students were required to submit a summary of the issues they had been considering in their journals on a weekly basis during Education 401/402 and on a biweekly basis during Education 405. These summaries have been used as a source of data for this study. After each formal observation, students wrote reflections on the lesson, the implications of the data and their plans to grow in teaching. These have contributed to the data base for this study.

As stated in Chapter Three, the content of the seminars was largely based on student needs and arising from their interests. In order to ensure that we were addressing student needs adequately, we asked for written feedback at regular intervals throughout Education 401/402. Moreover, it is common practice at SFU that students evaluate their programs and instructors at the end of each semester. While students have the option of maintaining anonymity on all of these feedback documents, the students in this study identified the documents as their own and gave permission for their inclusion in this study..

After the marks had been submitted and the semester had ended, all students in my group were asked to complete a questionnaire on the program elements and its influence on their thinking about teaching and learning. (see Appendix C) Ten of twelve questionnaires were returned and these were used to supplement the data collected from the seven research subjects.

The module team designed an alternative final evaluation form for the first semester that better reflected the emphasis of the module during the semester. (See Appendix B) These self evaluations were a valuable data source. During Education 405, student midterms and standard PDP final evaluations were used.

These also formed part of the data base. The final source of documentary evidence comes from fieldnotes that I recorded throughout the semester .

### Interviews

As stated in Chapter One, the interview data had limited application in this study. Most of the data for this study comes from documentary sources. Interviews were also conducted as a means of providing clarity in the interpretation of documentary evidence and additional insight into the thinking of the participants. Opportunities for interview during the semester were limited by my concerns that my agenda not intrude on the students' needs during their often stressful practicum experience.

Initial interviews were held with six of the students during the Education 405 semester. These interviews were unstructured and exploratory in nature and students participated individually in one session lasting approximately thirty minutes. These interviews were held following a supervisory cycle on a routine visit to the school. The interviews were tape recorded and I transcribed all the tapes myself.

One student, Kathryn, was not available to be interviewed until during the third semester. That interview took place at my home. I gave her questions to consider in advance of the interview and she arrived with notes on issues she wanted to be sure to include. That interview session was taped and lasted nearly two hours.

Subsequent interviews with the participants, for clarity or additional data, took place over the telephone. I took notes throughout these brief interviews and did my best to capture student comments verbatim. I then read the statements back to the students for verification.

### **The Subjects of the Inquiry**

Seven students agreed to be research subjects for this study. Each of these seven students permitted me generous access to their time and their written documents. I chose the original seven students for the following reasons.

Firstly, I wanted to be sure that the data I collected were representative of the range of student perspectives and responses I perceived. It was my perception that eight of the twelve students I supervised during Education 405 were enthusiastic in their response to the program and successful in implementing teaching techniques that are consistent with a constructivist perspective. I arbitrarily chose three of these students as subjects of this study. There were two students whom I perceived as being enthusiastic in their response to the program but who experienced difficulty with implementation. I chose both of these students. Finally, there were two students whom I perceived to be critical of the philosophy of the program and who expressed reservations about alternatives to direct instruction. I chose both of these students as subjects of the study with the intention of finding disconfirming evidence.

I also chose these particular seven students for the study because, while they presented diverse responses to the program, they all shared a number of characteristics in common and were 'typical' of ten out of twelve students in my half of the module in that they are women, they are all in their early twenties.

It should be noted that these data were collected from students who completed the program under my supervision. There are two additional students who were not included in the data base in this study. One of these students withdrew from PDP because of difficulties she encountered in the practicum. She appeared to lack a conceptual base from which to reflect on her teaching. She was unable to articulate learning outcomes and unable to plan a sequence of learning

experiences that resulted in pupils' engagement and growth. Consequently her relationship with her students began to deteriorate and she was unable to effect change in the learning situation. She chose to withdraw and to apply to re-do her practicum at a later date. Her response to the program in the first semester was favourable but her perceptions may have changed as a result of reflection on the program in light of the difficulties she encountered in the practicum. While our relationship remains positive, she is teaching in Korea now and is thus not available for further comment on the program.

There is a second student whose progress in the program also concerns me and whose perceptions would effect the data. After two supervisory conferences and a series of difficult conversations in which the student repeatedly challenged my perceptions of her teaching and my requests for modification of her practice, I asked to be relieved of the responsibility of supervising her. I believed that she would be more effectively and objectively supervised by someone else. Upon reflection, I believe that two factors may have contributed to the breakdown in our relationship. First, perhaps as a result of the program, this student came to believe most strongly in her own autonomy. It is my perception that for her, autonomy equalled infallibility and she found it difficult to examine her teaching critically. Secondly, I raised issues of concern regarding her teaching before a trusting relationship had been established between us. She became angry and confrontational as a result. While she did go on to complete her practicum with another supervisor, I suspect that her assessment of the module program and of my teaching would be quite different from the other students. I did not use her as a part of this study because our contact was limited and our relationship had disintegrated to the point where in-depth data collection was not possible.

## **Data Analysis**

### **Data Analysis Method**

My first step in analyzing the data was to classify them according to broad categories. The categories were:

- student statements of belief, attitudes, values and preconceptions upon entering the program
- student experience of the module
- student perspectives on teaching and learning in the first practicum
- student perspectives on teaching and learning in the second practicum
- reflections on the program
- other

I extracted these passages of student text verbatim and compiled a condensed set of data, or a vignette, for each of the seven students. From this condensation, I began to code the data for themes according to the manner recommended by Becker and Geer (1960, p.271) who describe data analysis in three stages:

- selection and definition of indices, concepts, and problems or themes
- check on the frequency and distribution of the phenomena
- incorporation of individual findings

Here are two examples of the manner in which I coded the data for themes, concepts and indices:

**Index:** "I just needed a straight answer from a professional."

**Concept:** Students did not find answers and simple solutions forthcoming.

**Theme:** The module program promoted dissonance.

and...

- index:** "It kept things manageable for me."  
**Concept:** Inquiry makes learning to teach more manageable  
**Theme:** Inquiry promotes student growth and change by making teaching more manageable.

From the data analysis, I then reviewed all the student vignettes to note the frequency and distribution of the phenomena. The data that were selected and quoted in Chapter Six are representative of the students' experience and perspective. They were not selected to support my view as researcher. In every instance, disconfirming evidence has been sought, and where available, it has been cited. In the discussion in Chapter Six it can be assumed by the reader that the data cited are representative of the perspectives of all the students in the sample and consistent throughout the data unless I have indicated otherwise.

### **Development of the Vignettes**

In developing the vignettes for presentation in Chapter Five, there has been considerable editing in the sense that I have lifted whole sentences or paragraphs out of the context of the students' documents and placed them in a sequence of my own design. However, there has been minimal editing of the actual content of the statements. Modifications were made only for the sake of reader clarity. For example, I abbreviated run-on sentences, replaced pronouns, and occasionally I changed verb tenses. I edited for repetition and expressions like "you know" and "kinda." In some cases, I corrected grammar.

With the exception of these limited changes, the student comments are lifted verbatim from their files. When I have included fieldnotes in the vignette, they are

clearly indicated in order to differentiate them from passages taken from the students' own writing or interview transcripts.

### **Summary**

In this chapter I have explained the research approach and its suitability to this study. Qualitative research was chosen for this study since our inquiry lies in the subjective interpretation of the experiences of those involved rather than in determining isolated laws, and measurable outcomes. This mode of inquiry is desirable in exploration of an innovative program because it provides rich, thick description that compliments more traditional forms of research. This investigation is an inquiry into conceptual change experienced by the students in a teacher education program in order to inform us about the preparation of teachers. The module program was developed from a constructivist perspective, and it has been argued in this chapter that presenting the data in the form of student vignettes is complimentary to the conceptualization of the program and the questions this study addresses.

The vignettes, following in Chapter five lead the reader into the data and illuminate two preservice teachers' understanding of teaching and learning. Moreover, the student vignettes express the voice of preservice teachers and their stories of learning to teach. I believed this would be informative for those of us who would prepare them for classrooms.

## **CHAPTER FIVE**

### **THE STUDENT VIGNETTES**

The chapter introduces the students chosen for the vignettes and presents the vignettes.

#### **Introduction to the Student Subjects of the Vignettes**

##### **Pam**

##### **Background**

Pam was twenty-two years old. She has attended private, denominational schools throughout her elementary, secondary and university education. Her experience in PDP was her only experience within the public education system. She lived at home with her parents and was engaged to be married soon after PDP. Pam was offered and accepted a teaching position in a private denominational school during Education 405. She began teaching the September after graduation.

Pam completed both of her practica in grade 5/6 classes. Both school associates used transmissive methods but were open to Pam's experimentation with other teaching methods. They both agreed to the rearrangement of the student desks from rows to groupings to facilitate student interaction. They both were pleased with Pam's contribution to the class and her development as a prospective teacher and colleague.

I chose Pam as the subject for this study because her entry beliefs were very traditional and conservative. Additionally, she expressed criticism of the program of seminars and her entry beliefs persisted during her practica. I felt that Pam, while sharing many traits in common with her classmates, represented the



traditional extreme. I believed it would be more difficult to realize conceptual change in Pam's beliefs than in the other student subjects of this study and, as a result, I believed that the development of her understanding and her response to the program would be interesting to read.

## Kathryn

### Background

Kathryn was also twenty-two years old. She attended public schools for her K-12 education and a private, denominational university for her undergraduate degree. Kathryn was married just prior to entering PDP and she hopes to be employed in the public school system. Kathryn's first practicum was in a grade 6/7 class and her second in a grade 5/6 class.

Both of Kathryn's School Associates also favored transmissive styles of teaching but the School Associate in the second practica had introduced the class to some cooperative learning strategies although she did not model this type of teaching for Kathryn. Both School Associates were supportive of Kathryn's efforts to vary instructional strategies and to move the furniture from rows to groupings. The School Associate in Kathryn's second placement insisted that she teach separate curricula to each grade. There could be no overlapping of topics or blending of assignments. Consequently, Kathryn had to prepare separate curricula for every subject for both grades. This contributed greatly to the stress that is evident in her vignette.

Both of Kathryn's School Associates were pleased with her development. Both expressed beliefs that she "had all the basics" and just needed to "refine" her teaching practices. Both felt that she would be an excellent teacher.

I chose to include Kathryn's vignette because, while her entry beliefs were

traditional, she responded enthusiastically to the seminar program and appeared to embrace constructivism from the start. She experienced success with alternative models of teaching in her first practicum and she demonstrated a promising conceptual grasp of teaching and learning. It appeared to me that Kathryn was committed to the vision of teaching proposed by the module team. Her experience in the extended practicum, however, demonstrates the difficulty she experienced in enacting the vision. Again, I felt her experience would be interesting to explore.

## **The Student Vignettes**

### **Pam**

#### **Statements of Belief Upon Entering the Program**

I have always believed, based on my faith, that students are very worthwhile and very valuable and yet they are sinful. They need structure, guidance, and they sometimes need to be taught a certain understanding of the way life is.

Direct instruction is what I learn best by and what I believe in for other students. I am convinced that students must learn an actual body of knowledge because they will not be able to function in our technological society. I also believe this because I believe that there is an absolute truth and solid knowledge that students may be able to learn and apply although they will each understand and apply it in different ways because of their uniqueness.

I believe that children learn by example and through experience in a holistic way involving them emotionally socially, physically, intellectually and spiritually. I believe that the role of the school is to help children learn intellectually. The teacher has to teach interesting and practical things. She has a leading, guiding, motivational role in the curriculum. Teachers have the authority and responsibility

to plan learning experiences for children. Teachers must always be in control as a leader and guider of events. While it is all right to involve students in decisions, they must not be allowed to dictate the program. At the same time, teachers should demonstrate love and care for all children and help them in developing a positive self-concept.

My metaphor for teaching is a mountain hike. The teacher is the guide and the hiking instructor who teaches the children how to hike to achieve their goals.

### **Experience of the Module Program**

The module team asked for our input a lot and really tried to tailor the program to meet our needs. They did this by frequently asking us to write down our needs individually and in groups and then asking us if those needs were met. The program was very helpful in that it really tried to address our needs and it provided many varied experiences during module time. But there is too much emphasis on process in this program and not enough on content.

There should be a way to actually teach us how to teach. There should be some basis. I don't think its a prescription type thing. Teaching is not a type of thing were you can prescribe OK in this situation, do this and this. It's not like that and yet I think there are some guidelines that generally good teachers do know and I feel like I'd like to be let in on the secret.

Sometimes the lack of guidelines from my FA frustrated me. This helped me to see that there is a balance between helping students to think for themselves and simply expecting them to do so without any guidelines or direction.

I think I was challenged throughout the seminars because I had slowly been developing some sense of trying to change the way things were in school because I had been taught mostly by direct instruction. I don't know if it challenged my

beliefs, I think it challenged my assumptions some times. In terms of challenging my beliefs, well, I don't know, sometimes. ...I don't know that I've changed them though.

### **Modelling.**

The risk-taking of my FA in trying to align her practice of teaching with her philosophy and the dedication with which she continued to learn about teaching strategies and philosophies of teaching and learning inspired me.

She was also conducting action research as a professional working with the student teachers and the curriculum. This helped me to realize that we are all on a continual process of growth and that Janine is in the same process. Janine modelled openness to new ideas and enthusiasm for trying to find different ways of doing things. She admitted to learning lots from us. She showed so much commitment and enthusiasm for being our FA. She was very supportive and built a good relationship with me as a student teacher. Her drive to do the best she could and her encouragement and support for us to do the same were amazing!

### **Cycle of supervision.**

Through the cycle of supervision, I was responsible for leading the discussion about my lesson. I learned to be more independent and responsible for what I did. Janine encouraged and enabled me to come up with ways to try to remedy situations. She encouraged me to involve the children in identifying problems and for them to contribute solutions. She gave me lots of feedback on what she saw during formal observations and this helped me see things more concretely and to put a finger on something I knew was there but couldn't describe. The cycle of supervision was helpful in making me realize what kinds of questions I

should ask about my lessons, my planning and the way in which I implemented my lessons.

### **Self evaluation.**

I still have difficulty with self evaluation because I have been used to teacher evaluation for so long and because I am a perfectionist. If I self evaluate, I have never done enough or learned enough. I am still struggling to develop and maintain a balance between challenging myself and yet being realistic. I am struggling with setting my own realistic goals as a developing professional without comparing myself to others.

Self evaluation in the final analysis taught me that no one else will help me evaluate my teaching. I'm not sure that this was the intent of the program. I feel that I didn't receive feedback after by self-evaluation. I also felt restricted by the need to "sell" myself and this inhibited me in openly analyzing my understanding of teaching and learning. I also still didn't feel that the threat of evaluation had been removed. I suppose this was because I was concerned about portfolios.

### **Reflection and inquiry.**

Reflecting really helped me to relate my philosophical understanding of teaching and learning with my practices. It also helped me to begin to solidify my own philosophy and style and to analyze the impact that my teaching may have on society and the impact that society has and will have on my teaching. I have discovered how crucial it is to the educational system to have reflective teachers who are life-long learners. Otherwise, teachers naturally revert back to what is more comfortable to them. It is important for the teacher to be a reflective and thoughtful practitioner.

The module has been effective in helping me become an independent learner by allowing me to choose a focus for my action research. I do see action research as a very useful and powerful tool for teachers, not only during PDP but throughout the teaching career.

### **Perspectives on Teaching and Learning in the First Practicum**

#### **Developing a teaching identity.**

I discovered two important principles this week. Teachers all have their own unique style, toleration level, manner of dress, and organization systems and this is fine because children learn different things from each teacher. This comforts me because I wondered if I was dressing or acting like a teacher and what this exactly looks like but I think now that we are only similar in our goal of helping students become lifelong learners and in our standards of professional excellence.

#### **Reflections on change.**

I have also discovered that the reason schools do not change is that teachers often revert to familiar strategies or methods because they are most comfortable with them. I see that in Ms R's focus on direct instruction and in my structuring of a PE class warmup. It's similar to what I learned in school. It is therefore necessary to provide teachers the theoretical and practical material to help them develop other methods in their classroom. Change comes about very slowly because of our our fear of the unknown.

#### **The vision.**

I want to create a warm, supportive atmosphere in the classroom where students would act in a caring way toward each other. The activities would allow

students to interact with and communicate with each other as well as the teacher, and they would incorporate many different teaching strategies so that students with different abilities and learning styles would be involved. The children would exhibit the cooperation skills of involving all group members, listening attentively to each other, and resolving problems in appropriate ways. They would self-evaluate and peer evaluate and list ways in which they could improve. The special needs children would participate actively in the group, have a more positive attitude toward learning, maintain higher on-task behavior and achieve more skills and content than before.

#### **Reflections on the needs of children.**

Grouping students was a very difficult task. I grouped them heterogeneously because many of the cooperative learning authors suggest that this is best, but I have wondered many times if the special needs students would benefit from being grouped together. I think sometimes that they could be grouped if this did not result in them feeling targeted or being set apart from the rest of the class. The teacher should respect and strive to help students develop to their full potential as individuals with different strengths and weaknesses who are equally valuable for who they are.

I realize the need to praise students when they use collaborative skills and to build a lot of positive interdependence into the cooperative lessons because these students are used to working on their own and they need a boost to talk to and help each other. Social learning is important because some students learn by verbalizing their thoughts and interacting with other student ideas. It is also important because it promotes the development of values and their application to life as well as positive attitudes.

**Moral beliefs and sense of agency.**

The students have great difficulty developing any cooperative learning skills. The teachers here have chosen not to use cooperative learning because of these difficulties but these are the children that cooperative learning can do so much for. They need to have a warm, harmonious classroom atmosphere that supports them because many of these students are not receiving the support at home to promote risk-taking and learning new things.

They also need to learn the collaborative skills that will enable them to develop committed relationships in which they can encourage each other and work out problems. That is the only way that we will be able to reduce divorce and family difficulties for the next generation of children. The students will be much happier on the job if they can develop better relationships there.

Cooperative learning is not just a morally and ethically valuable goal because of the emphasis on working with others and building meaningful relationships. It is also a very important goal in leading to positive leaders in the world who understand and can critically think about and reflect on definite concepts and knowledge and who have the problem solving skills and the people-skills to implement changes.

**Fieldnote on the effects of self evaluation:** On my last observation of Pam, she had planned an elaborate "jigsaw" structure on the states of matter. Pam's teaching partner had asked, "Are you sure you want to teach that lesson on a day when Janine is observing you?" Pam had responded, "Yes. Janine is coming to help me, not to evaluate me. I expect this to be a difficult lesson with a lot of learning for me. She can help me understand how to make adaptations for next time."



### **Perspectives on Teaching and Learning In the Extended Practicum**

**Fieldnote:** I called in to visit Pam and to see that she was settled in her new practicum placement. During our conversation she made the following statements:

“The new methods we learned in seminar are fine but I can't do something exciting every class of every day. My School Associate used the textbook before I got here, she will use the textbook again when I leave. The children are used to it. Why should I upset their routine?”

and...

“I don't know why you say you are coming to see me teach when it's the kids doing all the work that you want to see. Direct instruction is what I learned best by and it is what I believe in for my students.”

These comments surprised me because I had believed that Pam had begun to value alternatives to direct instruction by the end of her first practicum.

#### **The role of the school.**

I am realizing more and more that the school can try to compensate for the lack of positive family interaction that many students suffer from but the school will not be able to fill the function of the family without losing the time and ability to fulfil its unique function - educating students. The teacher and students cannot pretend to be anyone's family but they can help students to see how they can establish and maintain positive relationships with others as long as students are still learning content. I am comforted by my new understanding that cooperative learning benefits learning and mastery of content and does not detract from the goal of schools, namely student learning.

**Reflection promotes change in practice.**

I am looking into ways to extend student thinking to deeper levels. They show a strong tendency to want to memorize the facts for the test and many of them have great difficulty answering the higher level thinking questions on the test. I will try to teach them how to think.

I was shocked to see that according to the classification of questions for quality, most of my questions were at the lowest level, namely knowledge with only a couple of questions involving some elements of comprehension, application and analysis level. I was very disappointed because I felt the students were really thinking. I would like to make up some higher level questions to be incorporated into my science periods. One way to incorporate higher level questions would be to use the "Questioning for Quality Thinking" form as I ask questions during the lesson and to use this form to develop questions for students to answer in their notebooks.

**Management issues.**

My classroom management is better this lesson because I didn't allow the students to talk at all and I made sure they were all on task by asking them questions, taking away toys, using an "evil glare" or expectant wait and calling out their name. The management was more reactive than proactive because I was bound to the front of the room to the overhead projector.

I am being very strict in adhering to expectations and most are getting the message that these expectations must be followed. Things felt better, more organized and less frazzled than last week. Some students do not appreciate me right now but I think most and maybe even all respect me and my rules and expectations as a teacher. Classroom management is crucial in running a

classroom and, although I felt really awful about enforcing my expectations I think we are all benefiting from it.

The students in the class generally work quite hard but I'm having difficulty with some students who just aren't handing things in. I remind them, keep them in at recess and lunch. I hope they will soon realize that they won't get away with it.

J has been very difficult and I have not seemed to connect with him. Like some of the others he would prefer to socialize rather than do any work or listen to instructions. He hates staying in at recess and lunch so that consequence helps him get things done.

**Note:** I sensed that students are not "with Pam." There was antagonism in their body language and delay in responding to her questions or instructions. When I asked the School Associate how things were going, she said that she had had complaints from five parents about Pam. Additionally there had been a number of incidents in the class where students had been openly hostile and defiant, tempers had flared and there had been unpleasant scenes. I asked Pam to reflect the source of her difficulties in her relationship to her students. I asked her also to consider how she was demonstrating pleasure in the company of children and the place of humour and joy in her classroom.

### **Dissonance triggers reflection.**

I've tried to think of some reasons why some students may not be connecting with me and I'm not connecting with them. I've also tried to determine why the classroom atmosphere is not as positive as I would like...why are we not working together? Why have I not won them over?

I find throughout the day that things become more disorganized. There's

simply too much to do. I sometimes forget to do things although they are written in my daybook because I don't get much of a chance to look at my list of things to do. If I could get some time at my desk to check my daybook, I will be more consistent and I can exhibit much more comfort and joyous presence in the classroom.

I am trying to create a warm, supportive atmosphere with the purpose to learn. I have really emphasized my rule that everyone must try to learn. I think, however, that the caring atmosphere should enhance the content as the learning is central to school and the content is therefore very important. I have been strong on content because I think that is the purpose of school and I have been trying to build a caring classroom but as you can see, I'm still growing in this area.

### **Statements of Belief Upon Exiting the Program**

My view of learning has changed dramatically. I've realized that problem-solving, decision-making, synthesizing and evaluating are very important components of learning. Learning should emphasize the higher order thinking skills so that students know how to use information in morally good ways. In the process of realizing the need to learn higher order thinking, I realized what an impact society makes on the nature of schools.

I do not think that schools should portray knowledge as solely personally determined without any standards or starting place. The schools should give students as much as we know thus far so that they have a higher and deeper understanding from which to start problem solving. But children need to be more than simply books storing knowledge. They need to develop, adjust and apply their knowledge to the real world in more thoughtful ways than a computer because people have values which control how they apply their knowledge.

My view of learning also developed as I observed the effects of various

learning styles and intelligences. I also became aware of the results of brain research and their effect on our understanding of how children learn. Through being exposed to the constructivist philosophy, I realized the importance of the student's previous understanding and the need to build on and change this. I also learned to actively involve students in learning in minds-on and hands-on ways which I hadn't previously considered explicitly.

I think learning to teach is a constant progression. You don't just "get it" after a certain amount of time. You can continue to grow using certain tools. So far, I've found action research very helpful I don't think I would be able to carry it on in a scale like this when I'm teaching but I think in terms of the cycle (plan, act, observe, reflect) and the understanding and the questioning I think that will continue. Keeping a journal and just questioning and thinking that way will continue with me.

I also realize that teachers are always learning not only content, which I expected and looked forward to, but also teaching strategies and philosophies. I hadn't expected so much fluctuation in the "trendy" philosophy of schools, but I have also seen that teachers do not fluctuate quickly.

## Kathryn

### Statements of Belief Upon Entering the Program

If you want to deliver content and if you want students to learn facts, the best way to get that across is to either read it in a textbook or hear it from the teacher and to memorize it. Traditional methods of teaching are the most effective way of teaching content and innovative methods are best for teaching skills and attitudes.

I believe that the role of the teacher is to transmit knowledge and skills and pass on cultural values. The teacher is a guide but she should be in control. That does not mean a highly structured classroom but a physically and psychologically safe environment. Teachers must demonstrate respect for students and receive it. Children learn in various ways and learning is hard work but once you get some facts then you can start to apply them. I want to teach so that I can help my students make this world a better place.

### Experience of the Module Program

I feel like I want to take 4 years off so I can "independently learn everything I've been turned on to in the last 2 months. I'm definitely going to continue reading, discussion, action researching, etc. etc. for my whole career. I never knew there was this much to teaching! To a very large extent I feel like the program was tailor made. They (the module team) asked what we thought we needed, suggested some other important concepts, and respected our opinions. Ironically, the independent time (now that I look back on it) was by far the least valuable component for me. I would have rather had more time to develop what we had to rush through (videos, talks, readings, speakers etc.)

I feel extremely fortunate to have been a part of this module; it was near

perfect, I enjoyed my time with the module, I learned an enormous amount keeping in mind the “big picture” as well as technical (daily teaching) challenges.

I really felt there was a professional relationship between students and faculty associates, that we were on a par as teachers. I felt like right away I was elevated to the status of a teacher even though I wasn't certified and that really helped me to grow a lot because we were spoken to as peers. I really felt like at any point I could say, “this isn't meeting my needs” and there would be no reason why I would have to do it. This helped me to grow.

### **Modelling.**

Janine was a role model of the PDP goals. She is still learning, reading, changing...after 26 years in teaching. Janine was non-defensive when I gave feedback to her. She was an advocate for me with my School Associate who had difficulty letting go of her class. She was flexible and allowed lengthening of discussion, lots of talk time and cooperative learning.

I found nearly every activity (discussion, video, reading group exercise, presentation...) to be extremely valuable. It was relevant to my day to day and year to year (bigger picture as well as technical now-to's.) I embraced the goals on day one, but now I feel like they are beginning to become a reality.

We used methods at the university that we then incorporated into our classrooms. She gave me resources that she had used as a teacher. We talked about our philosophies and how they were to be worked out daily in the classroom. She gave me ideas about how to handle situations. I would want to be the kind of teacher my FA is and this is the best form of modelling.

### Cycle of Supervision.

Janine always started with my perceptions to encourage my development as a reflective practitioner. She would ask thought provoking questions about my practice and cite research to encourage me to re-think the effects of what I was doing.

Even when I felt I should act like I've got it all together, Janine made me feel like I didn't have to, and this helped me to grow. (never judging, always building up.) I was completely honest her because I knew she wouldn't judge me. I let her know when I was stressed out and didn't have it all together. She gave me the message that she believed in me, that I could become an excellent teacher.

### Self Evaluation.

Even though it was all up to me, I still felt the accountability. By allowing me to have 100% self evaluation I really thought through things because I was the one that was going to make a decision. I had to see where my strengths were and my weaknesses were. So it helped me to be reflective all through the process because I was the one that had to make the final judgment.

The second practicum was basically the same thing. I had to figure out where my strengths were and they had to match up with my Faculty Associate and School Associate. If I had a weakness I had to be sure that I was making some progress on it within a certain amount of time so I could feel good about making some improvement. I think self-evaluation was wonderful. Some people think we will slack off if we don't have this external evaluation but I think if you have the right people working with you it makes you work harder, it makes you strive for more.

I remember my school associate saying "Oh I remember PDP, all the hoops you have to jump," and I said, "Well we don't have any hoops to jump through. For



one reason we evaluate ourselves so why would I jump through a hoop if I can give myself my own grade?"

### **Reflection and Inquiry.**

One thing that really helped me to grow was the action research. Reflecting on technical, practical and critical issues helped me to move beyond "survival" only to strive towards excellence in teaching. It helped me to open up a whole rationale to my students so that our learning could become more meaningful. It forced me to be proactive. It forced me to look at the bigger issues and not just the running of things because you can run things quite smoothly but not really get anywhere.

Action research helped me to continue to develop my philosophy as I was forced to choose one area of focus, obviously an area of priority for me in teaching. Reflecting on my progress on my action research each week kept me on track, never losing sight of the big picture in spite of daily challenges. It gave me a focus, and helped me to tackle a challenging situation one step at a time. It is a "proactive" reflective strategy and it works.

I will continue to do action research throughout my career. I will immerse myself in books on different subjects and teaching strategies. I will pursue my personal academic interests to become more knowledgeable and well rounded.

### **Summary of seminar experience.**

In 401/402 I built the skills of being my own boss. I had to be satisfied with my own perceptions, knowing that no one was there to evaluate me, keep me in line or give me a pat on the back. This is the reality (long term) of teaching, and it was a helpful, growing process for me. I have a clearer idea of my own actions, and I am not as dependent on others for approval. These past few months have

been the best learning of my life. I wish I could take Education 401/402 part II and III!

## **Perspectives on Teaching in the First Practicum**

### **The vision and a moral agenda.**

As I plan day to day I am constantly reflecting on my vision - why becoming a powerful reader and communicator is important. I'm going to make Language Arts my informal action research plan in each situation I find myself teaching in. I'm not exaggerating when I say that it's the most important subject I'll teach. I realize that the reason why language arts as action research is so important to me is that I am "social reconstructivist" and I see literacy as one of the keys to change and improvement in society. My other keys include dignity of people (free from suffering, poverty, violence, racism, sexism...), holistic development (intellectual, spiritual, physical, aesthetic, emotional, moral.)

### **Enabling learners prompts reflection.**

After looking at one student's journal entry I'm thinking more about why a student's work might not represent what I think he is capable of. Does he need to feel more confident in his abilities? Does he need to better understand why what we are doing is important? Does he need more accountability, or push to work harder? I'm not sure exactly, maybe it's just a learned pattern of behavior from his old school. Whatever the reasons, I want to take the initiative to draw out his strengths, and help him to see how much better he could do. I'll watch him carefully, to keep him on task and not let him cut too many corners.

The setting of standards for the whole class on the performance scale was also tough. What is excellence in language arts? How many students are aiming

for and expecting an “A?” I also have to think of my goals -- to develop powerful readers and writers. They need confidence. They need encouraging grades, but I’m afraid I might lower the standards if I made “encouragement” my priority. It seems like such a tricky balance. If I had them for the whole year I would feel better because then if they got lower grades first term, we could really work towards improvement second term. They would then be encouraged, and confident in their ability and rightfully so.

**Growth an commitment is encouraged by the response of the students.**

I’m anxious but excited. I find I’m doing so many things for the first time in a day and it’s making me tired, but energy and confidence builds with every good experience. I vacillate between feeling empowered and overwhelmed! The highlight of my week was my drama lesson. It seems to come naturally to me and the kids love it. What a rush!

Thursday’s lesson went really well. It was kind of a wind-up for the novel. I was delighted with the sophistication of their thought processes and their enthusiasm for the assignment. I am becoming more and more convinced of the value of group work. I couldn’t have taught them as efficiently or effectively as they taught each other.

As I thought about my vision for the unit, I decided it would be more effective for me to ask my students what they thought they learned, rather than lecture them about what they should have learned. We voted on whether or not we would use the strategies in the future. Many said they would do them in their heads, and some said they would actually sketch out a map, or write a list of characters. They were sincere and had good intentions. This was a highlight of the term for me. But

what joy I feel, what immense satisfaction, with even just a hint of progress. I never anticipated all those wonderful feelings I'd feel as my students got excited about their work, tried so hard, worked ahead, came up with such creative and thoughtful answers...

The power and potential for change and improvement that I see in children convinced me that there is no better way for me to invest my time, energy, and talents, than in striving to become an excellent teacher. The opportunity to continue learning throughout my career was a strong motivation for me to become a teacher. Not only am I committed to lifelong learning, I am excited about becoming more knowledgeable in various fields and educational theories and practices.

### **Perspectives on teaching in the Extended Practicum**

#### **The vision.**

Though I often feel that it is taking just about everything in me to keep up with even the minimum requirements of teaching, I try not to lose focus of my higher goals, with the hope that in time I will move closer to them. In my vision, my classroom is filled with active learning, students are excited about their learning. They are experiencing, interacting, reflecting, communicating, inquiring, experimenting, researching, predicting, problem solving, and discovering their world. They work productively throughout the day, developing the knowledge, skills and attitudes which will help them make a better life for themselves and others.

#### **Management and complexity.**

Probably the biggest thing I have come to realize is the magnitude of the Classroom Management Issue. I have been working so hard on laying down a

foundation of good management so that I can effectively employ active learning strategies with my students and the progress is slow! I have had a new seating plan worked out for days but I don't think we are ready to sit in groups.

When I say "we" I truly include myself. I have to learn to be more clear and consistent, and to meet the new challenges that come with students sitting in groups. I have been working on setting clear and firm expectations for student behavior, and following through on the consequences if they are not met. I have been working on focussed observation of students, knowing what to look for when I circulate. I have been trying to remember "wait time" when questioning. I'm also trying to train myself to wait until all students are behaving appropriately before continuing on with instructions or the next activity. The progress is slow but there is progress. I am automatically using some strategies now that I just learned in the past few weeks.

**Fieldnotes mid-point in the second practicum:** On both of my observations, Kathryn has been in tears. She has been unprepared for the conference schedule, her reflective assignments have not been complete. Her action research focus is active learning but she is "unable to do active learning because of management issues." She is overwhelmed and says, "I don't know what I can stop doing." On both supervision cycles, Kathryn has been willing to do a taped interview for my research but as soon as we began, she burst into tears from exhaustion. She says she is "unable to think clearly."

Kathryn reports, "I am not where I want to be with active learning but I am trying to learn the basics. I thought I would be further along than this. I thought I should write all the report cards but I just can't imagine being able to do it. I don't have the data. There are so many interruptions. I've only

marked two things!" "I can't apply for the job search. I can't be confident. I'm not ready."

### **Reflection promotes change in practice.**

I found it easier, at first, to manage a classroom where students work individually for a large part of the day. However, this focus on management was a means to an end, not an end in itself. My ultimate focus is active learning, and now it is time to push on. Deliberating between options, I believe that it is better to take risks to move on to the higher goals than to compromise by staying with what seems most comfortable. I am also convinced that children will become more autonomous, more engaged, and more motivated to learn when active learning is the focus, and thus many of the management issues (keeping students on task, curbing the calling out, etc.) will become non issues.

I know that children need to be engaged in their learning and to develop the skills that are necessary to work in groups and thrive in community settings. I know they deserve to be a part of a stimulating and engaging environment where activities are intellectually challenging and relevant. Denying these needs could result in children being turned off school, even life.

### **Positive response of the students promotes change.**

Putting students into groups of four resulted in more positive interaction between students during group work, and, I was pleasantly surprised to find that off task behavior and inappropriate conversing with neighbours did not increase. I held the same expectations for student behavior as before, and it seems that my focus on classroom management for the first portion of my intensive practicum has paid off. Within the framework of a well structured environment, I have been able to

incorporate many more interactive lessons into our program, and I am quite pleased with the amount of student learning taking place.

There was a great sense of positive interdependence in science. Students also responded well to my giving them more responsibility for their learning. In one instance, I developed a study guide/question sheet for our salmon unit, and let them decide how they would go about learning what they needed to. Most students chose to tackle the project in pairs; brainstorming, researching, writing key notes, and then quizzing each other to see if they really knew and understood the content. It proved to be an enjoyable and highly productive period for the students.

With regards to active learning, I now approach each lesson with the question, "how can this lesson be modified so that I see less of me and more of the students?" There are many ways to meet the educational objectives, and those methods that are student centred are the first to be incorporated. My love and compassion for children necessitates a philosophy that includes all learners and is student-centered.

### **Reflection promotes a change in practice.**

I have been too focussed on marks. Part of that was that I needed to have a certain amount of data for my School Associate but I wrote a note to myself saying, "Conference more, mark less." I would spend more time conferencing with my students, talking about their work and about their improvement and less time marking, and giving back letter grades. I think its more helpful to take time samples, look at our improvement and have goals that we go for. I think grading can be damaging. I felt really bad handing back a grade that wasn't good to a student who had done their best or when I had to give a student a good grade because they had met the criteria but they didn't try very hard. Students need to

reflect on their learning.

### **Statements of Belief Upon Exiting the Program**

I'm actually surprised at how much I've changed on my ideas about stand and deliver teaching. What I realized throughout my practicum both from the learning styles that were modelled for me in seminar and through my own schooling was that it's actually not a very efficient way to teach content. I found that I could have children read a textbook and they wouldn't remember what they had read, or they wouldn't read it and they would pretend they had, or I could stand up and go over a mathematical formula fifteen times and a third of the class still wouldn't get it by the end of the three weeks. I was really surprised. I had forgotten about that from my learning.

In contrast to that, when we did things like cooperative group work and when I had the students teaching each other, they were learning in a meaningful way and they learned so much faster and better than they had the other way.

So what I learned was not only was cooperative work and inquiry based learning and using manipulatives, all those things that are associated with innovative teaching, not only are they good for the social benefits but they are probably the most effective and efficient way to teach content. I was really surprised by that. So I think it's like a win-win situation. I would never go back to teaching with the stand and deliver approach because I know I wouldn't be reaching the students and they would be bored to death. I don't think it's responsible.

I have come to realize that children like to do things with their hands, they like to be active, they like to work with their friends, and they like the idea of becoming and "expert" at something. Many children do not realize the importance



of building skills (reading and writing for example) and many don't like the idea of "hard work." Through my practicum I have come to the realization that as an educator, I must present what we do in schools in a strategic way, to "hook" students in, until they become convinced of the importance of becoming "educated" and they build the self-discipline necessary to do so.

While I have had seventeen years of school in one way, the experience that I had in PDP is far more impactful than the modelling that came before because I was at a point where I was in a crisis because I needed to teach children and I wanted to do it well and there was a lot more to it than I thought. I was at my most impressionable state because I was doing it for the first time. I was like a sponge. I was sucking up everything. The theory, the modelling we received in our module and with the books and videos of expert teachers, it's all so much clearer. I'll remember it because I was at the point where I was doing everything for the first time. I didn't matter that I had had all of high school modelled for me in one way. It didn't bring up the emotional response and it didn't connect with my philosophy. It didn't "work." So I could really never go back to that.

I've lost any arrogance or pride I may have had over the last year. I have been very humbled. I did a hundred things new in a day and I only did sixty of them right. That means I made a lot of mistakes every day and I had to apologize for them or make up for them or get around them and I think that really changed my character permanently. I can take a lot more risks now and not worry about what I will do if I fail because I've been there and it's not that bad.

This isn't my best teaching by far. I'm just learning. This isn't going to be my most risk-taking or my most innovative teaching at all because I'm trying to figure out how to run an overhead and take attendance. There's only so much that I can do. Covering the basics was keeping me busy enough. When it really came down

to it, bringing in manipulatives takes a lot more prep than opening the textbook. So what I really found was there was just no way I could come close to the vision that I had for my practicum. The time was too short. Everything was new. I just felt that I didn't have the energy or the know-how at that point to teach the way that I wanted. Even if I couldn't quite get it in my six weeks practicum I probably will in the next couple of years.

I know I have grown tremendously this term...I really feel however, that the expectations were too high and the workload too great. To teach every subject, with every major strategy, while participating in observations (2x week), action research and conferences, as well as all the other requirements that go with teaching, in just a few months is too much to expect. Yes I grew, but it nearly killed me! I know that I'm the kind of person who will grow and improve my whole life, so why does it "all" have to happen in Education 405? All in all though, I felt very supported in meeting these expectations and I did it!

I now fully understand that becoming an excellent teacher is a life-long process. I am now aware of all the resources that I must tap into if I am to become competent and current in all areas. Curriculum guides, books, workshops, university courses, and collaborating with other teachers are my major resources to continue growing.

My experience in PDP is like the formation of a metamorphic rock: changed by heat and pressure. The heat is on because you're in the spotlight. The pressure is on because you're busy and there's a certain amount that you want to get done. It's a process over time. It won't take me a million years I hope, but it will take my entire career. I know that it will because there is always more to learn. So the process of changing and improving in teaching is a process over time. Coal turns into diamonds under heat and pressure. It takes a million years.

## CHAPTER SIX

### ANALYSIS OF THE DATA

This chapter presents a critical analysis of the data related to the teacher education program that is the subject of this study. The data analysis is directed by the questions posed in Chapter One which are the central concerns for this study.

The themes under which the data are presented in this study arose from my analysis of the student data. As noted in chapter four, these data were taken from a number of documentary sources such as writing done by students on the first day of the program to reflect their entry perspectives, journal summaries, reflections on lessons formally observed, feedback on the program, questionnaire data and interviews. I compiled a set of data for each student, similar to the vignettes for Pam and Kathryn, and analyzed the data sets for themes. I was looking for data that showed evidence of student beliefs, that spoke of factors that influenced the students' development, and data that explained the lived experience of students in the module. I also looked for disconfirming evidence and I attempted to present the range of perspectives evident in the data. The themes that emerged from the data and examples of statements that illustrate the themes form the substance of this chapter. I also include my observations as a participant observer as they relate to the data presented here.

I understand that it is the role of the researcher in qualitative studies to seek and report the range of perspectives within the sample and to communicate instances in the data which are dissenting or contradictory to the majority view. While every effort was made to select subjects that represented the range of perspectives within the module, the data available to me showed the program in a positive light. It must be noted that, wherever available, data that communicated

critical or dissenting views of the program and its impact have been included in this report.

I have recognized the limitations of my role as participant, observer, teacher, researcher, and evaluator in conducting this study. In spite of these limitations, the analysis of the data and the presentation of the vignettes create impressionistic insight into the degree of conceptual change evident in the perspectives of the teachers in the module, into the factors that effected change, and into the lived experience of the students.

### **Student Entry and Exit Beliefs**

The first objective of this study was to determine whether or not conceptual change had occurred in the stated beliefs of the students in the module. In order to determine this, I selected seven students that I believed to be representative of the range of beliefs in the half of the module that I supervised. From the writing and interview transcripts of these students, I selected passages that were indicative of student beliefs upon entering and exiting the program. These data are presented on the following pages in Table 1.

**STATEMENTS OF ENTRY AND EXIT BELIEFS****Entry Statements****Exit Statements**

<b>Student A</b>	
<p>I come from a traditional school background where the teacher was the direct source of information. I believe that the teacher is in charge of relaying content and knowledge (not quite the empty vessel, but that idea.) The children must learn information, interact with it and give it back on a test. Group work or drama are "add-ons" to enrich the experience</p>	<p>The teacher is a part of of classroom interactions, not the direct source of knowledge. The learning experience includes interactions with classmates and materials. It extends beyond the four walls of the classroom to include learning from buddies, from members of the community, and from exploring a variety of rich media.</p>
<p><b>Student B</b></p> <p>My experience of being a student has contributed to my initial philosophy about teaching and learning. I came from a very structured school system where it was very much paper and pen and sit in straight lines. I believe that there are fundamentals that need to be taught in order to equip children to be contributing members of society. The teacher is the direct source of knowledge.</p>	<p>There is no comparison with the amount children learn when they are actively constructing meaning rather than with me just talking. I have found that group hands-on activities allow students to explore and collect their own knowledge with me acting as a facilitator rather than "impartor of knowledge." As I was more immersed in the teaching, my frame of mind became more open and I looked for different and exciting ways to present curriculum materials. I guess when you believe in an approach to teaching and embrace it, it becomes a part of who you are.</p>
<p><b>Student C</b></p> <p>The pattern goes like this; The teacher stands up at the front. The students read something or the teacher lectures about something, then the worksheets are handed out and students have to finish them before the end of the period.</p>	<p>The whole idea of "giving more" to students, like responsibility, ownership, inquiry, hands-on/minds-on learning experiences and interaction with peers...I feel like we are on the forefront of all this exciting information and it is our responsibility to use it, model it and share it with all the teachers we come into contact with.</p>
<p><b>Student D</b></p> <p>School is a preparatory stage for life outside of school. It is to instill certain values, skills and knowledge which will help students to be productive members of society.</p>	<p>When I entered PDP my head was full of ideas on how I was going to create positive relationships and learning experiences within my classroom. All good ideas, only problem was my lessons were teacher-directed and irrelevant. I would say there has been probably a dramatic shift in beliefs, or world view. I no longer liken teaching to being an actress on stage but rather see my voice as one among twenty-seven. I've made great strides to take the focus off me and place it were it is rightfully due - on the students.</p>

Table 1 continued

**STATEMENTS OF ENTRY AND EXIT BELIEFS****Entry Statements****Exit Statements**

<b>Student E</b>	
<p>Children learn from positive reinforcement that comes from enjoyment in the task. I would make classroom management a priority from the first day. It is important for the teacher to be respected and I think that structure is the key in the classroom. Clear expectations are a must.</p>	<p>I realize that students are unique and cannot be treated or taught like "cookie cutter kids," I have tried to put myself in their shoes, watched for their personal bests and celebrated with them. I feel I have grown from having the focus on me shift to where I can better look at the students' needs and attempt to meet them. I am reaching further into the future now..to the impact I can have on the leaders of tomorrow.</p>
<p><b>Pam</b></p> <p>Students are very worthwhile and very valuable and yet they are sinful. They need structure, guidance, and they sometimes need to be taught a certain understanding of the way life is. Direct instruction is what I learn best by and what I believe in for other students. I am convinced students must learn an actual body of knowledge because they will not be able to function in our technological society. I also believe that there is an absolute truth and solid knowledge.</p>	<p>I do not think that schools should portray knowledge as solely personally determined without any standards or starting place. The schools should give students as much as we know thus far. I hadn't expected so much fluctuation in the "trendy" philosophy of schools, but I have also seen that teachers do not fluctuate quickly.</p>
<p><b>Kathryn</b></p> <p>If you want to deliver content and if you want students to learn facts, the best way to get that across is to either read it in a textbook or hear it from the teacher and to memorize it. Traditional methods of teaching are the most effective way of teaching content and innovative methods are best for teaching skills and attitudes. The role of the teacher is to transmit knowledge and skills and pass on cultural values. Children learn in various ways and learning is hard work but once you get some facts then you can start to apply them.</p>	<p>I would never go back to teaching with the stand and deliver approach because I know I wouldn't be reaching the students and they would be bored to death. I don't think it's responsible. I have come to realize that children like to do things with their hands, they like to be active, they like to work with their friends. Through my practicum I have come to the realization that I must present what we do in a strategic way to "hook" students in until they become convinced of the importance of becoming "educated."</p>

There is evidence in Table 1 to confirm the contention in the literature (e.g. Hollingsworth, 1987; McDiarmid, 1991; Britzman, 1986; Powell and Riner, 1992) that preservice teachers enter teacher education programs with well-formed beliefs about the teaching and learning relationship. For example, Student B states "I began PDP with a pretty clear, if theoretical philosophy of education and my expectations of students." It is also evident in the data that these beliefs were formed, in part, by their prior experience as students in schools. In support of this assessment, Student A says, "I come from a traditional school background where the teacher was the direct source of information. I believe that the teacher is in charge of relaying the content."

A theme that is consistent in the data regarding the entry perspectives of the student teachers is that teaching is a transmissive act. It is evident from the data in Table 1 that the preservice teachers entered the program believing that knowledge is external to the learner and was to be found in textbooks and in the mind of the teacher. To illustrate this, Kathryn states "the role of the teacher is to transmit knowledge and skills and to pass on cultural values."

The data do, however, indicate a clear conceptual shift in perspective in the belief statements taken at the end of the program. Student B, upon entry to the program, indicates that she believes that there are "fundamentals that need to be taught." She continues by saying that "the teacher is the direct source of knowledge." When she exits the program, she says "there is no comparison with the amount children learn when they are actively constructing meaning." She continues to note that she has become a facilitator of activities that allow students to explore and collect their own knowledge.

Student B does use the word "present" to speak of the learning experiences she designs for children. Her choice of this word could lead one to believe that she

was using didactic methods. My observations of this student's teaching, however, are quite the contrary. For example, during a formal observation of a lesson intended to facilitate the expression of student opinion and to determine the difference between fact and opinion, this student teacher broke the class of seven and eight year olds into four groups. The groups met to discuss the new playground rules and to debate their relative merits. The children then met in pairs with members of other groups to discuss their perspectives. Finally they met with the student teacher who extended and clarified their thinking and promoted their reflection. The only "presenting" done during this lesson was to provide a framework within which the students could discuss their perspectives.

In support of my assessment of conceptual change on the part of this student, the following quotation from her school associate triangulates my perception. The school associate writes:

...significant change seen in ability and willingness to take risks with instructional strategies such as "four corners," and science stations.  
and

...turnaround in classroom management beliefs; moved from quieter more structured approach to belief that noise (children talking and being actively involved) can lead to better learning.

Another example of conceptual change is indicated in the belief statements of Student C. This student's entry beliefs are a recitation of a pattern familiar to many students: teacher talks, students listen, students do worksheets. Her belief statement upon exiting the program indicates a dramatic change in perspective.



The student wants to “give more” responsibility, ownership, inquiry, and interaction with peers and materials to her students. She believes she is “on the forefront” of new information about teaching and learning. Moreover, the data indicate a sense of agency in her perspective from the quote, “it is our responsibility to use it, model it and share it with all the teachers we come into contact with.”

My observation of her teaching would support my assessment of conceptual change as well. For example, on one observation, pupils in groups were given large tubs of water and an assortment of containers with which to experiment, observe, hypothesize and draw conclusions about liquid measure. The student teacher circulated, probing pupils’ thinking and inviting them to share their discoveries with their classmates.

At the end of the program, the data reveal that our program goals had been realized, to varying degrees, in the practice and perspectives of all of the students with the exception of Pam. There is evidence in Pam’s vignette that her entry beliefs about teaching and learning were a persistent factor into her second practica. At the end of the program, Pam *reports* that her beliefs about teaching and learning have dramatically changed but I am wary of this assertion. It is clear that Pam expanded and deepened her intellectual grasp of factors that influence learning. Moreover she employed a variety of teaching models. Her involvement in reflection and action research projects challenged her to envision new ways of providing learning experiences for children. She also says that she understands constructivist theory and its application to teaching. Additionally, it is evident that action research stimulated reflection throughout her practica.

But, as Pam stated at the outset of the vignette, she believes children are sinful and need control and guidance and it appears that her classroom perspective was an extension of her religious perspectives. Throughout her

practica she continued to stress control over both students and content. Pam uses alternative models of teaching as a means to help students to master the content she has presented to them and to arrive at the one correct answer for every question. Because of the persistence of this mindset, questions remain for me about Pam's long-term commitment to alternative methods of teaching and I am skeptical about her claim of conceptual change.

Table 1, however, tells only tells part of the story of student belief. While the table represents the students' statements of beliefs in relation to the delivery of curriculum, further examination of their entry perspectives reveals that the preservice teachers also held liberal, humanistic views of the relationship between teacher and learner and that they were concerned with the affective side of teaching. For example, Student B stated in Table 1 that the "teacher is the direct source of knowledge" but she also states the following:

... I have developed a deep consciousness for justice for all people. This extends itself into the classroom in that the children we teach deserve the very best available to them to develop their uniqueness. This requires a commitment to the children first as people then as learners. The curriculum is of no relevance if it is presented in a manner which is inappropriate for students. It is important for the teacher to create a supportive atmosphere for learning and growth.

Student B may well have been "ripe" for conceptual change. It appears from her exit statements that she relinquished her belief that the teacher is a direct source of knowledge in favor of methods that advance her liberal and humanistic views. A further example of the students' conflicting beliefs is evident in the entry

statements of Student C Table I who recites a “teachers talk-students listen and regurgitate” conception of teaching. This student also states that the teacher should be a “facilitator and guide.” That teachers need to “motivate learners by drawing on the abilities, needs, interests of the students,” mindful of their uniqueness. She continues that the teacher “must create exciting, stimulating learning environments” and a “caring, loving, encouraging atmosphere.” This leads me to suspect that she may simply have been unaware of alternative models of teaching.

There is evidence in the data that these preservice teachers held transmissive views of teaching at the same time holding beliefs that are liberal, child-centred and humanistic. Moreover, the data indicate that the preservice teachers were willing to relinquish their transmissive beliefs by the end of the program. The following exploration of the data provides insight into the conditions which nurtured the development of students’ child-centred beliefs and persuaded them to surrender their transmissive beliefs.

### **Factors that Contributed to Conceptual Change**

The questionnaire (Appendix C) asked the students to indicate the degree to which a number of factors influenced their understanding of teaching and learning. I coded these questionnaire responses together with additional documentary evidence and interview transcripts. I analyzed the coding to determine themes that were indicative of factors that were instrumental in promoting or limiting their conceptual change. The following themes emerged from my analysis of the student : modelling, autonomy, and reflection and inquiry.

## **Modelling Contributes to Conceptual Change**

A theme that emerges from the student data in promoting conceptual change is the modelling done by the module team, guest presenters and school associates.

### **The Module Team**

Analysis of the data on the modelling done by the module team reveals that the modelling was an effective contributor to students' conceptual change when the teaching behavior of the model was consistent with the goals of the program. The students understood what it is to be a lifelong learner, what it is to strive for excellence, to be open and reflective and to demonstrate care when they saw this behavior modelled by the module team. The following excerpts illustrate the students' perceptions of modelling done by the module team.

My FA was a good "role model" of the PDP goals. She modelled that we should continually be growing professionally... This enhanced my growth by encouraging me to always strive towards excellence and continually develop new understandings-- being a life-long learner.

My faculty associate really practices what she preaches and seems to be in the same boat as us to some extent as a student. She was being very vulnerable by giving us her action research which is very personal and this opens an avenue for me to be vulnerable with her. Now I understand that we are both on a learning curve together. It narrows the gap between teacher and student.

My faculty associate was a role model for me as a teacher, a professional in her field and as a reflective practitioner. She was able to reflect on and enhance her interactions with us and was always open to comments. Her love and respect for us and for children, as people and learners, was apparent in all she did.

When the behavior of the module team reflected the goals of the program, it helped to lower the level of abstraction so that students could understand what the goals of the program looked like in practice. This analysis is supported in this excerpt from the data:

I think we had a wonderful opportunity to be exposed to a lot of different models of teaching. I felt my understanding dramatically changed and shifted through this process. Teachers can create positive and relevant learning environments when they understand what it looks like.

It is also evident from the quotations cited in the preceding data that the students formed a strong personal connection with their faculty associate. In connection with this, I recall a quotation from an educator whose name I have forgotten but whose sentiment remains. The quotation went something like this.. "we can learn nothing from those we do not love." If this is the case, a strong personal bond between teacher educator and student could result in advancing the students' learning.

In my experience of PDP as a preservice teacher, my perspectives on teaching and learning were forever influenced by the close personal relationship I had with my teacher educator. She modelled a caring concern for her students.

As a result of her modelling, I felt inspired and I wanted to emulate her practices. Because of her example, I believed I had the moral obligation to be an agent of change and to make a contribution to the lives of children. Her modelling and our personal connection twenty-eight years ago continue to inspire my practice and to direct my reflections.

Judging from the student data, the teaching that is consistent with the goals of the program and within the bonds of a close personal relationship between student and teacher has the potential to effect the teaching perspectives of these preservice teachers. Yet modelling is a factor that appears to be ignored in the literature. An ERIC search on the effect of modelling on preservice teacher beliefs yielded no empirical studies.

### **Guest Presenters**

To gain further insight into the elements of modelling that create an impact on the student teachers' perspectives, I analyzed the students' response to the modelling done by guest presenters to the seminar. Two of three guest presenters had a positive impact on the students while a third presenter engendered resentment and annoyance. While they had only one contact with these presenters, that impact lasted for the duration of the program. Students' feedback forms cited the modelling done by the positive presenters as inspirational and motivating. The following quotation captures student experience of this modelling:

One presenter who did a session in the module also showed me the deep devotion that is hers for her students. Her inspiration spilled over into her presentation. I hope to inspire children to do the same things in my classroom. I wonder if language arts would be a vehicle which could be

used to empower learners.

All three presentations were practical, concerned with curriculum and had direct application to the classroom. In all three cases the presenters were experienced in working with adults, were knowledgeable in their fields and well-prepared with engaging activities to advance student understanding. The difference, however, appears to lie in the *manner* in which the material was presented. The teachers who received the positive response from students in regards to their modelling spoke to students as equals and set an inclusive tone in the classroom. They spoke of their work with children in ways that demonstrated their desire to empower and enhance children's lives. They spoke of their beliefs and practices about teaching and learning with conviction and passion. They were visionary and charismatic and they inspired an emotional response from the students. The students believed these teachers exemplified the goals of the program.

The students reported the lasting impact of these one-shot workshops throughout both semesters. They spoke of these teachers in glowing terms and desired to emulate their teaching practices. In contrast, the presenter who fostered student annoyance and resentment was believed by students to "talk down" to them. They felt she established herself as "the expert" and them as "the learners." The tone of the interactions during the presentation was hierarchical and distant. She demonstrated technical mastery but communicated no passion for her beliefs, no vision or caring to the student teachers. The students did not want her to return to do a follow-up session.

I have no data to indicate whether or not the students actually implemented ideas from the workshops they received so positively. It is my perception that the

content of the seminars was less important than the manner in which it was delivered. The presenters spoke from their hearts about programs that enabled and empowered children in ways the students had not yet imagined. They spoke to the students' idealism and left a lasting impression of what is possible to be and to achieve in teaching. From this encounter, it is my perception that students experienced modelling as conducive to conceptual change when it was inclusive, visionary, and connected with children.

### **School Associates**

In their response to the questionnaire, most students report that the modelling of their school associate was a factor in their development. The following quote summarizes the students' response to school associate modelling:

I was very fortunate to be placed with two wonderful school associates. Both of them had a significant influence on the development of my child-centred philosophy of teaching.

and...

Conversations after lessons, after school, and on teaching in general had a tremendous impact on my practice, methods and the strategies I tried.

My school associate modelled the reflective process to me -- showing how important it is for teachers to constantly be thinking critically about their teaching and making necessary changes. She modelled creativity, humour, and making the content come alive as well as the importance of setting clear expectations.



From my experience as a participant observer, and from the results of the questionnaire, students placed more significance on the modelling of school associates when it was consistent with PDP goals. It is my observation that when school associates favored transmissive teaching practices, the students did not cite the modelling as a factor in contributing significantly to their understanding of teaching and learning. This observation is supported in the data by the following student comment:

I benefited from the modelling of a well organized classroom, where students were generally happy to be in school and a decent amount of learning was going on. I would have liked to see more innovative methods modelled.

Not only is modelling not a positive influence when it is not reflective of the goals of the program, it is my observation that it can be detrimental to students' development. I have observed that the students' commitment to alternative practices can be undermined in settings where direct instruction is the only method of teaching practiced and alternatives to transmissive modes of teaching are devalued as "the stuff of the university." The student is caught between two conflicting perspectives and is not encouraged to persist with implementation when difficulties arise.

I believe this to have been a factor in Pam's development. While her school associates in both practica permitted experimentation with alternative models, they practiced only transmissive models and one was extremely authoritarian. Within these practicum settings, the data indicate that Pam believed that little had really changed in education. It is my assessment that because of this, she felt comfortable retaining her entry perspectives on transmissive teaching. Had Pam

been placed with teachers whose practices were consonant with the program goals, her entry perspectives may have been challenged.

Three of the student subjects in this study had school associates who enrolled in the field study course on mentoring student teachers. The students all report that their school associate's involvement in action research through the mentoring program was a positive contributor to their growth. Through their involvement in action research, school associates modelled themselves as learners in the continuous process of inquiry into teaching. This strengthened the bond between school associate and student teacher and created a reciprocal relationship which placed both student and teacher on a learning continuum as professionals. This is demonstrated in the following quotations from the student data.

My school associate's involvement helped bring us together to work even closer as a team. Her interest in helping me to grow encouraged me. It was helpful to see someone go through the action research process at the same time as I was and it was beneficial to be so closely involved in the research. What I found most encouraging was that she was learning something from me and was not there just to help me grow...I could reciprocate!

It was great to share the experience of doing action research--and sharing our growth and new understandings. Overall, a positive experience and I highly recommend it. It gives a common language for discussion and enables the school associate to better understand the PDP experience, to empathize, and cooperate with the program to help lead the student teacher on to growth as a professional.

The modelling in this case is influential because it placed the student and school associate in a collaborative learning relationship. The students felt that their experience as a learner was better understood and was shared by the school associate through their common involvement in action research. Once again, the data convey that the students found modelling to be influential in their development when it paralleled the goals of the program.

### **Autonomy Contributes to Conceptual Change**

The module team set out to promote student autonomy because we believed that autonomy was a necessary prerequisite to genuine conceptual change. In connection with our efforts to promote autonomy, a number of students in the study recounted their metaphor of their first few weeks in PDP. They expressed the feeling that they were free falling, like skydivers, out of control. This feeling persisted for them until they “understood enough to open the chute” and they were able to “use the toggles to direct their fall.”

The students’ metaphor for the initial weeks of the program resembles my own. I felt during those weeks that we had “pushed them out of the nest.” In my mind as well, they were free falling. It is my observation that before too long, they began to experience the program in a different way. Their free fall became an experience of controlled flight as their confidence and sense of autonomy began to grow.

The theme of student autonomy and its influence on their pedagogical thinking is recurrent throughout the data. The data report that the feeling of autonomy was promoted by numerous factors within the program design and its implementation. The factors that were conducive to autonomy and their impact on

student beliefs and perspectives are discussed in the following sections.

### **Factors Within the Program that Promote Autonomy**

#### **Trust, Choice and Limited Assignments**

The first theme that is evident in the data is the feeling of trust experienced by the students. This is reported by Kathryn in the vignette when she states,

Even when I felt I should act like I've got it all together, my faculty associate made me feel like I didn't have to, and this helped me to grow. (never judging, always building up.) I was completely honest her because I knew she wouldn't judge me. I let her know when I was stressed out and didn't have it all together. She gave me the message that she believed in me, that I could become an excellent teacher.

Analysis of the data indicates that students believed they were entrusted to grow and that they were given choice in determining the direction of their growth by the module team. The choice permitted them to direct their development in their own way. The following quotation supports this assessment:

I felt that I was given the responsibility and trust to grow as a professional without always being told what to do. We were given a lot of choice and by allowing us to become independent learners we could develop our own person, personality, and style in teaching.

The data report that students' feeling of autonomy also arose from the

experience of having input into the direction of the program. Because they were required to assess their needs and have input into their curriculum, they had to assume the responsibilities of professionals in directing their own learning. This belief is evident in the following:

This module program has enabled me to become an independent learner in that it was focused on meeting our needs. I feel like the students in the module owned the program much more than our FA's did. They were there basically to meet our needs. We were continuously asked for input. What do we feel we need? What are our most pressing concerns? I really appreciate the way that they took our concerns into consideration. It made us take the responsibility of the program upon ourselves.

The limited number of assignments prescribed by the module team contributed to the students' sense of autonomy and freed them to pursue their own goals. The following quotation illustrates this perception.

We were given freedom from "requirements" and that pushed us to pursue our own autonomy and success.

### **Self Evaluation**

Self evaluation was also indicated by the data as factor in promoting student autonomy. As a result of self evaluation, students began to identify themselves as professionals and to develop a mastery orientation towards their development. This is indicated in Kathryn's vignette as she states "some people think we will

slack off if we don't have this external evaluation but I think if you have the right people working with you it makes you work harder, it makes you strive for more." Kathryn's perspective is also shared by other students in the module and demonstrated in the following quotations:

Not having grades, mid-terms and a written final has helped me a great deal in switching from "student" to "professional." I'm learning for myself and my students now, not just a grade.

Unlike many courses in university I feel I've taken charge of my own learning. Readings and assignments are no longer done just because I need to jump through a hoop but because I want to grow as a professional and have a positive impact on my class.

As resistant as I was to self evaluation, I feel that it more than anything else shaped my understanding of teaching and learning. Self evaluation forced me to look for answers and guidance within myself. It made the whole practicum and PDP process more meaningful and, I feel, more beneficial.

The data further indicate that self evaluation promoted student autonomy by creating an environment for students to experiment and take risks in teaching:

It (self evaluation) just sets the stage for us to be lifelong learners...we won't always have others to help us out or tell us how we're doing. It also took the stress off-knowing we weren't being "rated."

Self evaluation helped me to see myself as a professional rather than a student. It also gave me security as I felt free to take risks and try different things.

Pam's vignette illustrates one example of how self evaluation promoted autonomy and risk-taking in the practice of the students in the module. In Pam's case, she planned a difficult and complex lesson for a formal observation but she viewed it as an opportunity to learn rather than as a threatening situation because of the absence of external evaluation.

### **Action research promotes autonomy**

The data indicate that students believed that action research promoted their autonomy and independence by providing them with the tools they needed to problem-solve, critique and analyze issues in teaching. The following quotation demonstrate the students' understanding:

Action research has taught me to become an independent learner. It has given me the tools to be able to make things problematic and how to find answers to these problems. Being able to critique things according to the technical, practical, and critical aspects has really helped me in that I can now take a deeper and more informed look at teaching in general and my own teaching performance.

The data reveal that action research promoted student autonomy by giving them confidence in their own abilities to deal with the complexities of teaching. They believe that action research and reflection enabled and empowered them

during their practica but also, the students attest to continuing to use this tools throughout their careers. This assessment is supported in the following quotation:

I believe in action research (you've convinced me!) and I'm willing and excited to make it "my own." I know I'll continue to use it in my career as I face big challenges. Action research is a tool I now have to help me and that gives me confidence.

Perhaps one reason why students are so much in favour of inquiry in the form of action research is its perceived ability to make learning to teach more manageable. Preservice teachers write that there is too much to learn. They are overwhelmed with the magnitude and the complexity of teaching that becomes evident during the practicum. Most students gained comfort and confidence in knowing they were responsible for depth of understanding in just one area of inquiry:

Action research taught me how to approach and attack my questions and big ideas and issues in education. It kept things manageable for me and I liked how we were encouraged to thoroughly research one area and dig deep rather than skim the surface of several ideas.

While some students expressed frustration at "being restricted to one aspect of teaching when there was so much to learn," they soon realized that in-depth examination of one issue developed understanding of many other inter-related issues. This is apparent in the following quotation:

There are so many big and overwhelming issues in education. My action



research helped me to focus and concentrate my efforts on learning and discovering new ideas about one specific topic. But I quickly learned that within education, ideas are very much interconnected and have a profound effect on one another.

The autonomy afforded by the process of action research prompted students to look beyond themselves and begin to address issues that impact upon the lives of children. As they began to reflect on larger social issues, they began to explore, challenge, and question existing classroom practices and their implications for society. Their conceptualization of the role of the teacher expanded and they felt empowered to make changes in their teaching and to address larger issues impacting the lives of their students. They became pro-active and developed a sense of moral agency. The following quotations support this analysis:

I began my practicum with a question for my action research: How can we celebrate diversity? This question caused me to look at my classroom again in a different light. What can I do to make it more inclusive of the differences found in the class? At present there is not a single bit of evidence of other cultures in the classroom besides an anti-racism poster on the door which seems to be there more for the bright colours than the sentiment described thereon. There seems to be a total lack of sensitivity to this whole issue in the classroom.

Another student writes...

Society on the whole needs help in understanding each others' unique

abilities and how we can work through those differences together for a desirable outcome. We need to help students learn to work together so they can survive in an increasingly complex, changing and unpredictable social and economic world. It's about bringing peace and security to our society--- together.

She continues to address another issue in her classroom...

I am increasingly concerned about the passivity of my girls. I need to make a conscious effort not only to call on them more but to get to the real "root of this gender issue." Yet I need to proceed cautiously.

It is clear from both of the vignettes that Kathryn and Pam also reflected on moral issues in education as a result of their involvement in action research. Pam experienced difficulties with students' social relationships that she attributed to their home environment. She reflected on ways to address this concern and to bring about changes in student perspectives that will create an impact on society. Kathryn hoped to empower learners through literacy. She saw her teaching role as instrumental in changing and improving society. While Pam and Kathryn have different objectives as moral agents, it is apparent in the data that both students view agency as part of their role as autonomous professionals.

While action research was instrumental in promoting students' confidence and consequently their autonomy, there were a number of students whose confidence was undermined by the teaching practices of the module team. Our teaching created dissonance and uncertainty for them.

### **Dissonance and Uncertainty**

Two student teachers expected faculty associates to teach in ways that minimize ambiguity and uncertainty. Pam's vignette expresses a need for more direction. She expects the module team to "let her in on the secret" of how to teach. Another student teacher writes that she needs "a straight answer from a professional." She complains that there is "too much eduspeak and too little practical information." More direction, guidelines and standards are seen by students as ways to provide clarity and reduce ambiguity and uncertainty in learning to teach.

There is evidence in the data that self evaluation contributed to students' dissonance and uncertainty. Pam reports feeling that external evaluation was still a factor in the program because of the portfolio requirements. It appears that she viewed the presentation of her work in portfolio like an external evaluation. Another student shares this perspective and the following quotation indicates that she felt that autonomy was given with self evaluation and then withdrawn with the portfolio requirement.

I feel that the intent of self-assessment is a good one, however, I do feel that we were given this opportunity and then some of it was taken back by the descriptive manner in which our action plans and summaries were requested.

For one student, self evaluation created tensions, anxiety and a heightened sense of vulnerability because she did not receive the tangible and external recognition of their efforts to which they had become accustomed. She wonders if she is "making it" and she wonders if she is pleasing the teacher:

I was never quite sure where I stood with my faculty associate. Was I doing OK? Was I progressing and growing in her estimation? Did I disappoint her as a teacher and a growing professional? A student teacher needs to grow and develop at their own pace and individually yet I would like to know comparatively where I stand and if she thinks I am meeting those descriptors of excellence. I struggle with my confidence.

The final was a great disappointment and source of frustration -- after all my hard work I left the final wondering if I had done it right and what my faculty associate thought of my growth.

While I did not include these perceptions of the module program as a factor in limiting students' conceptual growth, it has given me cause for reflection on the heightened sense of vulnerability experienced by student teachers. It was my perception that I was lavish in praising, recognizing and encouraging student development, however, the data indicate that some students needed more. I am unsure to what extent this need should be fed by the faculty associate. I believe it is more appropriate to encourage preservice teachers to strive to meet personal goals and to develop a sense of independence and autonomy rather than aiming to please the teacher.

Moreover, I did not include the creation of dissonance and uncertainty as a factor in limiting conceptual change because I believe it can contribute to professional growth and it can result in autonomy and understanding. The following quotation from the student data indicates her perception that growth resulted from her struggle to make meaning:

Just as we students grew in our understanding ...so too did our FA's.

Through their own struggles, clarity was brought to the task for me. If they had known all the “answers” at the start they may not have understood our confusion. With our faculty associates starting with us, it forced me to struggle ...and as a result, it brought me to a place where I would not have gone. You often find value and worth in an activity when you have to struggle with understanding it as opposed to being handed a black and white proposition of what it should look like.

### **Reflective Practice Contributes to Conceptual Change**

A third theme emerging from the data as factor contributing to students’ conceptual change is reflective practice. This section analyzes the student data for information regarding the students’ perception of reflection in their practice, the factors that encouraged their reflection and the ways in which reflection contributed to conceptual change.

#### **Students’ perception of reflection**

The data express the students’ belief in the power of reflection to help them to grow as teachers.

Reflection was crucial to growth in this program and as a professional. I learned to identify my own weaknesses and strengths and areas that I needed to improve and change. This particularly prepared me for the future – critically looking at my teaching and issues that affect the students, their lives and my teaching.

Reflection will keep my practice fresh, discarding what isn't working and strengthening what I keep. Reflection brought me to a place of discovery. Many areas of weakness and strengths were brought to light. In particular was my tendency to lean towards teacher directedness in the beginning.

Reflection came to be a huge part of my teaching. I discovered it to be a powerful and meaningful tool in my development. More than any thing else I have seen that the complexity of teaching can be excruciating. I was overwhelmed with how much I had to learn. What I came to realize was that I couldn't possibly learn everything and that there were not clear-cut, straightforward methods and techniques to be learned. A teacher must be a life-long learner. Teaching requires a commitment to learning and growing...I am eager to demonstrate that I too am a researcher and experimenter as an in-service teacher.

These data express the students' belief that, through reflection, they are better able to assess and analyze their own teaching. Reflection is seen as a tool to assist the professional to continue to learn and grow in teaching.

### **Factors that Stimulate Reflection**

Because the elements of the program were interrelated and mutually reinforcing so, too, are the data that support the themes. A number of factors that were instrumental in promoting autonomy were also indicated by the data to be supportive of reflective practice as well. The student data relating to these issues have already been explored through the lens of autonomy, so I will not revisit these data in depth to demonstrate their contribution to reflection. But rather, support my

assessment of their contribution to reflection through limited examples and proceed to other factors in the program that encouraged reflection.

The data indicate that self evaluation promoted both student autonomy and reflection. An excerpt from Kathryn's vignette supports this analysis.

By allowing me to have 100% self evaluation I really thought through things because I was the one that was going to make a decision. I had to see where my strengths were and my weaknesses were. So it helped me to be reflective all through the process because I was the one that had to make the final judgment.

Similarly, action research was an aspect of the program that promoted not only autonomy but also reflection. Again, excerpts from Kathryn's vignette demonstrate that action research cultivated student reflection.

One thing that really helped me to grow was the action research. Reflecting on technical, practical and critical issues helped me to move beyond "survival" only to strive towards excellence in teaching. It helped me to open up a whole rationale to my students so that our learning could become more meaningful. It forced me to be proactive. It forced me to look at the bigger issues and not just the running of things because you can run things quite smoothly but not really get anywhere.

Action research helped me to continue to develop my philosophy as I was forced to choose one area of focus, obviously an area of priority for me in teaching. Reflecting on my progress on my action research each week kept

me on track, never losing sight of the big picture in spite of daily challenges. It gave me a focus, and helped me to tackle a challenging situation one step at a time.

Additional aspects of the program that were noted in the data to promote reflection are explored in the following sections.

### **Examination of ideas.**

It is evident in the data that the examination of educational issues and alternatives became a stimulus for reflection and promoted students' conceptual change. The students engaged in discourse concerning their beliefs on educational issues. They had opportunities, in study groups, to challenge each other's assumptions and articulate alternative points of view. This discourse was sparked in seminar by guest speakers, readings, case studies and so forth and was fundamental to the module program.

It was a concern of the module team that the students not experience the program and our perspective as dogmatic and limiting. We wanted the students to leave the program equipped to assess and analyze educational contexts and decisions for themselves. In this regard, the data relate a feeling of acceptance of diverse opinions within the module community. This acceptance of diverse beliefs promoted students' autonomy and their critical examination of educational issues.

I've really appreciated the fact that it didn't matter if we didn't agree we could just stand up and say I really don't agree with you and these are my reasons and I wouldn't be shot down in flames but they would be discussed and accepted. I've really appreciated that because it's made me think and it's



made me challenge my own beliefs and defend my own beliefs more than I've ever had to do.

The data further report that the examination of educational ideas and exploration of alternative perspectives in a supportive environment cultivated students' reflection and resulted in changes in their teaching practice. The following excerpts illustrate this:

What has stretched me most and pushed me out of my comfort zone has been the thinking and discussing and reflecting about the "why" and issues of social justice, and equality and the impact of education on society and vice versa.

Another student relates...

As a result of my campus experience, I am more determined than ever to implement cooperative learning in my classroom. Participating in various group activities this week has shown me how important it is to have fellow classmates that you can bounce ideas off of, see where you lack understanding and find support for your ideas.

### **Congruence between belief and practice.**

The data reveal the potential of reflection to assist students to align their beliefs and practices. An example of this is found in Kathryn's vignette. Kathryn recounts the dissonance she experienced because of her reluctance to implement interactive teaching practices in the classroom. She is hesitant and nervous about the outcome of venturing into interactive teaching but her reflection points out the

inconsistency between her belief and her practice and she takes steps to align them. Her vignette illustrates the change in practice that resulted from reflection.

### **Reflection Promotes Change in Perspectives**

The data demonstrate that reflection and inquiry prompted students to think of teaching and learning in new ways. Kathryn's vignette reports her changing perspective on evaluation. Through the process of reflection, she began to envision new methods of evaluation that would be more effective in enhancing student growth. Another example of practice changing as a result of reflection is found in the following illustration.

One area that has changed quite dramatically is my view of classroom management. I have come to see that loud voices and lots of talking can lead to lots of learning and does not mean that children are off task. I now enjoy the chatter instead of being worried about it. This has come with my comfort at trying new approaches to student learning.

she continues...

There is lots of student interaction in my classroom. This has been the case from the start as that is the way my SA teaches, but I have been able to carry that over into my teaching and I am learning new ways to allow this interaction to be meaningful and useful to student learning. My view of the teacher has changed from that of a more direct source of knowledge to that of a facilitator of students' own discovery of knowledge.

Another excerpt from the data indicate that reflection in, on, and about action

facilitated a change in student perspective and practice.

An area that I have had to work on is my interactions with students while they are working. Initially, I merely asked them how they were doing which, I found, failed to promote further thinking or to challenge them. I began to realize that I was missing a valuable opportunity to promote further understanding of concepts and extend learning. I began to ask more probing, process-oriented questions and answering student questions with questions which would take them through steps to the answers required. Student understanding of concepts learned became clearer and the focus was then more on the process than the product which is far more important for much of the students' later learning.

### **Factors that Limit Conceptual Change**

In order to promote conceptual change and move students beyond survival in the practica, the module team asked the students to articulate a vision of their ideal classroom. Kathryn's data describe her vision of a rich and stimulating classroom environment with students purposefully engaged in challenging and interactive learning tasks. She was frustrated, however, in her ability to enact her vision and to bring her practice more in line with her new-found understandings about teaching and learning. One source of this frustration is the difficulty she, like several other students, encountered with classroom management.

### **Classroom Management**

The data reveal that the preservice teachers perceived that issues of

classroom management impact upon student learning and upon their ability to move beyond transmissive teaching. The data consistently communicate that the preservice teachers struggled to manage the behavior of students in order to establish a climate for learning and to enact their vision.

While difficulties with classroom management were a factor for all of the students in the study, they posed the greatest obstacle for Kathryn. It is evident in the vignette that she was reluctant to employ more interactive teaching strategies, although her action research focus was “active learning,” because she believed that the learning situation would disintegrate as a consequence. She believed that she was more able to manage the class with direct instruction and she preferred to use traditional teaching methods rather than risk the loss of classroom control.

### **Complexity**

Another factor that limited the students' ability to demonstrate conceptual change is the complexity and magnitude of the demands placed on the preservice teacher in the practicum. The data are rich in detailing the feeling of exhaustion experienced by the preservice teachers during their extended practicum. The data reveal they feel overwhelmed with the newness and complexity of the tasks. This aspect of teaching is demonstrated in both vignettes. Pam believes if she could just get to her daybook for a moment, she could establish a classroom atmosphere conducive to learning. The data in Kathryn's vignette and the fieldnotes reveal her stress and struggle just to survive. This theme is repeated in the following quotation:

Panic attack! Too many things going on and I'm stretched to the point I feel at any moment I could snap. Not good. I'm nearly non-functional by the time I get home. Little things can throw me into a panic. This week I cried at the

bank and I cried on the phone to Future Shop. Too much stress, more than I can handle.

Kathryn attempted to lessen the demands on her and to reduce the workload by relying on textbooks and direct instruction. Pam enforced a “no talking” policy and a series of escalating punishments for her pupils. Both of these practices were perceived as attempts to minimize the complexity of teaching but they are not indicative of conceptual change.

### **Entry Beliefs**

The final factor that limited conceptual change for two of the seven students' in the study is the persistence of transmissive entry beliefs about teaching and learning. The following excerpt, taken from the reflective writing of one of these students, illustrates this point:

The transformation from the way I was taught to who I want to become as a teacher is a long and difficult process. There is a stark contrast between these two and I am struggling with how I can challenge the notion that was in my head (of what a teacher looks and sounds like) and triumphantly replace it with my new unfolding vision.

When I entered PDP my head was full of ideas of how I was going to create positive relationships and learning experiences within my classroom. All good ideas, only problem was I had left the students out of the decision making process. Many lessons were teacher directed and not very meaningful.

*Children need to be involved in their learning in active learning and I*

knew that, that's the way that anybody learns best. But it's one thing knowing that, it's another thing acting that and being able to let the children discover for themselves.

The hardest transition for me was taking what was in my head as a student in elementary school, years ago and translating that into what as teacher I wanted to become. I was just acting upon all the experiences I had had as a student and using those to guide my direction as a professional. It was hard because at the beginning it's a panic situation and you just draw back to what you know best. The result was something that wasn't what I wanted to be as a teacher.

It is clear from this excerpt that this preservice teacher had a vision of the type of teacher she aspired to become. Her vision differed greatly from her experience of teachers in the past but she found herself reverting to those traditional teaching behaviors in moments of pressure. The inconsistency between her teaching idea and the reality created dissonance and promoted her reflection. She struggled to bring her teaching behaviors in line with her vision.

There is also evidence in Pam's vignette that her entry beliefs about teaching and learning were a persistent factor into her second practica. In contrast with the student quoted above, Pam does not struggle to change her beliefs, but rather to change the program to bring it in line with her beliefs.

### **Summary**

This chapter has presented an analysis of the data related to the preservice teacher education program. The purpose of the analysis was to explore whether

conceptual change had occurred as a result of the program and the factors that promoted or inhibited this change. The data reveal that conceptual change did occur in six of the seven students in this study. The factors in the program that were found to promote conceptual change are as follows:

- modelling
- student autonomy
- reflection

The factors in the program that were found to inhibit conceptual change are as follows:

- complexity of teaching
- classroom management
- student entry beliefs

Chapter Seven presents a summary of the issues presented in this study and my conclusions and reflections as a result of this inquiry.

## CHAPTER SEVEN

### SUMMARY, CONCLUSIONS AND REFLECTIONS

This thesis came about as a result of my work as a faculty associate in the Professional Development Program at Simon Fraser University where my teammates and I designed and implemented a teacher education program that reflected constructivist learning perspectives. The intent of the teacher education program was to promote conceptual change on the part of preservice teachers. Our goal was to prepare teachers who were capable of enhancing student learning through the creation of rich and vital learning environments based on constructivist theory. Moreover we sought to enhance the life chances of children by preparing their teachers to embrace critical inquiry and self-renewal. We believed that learning opportunities for children would be enhanced if their teachers were continuing to learn and grow. We were convinced that

... the future of public education rests ultimately on the shoulders of strong teachers who have been nurtured in viable and challenging programs of teacher preparation. Wideen and Grimmert (1995, p. vii)

The study examined the Professional Development Program (PDP) at Simon Fraser University and its potential to contribute to conceptual change. While PDP has many aspects that have the potential to contribute to the preparation of outstanding teachers, I found limitations within PDP. These limitations were evident as a result of my own experience within the program and in the literature concerning problems common to many teacher education programs. Additionally, the study examined the research on learning to teach and the factors that impact upon preservice teacher development. This examination of the literature was



undertaken for direction in designing a program that could result in conceptual change on the part of preservice teachers.

Because our module is unique within the general program, the particular needs and circumstances of our students were additional factors that were considered in developing the program. The module team considered these challenges and discussed ways to address them within the situation in which we worked. Our belief was if we could create the "right" environment for learning, the program would result in the realization of our goals. Our deliberations resulted in an inquiry-based teacher education program founded in constructivism and emphasizing three program elements: modelling effective teaching, self evaluation and reflection and inquiry.

To determine the effect of the program, I interviewed and observed seven preservice teachers and examined documentary data. These seven preservice teachers represented a range of perspectives. The data from two of the students in the program were compiled and presented as vignettes. My purpose in presenting the vignettes was to reflect the the students' voices and for readers to gain an impression of the nature of the data and of the lived experience of students in the program. The data were further analyzed for themes to determine the elements of the program that promoted or limited conceptual change.

## **Conclusions**

### **Creating Conceptual Change**

This thesis set out to explore three questions. In response to the first question, "Can we create conceptual change in the perspective of the preservice teachers in the program?" the answer is a qualified yes. Based on the documentary

evidence, interviews, and my observations, I would argue that it is possible to create conceptual change in the perspectives of preservice teachers.

Despite repeated claims in the literature that preservice teacher education programs fail because of the persistence of entry beliefs, the data from this program indicate that the program was effective in creating conceptual change. Each of the students in the study reported different perspectives on teaching and learning from their entry perspectives. This assessment is also supported by my observations as a participant observer in the case of six of the seven students. It is also my observation that the remaining five students, who were not subjects of this study, also experienced conceptual change. I noted in Chapter Four that the data were assembled from students who had completed the program under my supervision. Data from two students, one who withdrew and another who was transferred to another supervisor are not included in this study. It is possible that they may have had a different perspective of their experience in the module but I did not have access to their data for inclusion in this study.

It is evident from the data that we were successful in creating a climate that led to the realization of many of our goals. The data reveal that the preservice teachers believed that their experience in the program promoted their appetite for learning and nurtured an inquiring attitude toward their teaching practice. The data demonstrate that the student teachers believe that their involvement in the program resulted in greater thoughtfulness about the ways children learn, the ways to engage learners, and ways to enhance learning and social development. There is evidence in the data that the preservice teachers began to think of curriculum in new ways.

The data further reveal that the students believed themselves to be more thoughtful teachers as a result of the program and that they claimed, at the end of

the program, to be committed to continuous growth and development as teachers. Most students report that they experienced a sense of autonomy and freedom to experiment and to take risks within a supportive and caring environment. As a consequence of our module design, the preservice teachers expanded their perspectives of teaching to include multiple models of instruction and they embraced a constructivist perspective. The evidence in the data leads me to conclude that under the "right conditions" conceptual change will occur.

This conclusion causes me to question the assertion in the literature that preservice teachers' entry beliefs are robust and persistent. The data revealed that the transmissive beliefs of the preservice teachers in this study were held in conflict with more liberal and child-centred beliefs. It would appear that entry perspectives are more complex than the literature indicates and that students may be willing to relinquish transmissive beliefs if the learning environment creates conditions in which their child-centred beliefs can flourish.

If the data are accepted as written, the results of this study are optimistic. But I am mindful of the limitations of this study. It may be that the perceived changes in the beliefs of these preservice teachers are not genuine or enduring and they may not result in changed practice when they become teachers. Richardson (in press) argues that

Perceived changes in preservice students' beliefs and conceptions may be transitory or artificial and turn out not to drive their actions when they become teachers.

Even if the changes are genuine, I am concerned at the beginning teachers' ability to sustain practice that runs counter to the culture of the school. In my experience, a number of schools would find the practices the module team espoused as 'state

of the art' threatening and undesirable. New wine may not fare well in the old bottle. Longer term studies would be needed to determine...

- if these beginning teachers continue, as they vowed, with some form of inquiry into teaching.
- what beliefs they hold after one, and after five years in the profession.
- if their practice is consistent with their beliefs.
- what factors have influenced their teaching behaviors.
- what their impression of their teacher preparation experience is after one year in the classroom.
- if this study could be replicated with a different group of student teachers.

### **Factors that Contribute to Conceptual Change**

The second question I set out to address concerned the conditions under which the student teachers were persuaded to relinquish their transmissive beliefs. The first factor noted by students to contribute to this conceptual change was modelling done by the module team, by guest speakers to the seminar, and by school associates.

### **Modelling has the potential to contribute to conceptual change**

Modelling by the module team, guest presenters and school associates had the potential to be a contributing factor to the students' conceptual change. Modelling was effective in contributing to conceptual change when it involved a close personal relationship between teacher and learner and when it demonstrated the goals of the program in action. When modelling honoured and included the preservice teachers as emerging professionals and established a collaborative and non-hierarchical tone, students' learning was enhanced. Moreover, when the modelling was visionary, consistent with the goals of the

program, and spoke of a passionate commitment to enhance the lives of children, it touched the students' emotions and captured their imaginations. The modelling then inspired them to emulate the style or belief of the model in their own teaching. The data from this study indicate that the modelling done in the module produced conceptual change.

This conclusion raises a number of issues for teacher education. Firstly, the literature argues that university programs fail to provide adequate models for preservice teachers to emulate (e.g. Zeichner and Tabachnick, 1981; Fullan, 1993; Tuinman, 1995) and that this results in persistence of transmissive teaching practices. This argument appears to be based on assumption as I could find no studies to confirm or refute this assessment. Thus, those involved in teacher preparation are not informed by the literature as to those practices that constitute effective or ineffective modelling. If modelling done in preservice teacher preparation programs has the potential to effect change in the beliefs of preservice teachers, more needs to be known about it.

Perhaps one reason why there is little research done on the effects of modelling in teacher preparation programs is because of the failure of academe to place as much emphasis on *teaching* as it does on *research*. Research is done in cooperation and collaboration with others, it is open to public scrutiny and critique. It is the currency of academic credibility. If teaching within the university were subject to the same rigorous standards, no doubt more effective modelling would result. Future research efforts that focus on the beliefs and practices of the professoriate or clinical professor would be helpful for those attempting reform.

If modelling has the potential to be a powerful contributor to future teachers' perspectives, those involved in teacher preparation programs must address what is being modelled in their programs and their departments. This has implications for

the hiring of academic and clinical professors and for the selection of school associates for practicum placements.

While the data in this study suggest that modelling is most effective when it is consonant with the goals of the program, hiring individuals who present a uniform perspective on the interpretation of those goals presents, in my opinion, a dangerous consistency. When the views within a teacher preparation program are homogeneous, there is the potential for aspects of the program to be accepted as given and the assumptions upon which the practices of the program are based are not open to examination nor are they considered to be problematic. Cochran-Smith (1991b, p.107) argues that there is a danger in programs when neither teachers nor students...

are encouraged to examine their knowledge and language from multiple perspectives, draw upon their own resources to pose problems and generate theories, question the curriculum and its underlying assumptions, and challenge either the construction of a generic knowledge base for teaching or the institutional arrangements and consequences of schooling.

The danger lies in the dogmatism that may arise from unexamined acceptance of a uniform perspective.

I believe, rather, that the interests of preservice teachers, and the children they will encounter, are better served by diverse perspectives and by vigorous examination of pedagogical issues. I believe it is important that preservice teacher education programs nurture the development of reflective and critical teachers by expanding the realm of discussion and reflection on teaching to consider a range of perspectives. This is more effectively accomplished when teacher educators represent a range of perspectives. The dissonance that results from differing

perspectives may stimulate both preservice teachers and their supervisors to critique and transform their practice.

### **Autonomy has the potential to contribute to conceptual change**

The second factor contributing to conceptual change was autonomy. The data from this study indicate that the development of preservice teacher autonomy had a significant impact upon their perspectives and teaching practices and contributed to their conceptual change.

The students' experience of autonomy was a consequence of numerous factors within the design and delivery of the module program. Critical among those factors, in my estimation, was self evaluation. The reported significance of self evaluation in the program and the degree of conceptual change evident in the student data causes me to wonder if student entry beliefs persist because of the threat of failure. As noted in the vignettes, Pam and Kathryn made every effort to control all the variables in the learning situation when there was a threat of failure. When external evaluation is a factor in determining the students' future, they may attempt to control the learning situation by teaching in transmissive ways or by blindly adopting the practices of their supervisors in order to survive in the program. Neither of these alternatives is conducive to producing genuine conceptual change.

The issue of self evaluation in teacher preparation programs is rife with tensions concerning power, authority, control and trust. In my experience, self evaluation resulted in a conceptual shift not only for the preservice teachers, but for me as their teacher. When the module team relinquished the power to remove students from the program and gatekeeping was no longer an option, the focus was then placed on *our teaching* and the elements of the program that would have the best result for preservice teachers. This galvanized our efforts to ensure that the

program was as compelling as possible. Furthermore, when we divested ourselves of power and control, we gave it over to the preservice teachers. We had to trust that they they, too, wanted to be the best teachers for children. This resulted in the creation of a climate of trusting expectancy in the students' desire and ability to develop as professionals. Moreover, it resulted in providing opportunities for the students to direct the program and their inquiry according to their needs. In this way, they experienced autonomy and freedom to set their own goals and to pursue their own interests in advancing their professional development.

With the exception of the one student, mentioned in Chapter Four, who was transferred to another supervisor for the extended practicum, I believe that the power and trust invested in the students was not misplaced. Moreover I believe that the positive outcome of the program for the majority of students far outweighs the negative results for one student. Because of the potential of self evaluation to produce conceptual change, it would be worthwhile to conduct empirical studies into the effects of evaluation practices on program design and delivery and on conceptual change.

Another critical factor in creating student autonomy and producing conceptual change was the students' involvement in action research. The choice of topic and the plan of action was chosen by the student teacher based on their assessment of needs within the classroom, their knowledge and experience in that setting, their readings, workshops, and seminars. Action research made teaching more manageable and it gave students the confidence in their own ability to unravel the complexities before them through reflection, observation and thoughtful action. It reinforced for them that teaching is a continuous process of inquiry, discovery and reinvention of practice. Because action research placed the control and direction of their learning on the preservice teacher and nurtured their



perception of themselves as autonomous agents, the students became active, not passive learners.

At one time in PDP, there was an emphasis on collaborative research into teaching and learning by faculty, school and faculty associates, and student teachers. Regrettably, this effort seems to have been abandoned of late. In my opinion, action research has the potential not only to have profound and lasting effect on preservice teacher development but also to expand and inform the general knowledge base on teacher education. It is within the milieu of collaborative inquiry that all stake-holders may engage in dialogue surrounding issues in the on-going work of learning to teach. It is from this discourse that the moral dilemmas that confront teachers become evident and the resolve to effect change may result.

### **Reflection has the potential to contribute to conceptual change**

The third factor that promoted conceptual change was reported in the data to be the emphasis in the program on reflective practice. This leads me to the conclusion that reflection in, on and about practice has the potential to produce conceptual change.

This raises a number of issues of importance in teacher education. Firstly, as demonstrated by my experience as a first year faculty associate, time and space must be cleared in programs to allow for reflection. Teacher educators must resist the urge to "fill all the holes" and allow time within their programs for reflection. This is crucial not only for the development of preservice teachers but also for those who would facilitate their growth. I fear we have a tendency to keep the students so busy with assignments, that real reflection is rare.

Secondly, in my experience, the ability of preservice teachers to reflect may

be in direct relationship to the ability of their supervisors to support reflection. Facilitating the growth of preservice teachers through interactions that stimulate reflection is a sophisticated and complex skill. It requires that the supervisor understands the students' level of development and is able to frame questions that are within the students' conceptual grasp in order to scaffold the students' understanding from one place in the zone of proximal development to another. To do this well, requires time, experience, self-evaluation and concerted effort on the part of the supervisor.

Another challenging aspect of facilitating reflection lies in the development of a trusting relationship. In order to facilitate reflection, the student teacher must feel safe to expose their vulnerabilities, to think aloud and to take risks. Once again, promoting reflection requires that the supervisor have the necessary skills and experience to be effective. In the case of PDP as noted in Chapter Two, the two-year appointments of faculty associates may not be enough time to develop the necessary communication and rapport-building skills. It may be that teacher education programs in other universities also do not provide enough time or emphasis on the skills prerequisite to cultivating reflection and, consequently, the development of preservice teachers' ability to reflect may be circumscribed.

A third issue related to reflective practice concerns the fact that much of teaching is done in isolation and contacts with supervisors are limited. In connection with this, Shulman (1989, p.181) relates his perspective that genuine reflection cannot be accomplished alone. In Shulman's words, too much happens too rapidly and teachers are unable to make sense of the "buzzing, blooming confusion" of the classroom. Reflection requires collegiality to overcome the "limitations of individual rationality." If reflection has the potential to create conceptual change and, if as Shulman argues, reflection is unproductive when

practiced in isolation, then frequent opportunities to engage preservice teachers in reflective discourse is imperative. This speaks to increasing the number of contacts between supervisor and preservice teacher and to the selection of school associates and their preparedness to engage in reflective dialogue. These issues will be discussed separately as follows.

Contacts between supervisor and preservice teacher are problematic. Within PDP, for example, in one semester I supervised fourteen students in four school districts spanning a radius of seventy-five kilometres. I felt like I spent more time in the car than I did engaged with my students in thoughtful discussion related to issues of teaching and learning. Clustering students and reducing the numbers of students in the supervisory load would ease supervision and provide more opportunities to promote reflection on practice.

Another factor in enhancing the opportunities for preservice teachers to engage in reflective practice lies in improving field experiences for students in their practica. In this regard it is essential that the university work collaboratively with teachers in the field to design and implement innovative programs. I believe such collaborative teaching has potential to create improved teaching and learning conditions for all concerned. In support of this belief, Shulman (1989, p.186) states

All the talk of reforming schooling must never lose sight of the ultimate goal; to create institutions where students can learn through interactions with teachers who are themselves always learning. The effective school must become an educative setting for its teachers if it aspires to become an educational environment for its students.

By involving both school associates and preservice teachers in a process of inquiry into an aspect of teaching, we create an opportunity not only to enhance teachers'

learning, but pupils' learning as well. In this way, reflection on the part of all the stakeholders in the preparation of preservice teachers may result.

### **Factors that limit conceptual change**

The data indicate that conceptual change for the students in the program was limited by three factors: classroom management, complexity of teaching tasks and their entry beliefs. I have chosen to consider classroom management and complexity together under the heading complexity. This is followed by a discussion of entry beliefs.

#### **Complexity of teaching**

The student teachers' attempts to innovate are effected by the complexity of life in the classroom. Classroom management is one of the main contributors to this complexity. According to Smith and Geoffrey (1968, p.71) management involves a complex relationship of belief and sentiment... "part of the teacher's task is not only to have pupils know what they 'should' do but to be 'willing' to do it." It is evident in the vignettes that the preservice teachers found it difficult to persuade their pupils to be willing. They found it easier to survive in the classroom when they were in control of as many variables as possible.

Moreover, they are exhausted and overwhelmed by the complexity of the teaching tasks. Even routine activities such as writing on the chalkboard, taking attendance, collecting and distributing materials are all new experiences that challenge the novice teacher. They attempt to minimize the workload by using texts, worksheets, and direct instruction but the expectation of their university supervisors is that they will demonstrate innovative teaching that, in many cases, surpasses the teaching modelled by their school associate.

This leads me to wonder if, indeed, we are asking too much of these beginning teachers. Kathryn pleads, “why does it all have to happen in Education 405?” and in her poignant metaphor at the end of her vignette she states, “so the process of changing and improving in teaching is a process over time. Coal turns into diamonds under heat and pressure. It takes a million years.” I have no doubt that Kathryn is committed to constructivist perspective. She understands that teaching will require a lifelong effort in pursuit of excellence. All of the conceptual goals of the program are met within Kathryn’s perspective but the complexities of teaching overwhelm her efforts to implement her vision.

The data lead me to consider that if expectations of student teachers remain the same, teacher education programs need to find better ways to support student success. Kathryn’s experience prompts my reflection on modifications to the program and to our teaching that could enhance student learning by reducing the level of complexity of the teaching tasks. One possibility may be to encourage team teaching with school associates during the first weeks of the practicum or during periods when innovations are introduced. In this way, the preservice teacher is relieved of the full responsibility for the learning experience and the ‘cognitive overload’ would be reduced. I believe, like Hollingsworth (1989: 186) “that improved learning would result if preservice teachers were not required to think about all aspects of teaching at once.”

It also occurs to me that, while the module team modelled effective teaching in an adult setting, we did not demonstrate how teaching children would necessitate addressing a range of social, behavioral and academic concerns that are not evident in a class of highly motivated and capable adults. This assertion is confirmed by the research into urban classrooms conducted by Smith and Geoffrey (1968). Therefore, when preservice teachers attempt to model the behaviors

demonstrated by the module team, they encounter difficulties in the classroom. If the module team had demonstrated models of teaching with a class of children and guided the student teachers' understanding of what they were seeing throughout the lesson, preservice teachers may have been better able to grapple with the actual events of the classroom. School associates do demonstrate ways to work effectively with children, however their knowledge of teaching is often tacit and they are inexperienced in articulating reasons for their pedagogical actions.

Another factor that may exacerbate the difficulties student teachers encounter in the classroom is the 'hidden curriculum' of the university surrounding issues of classroom management. In my experience of PDP, for example, it is 'politically incorrect' to address issues of classroom management in comprehensive ways. Classroom management is assumed to take care of itself when the learning experience is well-conceived and engaging. Experience in the classroom has taught me, however, that this is only partly true. Even the best of learning experiences requires that the teacher is able to focus the attention of the children and to direct their behaviors in safe, purposeful, and respectful ways. This is a challenging task for a beginning teacher but one that is an essential prerequisite to pupil learning (Denscombe, 1982.) This leads me to conclude that university programs that downplay the significance of classroom management do student teachers a disservice. While I do not support Kagan's (1992) conclusion that teacher education programs should focus on teaching procedural and management knowledge to the exclusion of more substantive issues, more attention could have been spent on these concerns within the program under study.

### **Entry beliefs**

The final factor that limited conceptual change for the students in this study was the persistence of transmissive and authoritarian entry beliefs. This was a factor for Pam throughout her practicum and a factor for one other student who was aware of her transmissive conditioning and struggled to change it. I believe that Pam was the only student whose entry beliefs were unchanged.

While this study was limited to seven students and not generalizable to a larger population, the results raise some doubts for me about claims that success in creating conceptual change is limited by the persistence of entry beliefs. It may be more productive for teacher educators to reconceptualize their mission and to restructure programs to create conditions in which conceptual change is most likely to occur.

### **Refinements**

In the preceding sections, a number of issues have been raised that could be instrumental in advancing conceptual change. There are a number of additional factors that could also have promoted our students' conceptual change. I consider these to be refinements to our initial conceptualization that have the potential to make our program more compelling. For example, the module team did ask students to articulate a vision and to take steps to realize it through their action research. Upon reflection, more could be done with these vision statements to enhance students' reflection on the role of the school and the teacher, to inspire other students in the module, and to inspire moral action.

Moreover, our program fell short in expanding student understanding of the social factors that impact upon the lives of pupils. We did not, for example, examine issues of poverty, gender, race, culture or sexual orientation in depth. To

address this shortcoming, inquiry could be extended to include writing ethnography. This form of inquiry could be effective in deepening students' understanding of the critical issues of diversity and inclusion.

### **Summary**

A number of issues have been raised as a result of this study that could have impact on the outcome of teacher education programs and their ability to effect conceptual change. In summary, those issues are

- the emphasis of research over teaching within university communities
- the shortage of research into teacher education programs generally
- the lack of research into the effects of modelling on preservice teachers
- the lack of research into the effects of evaluation practices on the perspectives of preservice teachers and on the effects of self evaluation on the teaching practices of teacher educators
- the need to place more emphasis on collaborative inquiry with all stakeholders in the education community
- the need for increased opportunities for supervisors and student teachers to engage in reflective dialogue
- attention to the selection and preparation of school associates
- consideration of ways to lessen the "cognitive overload" of preservice teaching
- reconceptualize the mission of teacher education programs and restructure with conceptual change in mind
- continue to reflect upon and refine program elements to ensure that they are as compelling as possible.



## Reflections

It is my perception as a participant observer in PDP, that conceptual change was created, not only because of the themes evident in the data related to the program of seminars implemented by the module team, but also because of the structure of PDP itself. In Chapter Two of this study, I noted the similarities between Tom's (1995) conceptualization of a teacher education program that had the potential to promote change and PDP at Simon Fraser University. As a result of my experience in PDP, I would argue that the structural elements of the program, (i.e. its intensity, the assumption that pedagogical content knowledge arises from reflection upon practice, not in advance of it, the use of differentiated staffing and the clustering of students in cohort groups) create an opportunity for conceptual change to occur.

Moreover, PDP takes structural redesign a step further than Tom's vision by creating the module components in which experimentation can occur independent of the rest of the program. While there is a normative influence within PDP that tends to limit the parameters of risk-taking and experimentation, there are opportunities within the broad interpretation of the goals for those module teams who wish to innovate. As a result of my experience in the program, I believe that this programmatic structure was a powerful contributor to conceptual change.

This was not always my belief. Following my first year as a faculty associate, I believed that PDP needed to have a prescribed curriculum in order to provide direction and guidance for novice faculty associates. Like my students, I was searching for a 'recipe' to minimize the dissonance I experienced in the program.

One director of PDP refers to the program as “messy.” I believed that the “messiness,” of the program created by the broad goals of the program and the lack of explicit curriculum was a liability. Upon reflection, and as a result of my experience as a second year faculty associate, I have changed my perspective on this issue. Because of the flexibility of the goals and the resultant opportunity to experiment, profound changes can occur, not only for student teachers but for faculty associates as well.

The structure of PDP was intended to create “synergy” between the members of the module teams. This did not happen on our team in our first year together. However, as a result of our second year, true synergy was created and it was manifest in our ability to create the “right environment” for conceptual change to occur. Our synergy and the resulting program grew, because within our triad, technical rational knowledge and personal practical knowledge became, as Evans (1996:22) describes “a fuzzy distinction. Each member of the team was considered to possess ....both forms of knowledge.”

In this connection, it was fascinating for me to encounter the literature on creating conceptual change (e.g. Posner, Strike, Hewson and Gertzog, 1982; Strike and Posner 1985; Novak, 1988, Driver, 1987; ) after the program had finished because the factors proposed in the research were a part of our program and our tacit understanding from the outset. As we collaborated to realize our respective visions for conceptual change, we were able to harmonize our understandings and to reconceptualize our work as teacher educators.

Posner et al. (1982) and Strike and Posner (1985) use the term “conceptual ecology” to explain the conditions under which conceptions of knowledge are held. According to Strike and Posner (1985, p. 217), in order to create conceptual change, new conceptions must meet the following conditions

within the learner's conceptual ecology. They must:

- appear to have the potential to solve the anomalies the learner has identified in practice. In short, the individual must have "lost faith" in existing conceptions to solve the problems encountered.
- be analogous with existing conceptions so that connections can be made with prior knowledge.
- appear to be reasonable, intelligible and plausible.
- interpret past experience in a new way rather than contradicting past experience.
- fit within the individual's understanding of what constitutes knowledge.
- fit within the individual's metaphysical beliefs

Posner et al. elaborate on the educational implications of the conditions for conceptual change. They argue (1982, p. 224) that students are prepared for conceptual change when their current "conceptual ecologies" are in a state of "cognitive conflict."

It appears, from the data analysis, that cognitive conflict occurred as a result of the modelling by the module team and guests to the module, and because of the students' involvement in reflection and inquiry. Then, as a result of the autonomy afforded the students by the program design, they took an active role in addressing these anomalies. They began to assimilate their new understandings and to reconceptualize their perspectives on teaching and to demonstrate their new understandings.

It appears from the data that these preservice teachers entered the program with a moral imperative that contributed to their conceptualization of their role as teachers. This is evident in both student vignettes. It appears that when the program was consistent with the students' moral agenda because their intent was

to empower learners, constructivism was accepted as a means to do that. For these students, the program designed by the module team was perceived to be analogous with existing conceptions and to connect with their prior knowledge. Because of students' moral imperatives and their child-centred beliefs, constructivism appeared to be reasonable, intelligible and plausible.

Where the students' moral agenda was focused on academic content and control of student behavior, constructivism was not as readily accepted. This is evident in Pam's vignette. The perspective of the module team contradicted her understanding of knowledge and her metaphysical beliefs.

When I began this study, I was concerned that the students might perceive the module team's perspective as exploitive, radical or threatening and that would impede their conceptual change. The research of Posner et al. (1982) supports this analysis. The "radical" beliefs of the module team appeared to contradict Pam's previous conceptualizations and appeared to be incompatible with her conceptions of knowledge. For Pam, our experiment failed because it did not fit within her "conceptual ecology."

The module team believed, based on our experience in the first year, that students needed to have a sense of autonomy and personal power to be active in creating their own understandings. This became one of the central concerns of the program in the second year. This concern is again supported by the literature on conceptual change. Novak (1988) cites the work of Robertson (1982) and Sherris and Kable (1984) who found that students with a "constructivist commitment" tended to demonstrate an "internal locus of control" and to "believe that they are generally in control of their own destiny."

Where the student, e.g. Kathryn, reported to feel empowered and enabled, she adopted a constructivist perspective. But in Pam's case, she remained

resistant to conceptual change. She did not appear to feel empowered, nor did she want to be. She wanted to be told how to teach and she wanted to tell her pupils “the way things are.”

Bird and Little, 1986 (cited in Hargreaves and Dawe, 1990) argue that conceptual change is more likely to occur within an environment that supports “the norms of collegiality.” These norms are considered to include trust, support and sharing. Nias, Southworth and Yeomans (1989, also cited in Hargreaves and Dawe, 1990, p.238), posit that these norms are created through gestures, jokes, kindness, interest, praise, sharing of resources and the sharing of ideas. This finding affirms the module team’s belief that students’ growth and their conceptual change would flourish in a caring and risk-free environment. It is this understanding that led us to implement self evaluation and to foster and nurturing environment.

Within the structure of PDP at Simon Fraser University, the module team was able to develop a program to nurture conceptual change. I believe this conceptual change was a result of the horizontal staffing in PDP and the synergy developed within our module.

But conceptual change was not limited to our students. As noted in the opening chapters of this thesis, the impetus for this program came from my dissatisfaction with my work as a teacher educator in my first year. My personal goal, as a result of this program, was to emerge transformed from the “carwash” experience of the first year. Since that time, I have come to understand that I am in possession of a complex and multi-faceted knowledge base regarding teaching and learning. I have come to appreciate the richness of my experience as faculty associate and graduate student and I have been fascinated by my work in teacher education, because, like my students, I am learning to teach. The following quote

from Shulman (1987, p.103) captures this sentiment:

Their development from students to teachers, from a state of expertise as learners through a novitiate as teachers exposes and highlights the complex bodies of knowledge and skill needed to function effectively as a teacher. The result is that error, success, and refinement--in a work, teacher knowledge growth--are seen in high profile and in slow motion. The neophyte's stumble becomes the scholar's window.

The module team collaborated to enable our students to become reflective professionals equipped to design student-centered programs with a constructivist foundation, to engage in critical inquiry, and to view professional growth in terms of continuous renewal. As a result of our efforts, I have become more skilled in teaching practices founded in constructivism, more aware of critical issues, and I have experienced personal and professional renewal. In participating with my students to transform the learning experiences of the seminar into teaching practice I, too, have been transformed.

I have come to understand more clearly what it means to be a good teacher and I have struggled to align my practices with my espoused beliefs. As I deliberate about curriculum experiences for my return to the classroom for the coming year, I find I have shifted from 'activities' to considering ways in which I can engage my seven and eight year olds in the collaborative process of creating a meaningful and purposeful curriculum founded on inquiry. I have come to recognize the power of not knowing, of seeking and discovering as learners and teachers together. I have come to understand the significance of building time to reflect in each day, of creating spaces for considering our actions, intentions and goals.

As a result of this inquiry, I have become aware of the complexity of teaching and I am learning to celebrate questions and their inherent opportunity for exploration and discovery rather than seizing solutions. I am coming to understand, as Paley (199, p.80) relates:

Problems are not meant to be solved. They are ours to practice on, to explore the possibilities with, to help us study cause and effect. Important issues can't be solved with one grand plan or in one school year. Some are worked at for a lifetime, returning in different disguises, requiring fresh insights.

My practical, task-oriented nature wants to take action and fix things. It was my desire to "fix" schools, that brought me to PDP at Simon Fraser University and formed the motivation for this study. I hoped that through the preparation of teachers, schools could become places where children would flourish intellectually, emotionally and socially. In this connection, the module team developed a hypothesis that would drive our practice with preservice teachers. We theorized that if we could create the 'right' climate for learning, teachers that would make a contribution to the revitalization of schools and consequently to the life chances of children.

What, then, was the critical difference between the two programs and their success in facilitating conceptual change? It seems fair to assume that students in both years would have entered the program with a similar potential for learning, for demonstrating commitment, for acting on a moral imperative. The programs in both years emphasized reflective practice and incorporated inquiry in the form of action research; both programs included emphasis on modelling effective instruction. Upon reflection, however, I believe that the critical difference in creating

conceptual change was the empowerment of students in the second year.

We realized, after our experience with the students in the first year, that we could not “make them into teachers;” they would have to make themselves into teachers. Once the module team took this radical stance, then every decision made about the program was filtered through the lens of student autonomy and their need to construct their own understanding. When that became our goal, our interactions with students changed; our teaching changed, our very mindscape changed. We tried, at every opportunity, to divest ourselves of power and authority and to hand it over to the students. Self evaluation was a logical outgrowth of this reconceptualization. When we considered student assignments through the lens of autonomy, we move from our first year directives of “submit video tapes of your teaching with accompanying reflective analysis on the following three dates during the semester” and “conduct action research on a topic of your choice and submit a paper on your findings” to asking “How can you use action research to come to understand the goals of PDP? How could you demonstrate your understandings of what it is to teach and to learn? With what data will you support your self assessment?” In this way, the students were charged with the responsibility of creating themselves as teachers. They embraced this challenge with none of the minimalist “hoop-jumping” that we had seen in the first year. They were passionate and committed to their growth as professionals.

In the same way, empowering students charged the module team with the responsibility of recreating ourselves as teacher educators. Thus, conceptual change was realized, not only in the preservice teachers in the module, but also in the perspectives of the module team. It is ironic that our teaching at once became more powerful when we divested ourselves of power. The conceptual change that we were not able to mandate through gatekeeping in the first year, was embraced



freely by empowered students in the second year.

The findings of this study, while subject to numerous limitations, give me hope for children and their future in schools. Kathryn's statement at the end of her vignette supports my optimistic view. In it she implies that her entry perspectives on teaching and learning were effectively "washed out" by her teacher education program. This belief is evident in the following excerpt from her vignette:

While I have had seventeen years of school in one way, the experience that I had in PDP is far more impactful than the modelling that came before me because I was at a point where I was in a crisis because I needed to teach children and I wanted to do it well and there was a lot more to it than I thought. I was at my most impressionable state because I was doing it for the first time. I was like a sponge. I was sucking up everything. The theory, the modelling we received in our module and with the books and videos of expert teachers, it's all so much clearer. I'll remember it because I was at the point where I was doing everything for the first time. I didn't matter that I had had all of high school modelled for me in one way. It didn't bring up the emotional response and it didn't connect with my philosophy. It didn't "work." So I could really never go back to that.

Zeichner and Tabachnick's (1981) contend that teacher education programs at university are "washed out" by school experiences but Kathryn's statement suggests that students' transmissive and managerial beliefs about teaching and learning might also be "washed out" by the intensity of their teacher education experience.

As a result of this study, I believe that it is possible for teacher education programs to prepare teachers who are able to contribute "in constructive ways to

enhancing the learning of society's young in a rapidly changing and disintegrating context." (Grimmett, 1995, p.222). I also believe that this is the challenge that confronts teacher education programs, not only within the context of SFU, but also in other jurisdictions. It is a challenge that requires teacher educators to engage in critical reflection on the objectives of their mandate and to reconceptualize their mission. If this challenge is addressed in a wholehearted way, teacher education programs may, indeed, become effective agents in reforming the practices of teachers and enhancing opportunities for children.

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## **APPENDIX A**

### **GOALS OF THE PROFESSIONAL DEVELOPMENT PROGRAM**

#### **GOALS RELATED TO THE DEVELOPMENT OF TEACHERS AS EDUCATORS**

1. The development of a clear, coherent and justified view of education that enables one to: understand the place of education in an open, pluralistic and caring society; determine the content, methods and institutional arrangements that are relevant, worthwhile and appropriate for the education of children; have a personal vision of what one can achieve as an educator; understand how schooling and other institutions influence students.
2. The development of a clear commitment to; respect students as persons with varied interests, backgrounds, points of view, plans, goals and aspirations; care about students and their individual development; uphold standards of excellence inherent in various forms of inquiry; uphold the principles that ought to govern a civilized, democratic and pluralistic community; establish and maintain ethical and professional working relationships with all members of the educational community.
3. The development of clear commitment to lifelong learning manifest in; openness to alternatives and possibilities; reflective practice; engagement in dialogue and collaboration with colleagues, students, parents and others in the educational community; ability to form and reform ideas, methods, techniques; setting an example to students; stimulating students to be continuous learners.

#### **GOALS RELATED TO THE DEVELOPMENT OF EFFECTIVE CLASSROOM PRACTICES**

1. The development of ability to create opportunities for learning that are; engaging and imaginative; significant and relevant to pupils' educational development; intellectually challenging; sensitive to issues of social equity and cultural diversity; appropriate to building habits of sound thinking; responsive to students' individual learning needs; reflective of growing understanding of what goes on in the classroom; consonant with learning goals.
2. The development of ability to put educationally sound curriculum ideas into practice in well-organized ways.
3. The development of knowledge about teaching subjects, about how individuals and groups of students learn, and about evaluation practices that enhance learning.
4. The development of ability to be thoughtful and sensitive observers of what goes



on in the classroom.

5. The development of ability to use evaluation and assessment practices that; use evaluative data as a means of furthering student learning; appreciate the subjectivity of evaluative assessments; make use of varied evaluative practices that are congruent with learning goals; respect the dignity of each learner; show understanding of the moral implications of evaluation and assessment practices; promote self-assessment.

6. The development of ability to use classroom interactions that: show caring and respect for every student; encourage learners to clarify and examine their ideas; are authentic, unpretentious and honest; communicate openness, a tolerance for uncertainty, and appreciation of the spirit of inquiry.

7. The development of appreciation for and skill in organizing harmonious working groups, and interpersonally sound working relationships among students.

8. The development of ability to observe, understand and respond respectfully to students with learning difficulties.

9. The development of appreciation for and ability to be flexible about curriculum--recreating, re-inventing, re-constitution, and discarding practices that have been observed, upon reflection, to be inappropriate to individual and group learning needs.

**APPENDIX B.**  
**STUDENT SELF EVALUATION FORM**

**SIMON FRASER UNIVERSITY**  
**Faculty of Education**  
**Professional Development Program**  
**Education 401/402 Final Self Evaluation**

\_\_\_\_\_  
Student's Surname

\_\_\_\_\_  
First and Middle Names

\_\_\_\_\_  
Student Number

\_\_\_\_\_  
Faculty Associate

\_\_\_\_\_  
Levels/Subjects Taught

\_\_\_\_\_  
School Associate(s)

\_\_\_\_\_  
School

\_\_\_\_\_  
District

Semester:    Fall \_\_\_\_\_

Spring \_\_\_\_\_ 19\_\_\_\_

I have found the student teacher's growth and development in Education 405 to be competent for certification and therefore recommend that this student be assigned the grade of PASS for Education 405

\_\_\_\_\_  
Faculty Associate

\_\_\_\_\_  
School Associate(s)

I have read this statement:

\_\_\_\_\_  
Student Signature

Date: \_\_\_\_\_ Student Number: \_\_\_\_\_

return to: program coordinator, Faculty of Education, Simon Fraser University, Burnaby, BC V5A 1S6

distribution:

1st copy to records

2nd copy to student

3rd copy to school associate

4th copy to faculty associate

**This report represents the student's self evaluation of their growth and development toward professional competence, recorded at the completion of Education 401/402.**

**The student is required to:**

**1. Reflect on the following questions:**

- **What did you set out to accomplish through your action research?**
- **What personal beliefs led you to this plan of action?**

**2. Explain under each goal heading the following:**

- **What activities did you undertake in order to develop your understanding in this goal area?**
- **In what ways and to what extent did reflection play a part in your actions?**
  - **Technical Reflection**
  - **Practical Reflection**
  - **Critical Reflection**

**3. Finally, what are your recommendations for your continuing professional development?**

**This report will be presented by the student teacher to both school associates and faculty associates. The student's self assessment will be supported by authentic evidence and presented in a portfolio conference.**

**Following the presentation of the portfolio documents and the self evaluation, the triad, consisting of student teacher, school associate and faculty associate, will discuss recommendations for the student's continued professional growth during Education 405.**

## **Indicators of Professional Competence Related to PDP Goals**

### **A. The Student Teacher As A Growing Professional**

The demonstration of:

- thoughtful, self-initiating, rational, responsible behavior that is reflective, positive in outlook, genuine, non-defensive, non-judgmental
- a clear, coherent, well-thought out philosophy that is inclusive of all learners, places students at the centre of decision making; upholds ideals of inquiry, collaboration, integrity and caring
- a commitment to lifelong learning; ethical and professional working relationships with all members of the educational and wider community; an openness to possibilities and alternatives

- **What activities did you undertake in order to develop your understanding in this goal area?**
- **In what ways and to what extent did reflection play a part in your actions?**
  - **Technical Reflection**
  - **Practical Reflection**
  - **Critical Reflection**
- **What are your recommendations for your continuing professional development?**

## **B. The Student Teacher and the Pupils**

The demonstration of:

- respect for students with varied backgrounds, interests, points of view, goals and aspirations; respect for the dignity of each learner
- recognition for and responsiveness to individual learning needs
- understanding of how individuals and groups of students learn
- behavior that prizes students; that is free from attempts to dominate them
- behavior that is free from bias; that communicates sensitivity to students
- behavior that is real, genuine, authentic
- skill in organizing harmonious working groups in which students are actively involved in learning and purposeful inquiry
- interactions that show caring and respect; encourage learners to clarify and examine ideas; are unpretentious and honest; that communicate openness and tolerance for uncertainty
- ability to observe, understand and respond appropriately and respectfully to students with learning and behavioral difficulties
- ability to attend and hear students; to be non-judgmental in responding

**• What activities did you undertake in order to develop your understanding in this goal area?**

**• In what ways and to what extent did reflection play a part in your actions?**

**• Technical Reflection**

**• Practical Reflection**

**• Critical Reflection**

**• What are your recommendations for your continuing professional development?**

### **C. The Student Teacher and the Curriculum**

- The demonstration of:
- ability to develop curriculum materials that: are appropriate to educational goals; are lively and imaginative; reflect principles of learning; promote thinking; are relevant to students; are intellectually challenging; are sensitive to issues of social equity and cultural diversity; are varied and imaginative; engage students in “minds-on” and “hands-on” ways; address the “big ideas” rather than trivialities
  - ability to put educationally sound curriculum ideas into practice in well-organized ways
  - ability to develop and use evaluative materials and methods as a means of furthering student learning; make use of varied evaluative practices that are congruent with learning goals, that respect the dignity of learners, that promote self-assessment and self-evaluation
  - ability to be flexible about curriculum -- to recreate, reinvent and discard practices that are inappropriate to individual and group learning needs
  - knowledge of subject level material and ability to communicate knowledge clearly to students

- **What activities did you undertake in order to develop your understanding in this goal area?**
- **In what ways and to what extent did reflection play a part in your actions?**

- **Technical Reflection**
- **Practical Reflection**
- **Critical Reflection**

- **What are your recommendations for your continuing professional development?**

**Please make any other comments that have not been addressed in the evaluative comments above.**

**APPENDIX C****TEACHING AND LEARNING BELIEFS QUESTIONNAIRE**

1. My understanding of teaching and learning has changed since I entered PDP.

strongly disagree      1      2      3      4      5      strongly agree

**Please elaborate on your experience.**

My understanding about teaching and learning have been effected by:

- modelling by my school associate(s)

strongly disagree      1      2      3      4      5      strongly agree

**comment:**

- observation of children

strongly disagree      1      2      3      4      5      strongly agree

**comment:**

- professional reading

strongly disagree      1      2      3      4      5      strongly agree

**comment:**

- conversations with education professionals

strongly disagree      1      2      3      4      5      strongly agree

**comment:**



- modelling by my faculty associate(s)

strongly disagree      1      2      3      4      5      strongly agree

**comment:**

- reflecting on teaching and education issues

strongly disagree      1      2      3      4      5      strongly agree

**comment:**

- my action research

strongly disagree      1      2      3      4      5      strongly agree

**comment:**

- self evaluation in Education 401/2

strongly disagree      1      2      3      4      5      strongly agree

**comment:**

• other (Please specify) \_\_\_\_\_

strongly disagree      1      2      3      4      5      strongly agree

comment:

• other (Please specify) \_\_\_\_\_

strongly disagree      1      2      3      4      5      strongly agree

comment:

• other (Please specify) \_\_\_\_\_

strongly disagree      1      2      3      4      5      strongly agree

comment:

**Please make any other comments that have not been addressed in your comments above.**

This question is for those students whose School Associates took part in the teacher research group on mentoring student teacher development.

Please comment on how the involvement of your FA and SA in teacher research effected your practicum experience.