IT'S VERY IMPORTANT THAT YOU HAVE A CANOE:

A CASE STUDY ON THE INSTRUCTIONAL PREFERENCES AND VALUES

OF A CREE PRESERVICE TEACHER

by

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ABSTRACT

The purpose of this qualitative case study was to understand whether a Cree preservice teacher made decisions on her instructional preferences according to her stated values and the extent to which these values represented Cree culture. The use of an interpretivist or constructivist approach provided a holistic, Native-oriented view of a preservice teacher's beliefs and validated her ways of acting, thinking, and feeling. The participant was a mature Cree female enrolled in a community-based Aboriginal Teacher Education Program. An autobiography, a classroom case, a repertory grid, and an interview were used to give voice to the decisions she made. Initially, data were collected in the form of a written autobiography that addressed her values derived from her personal, informal educational, formal educational, and professional experiences. Next, a classroom case was presented that focused specifically on her methods of instruction. Later, this Cree preservice teacher's autobiography and classroom case were collected, and a repertory grid was developed from them and supplied to her. Finally, upon completion of the repertory grid, an interview was conducted with the preservice teacher. The participant's decisions on the use of behaviour modification, dependent study, and group discussion and activities appeared to reflect her values and represent Native values, but not necessarily traditional Cree values. Conversely, her judgments on the use of abstract presentation, and of teacher controlled and persistent media tended not to be well formed or perhaps not well understood, and therefore did not appear to reflect her values.

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To the Creator, I thank you ...

I trust I got it right.

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PROLOGUE

Throughout this case study I use canoe and travel metaphors, and the presentation of theoretical constructs in metaphorical terms. These metaphors are used to describe how I understand myself and my profession (Mahlios & Maxson, 1995). Also, I use these metaphors as a way of making clear and explicit the intent of my arguments in an attempt to help a variety of readers share the participant's and my educational and cultural understandings, and my interpretation of them (Knowles, 1994). These metaphors are used for readers to approach their interpretations of this study and their cultural and educational understandings as well. These readers may include Cree preservice teachers, Native and non-Native teachers, teacher educators, and other people interested in education. In addition, because some terminology in this inquiry may be unfamiliar to these readers, a glossary (see Appendix A) has been provided to help with some technical vocabulary.

CHAPTER 1: WHAT DO I WANT TO KNOW AND WHY?

(Introduction, Purpose, and Rationale)

Introduction

This inquiry is about the decisions that a Cree preservice teacher makes on her instructional preferences and the values that guide them. It is also about Native preservice teachers' beliefs, canoes, and a trip I'm about to travel on.

I begin this study with an overview on freighter canoes. Following this overview, I state the purpose of the study (What Do I Want to Know?). Subsequently, I explain the importance of having a canoe, and justify the importance of understanding Native teacher beliefs (Why Do I Want to Know This?). Then I present a review of the literature on preservice teacher beliefs, instructional preferences, the culture of teaching and learning, and values (WHAT DO OTHERS KNOW?). Next, I examine the interpretative framework (HOW DO WE KNOW THE WORLD?) and the specific techniques used for gathering information (WHOSE WORLD DO WE WANT TO KNOW?) which guide this research project. Following this framework, I present and analyze information (IF YOU WANT TO KNOW, ASK!) gathered from an autobiography, a classroom case, a repertory grid, and an interview with this particular Cree preservice teacher. This data and analysis sets the stage for a discussion (WHAT DO I KNOW NOW?) on the following: (a) existing concepts of teachers' beliefs, (b) knowledge gained from this Cree preservice teacher's values and instructional preferences, and (c) problems associated with teaching and learning as they affect the Cree preservice teacher in this study and perhaps other Cree preservice teachers. I conclude the study by suggesting where it might lead (Where do we go from here?) and point out its limitations.

The Freighter Canoe—Workhorse of the North

The canoe used on this trip is not a recreational type of water craft, but a freighter canoe that has often been called the workhorse of the North. Freighter canoes range in size from 16 to 24 foot models and can handle 10 to 75 horsepower outboard motors (Nor-West Canoes, 1997). These canoes, constructed of thin cedar planking covered with an epoxy hardened canvas, have a high degree of toughness and buoyancy. Their excellent performance and stability make them ideal for the salt waters of James Bay and Hudson Bay, and for the rivers of the Hudson Bay Lowland. The load capacity of freighter canoes compared to their weight is very high—up to 4500 pounds for a 22 foot model weighing 350 pounds. These features made freighter canoes useful in the past for unloading and loading people and supplies from Hudson's Bay Company ships. Freighter canoes continue to be useful for hunters, fishers, outfitters, and Native peoples in the North to the present (Nor-West Canoes, 1997). Canoes are useful for this inquiry as well.

What Do I Want to Know? (Purpose)

Brrr! It's a cold morning as Walter and I get ready to travel inland. Dawn is breaking and a fine mist hangs over the water. I feel good though, knowing that the 22 foot flat bottomed-62 inch wide freighter canoe we are using has survived the winter and is in good shape to carry us on our travels through familiar and unfamiliar territory in the Hudson Bay Lowland.

Walter, my friend, grew up in the village of Kashechewan on Fort Albany Reserve 67. He understands Cree culture and the Hudson Bay Lowland intimately. Walter has spent most of his life living and working in Cree communities along the western James Bay coast as a classroom assistant and teacher. In addition, he has spent time off reserve in high

school and in university furthering his education. Because of his experiences, Walter can make good sense of his surrounding environment.

I, on the other hand, grew up in the city of Ottawa in eastern Ontario. I have spent most of my life living in the larger Canadian society. Furthermore, I have spent the last 17 years living and working in Cree communities in northern Ontario as an education services provider, principal, teacher, and parent (see Vita). Despite my experiences, I still need people like Walter and the elders of the Mushkegowuk communities to help me make sense of my surroundings.

My particular experiences with the Cree people along the James Bay coast have supported my conviction in the importance of maintaining and strengthening Cree values as a way of ensuring Cree survival on Native reserves and in greater North American society. Concurrently, my experiences in Native education have lead to the realization that teachers are central to understanding and improving the teaching and learning process, and to understanding how teachers make decisions in the classroom.

With the introduction of Aboriginal Teacher Education Programs (ATEP) along the James Bay coast, more Cree teachers are being placed in the schools of the Mushkegowuk communities. However, with the continuing encroachment of Western traditions and values, I am uncertain of the values that Cree teachers bring with them into their classrooms and the effect of these values on their instructional decision making.

Many of these Cree teachers enter the teaching profession with the belief that they could make a difference in the lives of their students and contribute to their communities. However, the changing demands of students, parents, and society on teachers has lead many of them to question their social identities as teachers. These social identities,

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described as "that aspect of the person related to a role that one chooses and for which other members of a society have expectations as a result of the choice" (Hamberger & Moore, 1997, p. 304), may not be similar to the personal identities that preservice teachers hold. Subsequently, conflicts may arise from the differences in personal and social identities, and from differences in values as well.

Elizabeth, the Cree participant in this study, was born and raised in Northern Ontario. She grew up in both Native and non-Native communities. Elizabeth has spent the last several years working as a classroom assistant in a Mushkegowuk community school, and has entered an ATEP serving the James Bay area on her journey in becoming a classroom teacher.

Consequently, the purpose of this study is to understand whether Elizabeth, a Cree preservice teacher, makes decisions on instructional preferences according to her stated values and the extent to which these values represent traditional Cree culture. In this inquiry, preservice teacher instructional preferences are described as the specific educational beliefs or attitudes preservice teachers have about teaching and learning that lead them to act in particular ways in constructing learning environments (Solas, 1992). Similarly, preservice teacher values are described as the general beliefs preservice teachers have about their lives that explain why they choose to act in certain ways. Instructional preferences and values are both part of preservice teachers' broader belief systems.

Why Do I Want to Know This? (Rationale)

Sometimes it's good to take opportunities as they arise. The chance to get away from Kashechewan and get out on the land is one I rarely pass up. The land we will be traveling

on, the Hudson Bay Lowland, is one of the largest wetlands in the world. Typical vegetation in the lowland ranges from grasses and sedges in coastal areas to white spruce, balsam fir, trembling aspen, balsam poplar, and white birch along streams and riverbanks. I never know what to expect on these trips, whether we will catch fish or get something else. A great diversity of wildlife exists in the Hudson Bay Lowland with 38 species of fish, 295 species of birds, and 47 species of mammals observed. Walter and I know that there are fish, northern pike and walleye, where we are headed. We also know that we may shoot Canada geese, spruce grouse, or maybe even a moose. Anything is possible. At least Walter and I have a place to start and have some expectations for success.

Occasionally it's good to step back from my work as a curriculum writer. The opportunity to take some time and learn more about canoes and teachers' beliefs is always interesting to me. Although I have hunches about teachers' beliefs and the teaching and learning process, I never know where they will lead.

It's Very Important That You Have a Canoe

In 1993, the Hishkoonikun Education Authority in Kashechewan and Kiskinnohamakaywi Weecheehitowin (an educational services organization serving the western James Bay and Hudson Bay region) sponsored the Traditional Values Project in an attempt to record the values of the Cree elders. Out of this project, one phrase emerged that kept coming to mind, "It is very important that you have a canoe." This expression has held a great deal of significance for me. It linked the values of the past with the values of the present and it was told by a Cree educator and elder whom I greatly respect and admire. Later, I asked the author (N. Wesley) to expand upon his phrase:

> I reflect back sometimes on my childhood days. Now and then these memories come to me as revelations of lessons I was taught as a youngster.

My parents were people of the land. She from the upper Albany and he from Akamaski Island. In the late 1940s they moved to the Moose Factory area eventually settling there. I was born shortly thereafter.

My mother worked at the federal hospital on Moose Factory however my father chose to remain a hunter and trapper as he had always been. The closeness of the land made it difficult for him to enter the wage earning economy.

It was not long ago in my adult life that I rethought the words of my father when he said, "It is very important that you have a canoe." I recall him being very empathic that this was a basic and fundamental need.

I, of course understood; at least I thought I did. You see to him, his canoe was a basic fundamental need. Without it then he could go no where—we lived on an island ... more so the highway of our people were the rivers that took them from place to place from springtime until freeze-up in the late fall. I also learned through my brother, that like many of his generation, our father couldn't swim.

So a canoe was his basic need. And as I grew I wondered if this canoe would be my basic need. With the ever changing way of life, I resolved that the fundamental need of a canoe would not apply in my life.

As a family man now I hear the echo of my father's words, "It is very important that you have a canoe." These words now ring true that indeed I do need a canoe. That canoe which is the one that transported my father as a means of survival, is transformed into the vehicle I need to carry on. That vehicle is not a more modern mode of transport but rather a vessel that carries all life learning experiences and lessons to survive. Its contents are all that I have been taught. That vessel is my very being and what I put into my canoe is what I value and hence transforms me into who I am ... for better or worse.

This is my father's teaching ... (personal communication, October 24, 1994)

The canoe was an important need of the elders in the past; it transported the elders to and from their hunting and trapping grounds. This canoe carried everything the elders needed to survive off the land. Today, the canoe of the elders is replaced by the vessel that is our being. This vessel carries all of the life experiences we need to think and act in our lives. Therefore, it's very important that you have a canoe.

It's Very Important That We Understand Teachers' Beliefs

Upon completion of the Traditional Values Project in 1995, one impression

endured—the importance of values in helping the elders survive in their environment. The

importance of values in the elders' worlds lead me to wonder if values were important in

helping teachers cope in the classroom. A year later, I entered the Master of Education

program at Queen's University to find out more about teachers' instructional preferences

and the ways in which values express themselves in the context of schooling.

Teachers' beliefs, part of teachers' broader belief systems which include their

instructional preferences and values, are the implicit assumptions teachers or preservice

teachers have about the teaching and learning process (Kagan, 1992a). These educational

beliefs encompass a range of theories about instruction, curriculum, classroom

management, and evaluation. Although all these theories are important in education, this

inquiry focuses on specific aspects of teachers' beliefs related to instruction, namely their

instructional preferences regarding teaching methods.

The investigation of teachers' beliefs and theories is essential to a thorough

understanding of teachers' thought processes and their actions, and is based on the

assumption that what teachers do is affected by what they think or believe (Clark, 1980).

Increasingly, teacher educators and researchers are taking interest in teachers' and

preservice teachers' beliefs, and in the ways they make sense of their experiences (Bird,

Anderson, Sullivan, & Swidler, 1993; Bramald, Hardman, & Leat, 1995; Johnson, 1994;

Joram & Gabriele, 1998; Kagan, 1992b; Nettle, 1998; Pajares, 1992). However, some

caution is necessary because teachers' beliefs cannot be observed or measured, but must

be inferred by what teachers say, intend, and do.

The importance of understanding teachers' beliefs is based on the following assumptions: (a) Teachers' beliefs represent "the rich source of knowledge that teachers have that affect teacher planning and teachers' interactive thoughts and decisions" (Clark & Peterson, 1986, p. 258), and the beliefs that teachers have influences their judgments, that in turn affect their actions and their observable effects (Pajares, 1992); (b) Teachers' beliefs play a central role in how teachers interpret the teaching and learning process (Johnson, 1994); and (c) Teachers' beliefs are crucial to improving pre- and inservice teacher professional development and classroom practices (Clark, 1988; Fieman-Nemser & Floden, 1986; Munby, 1984; Nespor, 1987; Pajares, 1992).

Teachers' beliefs are an important construct in educational research. These beliefs affect all teachers' thought processes, and teachers' actions and their observable effects. Teachers' beliefs are critical to understanding and improving how teachers think and act in their teaching lives. Therefore, it's very important that we understand teachers' beliefs.

Summary

To understand the decisions that Elizabeth, a Cree preservice teacher, makes on her instructional preferences and the values that guide them requires an understanding of various aspects of teachers' broader belief systems. These aspects were introduced as instructional preferences, values, and teachers' beliefs. In this study, instructional preferences were stated as the specific educational beliefs or attitudes preservice teachers have about instruction, values were expressed as the general beliefs preservice teachers have about their lives, and preservice teachers' beliefs were explained as the implicit assumptions preservice teachers have about

education (or the teaching and learning process).

By 1997, I was ready to continue my examination of preservice teachers' beliefs, instructional preferences, values, and the connections amoung them. A survey of the literature on preservice teachers' beliefs promises a common base of shared educational knowledge. In addition, an overview of landform features that make up the Hudson Bay Lowland ensures a common base of shared environmental knowledge to help Walter and me in our travels.

CHAPTER 2: WHAT DO OTHERS KNOW?

(Literature Review)

The Hudson Bay Lowland has two distinct zones: tundra and transitional boreal forest. Although the Arctic tundra zone makes its southern most appearance in Canada along the southern shores of Hudson Bay, the transitional boreal forest zone predominates in the Hudson Bay Lowland. The transitional boreal forest or muskeg includes a variety of landform features: wetlands (bogs, fens, swamps, marshes, and shallow open water), maritime (saltwater) coastline, Sutton Ridges, and stream and river corridors. Wetlands cover much of the transitional boreal forest due to poor drainage in the Hudson Bay Lowland. The maritime coastline with its salt water tides and distinctive vegetation is an important area for migrating shorebirds and waterfowl. Another unique feature of the area, the Sutton Ridges, contain a series of rock outcrops that rise from the surrounding flat lands. All stream and river corridors in the Hudson Bay Lowland, which make up part of the Arctic watershed, flow into Hudson Bay or James Bay. Due to the large volume of water and ice released after spring break-up, these river corridors are constantly changing.

Walter knows these river corridors very well, particularly the rivers along the coast. He learned to travel on these "highways" from his uncle and other relatives. They taught Walter which rivers are navigable and the appropriate equipment to choose in any season. It is with this knowledge that Walter can capitalize on the experiences of those who came before him.

It is with the knowledge from other researchers that I can (a) investigate the instructional preferences of a Cree preservice teacher and infer their educational beliefs; (b) select appropriate methodologies, methods and data analysis; and (c) avoid unnecessary

replication of other work (McMillan & Schumacher, 1993). What others know ensures that the trip we are traveling on might be less difficult and take fewer unexpected turns, so that we can gain additional insights from this study.

Recent research has suggested that preservice teachers have well-defined beliefs about teaching and learning when they enter teacher education programs (Clark, 1988; Bramald et al., 1995). Florio-Ruane and Lensmire (1990) have stated that these beliefs are well established by the time preservice teachers enter teacher education programs, and include thoughts about what it takes to be successful teachers. Furthermore, teachers' beliefs serve as filters on all aspects of teachers' thoughts, judgments, and decisions (Clark & Peterson, 1986; Johnson, 1994; Nespor, 1987; Pajares, 1992; Pintrich, 1990). These beliefs about teaching and learning, help preservice teachers understand themselves and others and adapt to the world and their place in it (Pajares, 1992). Understanding preservice teachers' beliefs properly, requires an examination of belief systems.

Belief Systems

Belief systems are powerful determinants of the nature of the teaching and learning process, and essential in understanding how teachers make decisions. Lewis (cited in Pajares, 1992, p. 313) has supported this assumption by indicating that "the origin of knowledge is rooted in belief, and that ways of knowing are basically ways of choosing values." Bruner (1996, p. 59) has also stated that "knowledge, after all, is justified belief" and that "claims about truth must always be justified." Therefore, belief systems can serve as a framework for systematic and comparative investigations on teaching (Nespor, 1987). In this study, belief systems represent "the total universe of a person's beliefs about the physical world, the social world, and the self" (Rokeach, 1968, p. 123).

According to Nespor (1987), belief systems consist of beliefs, attitudes, values, and

beliefs substructures. Because instructional preferences or attitudes and values are used in

this study, it is necessary that the following four distinctions are made between attitudes

and values. First, values tend to be general and relatively stable, whereas attitudes tend to

be specific and more prone to change. Second, values are determinants rather than

components of attitudes. Third, different social institutions specialize in inculcating and

transmitting different subsets of values rather than attitudes (Kirby, 1993). Fourth,

teachers have tens of thousands of beliefs and thousands of attitudes, but they only have

dozens of values in their belief systems (Nespor, 1987).

Belief systems can be differentiated from knowledge systems in that (a) they do not

require general or group consensus and consist of propositions, concepts, arguments that

are recognized as disputable; and (b) they have no clear logical rules for determining their

relevance to reality. Although these differentiations may appear unfavourable for research

purposes, the "ill-structured problems" and "entangled domains" encountered by teachers

make beliefs more appropriate than cognitive processes for making sense of the teaching

and learning environment (Nespor, 1987). When teachers uncover problems that do not

belong to a given domain, the non-consensuality and unbounded nature of belief systems

allows teachers to examine problems from a variety of perspectives.

Beliefs, as a construct, can be distinguished from knowledge by the following four

characteristics: (1) they contain assumptions about the existence or nonexistence of

entities, (2) they often include representations of alternate realities, (3) they rely heavily

on affective and evaluative components, and (4) they reside primarily in episodic memory

with material drawn from personal experience or from cultural sources of knowledge

transmission. These characteristics make beliefs useful in finding out how teachers

organize and define tasks or problems (Nespor, 1987).

The Beliefs of Preservice Teachers (About Teaching and Learning)

The literature on preservice teachers' beliefs about the teaching and learning process

is noticeable by its variety in focus. For example, Kagan's (1992b) often cited review of

research on preservice teacher growth indicated, except in one study, that preservice

teachers' personal beliefs remained largely unchanged during their teacher education

programs. However, Grossman (1992) has criticized this review and its conclusions due to

the inadequate selection of studies employed. Dunkin (1996) has also criticized Kagan's

review due to errors made during the synthesis of the literature selected. Others

(Zeichner, Tabachnick, & Densmore, 1987) have noted an elaboration of preservice

teachers' beliefs by the teacher education program under study. They argued that

preservice teachers selected from experiences that suited their own beliefs. Nettle's

(1998) survey of articles published since Kagan's review suggested that there was change

and stability in the beliefs of student teachers. More recent studies have indicated some

change in the beliefs of preservice teachers before and after course work (Joram &

Gabriele, 1998) and during practice teaching (Nettle, 1998). Differing research agendas,

the complexity of the teaching and learning process, and the varying meanings of the term

"teacher belief" may explain why the literature is so heterogeneous in this area. Despite

these research findings, this inquiry is based on the assumption that preservice teachers'

beliefs are resistant to change, but changeable nevertheless.

Pajares (1992) has indicated that earlier incorporated beliefs are more difficult to

change even when these beliefs are no longer feasible representations of reality. For

conceptual or belief change to occur, new information must be incorporated into existing beliefs (assimilation); or when this new information cannot be assimilated, existing beliefs must be replaced or reorganized (accommodation). The following four conditions are necessary for accommodation to occur: (1) new information must represent a change, (2) there must be a need to integrate new information with existing beliefs, (3) there must be a need to reduce inconsistencies among beliefs, and (4) the assimilation of new information into existing beliefs must be seen as unsuccessful (Posner, Strike, Hewson, & Gertzog, 1982). Unless existing preservice teachers' beliefs are seen by preservice teachers as unsuccessful, they may not take account of what they are doing in teacher education and in the classroom, and belief change will not occur (Solas, 1992).

The necessity of changing preservice teachers' beliefs is compelling because some of their beliefs may be unrealistic or inappropriate in educational settings. Difficulties can arise when preservice teachers' beliefs do not reflect the reality and complexity of schools, classrooms, and the teaching and learning process. Cole and Knowles (1993) have stated that preservice teachers have high ideals and aspirations about teaching insofar as preservice teachers believe they will not face the problems of other classroom teachers. In addition, Weinstein (1990) has characterized preservice teachers as having unrealistic optimism and self-serving bias which doesn't prepare them for the uncertainty of the teaching and learning process.

Research has highlighted the effects of these unrealistic or self-serving preservice teachers' beliefs. Preservice teachers who had shown an inclination to overvalue affective variables and undervalue cognitive variables emphasized the value of interpersonal relationships while downplaying the academic aspects of teaching (Brookhart & Freeman,

1992; Pajares, 1992; Weinstein, 1990). Preservice teachers who think that the most effective teachers are those who develop lessons based on motivation and classroom management may fail to take into account that the students may be learning very little in terms of achievement outcomes (Joram & Gabriele, 1998). Conversely, preservice teachers who had shown a tendency to regard students as vessels to be filled with information and rules selected a task orientation as more important than an affective orientation in their teaching (Bird et al., 1993; Nettle, 1998). Preservice teachers who think that the most effective teachers are those who develop lessons based on independence in learning and the transmission of knowledge, may fail to consider that students may be learning at different levels of thinking (Joram & Gabriele, 1998).

If preservice teachers' overall beliefs restrict the range of ideas or actions that preservice teachers may consider, then it is important that the beliefs of Cree preservice teachers are examined. Research has shown that teacher "beliefs influence knowledge acquisition and interpretation, task definition and selection, interpretation of course content, and comprehension monitoring" (Pajares, 1992, p. 328). The study of preservice teachers' beliefs, particularly their instructional preferences, would help researchers understand how preservice teachers internalize and practice what they have learned in teacher education and in the classroom.

Instructional Preferences

Approaches to improving instruction, curriculum, classroom management, evaluation, or any other aspect of the teaching and learning process require an understanding of the total context of schooling (Zaharlick, 1992). An examination of the instructional preferences of preservice teachers is one aspect of the educational context that can

provide a better understanding of intended and unintended consequences of instruction in the classroom.

One way of making preservice teachers' instructional preferences explicit is through instructional planning (Clark, 1988). Instructional or lesson planning "marks an important shift from thinking like a student to thinking like a teacher in most teacher education programs" (Roskos, 1996, p. 120). Although conventional lesson planning is taught as a linear model at most faculties of education, it does not accurately describe the planning of many experienced teachers. Conventional planning consists of a sequence of four steps: (1) a selection of objectives or expectations, (2) a collection of resources, (3) an organization of teaching strategies, and (4) an identification of assessment instruments or evaluation procedures; whereas experienced teachers' planning is more often demonstrated as a circular or interactive learner-centred model (Doyle & Holm, 1998). Moreover, preservice teachers are inclined to develop a specific plan that concentrates on the product and the particular content to be covered, as opposed to experienced teachers' who tend to develop a general plan that focuses on process and the specific context of the classroom (Roskos, 1996).

Blumenfeld, Hicks, and Krajcik (1996) have suggested that instructional planning provides preservice teachers with an authentic task that gives them an opportunity to think in a way that teachers do. This type of teacher planning is beneficial in that preservice teachers learn by thinking through what to teach, how to teach it, and how to evaluate it. Instructional planning helps preservice teachers place their beliefs about teaching and learning in a classroom setting for a particular group of students (Blumenfeld et al., 1996). Moreover, Carter and Doyle (1995) have argued that task frameworks, or

instruments for understanding preservice teacher perspectives, provide a useful process for helping preservice teachers explore their instructional preferences and their interpretations of teaching contexts. Making sense of the instructional preferences of preservice teachers requires an organizational approach that promises a foundation of shared educational meanings. An examination of the instructional preferences of Cree preservice teachers through instructional methods can provide one way of understanding of Cree preservice teachers' instructional planning. It should be noted that the instructional methods approach is only one of many found in the instructional development literature.

Instructional methods may be elaborated as a composite of models, modes, and media (Campbell, 1995). Models are broad teaching and learning orientations that express the purposes of instruction and may be described in four families: information processing, personal, social, and behavioural (Joyce, Weil & Showers, 1992). The information processing family is concerned with the acquisition of concepts directly or indirectly by the students. In this family the teacher presents specific information for learning through inductive reasoning, scientific inquiry, inquiry training, or concept attainment. The orientation of the personal family is on the students, and a greater personal understanding of themselves and their responsibility for learning. Here, the teacher serves as a facilitator who guides their growth and development through non-directive teaching or through the classroom meeting. The social family is dedicated to processes rather than outcomes in student interactions. In this grouping the teacher presents information to the students and then poses a social problem for learning through role playing, group investigation, or social science inquiry. The behavioural family is based on positively reinforcing student

behaviours using behaviour modification techniques where appropriate. In this family, the teacher provides a highly structured approach with verbal praise or rewards through direct instruction, mastery learning, or computer assisted instruction (CAI) to the students (Joyce, Weil & Showers, 1992).

Modes, specific decision-making patterns about objectives and the methods used to achieve them, are organized into five categories: dependent study, alternate routes, alternative outcomes, independent study, and core-complementary (Campbell, 1995). These patterns are the result of interactions between the teacher and the students. In the dependent study mode, the teacher decides the objectives and methods used. In the second mode, alternate routes, the teacher chooses the objectives, while the student decides the methods of achieving them. Conversely, in the alternate outcomes mode, the student chooses objectives from a predetermined selection, while the teacher selects the ways of achieving each. In the independent study mode, the student decides the objectives and methods used with the teacher. Finally, in the core-complementary mode, the student masters a core of essential objectives using the dependent study mode, and then moves to complementary objectives using any of the other three modes of instruction (Campbell, 1995).

Media, the means for the exchange of information and content during instruction, are classified from concrete to abstract, individual to teacher control, persistent to transient, and on how well they accommodate the phases of instruction (Campbell, 1995). Some common media used in classrooms include lecture, film, video, TV, group discussion and activities, tutoring, games and simulation, CAI, newspapers, magazines, and texts. The choice of media used in providing a successful instructional event is dependent on how

well a given medium can exchange content.

Concrete to abstract media can be categorized by how well they represent reality (Campbell, 1995). Concrete presentations (games and simulations) or direct purposeful experiences are effective when students encounter new content, whereas abstract representation (text) or visual and verbal symbols are useful when students have the requisite prior experiences.

Individual to teacher control of media can be arranged to correspond with the students' need for achievement. If the content is complex, and the students are independent and have a high need for achievement, then student control of media (text, group discussions and activities, role playing, and CAI) is likely to be more successful. Conversely, if the students are dependent and have a low need for achievement, then teacher controlled media (lectures and demonstrations) may serve their needs better.

Persistent to transient media can be classified according to the degree that the content can be carried away. Persistent media (text), where the content can be carried away, are helpful when students need control over important content. Transient media (lecture, videos, and films), where the content cannot be taken away, are suitable for informal evaluation, application of one's knowledge, motivation, and entertainment.

In addition, media can be classified on how well they accommodate the following instructional phases: gaining attention, informing on the objective, stimulating recall, providing instruction, providing feedback, and providing practice (Gagné cited in Campbell, 1995).

The models, modes, and media of instruction highlighted here encompass a broad range of instructional methods encountered in daily instructional planning. If Cree

preservice teachers have specific beliefs or attitudes about teaching and learning that lead

them to act in specific ways in constructing learning environments, then it is important

that Cree preservice teachers become aware of their instructional preferences through

reflection, and be given opportunities to identify, examine, and review them.

Hollingsworth (1989) has stated that because preservice teachers have different entering

beliefs, the reproduction of prevailing instructional patterns and uncritical learning may be

due to a common approach to teacher education that favours a single cultural view to the

exclusion of others. Unless the instructional preferences of Cree preservice teachers are

made explicit through instructional planning, existing instructional patterns will continue

to be reproduced that reflect this conventional approach to teacher education.

The Culture of Teaching and Learning

Bruner (1996, p. 87) has identified four themes as crucial to understanding the nature

of the teaching and learning in schools: (1) agency—"taking more control of your own

mental activity"; (2) reflection—"making what you learn make sense, understanding it"; (3)

collaboration—"sharing the resources ... of human beings involved in teaching and

learning"; and (4) culture —"the way of life and thought that we construct, negotiate,

institutionalize, and finally (after it's all settled) end up calling reality."

Of these four themes, it is culture or reality that lies at the centre of preservice

teacher education (Olson, 1988). Olson continued by suggesting that what teachers tell us

about their practice is a reflection of their culture and cannot be understood without

reference to that culture which is interpersonal. Much of the meaning making people

attribute to their lives is particular to their sociocultural surroundings (Zaharlick, 1992).

Meanings in the minds of teachers are made in situated encounters with the world in

cultural contexts (Bruner, 1996). It is within these cultural contexts that culture can be intelligibly or thickly described. The study of the culture of teaching is essentially an attempt to understand the diversity of ways in which preservice teachers construct their lives in the act of leading them (Geertz, 1973).

One way of understanding teachers' lives is through narrative. Narrative, a mode of thought or discourse and an expression of a cultures' world view, is a culturally specific method of communication expressed in oral or written story form. It is through narrative that teachers can construct an identity and find a place in their culture (Bruner, 1996). These narrative constructions, made in the minds of teachers, are stored primarily in episodic memory and organized in terms of personal experiences, episodes or events. Similarly, teachers' beliefs are stored in episodic memory and organized in terms of personal experiences, episodes or events (Lundeberg & Fawver, 1994; Nespor, 1987). The narrative presentation of these personal experiences, episodes or events is useful for making meaning of teachers' lives, and more specifically teachers' beliefs because their beliefs cannot be directly observed or measured.

Values

Nespor (1987) has indicated that preservice teachers' beliefs are generated from personal experiences (learned by directed encounters with an object or situation) and cultural transmission (learned from others). There are three components of cultural transmission as described by Pajares (1992, p.316): (a) schooling—"the specific process of teaching and learning that takes place outside the home"; (b) education—"the directed and purposeful learning, either formal or informal, that has as its main task to bring behaviour in line with cultural requirements"; and (c) enculturation—"the incidental

learning process individuals undergo throughout their lives and includes their assimilation, through individual observation, participation, and imitation, of all the cultural elements present in their personal world." In this study, aspects of schooling, education, and enculturation, are represented by Elizabeth's formal educational experiences, informal educational experiences and professional experiences respectively. An examination of the values of Cree preservice teachers through their personal, informal educational, formal educational, and professional experiences can provide an understanding of the mechanisms by which Cree preservice teachers acquire and transmit knowledge (Pitman, Eisikovits, & Dobbert, 1989).

One way of making Cree preservice teachers' values explicit is through a form of written autobiography called personal history accounts (Brookfield, 1995). These personal history accounts or narratives help Cree preservice teachers place their values in the context of teaching and learning. Narratives or personal history accounts can be beneficial in helping preservice teachers understand the influences of personal experiences, formal educational experiences, informal educational experiences, and professional experiences on creating their values. The use of narratives is particularly appropriate because the transmission of Cree values occurs most often orally through a variety of traditional (noncyclical and cyclical legends, historical narratives, and songs) and popular (accounts of personal experiences, and descriptions, and oratory) narrative types (Ellis, 1995). In addition, narrative in the form of personal history accounts can provide a glimpse into the worlds of the Cree elders and Cree preservice teachers.

The influence of personal experiences on the generation of Cree preservice teachers' beliefs becomes meaningful when examining the Cree elders' adaptations to the world

around them. For example, a Cree elder's personal history account reflects the difficulties

of living off the land compared with modern life today:

> Life in the past was very difficult trying to survive. I was very poor. I
> survived off the land ... We brought up our children by living off the land.
> There were times when we didn't have any food due to bad weather. But it
> wasn't always like that. We were never hungry. I had to wade in icy water
> without shoes. Even my children had to do that. We had to wade in icy
> water in order to take our canoe out into deeper water. Sometimes I made
> boots using sealskin or polar bear skin ... I had to sleep outside too once,
> while we were on the move. We slept in a lean-to. It was very cold. I wasn't
> married yet. I was with my relatives because they asked me to go with
> them. We slept in a lean-to because we couldn't reach where we were
> camping (Edwards, cited in Long, 1993, pp. 12–13).

Furthermore, Preston (1986, p. 246) has suggested that

> the bush is a dynamic and unforgiving teacher, and a competent [Cree]
> adult was normally strongly motivated to make him or her self fit for the
> tasks at hand. Problems arise when a person fails to adjust to the
> requirements of the environment, but even more of a problem are the
> contingencies that are not a normal part of the environment.

Similarly, problems can arise when Cree preservice teachers fail to adjust to the

requirements of schools where Native teachers may be recognized as conventional

educators and sociocultural agents (Stairs, 1991). Even though values, derived from

personal experiences similar to the elders, can help Cree preservice teachers make sense

of their roles as teachers, they may not be compatible with conventional aspects of

teaching and learning.

The influence of schooling or formal purposeful educational experiences on the

development of Cree preservice teachers' beliefs becomes important when looking at the

many hours preservice teachers will have spent in the classroom as students before

entering a teacher education program (McAlpine, Ericks-Brophy, & Crago, 1996). Whereas

values brought about from formal educational experiences can help Cree preservice teachers make sense of classroom information, these values represent a one-sided students' view of the education process.

The influence of education or informal educational experiences on the creation of Cree preservice teachers' beliefs becomes applicable when describing the traditional Native ways of transmitting knowledge through observation and imitation in daily family and community life (Stairs, 1991). Preston (1982, p. 301) has claimed that Cree "children grow into apprenticeship relations with older people ... [and that] these may be practical activities, or socializing with teasing, pun-making and reciting stories." A Cree elder confirms this way of transmitting knowledge:

> Today's teaching is different from the way the natives taught their children. The children learn about native culture through observation. The children learned how to survive by watching their parents hunt, set traps, skin animals and stretch the skins. They also learned how to cure and tan moose and caribou hides and make clothing such as moccasins, mitts, jackets, etc. They even made jackets from rabbit skins. They also taught how to make snowshoes and dog sleds. It would take a long time to verbally teach these things ... (Koostachin, cited in Long, 1993, p. 17).

Although values, drawn from informal educational experiences, can help Cree preservice teachers make sense of their own teaching and learning, they must be negotiated with firmly established non-Native practices of transmitting knowledge.

The influence of enculturation or professional experiences on the creation of Cree preservice teachers' beliefs becomes relevant when describing the professional affiliation of preservice teachers (McAlpine et al., 1996). Britzman (1986) has argued that preservice teachers and professional educators hold shared values or cultural myths about the teaching profession where everything depends on the teacher; the teacher is expert, and

teachers are self-made. Although these shared values, drawn from professional experiences, can help Cree preservice teachers make sense of the teaching profession, they reinforce the concept of teaching as a highly individualistic endeavour (Britzman, 1986).

If Cree preservice teachers have general beliefs about their lives that explain why they choose to act in certain ways, then it is important that Cree preservice teachers are made aware of their values through personal history accounts and given opportunities to reconsider these values. Unless the values of preservice teachers are made clear by highlighting their experiences through personal history accounts or narratives, the shared beliefs or the status quo will continue to be reproduced (Britzman, 1986; Florio-Ruane & Lensmire, 1990). Further, Cree preservice teachers' beliefs consistent with effective teaching and learning can be produced by examining the connections between Cree preservice teachers' values and their instructional preferences.

The Connections Between Instructional Preferences and Values

The relative importance and strength of individual preservice teacher beliefs lies in their connectedness to other beliefs. Those individual preservice teacher beliefs with greater functional connections to other beliefs regarding teaching become more central (Rokeach, 1968). More central beliefs have greater implications and consequences on other beliefs in preservice teachers' beliefs systems. McAlpine and Taylor's (1993) findings indicated that Cree preservice teachers' values, specifically those derived from early childhood schooling experiences, may have influenced these preservice teachers' instructional preferences. The Cree preservice teachers in McAlpine and Taylor's study had more years of residential schooling and spent more time away from their communities than the Inuit and Mohawk teachers. Consequently, the Cree preservice teachers were stronger

than the Inuit and Mohawk teachers in believing that teachers teach best by telling how and that children learn best by listening to the teacher (McAlpine & Taylor, 1993). Understanding the importance and strength of individual beliefs and their connections to other beliefs, helps make research findings clearer and more meaningful (Pajares, 1992). It is for these reasons that the decisions Elizabeth makes on her instructional preferences are connected with her values in this inquiry.

If the strength of Cree preservice teachers' instructional preferences can be interpreted by their functional connections to values, then it is important that Cree preservice teachers are made aware of these relationships and given opportunities to identify and examine them through critical reflection. Otherwise, changes in beliefs are unlikely to occur.

Summary

The construct of preservice teachers' beliefs about teaching and learning is an important one for researchers and Cree preservice teachers. This construct can help researchers understand preservice teachers' implicit assumptions about education and can help Cree preservice teachers make sense of their own teaching and learning. In this study, Elizabeth's beliefs about education, specifically her instructional preferences, were made explicit through her instructional methods, or models, modes, and media of instruction. Understanding the decisions Elizabeth makes on her instructional preferences requires an understanding of her values. Elizabeth's values were made explicit through narratives derived from her personal experiences, formal educational experiences, informal educational experiences, and professional experiences. In addition, finding associations between Elizabeth's instructional preferences and values serve to make research findings

clearer and more meaningful.

Further, understanding the connections between Elizabeth's instructional preferences and values has implications on the methodology used. The choice of an applicable methodology, like the choice of a river to travel on, promises to shape the direction of our travels.

CHAPTER 3: HOW DO WE KNOW THE WORLD?

(Methodology)

The mouth of the Albany River near the James Bay coast is wide and offers few difficulties or challenges to Walter and me. At this point, the river separates into North and South channels. Although the tides have an effect on the river for many kilometres inland, we will only be traveling on the North Channel for a short time. The tributary that we have chosen to drive on is the Stooping River, approximately 25 kilometres upstream from Kashechewan. It is one of many larger streams that feeds into the Albany River drainage basin. The Stooping River combines easy, long, winding sections with narrower ones marked by rapids that require Walter and me to frequently jump out of the canoe and drag it over the shallower water. Other sections where trees have fallen across the river offer still more obstacles and require the use of a chain saw to allow further passage up the river. From its junction at the Albany River, the Stooping continues inland for about 150 kilometres to Jaab Lake, the place where we are eventually headed (see Figure 2). Although a river with too many obstructions may prove to be impassable and hamper Walter and me in our trip, a river with too few challenges may prevent us from recognizing various features in the Hudson Bay Lowland. The choice of a river to travel on is an important one.

The choice of a methodology which provides "the theory of knowledge and the interpretive framework that guides a particular research project" (Lather, 1992, p. 87) is also important. The use of qualitative methodology in research plays a significant role in clarifying the personal and social processes by which preservice teachers can describe their own thinking about teaching and learning. Its application also reflects changes in our
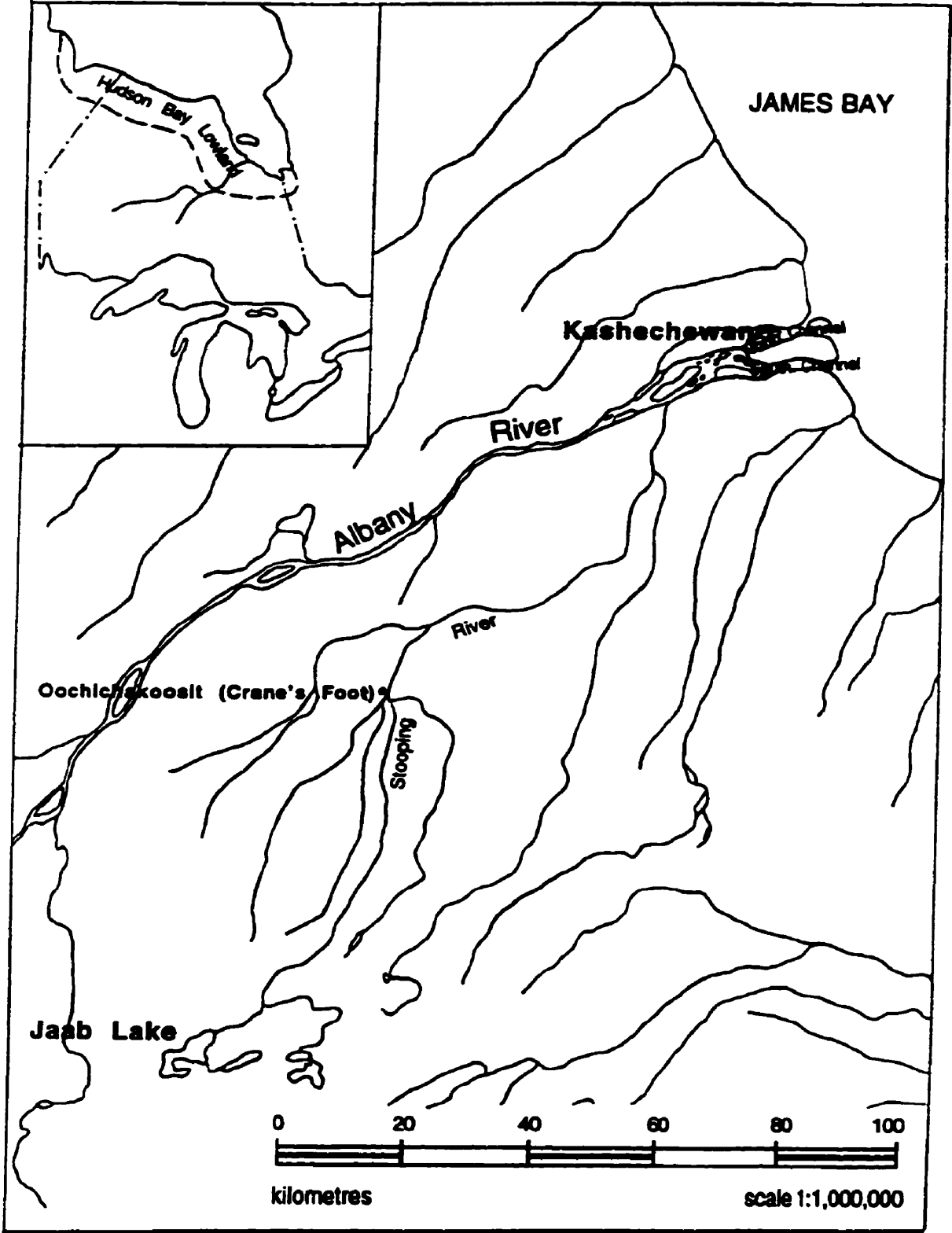
Figure 1. The Hudson Bay Lowland and the Albany River Drainage System

perceptions of classroom teaching and educational research to include that which is

naturalistic, interpretive, and attentive to the particular rather than the normative (Kagan,

1993). Furthermore, the use of qualitative methodology promises to give voice to the

beliefs and theories that shape and inform the activities that preservice teachers engage in

(Solas, 1992).

An Interpretivist Approach to Understanding the World

Guba and Lincoln (1994) have identified four competing paradigms or worldviews that

direct the researcher in qualitative research as positivism, postpositivism, critical theory,

and constructivism or interpretivism. In this study, constructivist or interpretivist

approaches offer an understanding of "the complex world of lived experience from the

point of view of those who live it" (Schwandt, 1994, p. 118).

An interpretivist approach recognizes that there are multiple realities in the world, and

that similarly, there are many constructions that might be made (Lincoln & Guba, 1985).

The Cree elders have acknowledged these multiple realities as well. The following

comments suggest the construction of one elder:

> Our ancestors' beliefs were that there is another world, the spiritual world.
> By looking at creation and creatures, they know another kind of world.
> They used to have a place to go, to seek an answer to their questions about
> creation, the mysteries of life, the dream quest ... Seeking answers to
> mysteries like the mention of giant animals buried underground on earth,
> like giant Beavers (Chookomolin, cited in Turner, Linklater, & Stadel,
> 1995, p. 24).

An interpretivist approach also promises different types of outcomes. Peshkin (1993)

has recognized four categories of outcomes in qualitative research as description,

interpretation, verification, and evaluation. It is through interpretation that the following

outcomes may occur in this inquiry by providing such insights as (a) an elaboration of

existing concepts of teachers' beliefs, (b) an enriched knowledge of Elizabeth's values and

instructional preferences, and (c) a recognition of the problems associated with teaching

and learning as they affect Elizabeth and perhaps other Cree preservice teachers.

An Interpretivist Construction of Reality

Donmoyer (1990) has suggested that human actions are constructed and are in a state

of mutual simultaneous shaping with the world, where everything influences everything

else. This concept, where everything is interrelated and related, is a common one in most

Native traditions (Beck & Walters, 1977). A Cree elder has explained the relationship

between human beings and animals as follows:

> In respecting Geese, when the rules are followed it is repaid by the Geese
> being less tense or not too scared. The result was that one can have a good
> hunt when the Geese are left alone in their feeding ground, so it pays off in
> the long run. The Geese then can be hunted enough to last till part way
> through the winter (Chookomolin, cited in Turner et al., 1995, p. 24).

Observation played a crucial role in ensuring a successful waterfowl hunt and survival

for the elders. Similarly, the interests, purposes, and values of researchers have strongly

influenced their observation or research (Smith, 1992). In this instance, my constructions

of reality depend on particular interactions between Elizabeth and me, including the

beliefs and issues that I bring to the study. Therefore, interpretive inquiry causes me to

focus on making meaning of the world with Elizabeth. This relationship between

researcher and participant characterizes interpretivist constructions of reality (Lincoln

1995). To present the strongest case for the interpretivist approach, I have made

interpretations through practical reasoning, presentation of examples, and careful

judgments within the context of an ongoing dialogue with Elizabeth (Smith, 1992).

The Reciprocity of Subjectivity and Objectivity

Grumet (1992, p. 29) has suggested that "an encounter with the world is a generative act, a spawning experience, a hybrid of objectivity and subjectivity, whose very birth modifies and extends and finally transcends its inheritance." Roman and Apple (1990) have stated that the distinction between subjectivity and objectivity is a complex one, due to the constantly shifting relationship between them. Because the researcher (or the subject of the inquiry) and the participant (or the object of the inquiry) interact to affect each another, the subject and the object of the study are inseparable (Lincoln & Guba, 1985). This interaction enables a kind of sharing, leading to a change in the meanings the researcher and the participant bring to the inquiry. Therefore, subjectivity and objectivity are seen in this study as reciprocal, (re)producing the self and the world (Grumet, 1988), and reality is seen as shaped through the interaction between Elizabeth and me. To present the strongest case for the reciprocity of subjectivity and objectivity (confirmability), I have attempted to provide thick descriptions of Elizabeth and myself as if told in our own voices. However, it must be acknowledged that Elizabeth's voice was based on my interpretation and pre-bounding of what was said and heard throughout this study.

The Relevance of Generalization

One consequence of interpretive inquiry is that the findings of a particular study are not generalizable in the traditional sense because there are always differences in settings over time and in context due to the changeability of culture. However, Becker (1990) has suggested that if researchers don't generalize about schools in some manner then they haven't solved the educational research problem about generalizing, that is, making

research applicable to schools. He continued by saying that generalizations are not about

how all schools are alike—they are not—but that generalizations are all about the social

processes of teaching and learning. Understanding these social processes lets researchers

generalize about some large area of social life. Whereas Cree preservice teachers may

make decisions on instructional preferences that reflect their values, the generalization

that all preservice teachers or teachers make decisions on instructional preferences in

accordance with their values may be true although the results are different (Becker,

1990). To present the strongest case for the usefulness of this inquiry to others' about

schools (generalizability), I have tried to produce a clear, detailed description of the

setting and context of this study (Schofield, 1990).

The Only Validity Is: Transferability and Credibility

The application of qualitative methodology has often been challenged as to its validity

(transferability and credibility) or trustworthiness. Gitlin and Russell (1994, p. 124) have

contended that "the degree to which the research process enables ... [individuals and]

groups to fully participate in the decision-making process, examine their beliefs, and make

changes based on this understanding" is one criterion of validity.

Lincoln and Guba (1985) have suggested that transferability (or external validity), a

function of the similarity between two contexts, can be judged with an appropriate base of

information in both settings. To present the strongest case for transferability to other

investigations of Cree and non-Native preservice teacher beliefs and teacher education

programs, I have attempted to supply a sufficient amount of information about myself,

Elizabeth, and the setting to allow others to make informed decisions about whether the

findings from this study are useful making judgments about similar studies (Schofield, 1990).

In addition, Lincoln and Guba (1985) have suggested that the credibility (or internal validity) of the reconstructions of reality is enhanced if these representations can be deemed trustworthy by the research participant. To present the strongest case for credibility, I have endeavoured to promote an ongoing conversation with Elizabeth to decide whether the research interpretations are authentic.

The Only Reliability Is: Dependability

The use of qualitative methodology has also been criticized as to its reliability (dependability) or to the ability of independent researchers to come to the same conclusions when the same methods are applied. Gitlin and Russell (1994, p.124) have indicated that "when the aim is the development of voice, it is not expected and undesirable that independent researcher-subject teams would come to the same conclusions" since populations and contexts change. The development of voice ensures the participation of groups or individuals not typically heard from in the research process. Therefore, one criterion of reliability is to satisfy the underlying principle of voice and its relation to a desired type of change (Gitlin & Russell, 1994). To present the strongest case for dependability, I have attempted to ground this study in the experiences of Elizabeth.

The interpretivist or constructivist worldview seeks out multiple constructions of the world and recognizes the relationships between the researcher and the participant, and the respective communities to which they belong (Lincoln, 1995). Further, Lincoln (1995) has suggested that research based on relationality or connectedness is founded on the emerging interpretivist concepts of community, sharing, and equality. These emerging interpretivist concepts correspond to Native worldviews (Beck & Walters, 1977). Consequently, the use of interpretivist approaches is particularly relevant for research on

Cree preservice teachers like Elizabeth.

Summary

The use of qualitative methodology in teaching and educational research provides an interpretivist approach that promises to give voice to the decisions Elizabeth makes on her instructional preferences and the values that guide them. Further, the interpretivist approach enables sharing and joint meaning-making between Elizabeth and myself. Research based on interpretivist or constructivist approaches recognize the interactions between the researcher and the participant, and the many constructions that might be made from these interactions.

Interpretivist research requires that I use the appropriate methodological techniques in this study. Similarly, travel upriver demands Walter use the necessary tools and equipment as well.

CHAPTER 4: WHOSE WORLD DO WE WANT TO KNOW?

(Method)

Since no trip can begin without proper tools and equipment to help us in our travels, it is necessary that we outfit our canoe with appropriate gear: two paddles, 20 horsepower Johnson outboard motor, spare spark plugs, 200 L gas, 4 L oil, fishing equipment, hunting equipment, prospector's tent, portable wood stove, stove pipes, chain saw, assorted tarps, sleeping bags, sponge, extra dry clothes, rain gear, rubber boots, Coleman stove, naphtha, cooking utensils, eating utensils, store bought food, and personal items. The use of appropriate tools and equipment ensures that we can travel safely and efficiently.

This gear is comparable to the techniques used for gathering empirical evidence, commonly called the method (Lather, 1992), which in this study includes the following: an autobiography, a classroom case, a repertory grid, and an interview. The application of qualitative methods promises to reveal the decisions that Elizabeth makes on her instructional preferences and the values that guide them.

Qualitative Methods

An understanding of the decisions teachers make can be determined by asking teachers what they think and believe. Two approaches in the study of teachers' thoughts and beliefs have appeared in the last decade: information-processing and decision-making (Solas, 1992). Choosing a suitable model is important when deciding the issue of voice.

The information-processing approach centres on how teachers limit and structure their environment, particularly during classroom interaction, from the perspective of the researcher. In this model, Clark (1980, p. 42) has suggested that the central research question asked is, "How does a teacher define a teaching situation, and how does the

teacher's definition of the situation affect his or her behaviour?" This approach tends not to take account of teachers' meanings of events or perceptions as they are talked about and written about by the researcher. Further, the information-processing approach assumes that the meanings of the language used throughout the research process are shared without problems (Solas, 1992).

The decision-making approach focuses on what and how teachers think from the perspective of the teachers themselves and includes the researcher's interpretations of these perspectives. In the decision-making model, Clark (1980, p. 42) has suggested that the central research question asked is, "Given a particular situation, how do teachers decide what to do?" This model is appropriate in circumstances like teacher planning before and after classroom interaction. Fieldwork, case studies, videotapes, participant observations, autobiographies, and repertory grids are some methods commonly used in the decision-making approach (Solas, 1992).

Determining what and how Elizabeth thinks from her perspective is difficult, but is based on the following assumptions that I accept: (a) that she can clearly express her thinking (Solas, 1992), (b) that what Elizabeth says relates to her instructional preferences and values (Gitlin & Russell, 1994), (c) that she does not share the same values or walk in the same world as me (Henze & Vanett, 1993), and (d) that the meanings of the language used throughout the research process are shared with difficulty (Solas, 1992).

In this study, the decision-making approach was used to promote Elizabeth's voice based on particular situations presented to her. In addition, the use of multiple methods served to provide a more holistic view of preservice teachers' beliefs that validated other ways of acting, thinking, and feeling (Zaharlick, 1992). The holistic perspective "maintains

that human events must be viewed in the larger contexts in which they naturally occur, and that much of the meaning people attribute to their lives is specific to their sociocultural surroundings" (Zaharlick, 1992, p. 117). A Cree elder describes the holistic world view in the following way: "Our elders have taught us to respect everything we see big or small. Our teaching, in our culture was total because we lived it everyday as we grew up" (Kataquapit, cited in Turner et al., 1995, p. 21). Therefore, becoming a teacher and teaching are complex processes best considered holistically through Elizabeth's voice. To know about this preservice teachers' beliefs, I asked her using an autobiography, tested her using a classroom case, and let her sample the options using a repertory grid (Hunt, 1987). To know more about Elizabeth's beliefs, I asked her again using an interview.

Autobiographies or If You Want to Know, Ask Her

First, I gave Elizabeth four questions dealing with life experiences to help Elizabeth write her autobiography (see Appendix B). A written autobiography is an account of an individual's own life. Written autobiographies may include the following: personal history accounts, journal keepings, explorations of personal metaphors, reflective accounts of practice (Cole & Knowles, 1993), teaching logs, teacher learning audits, role model profiles, ideology critiques, and good practice audits (Brookfield, 1995). Each type of written autobiography has special characteristics that lend themselves to particular methods of research.

In this study, a personal history account, in the form of stories of experiences about learning and teaching in formal and informal settings, was used to help Elizabeth generate her values. This account consisted of (a) personal experiences based on events during childhood, adolescence, and adulthood; (b) formal educational experiences founded on

events in elementary school, secondary school, college, or other post secondary institutions; (c) informal educational experiences based on events with parents, grandparents, elders, relatives, or friends; and (d) professional experiences grounded on events in schools as classroom assistants and preservice teachers or in the world of work outside education.

Upon receiving Elizabeth's written autobiography, I presented her with my personal history account in an attempt to foster trust and sharing in the research process. Following this exchange, I gave Elizabeth a summary chart of Native-derived values or gifts of the four directions (Bopp, Bopp, Brown, & Lane, 1984, pp. 72–73) to help Elizabeth identify her values in my terms (see Appendix C). I explained to Elizabeth that this summary chart contained values within the circle of Native worldviews. Then I returned Elizabeth's personal history account, and asked Elizabeth to read it over and write those values derived from her stories of experiences on her personal history account.

These stories of experiences are comparable to narratives that Polkinghorne (1988) has suggested are meaning making structures that organize human events and actions into a whole through themes or plots. Although plots or organizing themes provide the means through which specific events or experiences are understood, the identity and meaning of events are produced by a recognition of how they interact with a particular plot or different plots. Conversely, an inability to make sense of human events or experiences arises from difficulties integrating an event into a plot. These difficulties may represent personal or cultural differences. As a result, an understanding of these narrative organizational presentations or stories of experiences is vital in giving meaning to events that transcend "us as individuals as we communicate our personal thoughts and

experiences to others, and as we, in turn, participate as hearers and viewers of their expressions" (Polkinghorne, 1988, pp. 15–16).

Narrative presentations and stories of experiences acknowledge the importance of experience in developing beliefs about practice and about what it means to be a teacher. Similarly, personal history accounts focus our attention on the stories of experiences of preservice teachers. Therefore, personal history accounts can serve as tools to help researchers and preservice teachers understand the values that guide preservice teachers' decision-making and their interpretations of teaching contexts.

Personal history accounts are beneficial in that they can (a) describe participants' thinking; (b) reveal participants' implicit theories, values, and beliefs; (c) enhance Cree preservice teachers' learning through shared reflection with peers and teacher educators; (d) create a record of preservice teacher development; (e) supply data for researchers; and (f) record and interpret Cree preservice teacher voice (Coles & Knowles, 1993). Also, personal history accounts can link the particular experiences of preservice teachers to the realities of classrooms and to knowledge about teaching derived from research and theory (Carter, 1995).

Personal history accounts have been criticized for favouring better writers. This shortcoming did not appear to affect Elizabeth's ability to complete her personal history account satisfactorily.

Later, I asked Elizabeth to check off three or four additional values from the same summary chart of Native-derived values or gifts from each of the four directions (Bopp et al., 1984). This was accomplished to elicit a wider range of values that may have been limited due to the specific nature of the questions asked for her personal history account.

Classroom Cases or If You Want to Know, Test Her

Second, I gave Elizabeth primary learning outcomes and content to help Elizabeth write her classroom case (see Appendix D). A classroom case is a description of a real or realistic classroom situation that incorporates information needed to allow preservice teachers to clarify and develop solutions to problems presented (Kagan, 1993). Classroom cases may include the following: instructional, disciplinary or motivational, and administrative (Kagan & Tippins, 1991). Each type of classroom case has distinctive features that address specific aspects of the teaching and learning environment.

In this study, an instructional classroom case, in lesson plan form, was used to help Elizabeth identify her instructional preferences. This instructional case, designed for a Grade 3 class, consisted of the following: (a) four Ontario provincial language outcomes described as listening and speaking, reading, writing, and viewing and representing (Ministry of Education and Training, 1995) that I selected complex problem-solving levels of learning to increase the range of possible teaching methods from Elizabeth, and (b) Native-oriented content derived from materials available and used in Northern Ontario schools.

Elizabeth handed her lesson plan in during the early part of the 1997/98 school year. After several months of experience in the classroom, I asked Elizabeth to review her lesson plan and revise it if she felt this was necessary. Elizabeth made only one revision in her instructional planning. Her revision included using the reading outcome instead of all four outcomes originally provided. In spite of attempts to increase the range of possible teaching methods from Elizabeth, the data supplied by her tended to reproduce regular daybook planning.

Following the development of her lesson plan, I gave Elizabeth material on instructional method variables (Campbell, 1995) to help Elizabeth describe her instructional methods, that is, the models, modes, and media that she would choose. Afterward, I orally reviewed the readings with Elizabeth to ensure her understanding of the content, and confirm her responses. Although this organization of instructional methods arranged specific methods of instruction from what was probably a non-Native perspective and in my terms, it provided a common base of shared instructional meanings between Elizabeth and me. In addition, these instructional methods placed Elizabeth's meanings within a classroom context.

The construction of lesson plans, through instructional classroom cases, mirrors teachers' thinking about instruction encountered in schools. These instructional classroom cases are conventional in the sense that they reflect the thinking patterns of experienced teachers. Conversely, instructional cases are unique in the sense that they depict the decision-making of particular preservice teachers. Therefore, classroom cases focus our attention on the professional experiences of preservice teachers in a particular context. Although the way preservice teachers construct an instructional classroom case reflects their instructional preferences (Kagan & Tippins, 1991), the relationship between instructional classroom cases and actual practice is not necessarily a direct one.

Instructional classroom cases are useful in that they can provide data for research on teacher thinking, can serve as instructional tools to help preservice teachers connect theory to practice, can develop problem solving skills, and can promote change in teaching and learning beliefs and practices (Kagan, 1993). In addition, Lundeberg and Fawver (1994) indicated that preservice teacher cognitive growth improved when beliefs,

educational theories, and discussion of classroom cases were tied together.

One limitation of instructional classroom cases may be that they encourage written descriptions over oral discussions, and therefore may favour better writers (Lundeberg & Fawver, 1994). Furthermore, the nature of the writing task itself and the instructions used may affect the responses of the preservice teachers (Kagan & Tippins, 1991). Oral reviews indicated that neither of these limitations appeared to affect Elizabeth's ability to complete her instructional classroom case from a school based perspective.

Repertory Grids or If You Want to Know, Let Her Sample the Options

Third, I gave Elizabeth her repertory grid that I developed from the values Elizabeth derived from her autobiography and from the instructional preferences Elizabeth named from her instructional classroom case (see Appendix E). A repertory grid is an adaptable method of examining the ways in which preservice teachers experience their worlds (Solas, 1992). It consists of elicited, negotiated, or supplied elements and constructs. Repertory grids may include the following: tick-cross or dichotomous scales, rating scales, and rank order scales. Each type of repertory grid has specific purposes that depend on the participants and on the detail of information to be shared (Pope & Denicolo, 1993).

Repertory grids provide a mechanism for recording and supplying data for research on teachers' personal constructions about teaching and learning. These grids can help preservice teachers think about the many methods they use "for the transfer of learning and organize instruction accordingly" (Solas, 1992, p. 211). In addition, repertory grids offer a systematic nonprescriptive tool for giving voice to preservice teachers' constructions (Pope & Denicolo, 1993) in ways that were meaningful and significant to them.

In this study, a rating scale repertory grid was used to help Elizabeth decide whether she made decisions on her instructional preferences according to her stated values. Rating scale repertory grids provide more detail than cross-tick approaches because the participants can indicate the association and neutrality of the elements. Compared to rank order scale repertory grids, rating scale grids take less time and are less difficult to complete. In addition, "a ranking scale produces only *ordinal* information since the process contains no mechanism for ensuring that the *intervals* between, for example, ratings of (1 and 2) and (3 and 4) are the same within a construct dimension ... and this imposes limits on the kinds of statistical operations that can be applied to them" (Pope & Denicolo, 1993, p. 534). The rating scale supplied to Elizabeth included a "3" for definitely associated or yes, "2" for neutral, and "1" for definitely not associated or no (Munby, 1984).

Elizabeth's rating scale repertory grid contained elicited instructional preferences elements named from her models, modes, and media of instruction, and elicited values constructs derived from her personal, formal educational, informal educational, and professional experiences (described in Chapter 5). Elements usually include items that are all at the same level, e.g., all people, all events, all situations, or all instructional methods, and represent a wide range of possibilities in the world under investigation. Constructs usually include items classified as sensory, behavioural, inferential, or attitudinal, and represent the different ways in which the participants think about the elements. After reviewing her repertory grid, Elizabeth rated her values constructs using the rating scale supplied. In keeping with the repertory grid technique, I gave Elizabeth opportunities to omit or change her instructional preferences elements, values constructs, and rating scores throughout the rating process. Elizabeth did not make any changes to her repertory grid

during these opportunities. Although this grid technique may imply a non-Native way of thinking, it provided a foundation for the joint exploration of Elizabeth's personal constructs.

Because repertory grids are only partial records of preservice teachers' perspectives further probing is often required. Used with other tools such as interviews, repertory grids serve to confirm and elaborate various aspects of analysis and interpretation (Pope & Denicolo, 1993).

Interviews or If You Really Want to Know, Ask Her Again

Finally, following the receipt of Elizabeth's completed repertory grid, I conducted an interview with Elizabeth using questions based on my initial interpretation of her completed grid (see Appendix F). An interview is "an interactive and structured context where information and interpretation flow both ways" (Gudmundsdottir, 1996, p. 294). This special form of interaction takes place within the confines of a conversation with questions and answers. Interviews may be either directed or open-ended (Ohmagari, 1996).

In this study, a directed interview with questions I supplied was used to help Elizabeth and me highlight the decisions Elizabeth made on her instructional preferences according to her stated values. In preparation for the interview, I gave Elizabeth's completed repertory grid back to her, and asked her if she wanted to make any changes in her ratings. Again, Elizabeth did not make any changes to her repertory grid. Afterward, I gave Elizabeth a list of questions, which I derived from her repertory grid, to enhance her interview responses. From these questions a taped interview took place that was later transcribed. Throughout this interview, Elizabeth constructed her answers from her

repertory grid responses and from her understanding of my interpretivist approach.

Interviews, as conversations, are shaped by the experiences and belief systems of the participants and researchers. These interviews are useful tools for personal and local understanding of the teaching and learning process. As a result, interviews can provide a mechanism for negotiating personal meaning based on the particular experiences of preservice teachers themselves, and can empower researchers and participants to address contextual issues. Giving voice to these issues is educative for participants and researchers in the accumulation of knowledge about teaching. Furthermore, the grounding of the teaching and learning process, in the local and the personal, serves to equalize the roles and responsibilities for all participants in the research process (Carter, 1995).

Used with repertory grids, interviews are helpful in giving opportunities for preservice teachers to (a) identify the original patterns of meaning in the grid, (b) explore the emergent patterns of meanings revealed through an analysis of the grid, (c) create a more representative grid based on their revised perspectives, and (d) integrate new patterns of meaning into their daily practice (Thomas & Harri-Augstein, 1985).

Gudmundsdottir (1996) has suggested that interviews, like other research tools, are products of our culture, and express only selected aspects of our experiences at the expense of ignoring others. Nevertheless, I tried to produce more informed reconstructions of Elizabeth's experiences by placing them within the context of Native and non-Native education, and with knowledge informed by the literature and the elders.

Summary

The choice of relevant qualitative methods of data collection and analysis promises to reveal Elizabeth's beliefs about education from her perspective. In addition, multiple

methods of data collection serve to help Elizabeth and me understand the decisions that she makes on her instructional preferences and the values that guide them from a holistic viewpoint. These multiple methods of data collection and analysis were (a) a personal history account used to generate Elizabeth's values, (b) an instructional classroom case used to describe her instructional preferences; (c) a repertory grid used to help Elizabeth decide whether she made decisions on her instructional preferences according to her stated values, and (d) an interview used for negotiating the meanings revealed in the grid.

Interpretivist approaches to data collection present the complex nature of teaching and learning from the perspective of the Cree preservice teacher herself. An understanding of this perspective requires the proper arrangement of interpretative methods or procedures, and that I use these techniques with Elizabeth properly. Similarly, travelling up the river requires the correct placement of tools and equipment in the canoe and that Walter uses these materials with me properly too.

CHAPTER 5: IF YOU WANT TO KNOW, ASK!

(Data and Analysis)

Although we are excited, Walter and I take the time to load the canoe carefully. First, Walter attaches his motor to the canoe. After this, I hand Walter the gas tanks which he places in front of the driver's seat. Then Walter lays a plastic tarp on the floor between these gas tanks and the centre of the canoe. Next, we position the heavier and more water-resistant equipment—stoves, pack sacks, and food and cooking boxes—on the tarp. On top of this equipment, we place the tent, sleeping bags, and clothing. Following this, Walter wraps all these items in the tarp and holds them down with stove pipe sections, paddles, and remaining gear. This arrangement prevents most of our equipment from getting wet when travelling through rapids or when the weather turns to rain. Also, loading the canoe in this way ensures greater balance and added stability in the water. Finally, we put all of our fishing and hunting equipment in the front of the canoe.

Everything that we packed into our canoe is necessary and useful. The correct use of these tools and equipment enables us to have a successful trip up the Albany River. All the qualitative methods used in this inquiry to collect data are necessary and useful as well. The proper use of these methods allows me to collect and analyze data effectively. Before the collected data can be analyzed properly, it is necessary to provide information on the setting or context and on the participant in the study.

Give Me Information—The Aboriginal Teacher Education Program

The Aboriginal Teacher Education Program (ATEP), originally initiated through Kiskinnohamakaywi Weecheehitowin in cooperation with Queen's University, is a Mushkegowuk community-based education program (Queen's University Faculty of

Education, 1996). The ATEP began along the western James Bay and Hudson Bay coasts in 1993 when the first intake of preservice teachers occurred. This program, designed specifically for Aboriginal people, leads to a Diploma in Education or Bachelor of Education. The Diploma in Education option prepares preservice teachers for teaching in the Primary and Junior divisions (Kindergarten to Grade 6) with graduates qualifying for their Certificate of Qualification in these divisions. To increase the access of Aboriginal students to the Faculty of Education, the entrance requirements for the Diploma in Education consist of an Ontario Secondary School Diploma or equivalent, Indian ancestry, letters of Aboriginal community support, and previous experience in Native education. The Bachelor of Education option prepares preservice teachers for teaching in their choice of Primary-Junior, Junior-Intermediate, or Intermediate-Senior divisions with graduates qualifying for their Certificate of Qualification in two divisions depending on the program options chosen. All the Cree preservice teachers in the ATEP are enrolled in the Diploma in Education component of the program.

The Diploma in Education offers short, intensive education courses held on a part-time, off campus basis during the fall, winter, and summer sessions over a period of two years. These courses are made up of the following: (a) specific ATEP offerings that reflect local contexts, needs, and perspectives—Advanced Seminar in Curriculum (0.5 credit), Aboriginal Teacher Education (0.5 credit), and Aboriginal Student Teaching Practicum (1.0 credit); (b) general Faculty of Education offerings adapted from existing courses that include Native content—Human Dimensions in Teaching and Learning (0.5 credit), Language Arts (0.5 credit), Social and Environmental Studies (0.5 credit), and The Arts (0.5 credit); and (c) general Faculty of Education offerings—Mathematics (0.5 credit) and

Professional Skills (0.5 credit). In addition, the practice teaching requirement consists of an eleven week practicum. Half of this practicum placement must be completed in a First Nation school setting. Consequently, Aboriginal specific courses, courses adapted to Aboriginal contexts, and practicum placements make up to 4.0 credits of a 5.0 credit program. All the ATEP students take the same number of courses and same course concentrations as other Faculty of Education students at Queen's University (Queen's University Faculty of Education, 1996).

The courses delivered during the first year of the program (1997/98 school year) when this investigation took place included the following: (a) Effective Writing and Communication I, II, and III, (b) Human Dimensions in Teaching and Learning, (c) Aboriginal Teacher Education I and II, (d) Language Arts, (e) Social Studies, (f) The Arts, and (g) Aboriginal Student Teaching Practicum I. Throughout the first year of the program, the ATEP students travelled to Moose Factory to obtain most of their courses. These courses held in Moose Factory lasted for periods of up to three days. Other courses, such as Social Studies and The Arts, took place in Kingston for two weeks during the summer. In addition, the Aboriginal Student Teaching Practicum I course occurred in various communities along the James Bay coast for a three week period. All courses offered during the 1997/98 school year were delivered by staff from the Faculty of Education at Queen's University and from Kiskinnohamakaywi Weecheehitowin.

Give Me Voice—Elizabeth

This study was initially designed to draw its participants from a population of 18 Cree preservice teachers in the ATEP (see Appendix G). However, I was unable to sample these Cree preservice teachers as originally proposed due to the following: (a) my difficulty in

obtaining respondents from the ATEP during the 1996/97 school year, and (b) my own return to teaching as a principal during the 1997/98 school year. However, I was fortunate to have a staff member enrolled in the first year of the 1997/98 program who was eager and willing to participate in my inquiry (see Appendix H).

The possible power relationship between the participant and myself must be acknowledged. Discussions regarding my relationship to the participant as principal were held before undertaking this study. The participant indicated orally her understanding that the information collected would in no way interfere with our regular principal-staff member relationship. In addition, the participant was told verbally that participation in this inquiry would not interfere with her regular curriculum or disrupt her classroom teaching, and that participation in this study would be voluntary. The participant agreed orally to these conditions of participation during these discussions. Further, I attempted to avoid the perceived difficulties that might arise from this relationship by using a collegial approach and multiple methods of data collection.

The use of one Cree preservice teacher proved advantageous in that it served to identify mutually shaping influences, to allow for patterns of local values, to highlight the issue of voice, and to make the interaction between the participant and myself explicit, recognizable, and accountable (Lincoln, 1995; Lincoln & Guba, 1985). The following information on Elizabeth came from a personal information sheet supplied to her (see Appendix I) and interview questions undertaken as part of the method (see Appendix F).

Elizabeth, the adult (over 25 years old) Cree preservice teacher in this study, was born in Moose Factory although her family lived in Moosonee during this time. While living in Moosonee, Elizabeth attended this community's public school. Later, Elizabeth's family

moved to another small northern town where she attended the local public school and high school. It was in this town that Elizabeth met her future husband. Following their marriage there, Elizabeth moved to her present Native community where her three children were born and raised.

This Cree community, where Elizabeth lives, follows the organizational structures and practices of the neighbouring towns, but attempts have been made to incorporate traditional Cree customs and traditions into these structures and practices. English is the language of everyday use in the community and of Elizabeth as well. Cree is used predominantly by the elders; its use by the remainder of the community and by Elizabeth is limited.

Once her children became young adults, Elizabeth went back to high school and fulfilled the requirements for the Ontario Secondary School Diploma. Subsequently, she entered college and completed a 20-week Health Care Aide program, and worked in the health care field for a short time. Afterward, she worked as a Kindergarten classroom assistant in the local band operated school for four years.

The local school tends to be modeled after the public school system, however steps have been taken to encourage the integration of Native values and traditions. This integration has been fostered by strengthening the Cree language program and by hiring more Native teachers.

While in her position as a classroom assistant Elizabeth attended the Native Classroom Assistants Program held at Nipissing University. Upon acceptance into the ATEP, Elizabeth began teaching the Grade 2 class with the same Kindergarten teacher acting as her associate teacher. This associate teacher was Native as well, but was raised and educated in

a large northern Ontario city.

In addition to her experiences in Native education, Elizabeth has many of the characteristics of mature students—she has successfully attended a post secondary college, has continued to raise a family while working, has financial independence, and has an average socioeconomic status. Many of these characteristics are similar to those that appear in Eifler and Potthoff's (1998, p. 187) study on nontraditional teacher education students. Because of the maturity and diverse experiences of nontraditional preservice teachers, Rodriquez and Sjostrom (1998) have suggested that these preservice teachers may need different educational approaches than traditional preservice teachers to describe their beliefs about teaching and learning. Similarly, Cree preservice teachers, such as Elizabeth, may need different approaches to express their values and instructional preferences because of their maturity and previous experiences in Native education. One of these different educational approaches follows.

An autobiography, a classroom case, a repertory grid, and an interview provided the data that revealed the decisions Elizabeth made on her instructional preferences according to her stated values and the extent to which these values represented traditional Cree culture. At the end of 1998, Elizabeth was given several opportunities to examine the data and my analysis of it as part of the data collection and analysis process. Elizabeth appeared satisfied with this process and made no additional comments or changes.

If You Want to Know, Ask Her

Walter gets into the back seat, while I push the canoe from shore and jump into the front bench. Walter hooks up the gas tank line to the motor, pumps it several times, and pulls on the starting cord. The outboard motor sputters for a moment and then roars into

action. After a few minutes of idling, we take off. Walter has used his 20 horsepower outboard for many years. Except for changing the spark plugs due to normal wear and tear, and changing the propeller due to damage caused by rocks at low water levels, Walter has not had too many problems with it. The cedar paddles that we use were handmade by Walter's uncle. They are similar to standard canoe paddles that can be bought in stores; however, they are wider, longer, and much more sturdy in their construction because they are used not only for paddling, but also for pushing us through shallow water.

A 20 horsepower motor was the primary tool used for taking Walter and me up the Albany River against the current. This tool is an extension of Walter and me because it was steered by us. Similarly, an autobiography or a personal history account was the fundamental tool used for determining Elizabeth's general beliefs about her life or values. This tool is an extension of Elizabeth and me because it was derived from her experiences through a framework provided by me. So if you want to know the values of Elizabeth ask her to provide an account of her personal history.

Elizabeth's Values

The following values were identified by Elizabeth from her personal history account: vulnerability, repulsion of senseless violence, love, compassion, capacity to believe in the unseen, freedom from hate, rebirth, anger at injustice, guiding others, determination, and sensitivity to others. Because Elizabeth's values were developed from experiences described in her written autobiography from a summary chart of Native-derived values or gifts of the four directions (Bopp et al., 1984) supplied by me, an examination of them in greater detail is helpful in gaining an understanding of her world.

In terms of her personal experiences, Elizabeth indicated that she "had a lot of bad

experiences" connected to drinking and violence in her home with her parents and other adults while she was growing up. Elizabeth related these experiences to the vulnerability she felt and to her repulsion of senseless violence. Elizabeth stated that being "overprotective" and "forever checking" on her children showed her love for them that was subsequently confirmed to her through conversations with other mothers. Her capacity to believe in the unseen was indicated by Elizabeth's "strong belief in God and his son Jesus," although she would not call herself "a born-again Christian or follower of traditional beliefs." In spite of the difficulties Elizabeth faced in foster homes and among white people, she "learned that there are good people in the world" which has given her freedom from hate related to some of the inequities done to her. These experiences have resulted in a rebirth of sorts for Elizabeth.

Formal education experiences that included racism and being told she was "stubborn and stupid" in school directed Elizabeth to go out of her way to prove otherwise. She wanted to be on the honour roll every month, and succeeded in English and history. Although Elizabeth struggled with her high school mathematics, she received guidance and support from one "great" math teacher. This math teacher "would not give up" on her and with his help she passed the semester in math. In spite of her anger at some of the injustice that was done to her, Elizabeth completed her Ontario Secondary School Diploma at the age of 33, and subsequently completed her Health Care Aide Certificate and Nursing Assistant Diploma. Furthermore, Elizabeth took part in the Native Classroom Assistant Program before finally entering the teaching profession. These experiences directed Elizabeth to guide others, particularly her own children, and encourage them to complete their education as well.

Never knowing her grandparents, Elizabeth's informal education experiences came from her parents and other adults around her. Her father's attitude helped Elizabeth "a lot" even though her father did not believe in her aspirations. His attitude lead to Elizabeth's determination to succeed and "prove him wrong."

Elizabeth's compassion for her students was shown in her professional experiences by putting herself in their shoes, and by remembering her own experiences in math. This was reinforced by "encouraging them, letting them know there's a big world out there and that there's life beyond this reserve." Also, Elizabeth has fostered feelings of sensitivity toward her students and others "to their insecurities, where they need a lot of encouragement and a need to be believed." Elizabeth also suggested that she tries "to give special attention to that shy and quiet child" because she "was once that child too."

Besides the values Elizabeth indicated from her personal history account, Elizabeth selected the following additional values from the summary chart of Native-derived values or gifts of the four directions (Bopp et al., 1984): capacity to believe in the unseen, hope, watching over others, hope for the people, generosity, sensitivity to the feelings of others, compassion, ability to express joy and good feelings, dreams, spiritual insight, respect for others' beliefs, vision (a sense of possibilities and potentialities), understanding, integrating all intellectual capacities, seeing how all things fit together, and a sense of how to live a balanced life.

Generally, Elizabeth's values were characteristic of a world based on her experiences living on a Native reserve and in non-Native communities. Although Elizabeth's values are specific to her, the extent to which Elizabeth's values represent traditional Cree culture can be determined by examining the traditional Cree values of the Cree elders and the

Cree people of the past. Before this can be done, the traditional Cree values need to be described.

Traditional Cree Values

The Traditional Values Project 1994–95 (Hishkoonikun Education Authority, 1995) was one study that attempted to identify and record the values of the Cree elders from the James Bay coast. It was from this two year project that the following values were identified: respect for the environment, respect for animals, strength, courage, perseverance, generosity, sharing and kindness, joy and happiness, family unity, wisdom and knowledge, respect for elders, guidance, respect for parents, love for the Creator, daily prayer, honesty and truthfulness, and love for one another. These Cree elders' values were later placed on a summary chart of Native-derived values or gifts of the four directions (see Appendix C) adapted from Bopp et al. (1984). Because these Cree elders' values were developed from experiences derived from their oral autobiographies organized around their relationships to the land, to their community, to their family, and to other individuals, an exploration of them is useful in gaining an appreciation of their world.

The Cree "people survived on the land by getting things that they used from the land" (Hishkoonikun Education Authority, 1995). As a result, the environment was "respected in every way" because food, clothing, shelter, and medicine were obtained from it. Respect was also shown to animals because they "were given by the Creator for people to use, not to misuse or abuse." Strength came from hard work and "from food in the bush." Subsequently, survival often required courage and a strong will to deal with the changing day-to-day conditions on the land.

A sense of community was necessary when "dealing with [the] hardships of hunting, fishing, and cold temperatures [which] taught people not to give up, but to keep trying." Consequently, perseverance was highly admired by the Cree elders. When hunting and fishing were not good, the values of generosity, sharing and kindness were necessary to ensure survival. During periods of starvation, people were "taught to share extra meat with other families." In spite of the hardships, there was much joy and happiness. People were "happy living in the bush, and if there was something to celebrate there was a dance."

An awareness of family unity was important because "everybody had a role to play, [and] each member of the family had to be responsible to do something to survive in the bush." Knowledge was obtained through the "elders teaching traditional life and [through] story telling." Respect was shown to the elders because they had the knowledge and wisdom to "deal with most matters on their own." Children were guided by parents who helped them learn "how to do the things they [the parents] were doing." Respect for parents was thought to give children the "power and strength" required to live in the harsh conditions of the Hudson Bay Lowland.

The Cree were spiritual individuals; their love of the Creator was such that people could often be heard "singing and praying in their tents" early in the morning and late at night. Daily prayer to the Creator was thought to bring "wisdom, courage, and kindness." Other values such as honesty and truthfulness were praised because it was presumed that "honest people ... bring other people together." In addition, love for one another was shown through "handshakes, hugs, and kisses" that were extended not only to family members but to other family groups as well. Moreover, loving individuals were thought to "bring other people closer to [the] Creator." As a consequence of their spirituality, it was

suggested "that people lived longer in those days" (Hishkoonikun Education Authority, 1995).

In addition to the values identified from the Cree elders, a greater appreciation for the Cree world of the past can be shown through the following traditional Cree values identified by Ohmagari (1996) in her study of the knowledge and bush skills of Omushkegowuk women: respect between humans, respect for animals, sharing (of bush food), generosity, self-reliance and independence, humility, cooperation and interdependence, reciprocity between humans, reciprocity, patience, self-control, and diligence.

For the most part, the Cree elders' values and the traditional Cree values of the past were characteristic of a world based on Cree experiences living off the land.

Worlds Together, Worlds Apart

The extent to which Elizabeth's values might represent traditional Cree culture can be determined by examining the similarities between Elizabeth's values and the traditional values of the Cree elders and the Cree of the past. To do this I developed two lists of values: (1) Elizabeth's values obtained from her personal history account and her summary chart of Native-derived values, and (2) traditional Cree values acquired from the Cree elders in the Traditional Values Project (Hishkoonikun Education Authority, 1995) and from a survey of traditional Cree values of the past (Ohmagari, 1996). My analysis of both lists uncovered similarities between Elizabeth's values and traditional Cree values (see Table 1). Caution should be shown when examining Elizabeth's values and traditional Cree values because they are cultural constructions and indicators of a person's or group's perceptions at a particular moment or in a specific context. In spite of this caution, these

similar values, which I attributed to Elizabeth's and the Cree elders' common Cree

ancestry, have the potential to bring their worlds together.

Table 1

Similarities Between Elizabeth's Values and Traditional Cree Values

Values	
Elizabeth's	Traditional Cree
Generosity	Generosity
Ability to express joy and feelings of and happiness	Joy and happiness
Spiritual insight	Love for the Creator
Respect for others' beliefs	Respect between humans
Integrating all intellectual capacities	Knowledge
Seeing how things fit together	Wisdom
A sense of how to live a balanced life	Self-reliance and independence
	Cooperation and interdependence
Love	Love for one another
Guiding others	Guidance
Determination	Perseverance

The extent to which Elizabeth's values might not represent traditional Cree culture is

harder to determine because of the differences in context between Elizabeth's values and

the traditional Cree values. Nevertheless, my analysis of both lists of values found some

differences between Elizabeth's values (e.g., repulsion of senseless violence and anger at

injustice) and traditional Cree values (e.g., respect for the environment and respect for

animals) indicative of the change from living off the land to living on a Native reserve or in

non-Native communities. These different values, which I attributed to the changes in Cree

culture, have the potential to keep their worlds apart.

A Cree elder has also acknowledged the changes in Cree culture and education and their effects:

> Something else is happening regarding today's youth and the education system. These youths are losing their language and their culture. When they want to speak Cree, they speak broken Cree, but they are still understood by their parents. In the schools, they are not taught in their language. Even where I am from, up north, you hear children speaking English and these children are gradually losing their language completely. When they talk to each other, they sound just like the Whiteman. Everywhere I go there are Native children that I do not understand. They are my people, yet I do not understand them because they are speaking English (Patrick, 1999, p. 90).

In spite of the changes in Cree culture and education, it is Elizabeth's and the elders' common Cree ancestry that has the greatest potential to bring their worlds closer together.

The use of a personal history account allowed me to understand Elizabeth's world and helped Elizabeth identify her values. In addition, Elizabeth's values supplied the constructs used in the development of her repertory grid.

If You Want to Know, Test Her

After a couple of hours or so we finally reach the mouth of the Stooping River. It's a good thing that we are wearing our hip waders because we have to get out of the canoe and drag it over a small set of rapids here. After a short break, we start out again. Walter gives me a chance to drive because this part of the river is fairly wide and quite deep. I am always amazed at the constantly changing scenery from gently sloping banks covered with trembling aspen to steep banks topped with black spruce and tamarack. Abandoned tent frames can be seen on higher ground where Cree families spent the spring hunting for

Canada geese. When I ask how far it is to the next stop, Walter always says around the next

bend, which it never is. There are many winding turns on this river. However, the drive is

uneventful until Walter grabs his 12 gauge shot gun from the front of the canoe and shoots

at the bank. I really have no clue what is going on until Walter tells me to drive towards

the shore. He jumps out, runs along the bank, reaches down and picks up a freshly killed

spruce grouse—supper I guess. Walter grins at me, that suggests that this is no big deal.

However, I think this is really neat because I did not even see it. The trip continues until

we come to a Y in the river where we stop to fish, eat, and change gas tanks. Previous

experience has shown that this is a good spot for fishing. I once caught a five kilogram pike

here. Although we snag our lines and lose some red and white lures we manage to catch a

few good sized pike. Before we move on, we take out the Coleman stove and make a

quick meal of beef stew and bread. Afterward, we wash all this down with a can of pop.

The hunting and fishing equipment that enabled us to catch a spruce grouse and some

pike are similar to the instructional tools or techniques used to obtain Elizabeth's beliefs

about teaching and learning or her instructional preferences. So if you want to know the

instructional preferences of Elizabeth, test her through a classroom case on her

instructional planning.

Elizabeth's Instructional Preferences

The following instructional preferences were identified by Elizabeth from her

instructional classroom case: behaviour modification model, dependent study mode,

abstract, teacher controlled, and persistent media of instruction, and the use of group

discussion and activities. Because Elizabeth's instructional preferences were developed

from her classroom case or lesson plan with concepts supplied by me, an examination of

her preferences in greater detail is useful.

Elizabeth chose the behaviour modification model of instruction which is the one most teachers use intuitively (Campbell, 1995). This approach is frequently applied in changing cognitive, affective, or motor behaviours. Although Elizabeth selected this model, she stated that aspects of the social interaction and the personal orientation models for students who "just don't seem to get along with each other, other people" were also applicable to her instructional methods.

The dependent study mode of instruction selected by Elizabeth is the most teacher-centred of the five categories (Campbell, 1995). Elizabeth favoured this decision-making pattern because "they're always asking what is this right, what do I do now." She continued by saying that the dependent mode is useful for students who need high levels of structure. In addition, Elizabeth stated that the core-complementary mode which combines features of the dependent study, alternate routes, alternative outcomes, and independent study modes would be her preferred mode of instruction.

Elizabeth picked the abstract presentation of media for the content provided. She selected teacher control of the media because it is used for students who were dependent, inflexible, and have a low need for achievement. Persistent media was chosen by Elizabeth on account of it providing the students with some control over the pacing, review, and feedback of the content. Elizabeth suggested that she would incorporate all instructional phases in her instructional planning, except the "informing on objective phase" of instruction due to the context of her lesson plan. Further, Elizabeth indicated that group discussion and activities best developed the content described in this instructional classroom case, and accommodated the instructional phases identified.

Finally, although Elizabeth selected specific models, modes, and media of instruction as part of this activity, she indicated that her instructional preferences tended to be used in varying combinations with others. While Elizabeth's particular instructional methods are unique to her, the extent to which Elizabeth's instructional preferences express "a Native instructional method" can be established by placing Elizabeth's instructional preferences in the context of the instructional preferences of other Native teachers.

Native Instructional Preferences

One study (McAlpine & Taylor, 1993) was found that investigated the instructional preferences of Native teachers of Native children. In that study, Cree, Inuit, and Mohawk teachers showed preferences for "letting children learn from each other" (p.10) and "setting up routines for children to follow" (p. 11). This was similar to Elizabeth's emphasis on the social interaction and the behaviour modification models of instruction. Elizabeth's use of rewards and praise also showed her stronger preference for the behaviour model that complemented the Cree teachers' strong preferences "for using appropriate punishment" and showing "you are the boss" (McAlpine & Taylor, 1993, p. 11).

All Native teachers in McAlpine and Taylor's (1993) study displayed preferences for believing that students "learn best by talking with other children" (p. 11) and that the teacher teaches best by "showing how" (p.11). These preferences suggested the use of an alternate routes mode of instruction. Elizabeth preferred a dependent study mode of instruction or a teacher-centred approach. This approach corresponded closer to the Cree teachers' stronger preferences for "children learn best by listening to the teacher" (p.13) and "the teacher teaches best by telling how" (p.13) than to the preferences of the Inuit and the Mohawk teachers in McAlpine and Taylor's (1993) study.

McAlpine and Taylor's (1993, p. 14) finding that an "apparent preference for reading,

writing, speaking activities, and the lack of preference for instructional activities that are

related to real-world activities" among Cree, Inuit, and Mohawk teachers is comparable to

Elizabeth's preferences for abstract presentation of content. A Cree elder's comments

regarding the instruction of young people presented an opposite view where everything

was done through direct meaningful experience:

> I never received actual instruction as to how to live in the bush. I witnessed
> the act of living in the wilderness. Nobody told me what to do when I was
> young. I saw the day to day life in the bush, I guess I followed that example
> of that type of training. I did make my observations while I was young as
> our elders practiced their everyday life (Williams, cited in Turner et al.,
> 1995, p. 21).

Also, all Native teachers in McAlpine and Taylor's (1993) study showed a preference for

believing that students "learn best by talking to each other" (p.11). This was similar to

Elizabeth's preference for the use of group discussion and activities.

Similar, Yet Different

Although Elizabeth and the Cree, Inuit, and Mohawk teachers in McAlpine and Taylor's

(1993) study have been shown to share some instructional preferences, these similar

preferences were not extensive enough to suggest a common Native or Cree instructional

method. In addition, McAlpine and Taylor (1993) noted differences in Cree, Inuit, and

Mohawk instructional preferences and suggested that these differences were influenced by

their earlier social and educational experiences. I attributed the differences between

Elizabeth's instructional preferences and the Native teachers in McAlpine and Taylor's

(1993) study to her different social and educational experiences as well.

The use of a classroom case allowed me to understand Elizabeth's instructional

planning and helped Elizabeth identify her instructional preferences. Furthermore, Elizabeth's instructional preferences supplied the elements used in the development of her repertory grid.

If You Want to Know, Let Her Sample the Options

The rest of the day proves to be uneventful. We come across some old grave sites of people —one of an elderly man and another of a small child—who died long ago while their families were on the spring goose hunt. Travel was limited during this time due to wet, slushy ice conditions, so families couldn't leave the land until the ice broke up. These places hold a strange fascination for me, as I wonder how they came to their deaths, how the families coped with their grief, and how the grave markers continue to be painted and maintained by their relatives. We pay our respects and quietly move on. My rear end gets sore from sitting in the canoe all afternoon, which causes me to squirm. I try not to do this because I know Walter doesn't like the extra movement. He needs to watch the river because it is constantly changing from year to year. Walter sees me and chuckles to himself. He doesn't stop though, until we reach a place called Oochichakoosit (Crane's Foot), 105 kilometres from Kashechewan. We unload the entire canoe on the bank without talking to each other. Next, Walter and I set up the tent on a site that overlooks the river. It doesn't take long to do this because we have done it many times in the past. Finally, we put down the sponge to keep the cold away, roll out our sleeping bags, and store the remaining gear in the tent. Before we prepare supper and take time to chat, we take stock of our supplies.

Although Walter's tent holds all of our tools and supplies, we still have to rummage through boxes and backpacks to find out exactly what we have at this point on our trip.

Elizabeth's repertory grid, much like Walter's tent, contains her values and instructional preferences, but Elizabeth still had to construct relationships between them to determine why she chooses certain instructional approaches. So if you want to know the personal constructs of Elizabeth, let her sample the options through her rating scale repertory grid.

Elizabeth's Repertory Grid

From her personal repertory grid, Elizabeth constructed relationships or associations based on her elicited instructional preferences and on her elicited values. It was from these rated relationships or associations that I was able to make my analysis of Elizabeth's repertory grid (see Appendix E). An examination of Elizabeth's associated instructional preferences and values (that I obtained from constructs Elizabeth rated '3' on her repertory grid) showed that the behaviour modification model of instruction, the dependent study mode of instruction, and the use of group discussion and activities were most associated with her values 11, 9, and 12 times respectively (see Table 2). Abstract presentation and teacher control of media of instruction were selected as neutral (that Elizabeth rated '2' on her repertory grid) 14 and 16 times, and persistent media of instruction was least aligned with Elizabeth's values and was not associated (that Elizabeth rated '1' on her repertory grid) 13 times.

A closer analysis of Elizabeth's instructional preferences and values that were associated (see Table 2) indicated Elizabeth's values of watching over others, sensitivity to the feelings of others, compassion, respect for others' beliefs, understanding, sense of how to live a balanced life, and integrating all intellectual capacities were aligned more closely (three times or more each) with her instructional preferences. The value of integrating all intellectual capacities was chosen as associated five times and was the most related with

Table 2

Elizabeth's Associated Instructional Preferences and Values

Instructional Preference	Value
Behaviour modification model	Hope, watching over others, guiding others, hope for the people,sensitivity to the feelings others, love of one person for another, determination, compassion, repulsion of senseless violence, respect for others' beliefs, and freedom from hate
Dependent mode	Generosity, sensitivity to the feelings of others, determination, compassion, vision, understanding, integrating all intellectual capacities, seeing how things fit together, and sense of how to live a balanced life
Media—abstract presentation	Capacity to believe in the unseen, guiding others, respect for others' beliefs, understanding, integrating all intellectual capacities, and sense of how to live a balanced life
—teacher control	Watching over others, and integrating all intellectual capacities
—persistent	Integrating all intellectual capacities, and sense of how to live a balanced life
—group discussion and activities	Hope, watching over others, sensitivity to the feelings of others, love of one person for another, compassion, repulsion of senseless violence, ability to express joy and good feelings, respect for others' beliefs, understanding, integrating all intellectual capacities, seeing how all things fit together, and sense of how to live a balanced life

Elizabeth's instructional preferences. The fact that these values were strongly associated

with Elizabeth's instructional preferences suggests their importance in Elizabeth's

understanding of the teaching and learning process.

Conversely, Elizabeth's instructional preferences and values that were not associated (that I obtained from constructs Elizabeth rated '1' on her repertory grid) showed Elizabeth's values of hope for the people, love of one person for another, anger at injustice, repulsion of senseless violence, spiritual insight, and dreams were not associated (three times or more each) with her instructional preferences (see Table 3).

Table 3

Elizabeth's Instructional Preferences and Values Not Associated

Instructional Preference	Value
Behaviour modification model	Vulnerability, anger at injustice, and dreams
Dependent mode	Hope, love of one person for another, anger at injustice, repulsion of senseless violence, dreams, spiritual insight, and freedom from hate
Media—abstract presentation	Rebirth, hope for the people, repulsion of senseless violence, ability to express joy and good feelings, dreams, spiritual insight, and respect for others' beliefs
—teacher control	Hope for the people, love of one person for another, compassion, dreams, spiritual insight, and respect for others' beliefs
—persistent	Capacity to believe in the unseen, vulnerability, guiding others, hope for the people, generosity, love of one person for another, determination, anger at injustice, repulsion of senseless violence, dreams, spiritual insight, respect for others' beliefs, and vision
—group discussion and activities	Rebirth, dreams, and freedom from hate

Dreams were the least associated with Elizabeth's instructional preferences and were selected as not associated five times. The fact that these values were weakly associated with Elizabeth's instructional preferences may suggest their lack of importance in Elizabeth's conception of the instructional process and that not all life is in school.

The use of a repertory grid concentrated Elizabeth's attention on the associations or relationships between her instructional preferences and values. Furthermore, Elizabeth's grid helped me focus on her thinking about the teaching and learning process. Yet, much has been left unsaid at this time because Elizabeth's repertory grid is only a partial record of her personal construct system.

If You Really Want to Know, Ask Her Again

It's time to make our supper and relax a little. Walter sets up the stove while I clean and gut the pike by the river. Walter makes a mixture of flour, salt, and pepper, and then places each piece of fish in the frying pan loaded with melted margarine. The fish start to smell really good. A long day in the outdoors gives us a good appetite, and we promptly wolf everything down. Later I boil some water for instant coffee which we drink with cookies for dessert. After we clean up, Walter and I sit down on the bank and begin to talk about the day's trip. We talk about how well the motor is running, about the spruce grouse and fish we caught, and about getting the tent ready for the evening. The sky is starting to cloud over and the weather is getting cooler which means rain. Walter fixes the wood stove in the tent while I gather rocks from the bank and wood from the bush. The rocks are placed inside the tent to hold it down and keep out skunks, while the wood is used for heat in the morning. As night falls we get ready to retire for the evening, and we take the time to continue our conversation until we fall asleep. It's good to have a friend like

Walter to share experiences.

Our tent which provides shelter for the night, also provides Walter and me with a place to talk about the day's events without distractions. Similarly, Elizabeth's repertory grid provides Elizabeth and me with a place to talk about her instructional methods and values. So if you really want to know whether Elizabeth makes decisions on instructional preferences according to her stated values ask her again through an interview.

Elizabeth's Interview

The interview began with Elizabeth being asked about her particular methods (models, modes, and media) of instruction and what lead her to associate them with particular values on her repertory grid. My analysis of her interview revealed the Elizabeth's conceptions about teaching and learning as follows: "They learn to teach and be taught ... You have to step back ... They learn values at home ... [and] I didn't know."

They learn to teach and be taught

Elizabeth's comments on the behaviour modification model of instruction suggested that her values of guiding others, sensitivity to the feelings of others, repulsion of senseless violence, love of one person for another, and compassion were not only for teachers but "for the students especially." Elizabeth wants them "to help each other out ... to have a respect for each other through sensing when they're hurting another person ... to let the kids know these things like violence and stuff are not acceptable." In addition, "they need to respect each other, each other's feelings ... the kids have to learn to have [compassion] from each other too." Elizabeth goes on to say that every "kid" needs these values. Also, Elizabeth suggested that she preferred the behaviour modification approach to instruction

with personal orientation and social interaction models because her students "don't seem to get along with each other" and "they look at [what] other kids are doing and they gotta beat'em." Furthermore, Elizabeth said that the behaviour modification approach was useful for discipline and classroom management.

Elizabeth's preference for the teacher-centred or dependent study mode of instruction was characterized by statements where the students "have to understand what I'm talking about" and "you'll get it by doing it." In using this mode, Elizabeth said, "I find it's easier to tell [which ones are having problems] when you're doing dependent study." She continued by suggesting that, "I find that uh you give them an idea to start off with, and then through their work they can find, they're gonna find different um things that they want to do, like go further." Furthermore, her preference for the dependent study mode of instruction used with alternate routes was indicated through the following comments: "they're always [asking] is this right, what do I do now ... they give me the ideas ... they usually say why don't we do this instead, it usually works out really good."

Concerning group discussion and activities, Elizabeth believed "that they're learning to teach and be taught" using this approach to instruction. Through her values of watching over others, love of one person for another, compassion, ability to express joy and good feelings, and a sense of how to live a balanced life, Elizabeth lets the students know what is and is not acceptable:

> Yeah, make sure they don't push it to far when they're talkin ... I don't want them to say something that's gonna hurt another person ... that's why I see the good in everyone ... I see a lot of students that are getting excited about stuff that they've done, and other kids put them down, I, I don't like that ... they should not only be proud of what they do, but of others' achievements ... and then I also have students that help each other out, will go to another student and help them out with their work if they're

> having problems, so they help them out in activities ... here's where I could figure the kids would talk about it.

Elizabeth says that because "there's no person who's right or wrong ... it'll come out in group discussion." This teaching and learning approach suggests a Native adaptation that Gilliland (1992) has called letting children learn from children.

Although Elizabeth maintained that group discussion and activities best accommodated all phases of her media of instruction she does not inform her students on the objective "because mine changes so fast, I could come in with an objective, but just not touch on that at all, we'll just go right off in a different direction ... it usually changes." Nevertheless, she does start with an objective from the "book." These remarks indicate Elizabeth's experiences in the Primary division, particularly in Kindergarten classes, where students are usually not made aware of the objectives.

Elizabeth's instructional preferences for the behaviour modification model, the dependent study mode, and group discussion and activities medium were all associated with her values. I suggest that her image of "they learn to teach and be taught" suggests Elizabeth's orientation to the teaching and learning process.

You have to step back

Conversations with Elizabeth on her neutral associations (that she rated '2' on her repertory grid) between instructional preferences and values tended to reflect Elizabeth's belief that "you have to step back" and let the students "work it out themselves." These neutral associations represented Elizabeth's uncertainty regarding the relationships between her instructional preferences and her stated values. Further, Elizabeth suggested that students "do a lot by helping each other out," although some "tend not to be involved with other kids" and "some of them don't help each other out [at all]." In other words,

students have "to choose for themselves if they're gonna be determined and work like you

know how far they're going to go." Elizabeth continued by saying that:

> I don't think I can force them ... the way I look at it is you can't always
> protect these kids either ... they're only with us a certain amount of hours
> a day and the rest of the time they're at home.

With specific regard to media of instruction, Elizabeth's ambivalence toward abstract

presentation, teacher controlled, and persistent media was indicated in the following

statements:

> The teacher comes in, sets everything down, you gotta do it and that's that
> ... you get the best work out of the students ... I don't feel that's the way
> you do it ... it's like almost sometimes they're teaching themselves as they
> go along, and they're learning a lot more that way ... if it has to be, if I
> have to step in, then I will.

Although Elizabeth recognizes, encourages, and uses different media of instruction, I

maintain that she has yet to fully develop their use in the classroom and accommodate

them into her belief system. Further, I suggest from previous experiences working with

Cree preservice teachers that her notion of "you have to step back" indicates Elizabeth's

struggle with her role as a teacher to accommodate the needs of the students in her early

professional development as a teacher.

They learn values at home

When Elizabeth was asked about particular values—hope for the people, love for one

person for another, anger at injustice, repulsion of senseless violence, spiritual insight,

dreams—that were not associated with specific instructional preferences she said:

> I think these are the values they learn at home, and um I don't see they're
> gonna believe on what um what they learn at home rather than at school
> for the values ... on these ones, because this, I think the students pick
> these up at home ... I don't see I can't even see those, why they're in the
> school, spiritual, I mean dreams ... I think that it's something really private

though you keep to yourself ... that's something I think they're going to develop later ... I think the students pick these up at home.

Although Elizabeth stated that the school has to provide positive values, she went on to claim that "you should try though, but um I think it's learned by what they pick up at home." In terms of her role in the school, Elizabeth suggested that she has to provide positive values in the classroom, but not specifically traditional Cree values. In addition, Elizabeth's view "that a lot of that [values] comes from their home" indicates that school is just one part of life. I suggest that her representation of "they learn values at home" reflects Elizabeth's perception of the strength of community values on the students, and on the limited role of the school in influencing them.

I didn't know

Elizabeth's new awareness and identification of her values were expressed as "I didn't know I was using them ... I didn't know which value name is for things, I didn't know what values were," may encourage Elizabeth to reflect on her practice as a developing teacher. Also, I suggest that Elizabeth's identification, examination, and review of her particular models, modes, and media of instruction may help Elizabeth develop effective instructional practices.

The significance of instructional preferences and values to Elizabeth lies in developing effective classroom instruction for her students in that "you have to meet all these needs in them," and "the stuff that are important to me, I share with the kids." When Elizabeth was asked how she felt about the interview and the relevance of it on her teaching practice at this stage of her teaching career she stated that "it was interesting" and that she "found out some stuff" about herself.

The use of an interview allowed me to enter Elizabeth's world and understand

whether she made decisions on her instructional preferences according to her stated

values. In addition, the use of an interview helped allow Elizabeth to understand the

decisions she made.

Summary

Elizabeth's decisions on the use of the behaviour modification model of instruction, the

dependent study mode of instruction, and group discussion and activities were according

to her stated values. Conversely, Elizabeth's judgments on the use of abstract presentation,

teacher controlled, and persistent media were not well formed or perhaps not well

understood, and were not according to her stated values. The extent to which Elizabeth's

values represented traditional Cree culture was more difficult to understand. Similarities

between Elizabeth's values and the traditional Cree values of the elders and the Cree of

the past were shown and attributed to their common Cree ancestry; however, some

differences existed. These differences were attributed to the changes in Cree culture.

Although asking Elizabeth about her instructional preferences and values gave voice to

the joint construction and reconstruction of her educational beliefs, it is important she

recognizes that becoming a teacher is "a difficult journey with few, if any, shortcuts"

(Carter, 1995, p. 328). One way of making the journey easier is by being properly

prepared for the eventualities of the next day.

CHAPTER 6: WHAT DO I KNOW NOW?

(Discussion and Conclusion)

As dawn breaks, Walter stirs and lights a fire in the stove. Soon after, the tent warms up and water for teabaloss (a mixture of tea, flour, lard, and sugar) begins to boil. I don't feel like getting up though, because it is still very early and cold, but I do so realizing that if I don't Walter will roll me out of the sleeping bag anyway. A quick look out the door reveals that a light drizzle is falling from dark sheets of grey which cover the sky. The ground is damp, and the trees are dripping from the rain. It looks like this day will be different from the last, but we are prepared for any eventuality. After a short breakfast of teabaloss, we pull out our rain gear, break camp, and set out in the canoe as our trip continues up the Stooping River.

It looks like this section will be different as well, but we are ready to interpret and draw inferences from the decisions that Elizabeth made on her instructional preferences according to her stated values. Although "it is not reasonable to expect that every conclusion based on the personal experience of one individual will be appropriate to generalize to all [preservice education] students "(Holt-Reynolds, 1992, p. 342), making this study useful to other Cree preservice teachers and teacher educators on the process of teaching and learning is an important aspect of this research. To make this study relevant, I elaborate on existing concepts of teachers' beliefs about teaching and learning. Then I expand on knowledge gained from Elizabeth's values and instructional preferences. Finally, I identify problems associated with teaching and learning as they affect Elizabeth and perhaps other Cree preservice teachers.

The Connections Between Teachers' Beliefs

Pajares (1992) suggested that exploring the connections between the more context-specific educational beliefs (instructional preferences) and the broader general beliefs (values) of teachers would help explain the nature of their conceptions about teaching and learning. An exploration of the connections between Elizabeth's instructional preferences and values revealed her conceptions about teaching and learning as "they learn to teach and be taught .... you have to step back .... they learn values at home, [and] .... I didn't know." Further, Pajares (1992) stated that the strength and importance of teachers' beliefs about education lie in their connectedness to other beliefs. The strength and importance of Elizabeth's beliefs about education were shown in her choice of the behaviour modification model of instruction, the dependent study mode of instruction, and group discussion and activities that were most associated or connected with her stated values. The influence of values or broader general beliefs on the selection of instructional methods was also found in other studies on teachers' beliefs about teaching and learning (see Pajares, 1992, for review). Helping Elizabeth to understand aspects of her more extensive belief system, specifically her values and instructional preferences, may provide her with opportunities to develop beliefs consistent with effective teaching and learning at this stage of her professional development.

Values and Personal Identity

Through a personal history account Elizabeth became aware of her values, was able to identify them, and was given opportunities to reconsider them. Elizabeth's values can become meaningful, in an educational context, when they help her understand her personal identity as a teacher in the early teaching phase of her career (Hamberger &

Moore, 1997). Elizabeth's values can then become starting points to help her acknowledge

and resolve conflicts that may arise from differences in personal and social identities and in

differences in her values and others' values at this stage in her professional development.

The personal history account used in this study helped Elizabeth appreciate the power

of her personal, formal, informal and professional experiences in shaping her values and

conceptions. The use of a personal history account with repertory grid and interview

techniques allowed Elizabeth to explore the values that she developed from her narrative.

From these explorations, Elizabeth showed differences between her personal role where

she said, "they're gonna believe on what um they learn at home rather that at school for

the values ... I think you should try though, but I think it's learned by what they pick up

at home," and her social role where teachers may be expected to be promoters of values

that the community advocates (Hamberger & Moore, 1997). Furthermore, the differences

noted between Elizabeth's values derived from experiences living on a Native reserve and

in non-Native communities, and the Cree elders' values derived from experiences living off

the land may cause conflicts in communities where teachers may be expected to be

conservators or negotiators of Cree values. Acknowledging and resolving the conflicts that

may arise from these differences in her values and others' values may encourage Elizabeth

to develop new understandings of her personal identity as teacher. These new

understandings may replace some shared values and cultural myths about the teaching

profession that teachers hold. One opportunity for developing new understandings lies in

the area of instruction.

Instructional Preferences and Instruction

Through a classroom case, Elizabeth became aware of her instructional preferences,

and was given opportunities to identify, examine, and review them. Elizabeth's instructional preferences can become meaningful to her when they are connected to particular situations in classroom cases or to previous instructional experiences in classrooms (Lundeberg & Fawver, 1994). Elizabeth's instructional preferences can then be used as beginning places to guide her in selecting and modifying appropriate methods of instruction for her instructional planning.

The use of a classroom case with repertory grid and interview techniques allowed Elizabeth to examine the instructional preferences that she developed from her instructional planning. From these examinations, Elizabeth made specific instructional preferences. In addition, Elizabeth's preferences for the behaviour modification approach to instruction used with personal orientation and social interaction models, and her comments,"they give me the ideas ... they usually say why don't we do this instead, it usually works out really good," showed Elizabeth's willingness to modify her methods of instruction to meet the needs of the learners. Elizabeth's new understandings about her instructional preferences may encourage her to think about and use different instructional approaches that may lead to more effective instruction.

Culturally Relevant or Responsive Teaching

Although effective instruction is crucial to the academic success of students, teaching that helps students accept and affirm their cultural identity and allows them to examine social inequities is vital to their cultural success (Ladson-Billings, 1995). This combination of fostering academic achievement, and developing cultural competence and encouraging social awareness, has been called culturally relevant teaching. It is an approach to teaching that acknowledges the cultural differences between school and home, and is similar to

culturally responsive teaching described by Erickson and Mohatt (1984) in their study of

instructional adaptations made by the Native and non-Native teachers of Odawa (Ojibway)

students. Erickson and Mohatt have suggested that teaching which adapts to the culture of

the learners' home and community may lead to improvements in school achievement and

the quality of teaching and learning. Culturally relevant or culturally responsive teaching is

particularly applicable in culturally diverse Native classrooms and schools where students

may lack achievement in school and the appropriate cultural skills and judgments.

Despite the variations in fit between the culture of the home and school, students are

required to be academically successful. This is a basic characteristic of present-day schools.

Culturally relevant teaching fosters academic achievement by connecting students in

meaningful and culturally appropriate ways to instructional outcomes and content.

Fostering academic success assumes that Cree preservice teachers create or adapt

instruction and content in greater agreement with the culture of the students' home and

community (Erickson & Mohatt, 1984). Elizabeth comments suggested Native instructional

adaptations with her emphasis on letting the students learn from each other and on

sharing and cooperation (Gilliland, 1992; Lipka, 1991; McAlpine & Taylor, 1993; Erickson

& Mohatt, 1984). Elizabeth stated that

> they're learning to teach and be taught . . . I also have students that help
> each other out, will go to another student and help them out with their
> work if they're having problems, so they help them out in activities . . .
> here's where I could figure the kids would talk about it . . . to help each
> other . . . [and] they give me the ideas . . . they usually say why don't we do
> this instead, it usually works out really good.

Because many preservice teachers may lack these or similar instructional adaptations that

reflect the culture of the home and community, the proposition is that Elizabeth and

possibly other Cree preservice teachers with Native adaptive approaches can create

instructional outcomes or content that fosters greater student achievement. Some of these Native adaptive instructional approaches suggested by Gilliland (1992) are as follows: (a) employing family or community instructional methods (b) letting students learn from students, (c) promoting holistic learning, (d) using active learning strategies, and (e) encouraging cooperative learning.

Culturally relevant teaching also develops cultural competence in the students. Cultural competence allows the students to maintain their culture (Ladson-Billings, 1995). Developing cultural competence presupposes that Cree preservice teachers attend to their own values and how they influence their classroom teaching, and attend to students' values and how they influence their learning in school as well (Powell, 1997). Elizabeth's comments that "I didn't know what values were ... I didn't know which value name is for things, ... I didn't know I was using them ... the stuff [values] that are important to me, I share with the kids" suggested Elizabeth's attention to her values and their influence on her classroom teaching. Further, Elizabeth's remarks that "they learn values at home, ... a lot of that [values] comes from their home, ... you should try though, but um I think it's learned by what they pick up at home" suggested her recognition of the values the students bring with them into the classroom and their influence on the students' learning. Because many preservice teachers do not focus on their own values and the values of the students' home and community, the premise is that Elizabeth and perhaps other Cree preservice teachers, with recognition of their own values and the values of the students' home and community, can provide better opportunities that help the students to appreciate and affirm their cultural identities.

Besides fostering academic success and developing cultural competence, culturally

relevant teaching encourages social awareness in the students. Encouraging social awareness assumes that Cree preservice teachers comprehend social inequities and their causes. Elizabeth's understanding of social inequities and their causes is based on her experiences living in homes on a Native reserve and in non-Native communities and on her experiences in non-Native schools. Elizabeth's comments about having "a lot of bad experiences" connected to drinking and violence in her home with her parents, living in foster homes with white people, and realization "that there are good people in the world" indicated her understanding of social unfairness. Additionally, her experiences in non-Native schools concerning racism and being told she was "stubborn and stupid" showed her understanding of the causes of these social inequities. Because many preservice teachers may lack these understandings and deny information regarding social inequity (Ladson-Billings, 1995), the suggestion is that Elizabeth and perhaps other Cree preservice teachers with similar understandings can create interactions, between home and school that allows the students to examine social inequities.

The failure to provide culturally relevant or culturally responsive teaching to the students has resulted in problems noted by a Cree elder:

> At one time there was only one road of life our people followed. Now there is another road the young people are following. It shows that they are following that road. That other road is creating problems for us. Those of us who followed the old road are having problems following the new road. That is what I see, and that is how I understand it. Everybody that is here today knows the kind of teaching they received from their parents (Spence, cited in Long, 1993, p. 125).

Helping Elizabeth and other Cree preservice teachers "to understand their culture (their own and others) and the way it functions in education" (Ladson-Billings, 1995, p.483) may lead these Cree preservice teachers to improve the quality of their teaching and of their

students' learning.

Where Do We Go From Here? (Conclusion)

It's very important that we recognize and reflect on beliefs in specific contexts, because they guide us in our personal and therefore professional lives as teachers. As I learn more about teachers' belief systems, particularly their instructional preferences and values, I am convinced that they are central to understanding the nature of teaching and learning, and to understanding how teachers make decisions in the classroom. Further, as we learn more about teachers' beliefs about teaching and learning, we are likely to come a great deal closer to developing an image of a teacher as a reflective professional, and teaching as a transformative activity for ourselves and for those around us.

It's very important that Cree preservice teachers, like Elizabeth, have a canoe, so that they can understand the beliefs with which they define their work, and their connections to the teaching and learning process. If Cree preservice teachers are to grow and change, they should be encouraged to recognize and reflect on their specific educational beliefs or attitudes about instruction and their general beliefs about their lives. In addition, Cree preservice teachers should be invited to make sense of their classroom practices in terms of their own instructional preferences and values (Johnson, 1994).

Walter and I know what the weather might be like, and that travel has already brought some success—pike and a spruce grouse. Traveling from Oochichakoosit, the Stooping River branches into three smaller rivers flowing in different directions. The smaller river we take will eventually lead us to Jaab Lake.

This investigation could also flow in three directions. First, continuing study on the instructional preferences and values of Cree preservice teachers needs to be done, but

with a larger population of teachers, for reasons outlined at the beginning of this research. Second, more study on the connections between Cree preservice teachers' beliefs about education and classroom practice is required. Recent research on preservice teachers' thinking and how it relates to classroom practice (Bramald et al., 1994; Kagan, 1992a; Knowles, 1994; Johnson, 1994; Powell, 1992; Parawat, 1992) has stated that "there is an important relationship between teachers' personal belief systems for teaching and learning . . . and the nature of their classroom curricula" (Powell, 1996, p. 378). Understanding the nature of the connections between Cree preservice teachers' beliefs and classroom practice is essential because teachers can follow different practices for different reasons (Kagan, 1992a). Third, further study on the relationships between Cree preservice teachers' educational beliefs and different forms of narrative is necessary. This is based on the premise that narrative "is the primary form by which human experience is made meaningful" (Polkinghorne, 1988, p.1) and that "teaching and learning to teach are deeply connected to one's identity, and thus, to one's life story" (Carter & Doyle, 1995, p. 186). Insight on the connections between Cree preservice teachers' beliefs and narrative is crucial because of the diversity of ways in which Cree preservice teachers construct their lives.

We know that our canoe is holding up well after its long period of storage over the winter. We are also closer to our destination than we were the day before. Our canoe is getting lighter and floating higher in the water because we are using gas and food supplies. This has resulted in easier and safer travel for Walter and me.

We now know more about the nature of teaching and learning—that Cree preservice teacher beliefs about education are essential to understanding their thought processes and

their actions. We are also closer to understanding the need for Cree preservice teachers, like Elizabeth, to examine that vessel which is their very being in the context of their own beliefs on the nature of the teaching and learning process. The knowledge we gain, from studies such as this, can be used to make our work as teachers and teacher educators more effective and improve the quality of our students' learning.

Limitations

Throughout the study, I asked Elizabeth to review a synthesis of the data and modify any misrepresentations of the meanings to establish credibility throughout the research process. In spite of this, the use of autobiography, classroom case, repertory grid, and interview may present limitations that arise from issues of denial, distortion, and different ways of thinking (Brookfield, 1995). Furthermore, using these Western techniques on Elizabeth's experiences may remove or distort her voice and participation in this study.

To improve the probability that the data were found credible, I used multiple and different approaches of data collection (Lincoln & Guba, 1985). In addition, I field tested the autobiography and classroom case, before their application with a Cree educator, a non-Native educator, and a Cree preservice teacher, to ensure that these strategies closely corresponded to Elizabeth's language. The use of autobiography, classroom case, repertory grid, and interview may also present limitations that emerge from situations defined by me as a non-Native person. The personal history account, the instructional case, the repertory grid and the interview were all externally structured by myself. However, I have taken the time to learn the context, to reduce distortions, and to build trust with Elizabeth throughout this study (Lincoln & Guba, 1985).

My control over the design of the data collection and analysis process, and the limited

nature of Elizabeth's involvement in this process can be questioned. But as the data collection and analysis process unfolded, Elizabeth and I became mutually aware of the research process although from different perspectives. Consequently, the data and the analysis of the data are not a reflection of Elizabeth's voice alone, but a joint intercultural construction between Elizabeth and me.

As I wrote and rewrote various sections, what came to mind was the unavoidable aspect of dealing with interpretations of interpretations of meaning as they are talked about and written about (Rabinow & Sullivan, 1987). Ultimately, the worldviews (Elizabeth's, the elders', from the literature, and my own) presented in this study have been filtered through my cultural experiences. These experiences formed initially by growing up in non-Native communities in eastern Ontario and later by living and working in Cree communities in northern Ontario reflected my shift from positivist to interpretivist paradigms used in this research. This shift lead to the integration of worldviews in the design of this study and conclusion that are not entirely compatible with one another. Further, the meanings made of what was said and read are my interpretations of these presentations. I acknowledge these limitations as part of my work across cultural boundaries.

EPILOGUE

It's coming to the end of 1999, and I look back on what has happened since the Traditional Values Project 1994–95 provided the motivation for this study. Many things stand out, particularly my continuing struggles with the issue of researcher-participant relationships and to a lesser extent with the issue of beliefs.

Much has been made of the researcher-participant relationships in qualitative research. In retrospect, it might have been better to involve Elizabeth more in the research process as the methodology changed from sampling a population of 18 Cree preservice teachers to a case study. Furthermore, it might have been better to ask Elizabeth about her sense of values and instructional preferences before my intervention in her personal history account and instructional case. Sometimes the process is equally important as the product.

Although the distinctions between beliefs, attitudes (instructional preferences), and values are a messy area in the literature, I have tried to clarify them for the purposes of this study. Nevertheless, I feel that more needs to be done, particularly in the area of values research. A more detailed examination of values and their connection to narrative may resolve some reification problems that plague this study and perhaps other similar studies. This is the direction or river I would like to travel on should the opportunity arise.

The journey has not been an easy one for me, dealing with participant-researcher relationships and the messy construct of beliefs while traveling across cultural boundaries. Periods of intense frustration followed by periods of keen insight were parts of my normal day to day efforts in bringing this study to completion. The temptation to travel up smaller streams on the main river or get away from the purpose of this study was easy and happened quite often. People like Walter and my thesis supervisors, Don and Arlene, kept

me moving forward—sometimes reluctantly. Much of their encouragement will remain with me for some time yet, long after this study is forgotten.

It's good to stop, rest, and look back; but it is also good to travel and look ahead. For me, anyway, the trip continues.

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APPENDIX A

Glossary of Terms

The following definitions are intended to clarify educational terms contained in this study.

attitude: a "set of interrelated predispositions to action [beliefs] organized around an object or situation" (Rokeach, 1968, p. 113).

autobiography: an account an individual's own life. Written autobiographies may include the following: personal history accounts, journal keepings, explorations of personal metaphors, reflective accounts of practice (Cole & Knowles, 1993), teaching logs, teacher learning audits, role model profiles, ideology critiques, and good practice audits (Brookfield, 1995)

belief: a predisposition to action (Rokeach, 1968).

beliefs system: "the total universe of a person's beliefs about the physical world, the social world, and the self" (Rokeach, 1968, p. 123).

classroom case: a description of a real or realistic classroom situation that incorporates information needed to allow preservice teachers to clarify and develop solutions to problems presented (Kagan, 1993). Classroom cases may include the following: instructional, disciplinary or motivational, and administrative (Kagan & Tippins, 1991).

constructions: "attempts to make sense of or to interpret experience" (Schwandt, 1994, p. 129).

culture: "the way of life and thought that we construct, negotiate, institutionalize, and finally (after it's all settled) end up calling reality" (Bruner, 1996, p. 87).

culturally relevant teaching: a perspective that consists of promoting student achievement, encouraging students to accept and affirm their cultural identity, and helping students to recognize, understand, and evaluate current social inequalities (Ladson-Billings, 1995).

curriculum: "an organized set of formal educational and/or training intentions" (Pratt, 1980, p. 4).

education: "the directed and purposeful learning, either in formal or informal, that has as its main task bring behaviour in line with cultural requirements" (Pajares, 1992, p. 316).

elders: "individuals trained in traditional knowledge and responsible for safeguarding and transmitting traditional knowledge, ceremonies and beliefs from one generation to the next. In this sense, not every old person is an elder; not every elder is an old person" (Minister of Supply and Services, 1996, p. 569).

enculturation: "the incidental learning process individuals undergo throughout their lives and includes their assimilation, through individual observation, participation, and imitation, of all the cultural elements present in their personal world" (Pajares, 1992, p. 316).

experience: "a transaction taking place between an individual and what, at the time, constitutes his [or her] environment" (Dewey, 1938, p. 43) or "a construction fashioned out of the interaction between a person's organizing cognitive schemes and the impact of the environment on his or her sense apparatus. Experience is an integrated construction, produced by the realm of meaning, which interpretively links recollections, perceptions, and expectations" (Pocklinghorne, 1988, p. 16).

instruction: decisions about the ways in which teachers interact with their students (Pratt, 1980, p. 297).

instructional preferences: the specific educational beliefs teachers have about teaching and learning that lead them to act in specific ways in constructing learning environments (Solas, 1992).

interpretivist or constructivist: a qualitative research approach used to understand "the complex. world of lived experience from the point of view of those who live it" (Schwandt, 1994, p. 118).

interview: "an interactive and structured context where information and interpretation flow both ways" (Gudmundsdottir, 1996, p. 294). Interviews may be either directed or open-ended (Ohmagari, 1996).

meaning making: "assigning meanings to things in different settings on particular occasions ... [it] involves situating encounters with the world in their appropriate cultural contexts in order to know what they are about" (Bruner, 1996, p. 3)

method: the technique "for gathering empirical evidence" (Lather, 1992, p. 87).

methodology: the "theory of knowledge and the interpretive framework that guides a particular research project" (Lather, 1992, p. 87).

narrative: "a mode of thought and an expression of a cultures' world view" (Bruner, 1996,

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p. xiv) expressed in story form that is a culturally specific way of communicating the human condition; it is one of the most important forms for making meaning of an individual's experiences.

Native: a person who possesses sufficient Indian blood and is associated with a Native community or has sufficient racial and social characteristics to be considered an Indian within the meaning of the Indian Act (Cumming & Mickenberg, 1972, pp.6–9).

nontraditional preservice teachers: teachers who "attend more than one institution for a degree, attend part-time, have multiple family and professional commitments, are not financially dependent on parents, reflect no predominant socioeconomic status, and represent all racial groups" (Eifler & Potthoff, 1998, p. 187).

paradigm: "a basic belief system or worldview" (Guba & Lincoln, 1994, p. 105).

pedagogy: "the art or profession of teaching" (Merriam-Webster Dictionary, 1974).

personal history accounts: stories of experiences of learning and teaching in formal and informal settings, and the meanings ascribed to them (Coles & Knowles, 1993).

program: areas of study into which the curriculum is organized e.g., Language, Mathematics, Personal and Social Studies: Self and Society; Science and Technology, the Arts, and Health and Physical Education. (Ministry of Education and Training, 1998)

qualitative research: "a wide range of interconnecting methods" that are used to make the worlds of experience that are studied more understandable (Denzin & Lincoln, 1994. p. 12).

repertory grids: an adaptable method of examining the ways in which preservice teachers experience their worlds (Solas, 1992). It consists of elicited, negotiated, or supplied elements and constructs. Repertory grids may include the following: tick-cross or dichotomous scales, rating scales, and rank order scales.

schooling: "the specific process of teaching and learning that takes place outside the home" (Pajares, 1992, p. 316).

status quo: shared values or cultural myths about the teaching profession where "(1) everything depends on the teacher; (2) the teacher is expert; (3) and teachers are self-made" (Britzman, 1986, p. 448)

teachers' beliefs: as part of teachers' broader beliefs systems, are the implicit assumptions teachers or preservice teachers have about the teaching and learning process

(Kagan, 1992a).

thick description: the "emphasis on supplying a substantial amount of information about the entity studied and the setting in which that entity was found" (Schofield, 1990, p. 207).

traditional preservice teachers: those who enter teacher education programs immediately after university and enter teaching as a first profession (Powell, 1992).

value: the general beliefs preservice teachers have about their lives that explain why they choose to act in certain ways or an imperative to action organized around a "single belief that transcendentally guides actions and judgments across specific objects and situations [attitudes]" (Rokeach, 1968, p. 113).

voice: the participation of groups or individuals not typically heard from in the research process (Gitlin & Russell, 1994)

APPENDIX B

Instructions for Compiling Your Autobiography

Please think back in your life and answer the following as honestly as you can. You may complete your autobiography in written form or on audio cassette.

QUESTION 1:

Describe those personal experiences that have had an influence on your life?

QUESTION 2:

Describe those formal educational experiences (e.g., those of your elementary, secondary, or post secondary schools etc.) that have had an influence on your life?

QUESTION 3:

Describe those informal educational experiences (e.g., those of your parents, grandparents, or Elders etc.) that have had an influence on your life?

QUESTION 4:

Describe those professional experiences (e.g., teaching) that have had an influence on your life?

APPENDIX C

Summary Chart of Native-derived Values adapted from Bopp et al (1984)

Gifts of the east

-light
-beginnings
-renewal
-innocence
-watching over others
-spontaneity
-joy and happiness
-capacity to believe in the unseen
-purity
-trust
-hope
-uncritical acceptance of others
-love that doesn't question others and doesn't know itself
-devotion to the service of others
-truthfulness
-childhood
-guidance

-beautiful speech
-vulnerability
-ability to see clearly through complex situations
-guiding others
-guilelessness
-seeing situations in perspective
-hope for the people
-warmth of spirit
-trust in your own vision
-ability to focus attention on present tasks
-courage
-concentration
-rebirth
-birth
-illumination
-leadership

Gifts of the south

-youth
-fullness
-summer
-generosity
-sensitivity to the feelings of others
-anger at injustice
-repulsion by senseless violence
-love (love of one person for another)
-balanced development of the physical body
-ability to express hurt and other bad feelings
-physical discipline
-self control
-ability to set aside strong feelings in order to serve others
-goal setting
-musical development
-appreciation of the arts
-passionate involvement in the world

-idealism
-emotional attraction to good and repulsion to bad
-the heart
-compassion
-kindness, caring
-loyalty
-noble passions
-feelings refined,developed and controlled

-ability to express joy and good feelings
-determination

-training senses such as sight, hearing, taste
-gracefulness
-discrimination in sight, hearing and taste

Gifts of the west

-darkness
-**the unkown**
-sacrifice
-dreams
-deep inner thoughts
-testing of the will
-**perseverance**
-**independence**
commitment to universal life of values and a high moral code
-spiritual insight
-commitment to the struggle to assist the development of the people
-meditation
-reflection
-contemplation
-silence
-**vision (a sense of possibilities and potentialities)**
-**respect for elders**
-**respect for parents**
-respect for the spiritual struggles of others
-**strength**

-**awareness of our spiritual nature**
-going within
-management of power
-**humility**
-**love for the Creator**
-commitment to the path of personal development
-stick-to-it-iveness
-**self reliance**

-**daily prayer**

-fasting
-ceremony
-clear self-knowledge
-**being alone with one's self**

-**respect for environment**
-**respect for animals and plants**
-respect for others' beliefs
-**family unity**

Gifts of the north

-**elders**
-**wisdom and knowledge**
-thinking
-analyzing
-seeing how all things fit together
-calculation
-**predicition**
-organizing
-**sense of how to live a balanced life**
-criticizing
-**capacity to dwell in the center of things, to see and take the middle way**
-problem solving
-integrating all intellectual capacities
-justice
-completion
-lessons of things that end
- detachment

-freedom from hate
-freedom from love
-freedom from knowledge
-understanding
-**speculating**
-insight
-intuition made conscious
-categorizing
-discriminating
-imagining

-interpreting
-**moderation**
-**decision making**
-fulfillment
-capacity to finish what we begain
-**freedom from fear**

note: Cree gifts in bold were determined from the Traditional Values Project 1993–95

APPENDIX D

Instructions for Completing Your Classroom Case

This exercise asks you to describe the instructional approaches that you would use in teaching the outcomes and content presented. You may wish to consider the nature of the content and the type of learning contained in the outcomes (L) provided, the strategies used to achieve them, and the resources used to bring the students and knowledge, skills, and attitudes to be learned together. Please read the outcomes and content provided carefully.

CONTEXT:

The Grade 3 class consists of a group of 25 Native learners of varying abilities. The specific outcomes were derived from the provincial language standards in the *Common Curriculum*. The content was developed from the Ojibway-Cree Cultural Centre's *Nishnawbe-aski Nation: A History of the Cree and Ojibway of Northern Ontario* and John Long's *The Government is Asking You for Your Land: The Treaty Made in 1905 at Fort Albany According to Cree Oral Tradition*.

OUTCOMES:

The students will be able to:

1) investigate real relationships, feelings, and experiences (L4—listening and speaking),

2) read classroom materials with ease and identify some complex concepts in texts; recall and explain sequence of events (L8— reading),

3) use a range of forms (e.g., narration, drama, exposition, poetry), incorporating descriptive language to express ideas, feelings, and experiences (L13—writing),

4) ask questions about issues raised in a media text (e.g., characterization and validity of

factual material); listens to others' opinions and states own ideas (L24—viewing and representing).

CONTENT: Treaty Number 9

In 1905, the Cree signed Treaty Number 9 with the understanding that the government would take care of them in times of need.

Treaty Number 9 contained written and oral promises made to the Cree people.

The oral promise was that our grandfathers' (Cree) method of making a living would "never be interfered with" as long as the sun shines and the river flows.

The written promise in part states the following: "And His Majesty the King hereby agrees with the said Indians that they shall have the right to pursue their usual vocations of hunting, trapping and fishing throughout the tract surrendered as heretofore described, subject to such regulations that may from time to time be made by the government of the country, acting under the authority of His Majesty, and saving and excepting such tracts as may be required or taken up from time to time for settlement, mining, lumbering, trading or other purposes."

Although the Cree could not read or understand English very well at this time, they believed the oral promises that they were told and understood. Some of the oral promises not found in the written treaty included health care and housing.

In return for giving up all rights to their land and following the government's laws, the Cree were given the following: (1) the right to hunt, trap and fish subject to government regulations, (2) reserve lands based on five square miles for each family, (3) an original amount of $8.00 in 1905, followed by $4.00 yearly to each man, woman and child (4) a flag and a copy of the treaty for the chief, and (5) teachers, school buildings and equipment.

"These elders we talked about liked what they heard. They thought everything they heard would happen, but it never did." —the late James Wesley, Kashechewan

APPENDIX E

Instructions for Completing Your Repertory Grid

This exercise asks you explore your personal construct system or the relationships between your instructional preferences and cultural values. You will be asked to rate the association of each "element" or instructional preference with each "construct" or cultural value using the scale "3" definitely associated or yes, "2" neutral, and "1"' definitely not associated or no. This will then form the basis for an interview.

	Instructional Preferences	*Models of Instruction*	behaviour modification	*Modes of Instruction*	dependent study	*Media of Instruction*	abstract presentation	teacher control	persistent medium	group discussion & activities
Values										
East										
capacity to believe in the unseen			2		2		3	2	1	2
hope			3		1		2	2	2	3
rebirth			2		2		1	2	2	1
vulnerability			1		2		2	2	1	2
watching over others			3		2		2	3	2	3
guiding others			3		2		3	2	1	2
hope for the people			3		2		1	1	1	2
South										
generosity			2		3		2	2	1	2
sensitivity to the feelings of others			3		3		2	2	2	3
love of one person for another			3		1		2	1	1	3
determination			3		3		2	2	1	2
compassion			3		3		2	1	2	3
anger at injustice			1		1		2	2	1	2

repulsion of senseless violence			3		1		1	2	1	3
ability to express joy and good feelings			2		2		1	2	2	3
West										
dreams			1		1		2	1	1	1
spiritual insight			2		1		2	1	1	2
respect for others' beliefs			3		2		3	1	1	3
vision (a sense of possibilities and potentialities)			2		3		2	2	1	2
North										
understanding			2		3		3	2	2	3
integrating all intellectual capacities			2		3		3	3	3	3
freedom from hate			3		1		2	2	2	1
seeing how all things fit together			2		3		2	2	2	3
sense of how to live a balanced life			2		3		3	2	3	3

note: Elizabeth was given this repertory grid unrated.

APPENDIX F

Interview Questions

Background prior to 1975

Date of Birth/Age

Birthplace

Early Schooling/Education/Activities

Language Affiliation

Did you have to take any co-requisite courses as required for the Primary-Junior program outline?

1) What is it about a particular cultural value that leads you to associate it with a particular instructional preference?

2) What are your comments regarding your associations made between the following:

watching over others and dependent study

guiding others and dependent study

seeing how all things fit together and abstract presentation

guiding others and teacher control

determination and teacher control

understanding and persistent media

seeing how things all fit together and persistent media

vulnerability and group discussion and activities

hope for the people and group discussion and activities

vision (a sense of possibilities and potentialities) and group discussion and activities

3) What are the most important cultural values with regard to your present teaching?

4) Behavioural modification in conjunction with personal orientation and social interaction models, dependent study in conjunction with core-complementary modes, and group discussion and activities appear to be rated as being associated; while abstract presentation, teacher control and persistent media appear to be rated as not associated or neutral. What are the instructional preferences at work here when there appears to be a contradiction between behavioural modification model, dependent study mode, and group discussion and activities, and teacher control?

5) What is it about a particular cultural value that leads you to not associate it with a particular instructional preference?

6) Is the use of Native values and traditions as important one for you particularly with regard to developing effective instruction?

7) Do you have any other comments or concerns regarding the issues of instructional preferences and cultural values?

8) How do you feel about the interview?

9) Is it relevant to your teaching practice at this stage of your teaching career?

APPENDIX G

Teacher Information Sheet   April 28, 1997

Dear preservice teacher,

Re: Research study on the instructional preferences of Cree preservice teachers and their cultural values.

I am writing to ask for your cooperation in a study on your instructional preferences. I am also interested in learning about whether or not decisions made on instructional preferences reflect your cultural values.

I would like to accomplish this through the use of autobiographies, classroom cases or lessons, repertory grids, and interviews.

Participation in this study will not interfere with the normal curriculum or your current teaching in any way. The study has received approval from the administrators of the Aboriginal Teacher Education Program and the ethical review committee of the Faculty of Education at Queen's University.

It is hoped that information gathered will be used to promote growth and change in Cree preservice teacher beliefs through the development of appropriate tools and techniques, and may be used to provide teacher educators with information on future curricula and program direction Subsequently, I feel that **this study may help you to become a better teacher** and may serve to enhance the Aboriginal Teacher Education Program for future preservice teachers.

If you have any questions about this study, please do not hesitate to contact me at (613) 548-7341. Thank you very much for your time and effort, it is greatly appreciated.

Jim Hollander, Faculty of Education Queen's University

APPENDIX H

Teacher Consent Form

I _____ , agree to participate in a research study conducted by Jim Hollander, Master of Education student at Queen's University.

I understand that the purpose of the study is to find out information on the instructional preferences of Cree preservice teachers and their cultural values, and that it will take approximately 1 hour to fill out an autobiography and 1 hour to complete a classroom case or lesson. I also acknowledge that I may be called upon within the next three months to discuss my instructional preferences, cultural values, and/or complete a repertory grid in this area of research.

It is hoped that information gathered through this study will be used to promote growth and change in Cree preservice teacher beliefs, and that this information may be used to provide teacher educators with information on curricula and program direction.

I am aware that my participation in this study is strictly voluntary and that I am free to withdraw at any time for any reason.

I understand that my name will be held confidential and will not be used in the research report. My identity will be only known to the researcher, and that efforts to ensure anonymity will be achieved through consultation by the researcher.

I am fully aware that if, as a research participant, I have, now or later, some concern about the research, that I am free to discuss this with the researcher, Jim Hollander, or his Thesis Supervisor, Dr. Don Campbell.

_____   _____

Date   Name of Study Participant

APPENDIX I

Teacher Personal Information Sheet

Please complete the following confidential personal information sheet where applicable by

(circling) or writing in the appropriate response.

Name:_____

Sex: Male, Female

Age: 20–24, 25–30, 31–35, 36–40, 41–45, 46–50, Other_____

Band Affiliation:_____

Home Community: Moose Factory, Moosonee, Fort Albany, Kashechewan, Attawapiskat,

Peawanuk, Other_____

Martial Status: Single, Married

Number of Children: 0 1 2 3 4 5 6, Other_____

First Language: Cree, English, Other_____

Belief: Traditional, Christian, Other_____

Level of Education: Grade 9 10 11 12 13, College 1 2 3 4, University 1 2 3 4,

Other_____

School: Provincial, Band Operated, Other_____

Years of Classroom Experience: 1 2 3 4 5 6 7 8 9 10, Other_____

Current Position: Student Teacher, Classroom Assistant, Cree Language Teacher,

Other_____

Current Grade: JK SK 1 2 3 4 5 6