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Learning Strategies of Mi'kmaq (Aboriginal) Students

By

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## ABSTRACT

In this qualitative research study, First Nation students in high school participated in an interview study designed to 1) describe how their school experiences related to academic success and 2) to identify learning strategies used to achieve success. Participants described the importance of achieving academic success to ensure future economic security. In their approaches to learning, participants preferred multiple modes of learning. Various types of learning strategies included both visual and verbal methods such as teacher demonstrations, reading, and writing. Motivational influences were also identified as contributing to their educational success which came from a variety of sources such as teachers, parents, peers, and community leaders. Educational success for these Aboriginal students is both multi-dimension and multi-modal. Implication of the research and future direction will be discussed.

## RÉSUMÉ

Dans le cadre de cette recherche qualitative, des élèves autochtones de niveau secondaire ont participé à une étude par entrevue conçue pour 1) décrire de quelle manière les expériences vécues à l'école influencent le succès scolaire et 2) identifier les stratégies d'apprentissage menant à la réussite. Les participants ont décrit l'importance de la réussite scolaire pour assurer leur sécurité économique future. Ils privilégient des modes d'apprentissage multiples. Les diverses stratégies utilisées comprennent des méthodes visuelles et verbales comme les explications de l'enseignant, la lecture et l'écriture. Des motivations de sources variées (enseignants, parents, amis et leaders communautaires) contribuent également au succès scolaire. Pour les élèves autochtones, ce succès est à la fois multidimensionnel et multimodal. Les répercussions de l'étude et les orientations ultérieures seront discutées.

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## Chapter 1

### Review and Literature

#### *Definition of terms*

The Oxford dictionary defines Aboriginal as inhabiting or existing in a land from the earliest times or from before the arrival of colonists. To orient the reader, the term Aboriginal will be used interchangeably with the term First Nations and Native.

#### *Introduction*

This research will examine learning and the learning strategies implemented to attain educational success. Specifically, it will focus on First Nation students in high school as they achieve academic success in a mainstream educational system. Different worldviews of Native and Non-Native societies will be discussed as well as theories suggesting why Aboriginal peoples do not succeed in a school based on Western thinking. Then a contrast between the two philosophies will be addressed within the learning context of the school. Finally, academically successful Aboriginal students within a mainstream high school will be discussed; in particular, how their school related experiences and learning strategies resulted in their abilities to educationally excel.

#### *Definition of learning styles*

The literature on learning styles originates from several disciplines, resulting in inconsistent and contradictory information regarding what a learning style is (Eric digest, 2002). Riding and Rayner (1998) define learning styles as an individual's repertoire of learning strategies (the ways in which learning tasks are habitually responded to) combined with cognitive styles (the way information is organized and represented). Learning styles consist of different dimensions and are unique to individuals.

*Aspects of learning styles*

Learning styles consist of six interrelated aspects: cognitive, executive, affective, social, physiological, and behavioural (Oxford and Anderson, 1995). The cognitive element involves an individual's preferred method of mental functioning. An executive aspect includes the degree to which a person seeks order, organization, closure, and how one's learning processes is managed. The affective component consists of what individuals pay most attention to in a learning situation, which reflects a combination of attitudes, beliefs, and values. A social element consists of the amount of involvement one has with other people during a learning process. Physiological aspects, partially involve a biological basis, that is determined by an individual's sensory perceptual tendencies. Finally, a behavioural standpoint, which includes an individual's tendency to seek out situations that are compatible to one's preferred methods of learning. Learning styles consist of many different interconnected dimensions and just as many theories exist to explain how learning occurs (Oxford et al., 1995).

*Models of knowledge acquisition*

Numerous theories exist indicating how learning occurs. Such models include: behaviorist, listening and receiving knowledge, analytical, intuition aesthetics, tacit learning, and constructivist learning. Based on the research by Belenky, Clinchy, Gold, Berger, and Tarule (1986), two ways of how learning occurs have been indicated. Behavioristic is one way to learn and it consists of an individual performing a task. In this approach, an authority person makes a demand for action and the individual responds to the demand without being consciously aware of what is being asked. The second model of gaining knowledge is by listening and receiving information. This involves a

passive act, which relies on peers, family, or other authority figures telling the individual what to think, what opinions to have, and how to respond. Bruner (1960 as cited in Shade, Kelly & Oberg, 1997) depicted two other styles of learning. An analytical learning approach suggests that individuals are aware of the knowledge that is all around them, but they need to search for it. Learners tend to use formulas or algorithms to deduce certain facts to gain information or they experiment, discover concepts, or acquire knowledge through inductive processes. Intuition is Bruner's second approach to learning. Knowledge is gained by developing an insight into a situation or idea. Without proof, learners make a cognitive leap to a conclusion or idea, perceived as self-evident. This type of learning is associated with mysticism, spirituality, and subjectivity and is often seen as irrational.

Eisner's (1985 as cited in Shade et al., 1997) approach to knowledge acquisition suggests that individuals learn through aesthetics. Through personal experience, individuals begin to understand the world around them. The primary method of knowing is through perception such as seeing, feeling, touching, and experience. This type of learning may be the basis for creative thinking. An additional dimension of learning is tacit learning. According to Polanyi (1966 as cited in Shade, et al., 1997), observation is the basis for this style of learning. Children are expected to watch the performance of a task and then do what is required. These last three models; intuition, aesthetics, and tacit learning are hard to define, and as a result, they are not recognized in teaching and learning processes.

The final approach to knowledge acquisition is constructivist learning. This type of learning takes place when individuals create their own models, or theories of ideas.

Through personal experience, they determine what information is important and then they integrate it and connect it to their conceptualization of the world. An individual who learns with this approach tends to develop their own sense of order and construction of reality (Shade, et al., 1997). Although there are many theories that attempt to explain how learning occurs, learning styles on the other hand, are conceptualized differently.

*Learning style as internal and external cognitive processes*

According to the research on learning styles, learning is regarded as both an external cognitive process and an internal cognitive process. In relation to external cognitive processes, studies have focused on the physical characteristics of the setting in which learning takes place (More, 1989). Internal cognitive processes, on the other hand, are described as the manner in which a student codes, organizes, and processes information and also how an individual approaches a learning situation to understand and remember information (More, 1989). More (1989) indicated that learning styles are something that can be learned, one's learning style is not innate and, as a result, learning styles can evolve and change.

The investigation of learning styles arose from the study of individual differences. As researchers try to understand the range of individual differences, other sources should be examined such as cultural differences (Berry, 1976 as cited in More 1989). Research suggests that culture can influence an individual's preferred learning style and personality style (Nuby & Oxford, 1998). Adler's (1930 as cited in Yates 1987) research indicated that a child has both an inner and outer environment. The inner environment is one's hereditary endowment and the outer environment includes: family atmosphere, family constellation, and child rearing practices. As a child interprets their learning experiences

within the environment, they draw conclusions about effective approaches toward social living and develop attitudes and patterns toward life, resulting in ethnic development (Longstreet 1983 as cited in Yates 1987). Ethnic development is behaviour learned as a result of direct contact with people and immediate environment (Longstreet 1983 as cited in Yates 1987). Such learning is attributed to behaviour patterns, and preferred modes of learning (visual) that are associated with an ethnic learning style. For instance, a child's ethnic learning style (e.g. being Mi'kmaq) is modified through the exposure of one's broader culture (e.g. being an Aboriginal). A child's ethnic learning experiences are the foundation of one's culturally related learning style. As a Native child enters a mainstream educational system, cultural differences regarding learning styles should be taken into consideration to ensure effective learning and educational attainment, but their worldviews are politely dismissed. An individual's preferred style of learning is determined by culture and variables associated with that particular culture, ultimately culture influences how one perceives and views the world.

#### *Different world views*

The lack of attention and respect for worldview differences are perceived as a major concern of educational difficulties for Native children (Deloria, 1991). Worldview refers to a set of belief systems and principles by which individuals understand and make sense of the world and their place in that world (Deloria, 1991). There are many striking differences between a Non-Native worldview and a Native worldview. A Native worldview is described in terms of Native metaphysics. Their knowledge of the natural world, of the human world, and of whatever realities exist beyond the senses has an interconnectedness that far surpasses anything devised by western civilization (Deloria,

1991). Native traditional values and beliefs associated with this worldview consist of sharing, cooperation, noninterference, being, the group and extended family, harmony with nature, a time orientation toward living in the present, preference for explanation of natural phenomena according to the supernatural, and a deep respect for elders (DuBray, 1985). A Non-Native worldview on the other hand, is characterized by reductionism and is enhanced by the success of modern technology. This view has emerged from a complex mixture of folklore, religious doctrine, and Greek natural science and is held as the highest intellectual achievement of the human species (Deloria, 1991). Values and beliefs associated with a Non-Native worldview consist of: saving, domination, competition and aggression, doing, individualism and the nuclear family, mastery over nature, a time orientation toward living for the future, a preference for scientific explanations of everything, as well as clock-watching, winning as much as possible, and reverence of youth (DuBray, 1985). In addition to values and beliefs determining one's worldview, other cultural factors are also apparent.

#### *Broader issues of learning*

According to Deloria (1991), Native knowledge systems require a "prodigious memory." A key to understanding this way of knowing is to realize that the emphasis is on the particular and not on general laws or explanations of how things work. Collected information is characterized as correlational or relational in nature thus, Aboriginal students develop a relational thinking style. For instance, Natives are interested in the psychological behaviour of all living things and in attributing personality to things. As a result, they notice and remember how and when things happened together. Although the connections made between things have no firm belief in cause and effect relations they



are well aware that when a sequence of things begins, other events are sure to follow Deloria (1991).

These correlational and relational patterns are seen in the oral and written discourse of Natives. To many Non-Natives, ideas may appear to be unconnected because they are non-linear, but the connectedness of ideas may actually be unspoken or provided within a broader context. According to Tharp (1994), First Nation cognition is the “anchor” example of holistic thought because pieces of information derive their meaning from the pattern of the whole. For instance, a lesson plan devised by elders to learn a traditional craft, making moccasins of Caribou skin, is a 16-week unit. It begins with preparations for the hunt and learning to make moccasins begins in the 15<sup>th</sup> week. To the elders, it is not possible to understand the moccasins outside the context of the leather, which is not understood outside the spiritual relationship to the land. Native ways of thinking revolve around life and all of its interrelationships: sensory, cognitive, emotional, intuitive and spiritual (Tharp, 1994). This way of thinking is neither linear nor hierarchical which is reflected in their traditional methods of learning.

#### *Traditional methods of learning styles*

Within First Nations’ cultures, traditional methods of learning vary. These methods of learning include: legends and stories, watch then do, child raising practices and communication (Scollon & Scollon, 1983; Red Horse, 1980; Soldier 1985). The primary method of acquiring values and attitudes is through the sharing of legends and stories (Scollon & Scollon, 1983). Legends and stories have deep meanings and involve complex relationships. Teaching is provided through the use of symbolism, anthropomorphism (giving human characteristics to animals and objects), animism

(giving life and soul to natural phenomena like rocks, trees, and wind), and metaphors, which are considered effective methods in teaching deep and complex concepts. These teaching methods allow for understanding to occur at one's own level of cognitive and emotional development. When a story or legend is retold a few years later, it will have an even deeper meaning for the learner (Scollon & Scollon, 1983).

Watch-then-do is the primary learning method used to acquire skills (Red Horse, 1980). Parents or elders generally teach through demonstration and Native children learn by observation. Children watch, and then are expected to imitate the skills. For example, a mother might teach an important skill by modeling (Red Horse, 1980; Little Lee Soldier, 1985).

Traditional child rearing practices are also related to learning styles. Children are allowed to explore and be independent as soon as they are able too (Scollon & Scollon, 1983). They are allowed to learn from their mistakes and parents/guardians do not interfere with the child's learning process unless, there a sense of danger is imminent. Misbehavior is often ignored because children need to learn natural consequences of misbehaving and take control of his/her own behaviours. In child rearing practices, grandparents and other elders are also responsible for the child's learning (Scollon & Scollon, 1983).

Another important traditional aspect of learning is communication (More, 1989). Communication patterns are both verbal and nonverbal in nature; however, much of the emphasis is placed on nonverbal communication because children learn customs and skills by directly sharing in the activities of others. Silence is valued as a means of communication. Eye contact and quiet calmness are important methods of discipline and

communication. After a learning situation, children are expected to self-test and they are not disrupted by others asking questions about their learning (More, 1989). These traditional methods of learning allow for information processing to be based on different stages of socialization.

*Native processing style – stages of learning*

The processing style of Aboriginal children consists of levels of socialization because it is perceived as an important stage of learning (Smith 1996 as cited in Shade et. al., 1997). According to Smith (1996), there are six learning stages, which are referred to as one's development by thoughts. These stages are as follows: (a) one becomes aware, (b) one becomes self-aware, (c) one begins to think and do things, (d) one's thought begins existing, (e) one begins to think for oneself, and (f) one begins to think about all things. Traditional methods of learning also develop one's perceptual styles.

It is believed that Aboriginal children's perceptual tendency toward learning is visual (Kaulback, 1984). Rougas (2000) has determined that Native children are good at remembering symbols, manipulating pictures and designs, and understanding visual relationships. As a result of culturally traditional methods of learning, Native children are taught through observation (Red Horse, 1980; Little Lee Soldier 1985) and it is believed that this results in a visual mode of learning.

*Broader effects of the culture*

There are numerous explanations accounting for an Aboriginal child's orientation toward a visual learning style. Berry, (1966 as cited in Kaulback, 1984) suggests that certain ecological factors (nature of the environment) that Native children are exposed to may influence the development of certain perceptual skills (i.e., visual and spatial skills).

Native children exposed to active trapping and hunting traditions may develop visual and spatial skills. However, other Aboriginal children not exposed to these ecological factors also develop acute visual perceptual abilities (Kaulback, 1984). Therefore, other factors must also enhance the development of visual perceptual skills such as cultural activities.

### *Child rearing*

Despite rapid changes in culture and economics, child-raising methods practiced by Aboriginal peoples have remained relatively unchanged throughout the generations (More, 1989). Cultural activities associated with child rearing traits may also account for the visual style of learning among Native children regardless of a community's preference toward a traditional or non-traditional orientation (Pepper & Henry, 1986). Young Native children learn by observing and playfully imitating the actions of their parents, siblings and elders which plays an important role in the development of certain perceptual skills (Red Horse, 1980; Little Lee Soldier, 1985). Although patterns of child rearing in Native communities resemble those of other cultures within society, there is an important distinction between child raising practices in a Native society and those of another culture, such as the use of verbal instruction (Kaulback, 1984).

In Aboriginal societies, much of the learning is nonverbal in nature. Since a child will learn the customs and skills of their culture by sharing in the activities of others, verbal instruction is not required because the child's proximity to the observable action makes giving verbal instructions redundant. Therefore, the information a child is exposed to and required to learn is through the act of observation rather than verbalization (Kaulback, 1984). Traditional methods of learning that develop a visually oriented learning style may have a negative effect on First Nation children once they enter a

mainstream education system.

*Result of this style of upbringing*

The result of a different cultural upbringing for Natives is that children attending a mainstream school, which tends to favour verbalization may find themselves in a culturally incoherent system. Arbess (1981 as cited in Pepper & Henry 1986) investigated cultural incongruencies and discovered that educational expectations held by Native children are opposite to those communicated in a mainstream school setting. For instance, Aboriginal children expected freedom of movement, visual spatial learning, and direct experience learning, but instead they found restrictive movement, verbal learning dimension and learning experiences that are indirect. Cultural incongruencies vary based on the stage of acculturation of the Native child's family (Pepper & Henry 1989). Through family contacts, ethnicity, and culture, the basis of one's learning style is determined as well as the values and beliefs a child may acquire. These factors will affect a child's congruency or lack of congruency within the school setting (Pepper et al., 1989). Having an observational learning style has far reaching consequences in the formal education of Native students, especially since the formal educative process tends to favor those who are highly verbal (Kaulback, 1984). Therefore, Native children's predisposition to a visual learning style may limit their ability to succeed in school because the teaching methods in schools tend to cater to the auditory learner.

Different theories have been suggested to explain Native students' difficulties in succeeding in a mainstream educational system. Theories concerning the effects of cultural difference between Native students and Non-Native teachers attempt to explain why Aboriginal students experience a lack of success in a mainstream educational

system. Such theories include match/mismatch hypothesis, and cultural discontinuity theory.

#### *Match/mismatch hypothesis*

To aid in explaining the effects of cultural differences between Non-Native students and Native students' experiences of the difficulties in attaining an education, researchers proposed a match/mismatch hypothesis (Westby et al., 1995). The match/mismatch hypothesis suggests that students whose cultural patterns are more similar to those of the schools are more successful and students whose cultural patterns are quite different to those of the school experience more difficulties. This hypothesis has been determined to be invalid because the research does not indicate which variables are important for school success or how schools should address the efforts to match teaching with learning styles.

#### *Cultural discontinuity theory*

A second theory is cultural discontinuity. Robinson-Zanartu (1996) stated that upon entering school, children have a range of experiences connected to their home socialization patterns. If the school's content is based on the norms of the majority culture then children must learn to translate behaviours and values and then they must assimilate into the school culture, which may be at odds with their home culture. For First Nation children, school may become highly decontextualized leading towards negative learning experiences which may result in a resistance towards learning. Therefore, school counselors and educators must become aware of several common areas of cultural misunderstanding and miscommunication that Aboriginal children face in the education system as a result of their cultural value and belief systems.

*Mainstream expectations and cultural values*

The formal education system requires Native students to adopt unfamiliar ways of acting and thinking, while rejecting their informal education of storytelling and participation in ceremonies and rituals that teach them how to live traditionally (Garrett, 1995). As an Aboriginal child confronts a social value system that is inconsistent with their own they develop feelings of isolation, rejection, and anxiety. These negative emotional reactions tend to discourage youth and as a result, they become confused about themselves and their cultural ways. In addition, they feel alienated and ashamed of their inability to meet mainstream expectations and as a result they withdraw (Sanders, 1987). The following values and beliefs are common areas of cultural misunderstandings: extended family, property, cooperating and sharing, individual praise, put on the spot, curiosity and for asking questions, and time.

*Extended family.* What mainstream society defines as “family” has a much broader view in the Aboriginal culture. The structural characteristics of the extended family network and tribal networks serves as facilitators of social responsibility, reciprocity, and value transmission (Red Horse, 1980). Aboriginals consider the family relationships to include much more than the biological connections of the nuclear family. Their perceptions extend far beyond one’s immediate relatives, to extended family relatives, to members of one’s clan, to members of the community and finally to all living things. Schools, on the other hand, emphasize individuality in their teaching methods and classroom organization (Little Lee Soldier, 1985).

*Property.* Another conflict of interest is the notion of individual property. Teachers will often label a child’s property with their name. To Aboriginal children who

have not internalized the idea of individual ownership, “yours” might mean belonging to the group. Part of their socialization process promotes the value of sharing, whatever belongs to the group, the Native child regards as his/her own too (Little Lee Soldier, 1985).

*Cooperating and sharing.* Cooperation is another important value in the Aboriginal culture. The research literature addresses the “weaknesses” (cultural difference) Native children face upon entering school. In relation to social development, First Nation children may actually be ahead of Non- Native children because they are already used to sharing and cooperating, therefore, they are able to participate in group activities successfully at a young age. Cooperation, on the other hand, can be a conflict within schools because of the competitiveness that is often promoted. Since competition is conceptualized differently in an Aboriginal culture, these children may not act in a competitive and assertive way as is expected by the school (Little Lee Soldier, 1985).

*Individual praise.* Boasting of one’s accomplishments and displaying loud behaviour that attracts attention to oneself are discouraged in Native culture. However, individual praise is welcomed if it has been earned and the praise is given in the presence of a group. On the other hand, in a classroom, a Native child who is singled out or put on the spot will drop their head and eyes as a sign of respect. Due to this cultural misunderstanding, Aboriginal children are seen as being rude and disrespectful or as hiding something (Garrett, 1995).

*Put on the spot.* Another area of conflict can occur when a teacher puts the Native child on the spot. The student may not meet the teacher’s expectations of looking directly at him/her and instead may act in a culturally appropriate way by dropping one’s



head as a sign of respect and compliance. Teachers may portray the Aboriginal child's behaviour as impolite or even rebellious (Little Lee Soldier, 1985).

*Curiosity and asking questions.* Culturally, Native children are expected to learn by observation and to be patient. They are not rewarded for curiosity and for asking questions. Since Aboriginal children are socialized into opposing behavioural patterns, they simply can not meet the teacher's expectations. As a result of these cultural differences, teachers may mistakenly mislabel Native students as passive, uncooperative, unassertive, and even lazy (Little Lee Soldier, 1985).

*Time.* A First Nation culture is "now" oriented. This creates a problem for Aboriginal children who are in schools because they are not socialized to think of long-term goals and planning for the future. As opposed to mainstream society, Natives do not live by the clock. The so-called "Indian time" says things begin when everyone has arrived and are ready; things are finished when they are finished. As a result, Aboriginal children do not do well on timed tests, which is part of the education system (Garrett, 1995).

These values are identified by the majority culture as social barriers to educational and economic success for Aboriginals. As a result, Native children are faced with contradictory messages from home and school (Garrett, 1995). Teachers can improve this situation by becoming aware of Native students' culture.

#### *Cultural influences on learning performance*

Cultural sensitivity can help teachers improve their relationships with Aboriginal students, and facilitate their learning process (Holland, 1982). Cultural sensitivity means the ability to identify and empathize with the feelings, language, values, home interaction

patterns, and behaviours of minorities in schools. Cultural sensitivity is necessary to understand and identify the learning style of minority students. It is important that educators understand that cultural teaching is based on example and not precept (rule of action). In other words, learning is based on example that requires emotional attitudes and opinions. Cultural learning activities are often centered on the child and their state of readiness to learn. It is important to note that the cultural teachings are not based on a formal structure that emphasizes the teacher, which is the case in mainstream schools; rather, the importance is placed on an informal structure that emphasizes the learner (Holland, 1982).

#### *Aboriginal educational success*

Few research studies have looked at the educational success that Native students achieve in a mainstream educational system. Lin (1985) asserted that Aboriginal students are indeed capable of succeeding in school. They are concerned about school and are highly motivated towards obtaining educational success (Wauters, Bruce, Black & Hocker, 1989). In addition, they understand the importance of achieving an education for future employment purposes. In fact, they use various motivational influences to enhance their academic success such as teachers, parental support (Radda, Iwamoto & Patrick, 1998; Rindone, 1988; Willette 1999), and cultural values to aid in their learning endeavours (Bert & Bert, 1992).

Macias (1989) stated that Aboriginal students are multi-modal in their approaches to learning. They use both visual and verbal approaches to aid in their learning. Other researchers (Berger & Ross 2006; Whitbeck, Hoyt, Stubben & LaFromboise, 2001) believe that Native students who identify with their culture may be at an advantage

because Native culture acts as a protective factor which contributes to prosocial behaviours and attitudes resulting in Aboriginal students' abilities to attain educational achievement.

#### *Limitations of the existing research*

The review of the literature presents a number of limitations in the existing research. One such limitation is that Non-Native researchers conduct most of the research. Little research exists that investigates successful Aboriginal students in a mainstream educational system particularly, Native students in high school. Much of the literature is based on quantitative methods, which are not a true reflection of cultural differences. Qualitative research does exist on Aboriginal students in a mainstream school, but the sample sizes are often small making generalization difficult to say the least. Literature is available on Aboriginal learning styles, but little is available on Native learning strategies.

#### *The current study*

This study looks at Aboriginal students' school related experiences in high school as well as how their experiences contributed to their learning success in a mainstream educational system, in a small rural community. Since little research has been conducted regarding Aboriginal academic success (Willette, 1999) particularly with Native students in high school. This study attempts to define what school related experience influence their educational success, and how they go about learning in order to succeed in high school.

## Chapter 2

### Methodology

A multiple case study was the qualitative research strategy used in this project. The rationale for selecting case study as a research strategy was to gain informative data, to provide insight into a phenomenon, to make generalization to other cases and to make informative decisions about generating questions and hypotheses for future research (Creswell, 1998; Marshall, 1999; Stake 1995). For this case study, a descriptive method has been chosen; this analysis approach both described and provided a deeper understanding of the learning strategies employed by Aboriginal students. The discussion about this study followed a typical format that provided a detailed description of each case as well as identifies themes between the cases. This type of analysis was considered a within-case analysis (Creswell, 1998). This format also provided a thematic analysis across the cases, called a cross-case analysis (Creswell, 1998). Finally, the researcher provided an interpretation of the meaning of the case and reported the “lessons learned” from the cases (Creswell, 1998).

To explore multiple cases through data collection involves multiple sources of rich information. These sources of information included an in-depth semi-structured interview, literature review, in-sight from the Aboriginal researcher, supervisor and project collaborators. The goal of this project was to identify factors and contextual variables that promoted academic success in Aboriginal students and explain how these students arrived at and implement strategies to further their learning experiences. Data-collection occurred within an Aboriginal community in New Brunswick.

The focus of the collective case study was both intrinsic and instrumental. An intrinsic case study was undertaken to enhance the understanding of Aboriginal success.

There was an interest to determine what was common or what was particular about Aboriginal students with an end result of portraying something of the uncommon (Stake, 1995). In addition, an instrumental case study was undertaken; it provided insight into the issues of academic success among Aboriginal students. This approach aided in identifying strategies that aboriginal students used to develop their learning as well as how implementing these strategies ultimately resulted in their success (Stake, 1995). An intrinsic and instrumental case study enhanced the researcher's understanding of the learning strategies employed by successful Aboriginal students.

#### *The researcher*

An Aboriginal researcher collected data for this study. The researcher was in a Master's of Arts program, School/Applied child psychology, at McGill University in Quebec, Canada. Data collection occurred within the researcher's home community in New Brunswick. The analysis of the data and the writing of this study were mainly conducted by the researcher; however, guidance was provided from the researcher's supervisor. In order to control for the researcher's subjective stance the supervisor asked questions in order to challenge the researcher's biases.

#### *Participants*

The sample of this study consisted of two Aboriginal students who were attending high school. More specifically, there was one female in grade 11 and one male in grade 10. Research participants of this study were recruited by word of mouth. The ages of the participants were between 15 to 16 years, with an overall academic average of 80% or better. Both students were interviewed separately and each interview lasted approximately 60 to 90 minutes. Interviews were audio-taped and transcribed by the researcher. The interviews took place within the participant's community, in a private

room mutually, free from distractions to ensure confidentiality, convenient to both the researcher and the participants. The data was securely stored at the researcher's apartment in Montreal.

Participants were volunteers and no formal incentives were offered to them. However, they were aware that participation in this study would provide information that may assist other Aboriginal students in achieving academic success.

Informed consent was discussed in detail with the participant and their parents, and parent consent and participant assent was provided. Participants and their parents were informed during an initial contact and prior to the interview that they may withdraw from the study at any time. In addition, a statement was included in the consent form that participants had the right to withdraw from the study at any point in time, for whatever reason without penalty. The consent form required both the parents' consent and the participants' assent.

### *Instruments*

*Demographic information sheet.* To collect demographic information of the research participants, such as age, family status, income, grade level, grade point average most favorite class and least favorite class, a demographic information sheet was developed specifically for this research (see Appendix A).

Two high school participants were interested in partaking in this study. Paige is a 19-year-old adolescent girl who lives at home with her mom and younger brother. She is in grade 11 and has a grade point average of 82.5%, Her mother's annual income was \$21,000. Her teachers view her as a very pleasant and cooperative student she produces very good work. Paige believes she is a hard working student and her good grades reflect this characteristic. Her favourite subject is Biology because she finds the topic very

interesting and she hopes to pursue a degree in this discipline. The grade she earned in Biology is 85%. Her least favorite subject is Math because she sometimes finds the concepts difficult to understand. The grade she earned in this course is 69%.

Shayne is a 15-year-old adolescent boy who lives at home with both of his parents and his younger sister. He is in grade 10 and has a grade point average of 76%. His parents combined annual income is \$60,000 per year. His teachers view him as a very pleasant and cooperative student who enjoys participating in class discussions. He is perceived as a very pleasant and cooperative student who enjoys participating in class discussions and who produces very good work. Shayne believes he is a good student because he always tries his best and his grades reflect these good efforts. His favourite subject is Math because he someday wishes to become a Math teacher. He earned a grade 84% in Math. His least favourite subject is Personal Development and Career planning simply because “the teacher spoke too much about irrelevant topics not pertaining to the course and because of this he did not develop an interest in the course.” The grade he earned in this course was 85%.

The participants of this study were from a small Native community, consisting of approximately 350 individuals. 35% consists of the population consists of youth between the ages of 0-24. 45% consists of adults between the ages of 24 –65. While 20% consists of elders over the age of 65.

The Aboriginal students attended a public high school in a neighboring community. The principle, vice-principle, and all the teachers were Non-Native except for one teacher who was Aboriginal and one Native resource teacher who was also Aboriginal. There were approximately 400 students attending the school. The majority of the students were also of Caucasian descent and 30 of these students were of Aboriginal

descent.

*Interview protocol.* The research data was dependent upon narratives of the participants' experiences, which was based on the research questions. Data was collected through a semi-structured interview with the participants. To conduct in-depth interviews with the research participants, an interview protocol was created. Questions pertaining to the interview were generated from the research literature, the researcher's professional and personal experience, and discussions with the supervisor. The list of questions in the interview protocol consisted of a semi-structured interview technique that was designed to have open-ended questions so the participants were provided with an opportunity to fully elaborate on their educational experiences (See Appendix B). Participants were asked to describe their academically successful experiences in the following areas: a) background information, b) critical incidence, c) school experiences, d) school values and beliefs, e) attitudes about learning, f) strategies implemented to enhance learning, g) barriers and challenges experienced in school, h) conflict resolution, i) cultural values and beliefs, j) role models, k) community involvement/support, l) future aspirations and m) personal reactions to the interview process. Both students were encouraged to convey their experiences in these areas both generally and specifically.

### *Procedures*

Research participants were recruited through word of mouth. Both participants and their parents signed consent and assent forms. The participants were also informed that they would be asked to fill out a demographic information sheet before the interviews, that the interviews would be audiotaped and that the audiotaped interviews would be transcribed for data analysis. Additional information was provided to the participants concerning how their anonymity would be obtained and how the



confidentiality of their information, during the interview, would be preserved. The participants were also informed that they could withdraw from the study at any time without penalty.

Both interviews were conducted face-to-face at a mutually agreed upon place and each was conducted in English. In addition to the interviews, field notes were taken immediately before and after contact with each participant in order to determine the researcher's reflexive stance and to identify any assumptions or conclusions for interpreting the data during analysis. In these notes, the researcher indicated the process of preparing for the interviews, how she experienced the participants, conclusions about the interview and any other information about the interview and her environment. These notes were used to provide additional information about the context of the interview process. This was achieved by providing details and observations about the interviews that would not have been viewed through the audiotaping process such as body language and the number of interruptions. During the analysis process these notes can provide the researcher with clarification concerning confusing or inconsistent information that some of the interviews contained. More specifically, the notes were used to identify the researcher's own process to discover any premature assumptions.

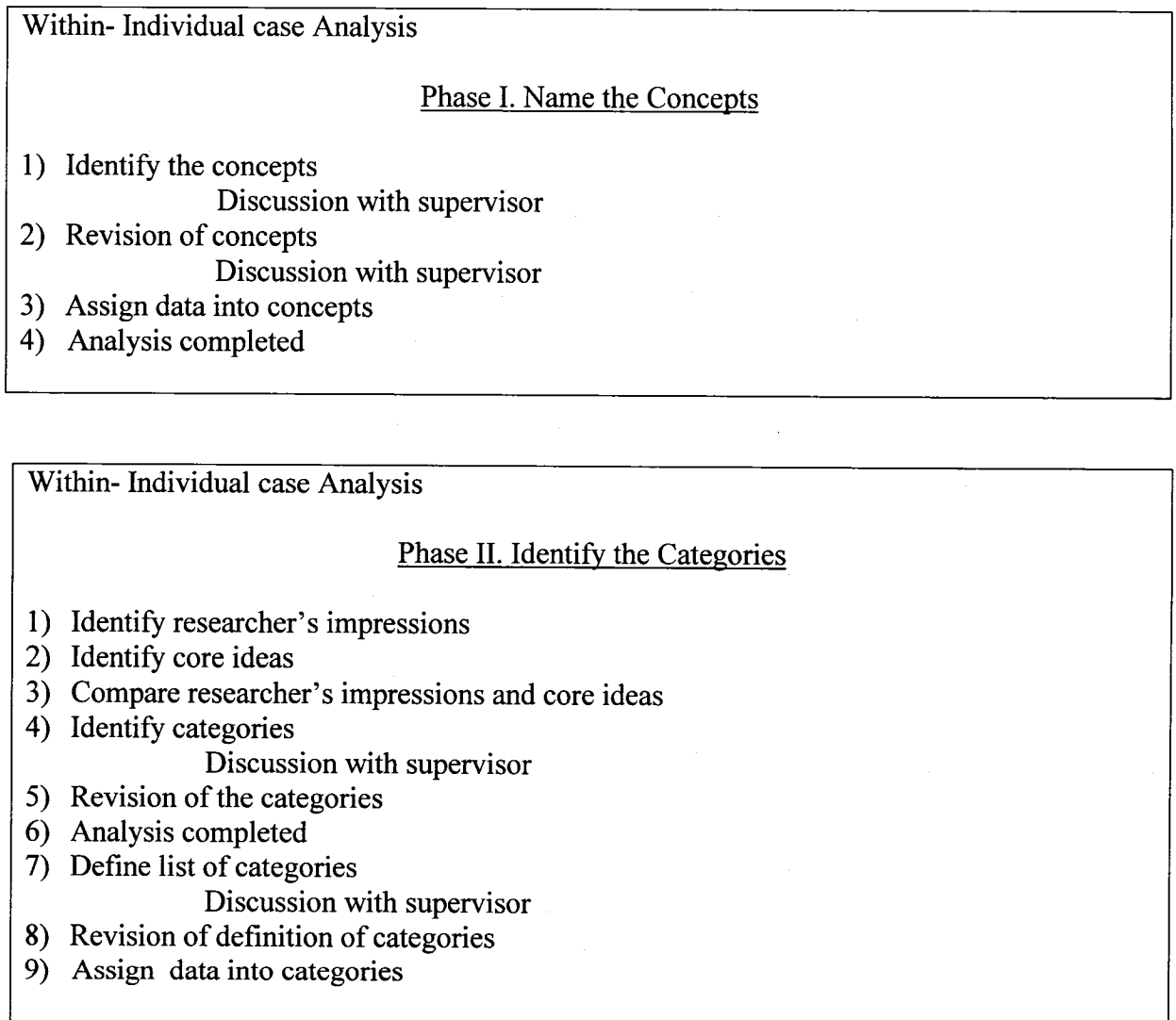
All audiotaped material was transcribed verbatim by the researcher. One of the interviews lasted 90 minutes and the second interview lasted 40 minutes. Since the second interview did not provide sufficient information, a second interview was scheduled, this lasted another 40 minutes. The transcribed interviews were 18 and 22 single-spaced pages with a total of 40 pages of data to be analyzed.

#### *Data Analysis*

For multiple case studies, a holistic analysis procedure was conducted (Creswell

1998, Stake 1995). This format provided a detailed description of the cases and themes within the case, called a within-case analysis. This was followed by a thematic analysis across the cases, called a cross-case analysis and then an interpretation of the meaning of the case was provided. In this final interpretative phase, the researcher reported “lessons learned” from the cases.

In figure 1 a flow chart of the steps taken for analyzing the data was presented.



## Cross Analysis

Phase III. Identify Themes

- 1) Identify common categories for each case
- 2) Compare common categories for each case  
Discussion with supervisor
- 3) Identify research themes
- 4) Assign data to themes

## Cross Analysis

Phase IV. Building Hypotheses from the interaction among the themes

- 1) Propose hypotheses about the relation among the themes  
Discussion with supervisor
- 2) Revise the relationship
- 3) Verify relationship by assigning data

As indicated in the flow chart, data analysis began with reducing the data by categorizing it. As a first level of analysis, the examination of the data was conducted by a line by line approach in order to generate a list of concept names (Stake, 1995). Following this step of analysis, the data was coded and a list of concepts were identified. To ensure internal consistency of the study, frequent discussions, regarding the coding of the data, occurred with the researcher's supervisor who assumed the responsibility of challenging the researcher's biases. After the concepts were developed, the data were assigned to them.

The second level of analysis included the process of identifying categories. This was achieved by re-reading the transcripts to familiarize the researcher with what was said by the participants for each concept. This process helped in generating a list of categorical ideas for each interview, this is thought of as "winnowing" the data (Creswell,

1998). The researcher then compared the list of categorical ideas and her field notes, which led to the identification of several categories. Throughout this process, the researcher discussed her ideas and the list of categories with her supervisor. After these discussions, all necessary modifications were made.

The research themes began to emerge as a result of the commonalties between the participant's cases. The researcher presented the themes to the supervisor, discussed the hypotheses about them, and completed the process by assigning data to each theme.

During the final stage of analysis, several hypotheses were identified. These hypotheses between the themes were discussed with the supervisor. She challenged the researcher's assumptions about the hypotheses and modifications were made.

## CHAPTER 3

### Results

The data analysis as described in the methodology chapter resulted in the identification of the main research themes and categories. This chapter focuses on the descriptions of these themes and categories. Following the introduction of the main themes, the relationship between them is presented. A comparison between the findings and the existing literature may be found in Chapter 4.

In presenting the findings about the main themes, I used verbatim quotations from the participants for illustrative purposes. These quotations serve as explanatory expressions of a particular theme. With regards to the variability of the responses for a particular theme, the differences of the experiences were noted.

In order to ease the flow of the presentation of the results and orient the reader, each participant was assigned a fictional name. Any identifying details about these Aboriginal students were removed from the introduction. Before providing a detailed description of the emergent themes, a brief description of each participant's academic background is presented below.

#### Overview of Result Findings

Aboriginal participants in the current study were able to describe factors that influenced their active participation in school. They identified both academic success and economic security as two important aspects conducive to their abilities to scholastically excel in their education. In fact, these two major categories are interrelated and are actually considered to be motivational factors. The fundamental motivational drive used by these Aboriginal students to excel in their scholastic endeavors results in good

academic success which in turn, will leads to economic stability. The overall finding of this study is the relationship between academics and economic security. For these Aboriginal students, school experiences have played an important role in achieving academic success.

Data analysis was conducted in the area of Native student learning strategies resulting in academic success and the results of this study will be presented in the following areas: (a) school experience, (b) learning strategies, (c) barriers and challenges and, (d) community. Each major area includes a description of participants' process of achieving academic success; the main themes that were identified as a result of the data analysis as well as the supporting evidence which is the exact quotations of what the research participants said during the interviews will be addressed throughout this chapter.

#### *School Experiences*

In this section, a discussion of various school related experiences that have aided in increasing learning and academic success will be provided. First, a brief description of numerous experiences encountered at school is discussed. Following this, categories and themes concerning school related experiences will be introduced.

Both participants have identified and described various experiences that have engaged them in school. They discussed how extra curricular activities encouraged them to become more involved in their school. This sense of school connection has created sparks of excitement or school spirit both within themselves and their peers. Participants identified positive school experiences and have found the following extra-curricular activities interesting: a) school sports, b) school play, c) student council, and (d) having a hobby.

*Sports.* For these students extra-curricular activities are perceived as motivational factors in achieving a sense of connection to school. With regards to school sports one participant reported:

[playing soccer is] exciting, because you get to be active and get to meet new people and just travel and just have more experiences, but I like volleyball more.

It's kind of like a goal, like a personal achievement for me because I really like that sport. . . .

The other participant stated:

For hockey, it keeps you in shape, it makes you feel more part of the school. [For baseball, it's about] . . . learning something new, I learn to throw new and more pitches and hit better and feel better. . . .

*School Play.* For one participant, encouraging other students to become more involved with their school and school related activities are very important. One such way to create this interest is by participating in a school play. One participant indicated: 'It [the school play] was fun, . . . but I thought it was good to like put on a show for the entire school . . . and they like it. Because . . . activities help people get more involved with their school and care about what happens. Well, I thought it was well done.'

*Student Council.* One participant attempted to increase students' interest in school and to engage them in school related activities by joining student council. Hearing other students' ideas and concerns about different school activities was key in trying to increase other students' sense of school spirit and pride. One participant reported:

It's good [sitting on student council] because . . . a lot of people complain about how there is like nothing around the school. Like how there's nothing [no

initiative] being done. My first meeting was only last week so I kind of want to change that and organize activities so people won't have to say that [complain]. [To eliminate the complaining] I would do fund-raisers so we can have more [lunch time] activities like a jellybean contest . . . [By fund-raising], people won't have to pay to go see stuff . . . And just right now at school, people are showing movies at lunch time so people [students] would have things to do. So people will get school spirit and excited about going to school. I think that's good.

In addition to wanting to be academically successful, having a hobby is also important for these students. Some hobbies may have an enhancing effect on learning while others are simply for fun and pleasure. Hobbies indicated by these students included; reading, playing volleyball, hanging out with friends, skateboarding, golf and playing video games.

*Hobby.* One participant reported that reading was an important and valuable hobby. Reading not only educated the student about worldly events, but it also supported an involvement and interest in school curriculum. For example, 'for reading, it's just fun because . . . right now I am really into history and stuff. So, I can like learn what's really going on in the world and I think that's exciting.'

All of these factors suggested by the Aboriginal students were ways of increasing school spirit and interest among other students within the school. It also engaged them and created their own interest in wanting to be successful students.

#### *Student's educational values and beliefs*

Both participants have discussed the importance and value in achieving a high school education. Their drive for success today is dependent upon their desire to achieve



success tomorrow. Part of their academic achievement is attributed to their participation in extra-curricular activities. These activities have enhanced their learning indirectly by installing school spirit and a sense of connection to school. Other students viewed the participants as role models. To live up to this leadership role, they would try harder to achieve academic success by regularly attending classes, completing class assignments and earning good test grades. The values these students have placed on education include: (a) completing high school, (b) school spirit and, (c) attending university.

*High school.* These students believe that obtaining a high school education is important for future success as stated by one participant:

I think it [education] is important, a lot of people [fellow students] don't like it and they complain about school and the teachers and stuff, but I don't know. I think they just have poor attitudes, we might not like it now, but whenever you go and do something you really like, or whatever, it's all really worth it.

According to the other participant:

I just want to be successful to have money to buy stuff, whatever I want pretty much. [So, I] try to get all the work that I could do done. Get school over with, pass everything, and move on . . . [to] better things like just get out of high school first of all. [Education is also important because I have] to make my parents happy.

*School Spirit.* Being involved in extra-curricular activities has led to school spirit which in turn fosters learning. As indicated by one student:

'It makes you feel more part of the school you fit in. You make new friends and you all got the same interests, you all play hockey. That just makes playing for

your school more fun [because there's] more fans. Well, a lot of people from our school go a lot, so they get school spirit.'

The other participant stated:

Well, I go to extra-curricular activities and that kind of helps learning because it gives you school spirit . . .it helps people get more involved with their school and care about what happens and like a lot of people look up to you. [For example,] if you're on student council, people will expect you to do good so you do good. You try your hardest that's kind of also a motivation thing because you're a role model and you don't want to be a bad role model for other people.

*Success as defined by university education*

Attaining a university degree is also important to these students. As indicated by a participant: 'Because to be [personally] successful you have to have a good paying job and to have a good paying job you need an education like a degree. . . . Especially now-a-days, it's mostly a money issue. So, ya I want to be financially [independent] stable.'

The other student indicated:

I just want to be [personally] successful and make money. I want to live in life.

Well, if you're successful, if you have a good job, paying the bills is easier, eating is easier [cause of] all the money. Like having a house, being able to eat everyday, without having to worry about anything, just having money to pay the bills and you will be alright. Make life easier for me in the long run and it's about doing stuff you like. . . . I just want to get a good education. [Also] if you have a family it will be fun [because you] can go on vacations [you] can just go.

*Family's educational values and beliefs*

Both participants have indicated that their families value education. Parents have set clear educational expectations for their children and have communicated the importance of achieving academic success. In some instance, failing to meet these expectations has led to certain behavioural consequences. The values families' places on education include: (a) expectations and, (b) supervision.

*Educational expectations.* With regards to academic expectations, one student indicated:

Get good marks [80's and 90's] or you're in trouble [grounded], I just won't be able to go out. That usually [happens] when I get bad marks cause I didn't study. [They also expect me] to study, to go to class, and pay attention, don't fool around and I'll be all right. [Also] do my homework after school and if I do it after school then I'm all right.

The other participant stated:

'Well my mom wants me to go to university. She expects me to get good marks in school, but she understands that if [you don't] . . . you tried your best, it's like the best you can do. She just wants me to go to school and [to] get a good job [making enough money to live comfortably] and [to get] a good [university] education.'

*Supervision.* Parents have also communicated the importance of achieving academic success and have played an active role in ensuring their child's success by contacting teachers. According to one participant: 'She tells me to do my homework. She doesn't really have to tell me much I do my own stuff I'm a self-motivator.'

The other student explained:

My dad telling me [that] I'm suppose to have this kind of marks and what he expects of me. He wants me to get a better education than what he got and all that stuff. [My mom], she doesn't really say nothing it's always dad. [In addition], they are always checking with the teachers, checking to see if I'm doing good in school [and] making sure my marks are always up.

### Learning Strategies

In this section, a discussion of how participants have implemented multiple learning strategies to ensure learning and academic success will be provided. First, a brief description of how participants determine suitable learning strategies is discussed. Following this, categories and themes concerning learning strategies will be introduced.

#### *Learning strategies – determination of a strategy*

Determining personally appropriate learning strategies requires trial and error on part of the student. Selecting strategies that reflect their personal learning style has made acquiring knowledge easier. This learning process can sometimes be difficult and overwhelming, which may elicit various emotional reactions. Learning strategies that are considered effective have resulted in a motivation to learn and a desire to achieve academic success. On the contrary, learning strategies that are considered ineffective have resulted in feelings of frustration, a sense of confusion, and even the desire to not want to learn. However, perseverance and a motivational drive to become academically successful have led to the resolution of any academic challenges. To ensure student learning and academic success, effective learning strategies need to be implemented and well executed. Strategy selection is based on personal preference and its effectiveness. As

a result of data analysis, four different themes emerged in relation to academic success

- (a) determining a learning strategy
- (b) choosing learning strategies that are effective, and
- (c) choosing learning strategies that are not effective.

*Determination of a strategy.* Determining personally appropriate learning strategies can make learning more efficient. As stated by one student:

Well, for me it wasn't that big of an issue because I was always a good student. I always paid attention in class, [but] you just try it [learning strategy] out and if you got a good mark well then it worked for you. Sometimes you just might not like it even if it does work for you. So you have to go to something else cause if it's too stressful, and just too hard then you won't go back to it.

According to the other participant: 'I learn from mistakes. When one thing doesn't work I will try something else.'

*Strategy effectiveness.* When a strategy is not found to be effective, different reactions are elicited. For example, one participant indicated: '[I] just say 'I give up. I can't do this. I'm never going to be able to do this. I won't succeed in life. I just bring myself down – like a lot.' The other student stated: 'I just keep on trying other ones, to get the right one, until I finally get it. It's like trial and error, I keep on trying it until I get it right, and it works whenever I get the right answer.'

On the other hand, when a strategy is effective as stated by one student: '[I say] 'do it again,' I have to do it again cause if I did it once and you found it like easy, you'd do it again. [You] just have to know what your good at.'

*Choosing strategies- strategies that are effective*

Both participants reported classroom strategies that have enhanced their learning and ultimately, their academic success. Common everyday strategies that were used by both students, in the classroom, involved being on time, paying attention and getting along with the teacher. Each of these strategies has helped these students engage in the learning process by making schoolwork and listening to the teacher easier. Once they were engaged and interested in the topic of discussion a greater interest to learn was created. The following strategies have helped to decrease frustrations and increase understanding of content material and their curiosity for learning. Although each student has their own preferred learning strategy the following strategies common to both students included: a) note-taking and being organized, b) seating choice, c) understanding course material, and d) studying methods

*Note taking and being organized.* Writing class notes neatly and organizing them effectively is one strategy that makes studying for tests quicker and learning easier. For example, one participant explained: '[I] write my notes neatly so it would be easier for me later. . . . cause if you're organized, whenever you are studying, you can find everything you need and . . . you can study better and remember things better.' The other student stated: '[I] take notes, [because] if I have notes then I can go home and study it, read it over until I know it. If you have notes it's easier for exams [and to] . . . be organized. It [organization] makes it easier to go through things when you need to check back on it.

*Seating Choice.* Finding a seat in the classroom away from friends or other disruptive student has made has allowed students to focus on class lectures improves

learning and helps to ensure that assigned work gets completed. As one student stated:

I don't sit next to my friends in some classes because I know that if I do, sit by them, I won't do any work. I find that's a problem in math that's why my marks are kind of getting down because I actually talk in class a lot. Now, I sit in the front row, I find [that] helps a lot cause it seems like you're more communicating with the teacher. Cause if your sitting in the back, you're not as in-tune. You could like fall asleep and the teacher wouldn't really notice, but in the front row the teachers' right there. You could hear . . . everything she's like presenting to the class.

The other participant indicated: '[I] make sure [that] I'm not sitting by the rowdy kids. [I] put myself where I know I will be able to work.'

*Understanding.* Being able to understand the lecture material has made studying and retrieving information for testing purposes easier. In addition, various methods of instructional techniques have resulted in increased learning. For example, one participant stated:

'I find understanding helps a lot because if you understand it [the lesson] then when you go back to study it later you remember . . . it a lot longer and a lot better. You know how it [concepts/ideas] works, you know what's going on and what's happening. . . . If you don't understand what the teacher is saying, like say 'if we had a math problem, but you didn't know how it worked out. It [understanding] would help you with problem solving cause you can just see everything, so you have to understand. I [also] study in colour it works well. So, that's all I do.

*Study Methods.* To further enhance student learning and understanding teachers have used various modes of instruction. These teaching methods are as followed: (a) movies, (b) application.

*Movies.* A visual method used to enhance learning is movies. According to one student: 'He [teacher] usually shows us movies, I understand better from movies when I watch it. It makes you pay more attention.'

*Application.* A practical method to enhance understanding and retrieval of appropriate information is by applying the procedures or concepts previously learned. As stated by one participant: 'practice, he usually gives us a sheet to practice and once you do it so many times it just stays. You'll just always remember it.' The other student indicated: 'If I applied myself, . . . you know what to . . . do on each question and apply yourself. By doing it yourself, you see where your problems are and what you need help on.'

*Studying.* A final learning strategy shared by both students is studying. Re-reading notes and colour coding notes as well as checking for understanding are methods used to achieve learning. One student stated:

'I study when there's tests. I read over my notes some nights so, whenever there is a test, so I won't be like 'whoa what am I doing so sometimes I just review my notes. I heard that if you study before you go to bed you remember it [easier]. It'll be in you head all the time you sleep . . . I find that kind of helps me remember a little bit better.'

The other participant indicated:



This is actually my first year like studying. . . . I never really studied . . . most of the stuff I already know. So I pretty much just go over it, read it and I'll be all right. [When] I study – I pretty much read it, read it look away from it. Check if I know it and I go on to number two. When I know how to do that one I go back up to number one. [I] do that then after I do it I'll always remember it. I just remember the work, like I have a picture of it. Like I have a paper and I picture the order and I could just remember the page and what's before it and what's after it.

One way to make studying effortless and easier is by colour coding class notes. For instance, one student explained:

The colouring helps me too because it just doesn't seem so much of an effort to go and study as it did before. Whenever you open it [the notes], everything just pops out at you. You [are] like just concentrated more, it just helps you a lot. . . it helps me to like read it [notes] over. . . . Especially for history, there's a lot of notes and you don't want to go and read everything . . . . So if I'm doing a review, I could just go quickly through it.

*Choosing strategies – strategies that do not work.*

Both participants have identified numerous strategies that do not enhance learning. These strategies have created feelings of confusion and frustration about what is happening in class sometimes resulting in a desire to give up on learning. A common experience shared by both students was a lack of interest concerning course content. Other ineffective strategies that have prevented learning included a) lack of interest b) absenteeism or tardiness, c) over- studying, and d) cramming.

*Lack of interest.* Having a lack of interest in the course content and being inattentive during teaching sessions are behaviours that hinder one's ability to learning.

One participant has indicated:

'Not having an interest, if I don't pay attention in class I won't know what's going on. I won't be interested, then I would get into that habit of not listening and you would just not care about school anymore, you would just stop paying attention.'

The other student indicated: 'not paying attention like talking a lot in class and just fooling around.'

*Absenteeism or tardiness.* By choosing not to attend class or to arrive to class late on a regular basis learning of content material is compromised. One participant has indicated: 'Not going to class and being late [are ineffective strategies] because I can't learn if I'm not there.'

*Over-studying.* Studying too much or too often can lead to feelings of frustration and a willingness to give up on learning. According to one participant:

[I] try not to study too too much cause if you study too much then you just get so frustrated [and] you don't want to study anymore. . . . So, I try to stay away from that, I don't want to end up hating school, especially if you're like like studying every night every night. I mean you need a break, you need to like just get away from school do something fun, just go and do something with your friends. So I find if I study all the time I just won't care because too much of it is bad, but too little of it is also bad. So I just have to watch, I have to balance it out.'

*Cramming.* Cramming is an ineffective learning strategy that has lead to increase frustration and a desire to give up on learning, one student stated: 'Whenever it came to

the test like I didn't know anything. I just get so frustrated. I just didn't want to do the test. I just wanted to give it back to the teacher and tell him give me a failing mark, so I learned not to cram ever again it's not good.'

### *Conflict resolution*

Both participants identified and described various conflicts they experienced as a result of their educational training. Although they found various challenges frustrating and anxiety provoking, their ability to overcome and resolve such struggles was apparent. Their drive for success outweighed any obstacles that stood in their path. The conflicts experienced by these students have included: (a) resolving challenging tasks, (b) getting bad marks on tests and (c) test taking.

*Challenging tasks.* Initially, each student approached their conflicts differently, but then quickly arrived at a productive and efficient outcome. According to one student: At first, I freak out saying 'I can't do it. It's a whole lot of stuff,' but then I just start planning on what I have to do. What's like [the] most important . . . thing to learn about that I have to know. I just try my hardest.'

The other student stated:

I figure there must be like basics to . . . [the] harder question, so I try to remember what all that I learn, and like check if it looks familiar to what I've learned before. It must [be] like algebra equations, usually it's going to have adding, but there's different strategies to doing it. I'll use trial and error until it seems right. Usually you can verify it and check if the answers right. I just do the best of my ability, can't do better than that. [I don't say anything to myself] I just do it just cause it's worth marks. I got to get out of grade 10. Just do it and get it over with.

*Bad marks.* Another area of conflict is achieving unfavorable grades which have led to feelings of anger and self-doubt. However, understanding the importance of obtaining good grades for a future career has resulted in the determination to achieve success. As one participant indicated:

“I get a little angry at first. [Especially] if I know it’s something that I could have done better on. Sometimes in math, like lately, because it’s getting so hard I tell myself ‘I can’t do it, and I shouldn’t go into biology and go to university’ cause ... math is like a big subject that you have to do [in order] to get into . . . sciences. When I’m frustrated, I just say ‘I give up. I can’t do this. I’m never going to be able to do this. I won’t succeed in life.’ I just bring myself down like a lot.”

[However], when I’m frustrated, I just take deep breaths, try to concentrate and get back on track. I keep trying because like I have to do it. I really like biology, but to get into that [field of study] I need my math, so I just try hard. [I] tell myself that ‘I have to . . . get my degree and that one day I’ll just be able to do biology and not have to worry so much [about] math [and] in marks and stuff.’

According to the other student: ‘I get mad at myself. I feel like I should have studied, study for the next one. If . . . I don’t know the answer to the question . . . I’ll think about it all night until, I finally get it in my head, till I know it.’

*Test taking.* For one student, test taking is an area of conflict that has led to feelings of anxiety. Positive self-talk and an ultimate desire to achieve success however, remedied these feelings. The participant stated:

If I’m doing a test, I’ll just take a deep breath and then skip the part that I’m having troubles on. First [I] tell myself that I have to . . . go on. Just cause I’m stuck on

one question, I can't spend like an hour just being so frustrated on it and trying to get it. So I do the questions that I can do and that kind of like tells me that 'okay like I'm on the right track and stuff.' So . . . after all that, I can go back and then I won't be so frustrated anymore. . . . Cause whenever you're frustrated, you're not thinking about the material. You're thinking about 'what am I going to do. I can't do this. I can't do this question. I can't do the rest of the test.' So you can't really think about what the question [is] asking. You [can] read it over like a hundred times and you still won't be able to get it. Well for me anyways. So I just continue with the test, go back to it [later] and sometimes it [the answer] comes back to me.

#### *Attitude and values toward education*

Both participants discussed the importance of achieving good grades in order to become academically successful. Each engaged in positive classroom behaviours that ultimately resulted in their success. To them, being successful is a goal that must be reached to avoid being labelled as a failure and more importantly, to secure future financial stability. Meeting parents' expectations concerning educational demands is also important for them, however, this is not always possible to achieve, and sometimes families' expectations are not met. Student's perception of achieving academic success involves different components such as, (a) classroom demands, (b) personal achievement, (c) family, and (d) a lack of success.

*Classroom demands.* A good starting point towards becoming academically successful begins in the classroom. The motivation to achieve success results from a fear of being negatively labelled and adjusting to the instructor's teaching styles. According to one participant: 'I pay attention in class, I don't goof around. . . . I do my work in class,

and everything in [and I] study. I just do it [the work because] I don't want to be known as a bad student.'

The other participant stated:

Well you have to pay attention at the high school level cause that's where it kind of . . . starts, it's the most important, so you have to pay attention in high school. I'm interested in it and that's why I picked the subjects I have. I'm just open-minded to what the teachers are like, [and] their ways of teaching and stuff.

*Personal achievement.* Both participants agree that being academically successful in high school has important implication for future success in university. The desire to personally achieve has resulted from being perceived as a failure and wanting to live a good lifestyle in the future. Academic success is considered as a personal achievement.

As indicated by one student:

Well, you don't want to be a failure. I don't want to fail everything. . . . No one likes to fail at something, so you always want to, I don't know be better. Like grade nine and ten, I knew it didn't matter. [My] parents tried to tell me it did . . . matter, but I knew it didn't. Nine and ten don't matter, as long as you pass it your alright. It's only grade eleven that matters. . . . I got to pass everything now. I got to like get really high marks for University and stuff.

According to the other student:

To be successful [achieve success] you have to have a good paying job, and to have a good paying job you need an education. Like a degree or something, especially now a days [because] it's mostly a money issue. . . . I want to be financially stable cause it would be a lot better doing something that I like than working at a

convenient store and getting paid minimum wage. It just wouldn't be a good lifestyle.

*Family.* Another driving force that guides these students towards obtaining good grades in school and ultimately achieving academic success is their families. Each family has certain educational expectations that their children are required to meet. One participant stated: 'my mom wants me to do good, the best that I can do, and that's all she asks for.' The other student indicated: '[They expect me to] pay attention, go to class, hand in all my work, don't mess around [and] make sure my marks are always up.'

*Lack of success.* When success is not achieved these students are made aware of the different types of lifestyles their lack of success could result in. In particular, attention is drawn towards people who have a lack of education and therefore are limited in terms of employment opportunities. This in turn leads to experiencing many of life's hardships due to a lack of economic resources. By having a limited income, purchasing the basic necessities of life such as food and clothing can be a never-ending struggle. In addition, a lack of education leads to few working opportunities as stated by one student:

[my parents] compare me to other people. Saying 'do you want to be like them?'

Like some people . . . have no education [and] live on welfare and stuff like that.

[My parents are] telling me I should get an education [and] life would be a little bit easier.

For the other participant: 'she'd [my mother] be upset if I got a bad grade, but that's because she wants me to do really good and she knows I have it [the intelligence] to do good. The stuff I do bad on she knows it's something I did wrong.'

*Motivation*

Both participants believe in the importance of obtaining an education and have indicated various sources of motivation that have led them to academic success. Within the classroom, both participants felt encouraged and supported by their teachers, where one student actually became the teacher's assistant this in turn fostered and enhanced their interest in becoming successful students. Parents' expectations also played an important role in the academic success of their children as well as friends who also share their same interest of educational achievement. The motivation to academically succeed has also come from the student's desire to excel in school and from playing on a school related sports team. Moreover, these students have made future plans to continue on with their studies into university. Different sources of motivation that are utilized include: (a) teachers, (b) peer tutoring, (c) family influence, (d) friends, (e) community members, (f) self-motivation, (g) extra-curricular activities, and (h) future goals.

*Teachers.* Teachers support and encouragement has had a positive impact on the students, which in turn has contributed to their academic success. One participant stated:

My teachers saying that . . . I'm able to do that [succeed]. Like my teachers saying that I'm a good student and saying that I'm capable of good grades and a good life. [This motivates me because] It just gets me thinking that I could really be successful in life.

The other participant reported:

Teachers, teachers motivate you. Some, you'll notice don't care and I find if they don't care [then] why would you care. Some of them [teachers], they really want you to do good, they talk to you, they give you help whenever you need it. I find that motivates



me cause I know if I need help it's there.

*Peer-Tutoring.* For one participant, Assisting the teacher and helping other students understand their assignment is a source of motivation for one participant:

I help a lot of people in class, I find it fun. . . . If people need help I like giving it . . . they understand it and I feel good. When I do all my work, let's say math class, I usually have my work done before everybody else [so] the teacher just tells me 'go around and help people.' So I just go around asking 'Do you need help.' . . . They find it helpful [because] they have someone in front of them telling them how to do it, it makes it a lot easier.

A learning strategy preferred by one of the students was tutoring. Tutoring is another method that ensures learning, it provides clarification and makes learning new information easier. According to one student:

I went to tutoring a couple of times to get extra time because if I'm at home sometimes you can't really do it, because you need to ask questions [in order] to be able to answer a question. So, I go to tutoring, . . . if I have a question I could just ask it right away and move on with the next task that I have to do. So I just try to get a lot of help.

*Family influence.* Participants also viewed their parent's guidance and support as contributing forces in their drive to academically excel. According to one student:

I guess my parents, [they are] always telling me to do good in school, and it just kind of gets in your head after a while that you got to.' [In addition,] 'I rely a lot on my parents, they help me out. If I need help writing a report they're always there,

they correct my mistakes, [They're] always there to help me . . . when I don't know what I'm doing.

The other student stated: 'Well my mom wants me to go to university and she expects me to get good marks in school. . . . She just wants me to go to school and get a good job and a good education.'

*Friends.* Both participants agree that being surrounded by other students who are interested in doing well in school has contributed to their aspiration to academically succeed. For example, as indicated by one participant: 'I find hanging out with the right people helps because if they don't care [about school] you won't care either. You'll just follow along, so that helps a lot.'

*Community members.* Having community members model the role of perseverance by achieving a post-secondary education is one source of motivation, which inspires one student to excel in high school and to continue studying at a post-secondary level. One student indicated: 'Well, because they can do it [and] they had the courage to try it . . . I think I could do it too, it kind of helps because it's not so scary.'

*Self-motivation.* Another source of motivation among these participants is their internal desire to want to do well in school and to complete all of the demands requested by their teachers. As stated by one participant.

Self-motivation, . . . I'm just a good student and I just know it has to be done cause whenever I get a good mark I feel good about myself. I feel that I've earned it and I worked really hard to get that mark so. . . . It's kind of weird like if you get good marks it motivates you to get more good marks.

The other participant indicated:

I don't want to be like anybody [else]. I don't want to be as smart as anybody [else]. In school, like . . . if someone's smarter than me, I don't want to be like him. It doesn't bother me if he's smarter than me. [If] he's smarter than me, good for him. There's always somebody smarter. But I just do it [school work] and get it over with because I'm suppose to do it. They give me the work and I'm suppose to listen. I'm in school to learn. After the interview was completed this student and I engaged in an informal discussion concerning the interview. This topic of competition arose and I pursued the question of who do you compete with, in terms of grades, oneself or other students in the class? The reply was with oneself, the goal was to obtain a better grade than the last one received.

*Extra-curricular activities.* Being involved in school-related activities has helped one participant achieve the motivation and desire to continue being an academically successful student and as a result of motivational drive became a role model for other students. As stated by one participant:

Well, I go to extra – curricular activities and that kind of helps learning. It gives you school spirit, . . .it helps people get more involved with their school and care about what happens, and a lot of people look up to you. [For example,] if you're on student council, people will expect you to do good, so you do good. You try your hardest that's kind of also a motivation thing because you're a role model and you don't want to be a bad role model for other people.

*Future goals.* A final source of motivation revolves around future goals. Obtaining a university degree is important for financial stability. The notion of personal freedom is perceived to be of central importance for these students. In particular, choosing a career

that is personally fulfilling and earning enough money to live a good and healthy lifestyle. One participant responded:

Going to university, mostly just going off on my own, being independent.

...Being financially independent and getting off this reserve and just being on my own, not having to worry about if I have to go on welfare. I don't want that lifestyle for me, and I don't want people to view me as someone who's like that way.

Well again back to the money, I like to shop and I know to do that I have to get a good education, get a good job, it's not only money. It's [about] doing what I like. Cause I wouldn't want to work at a convenient store and getting paid minimum wage. I would want to do something I really love, even though it takes longer to get there, and [it's] a lot of hard work, [but] it would be worth it. . . . It would [have to] be something I would love to do, something I wouldn't be scared to do. I wouldn't want to go to work and dredge each day. I'd [want to] be excited.

#### *Future aspirations*

For both students the notion of a future career is important. They have researched different universities and different areas of interest. To them, a post-secondary education is perceived as very important especially in choosing an appropriate: (a) field of interest  
b) academic institution.

*Field of interest.* Although both participants share the same educational goal of attending university, both have different interests. One student reported: 'Right now I am interested in biology. I'm not exactly sure of what field I want to go into, but I think its

abotomist, like a plant biologist, or [I want to be] a marine biologist. I'm really interested in science.'

The other participant indicated:

'I want to be a teacher because I help a lot of people in class and I find it fun helping people out. I like math, so I'm going to try and be a math teacher. Like . . . in math class, I usually have my work done before everybody else. The teacher tells me go around and help people, so I just go around asking 'Do you need help.' They find it helpful [to] have someone in front of them telling them how to do it. It makes it [learning] a lot easier.'

*Academic institution.* In addition to selecting an academic field of interest to pursue, various educational institutions have been researched to determine whether a chosen field of study is offered by that university. One participant stated:

You really have to plan for your future. You have to start researching the different kinds of universities and what you like. Start exploring, like self-exploration, what you like to do . . . if you have a school in mind you have to see what courses are required to get that degree. [Researching also] helps in what courses you take [in high school].

### Barriers and Challenges

This section will include the findings associated with the barriers and challenges that are encountered at school. First, a description of the barriers and challenges experienced at school and school-related sporting events are discussed in each section. Following each description, the research categories and themes about the barriers and challenges will be introduced.

### *Barriers and Challenges*

Different types of barriers and challenges can be experienced by individuals from a different cultural orientation. For high school students these encounters can occur either at school, at school related sporting events or within their community. The barriers and challenges encountered by these Aboriginal students have elicited various cognitive and emotional responses. For these participants who attend a mainstream high school, various learning challenges that are experienced have created both a sense of doubt and anxiety, while in the same instance, heightening one's curiosity and interest for obtaining academic knowledge. In addition, racial barriers that are experienced at school have led to issues of labelling and cultural confusion, which in turn ironically sparked a strong desire to achieve both personal and educational success. While participating in school related sporting events, the presentation of racial barriers seemed only to provoke confusion, anger and even aggression on part of the student. Within the community, the limited amount of information communicated to students is perceived as potential obstacles to their educational success. In spite of these barriers and challenges, each student approached their learning tasks differently, yet each arrived at efficient and effective solutions that were based on good problem solving techniques, a positive attitude and their resiliency. The barriers and challenges experienced by these students included: (a) the ability to predict a learning situation, (b) the inability to predict a learning situation, (c) racism and, (d) community lack of awareness.

*Ability to predict a learning situation.* One form of challenge that is encountered in school is the ability to predict a learning situation. Both students viewed a predictable learning situation similarly, but for different reason. As one participant indicated: 'Well,

if it's a review of something, I should already know it. I guess I would pay attention. I have to get on the teacher's good side.'

The other student stated:

Well, ...if I was expecting everything I would get bored and not pay attention. So I'd talk to the teacher and tell her maybe go into a higher ...level cause then it would not be boring. A lot of it is just communication with the teacher, you [need to] say what you want. [On the other hand], If I knew the concepts I would be like 'I know what she is kind of talking about' and I'd want to learn more because I already know the basic thing. If she's just giving the details and elaborating and stuff, I'd [also] want to learn it cause chances are if I already knew about it before I'm interested in it. I would just pay attention [and] ask her questions.

*Inability to predict a learning situation.* A second form of challenge was the inability to predict a learning situation. Both participants have used very different techniques when approaching a new learning situation. For example, as stated by one student: '[I would] sit back and listen. Take notes so I could read them later. So when I read it, I would eventually know it and I can just remember it. She'll say it and I'll remember it.' For the other student, anxiety usually occurred before being able to engage in the lesson. For instance, as stated by one student:

If teachers started going into these big . . . complicated things and didn't slow down and take the time to explain it. I would just sit there and just start like 'oh my god! What is she talking about? I don't understand this at all.' Then I would just kind of like space out. So to deal with that, I'd have to start paying attention, take initiative . . . raise my hand, and ask her because maybe the teacher just don't

realize it or something. But I would just have to take the initiative, raise my hand and don't be shy. I can't feel stupid because if I feel stupid, well then I won't ask any questions, so I just have to ask.

*Racism.* A third challenge presented to these Aboriginal students revolves around cultural issues. The participants attend a mainstream public high school in a neighbouring town where the majority of students and staff who attend and work at the high school are Caucasian. At school, Native students are either reminded by their peers of the 'special benefits' they have or they tend to be viewed as 'different' because they come from a different race and culture. For the most part, Native students are aware of some of the cultural benefits that are provided to them. However, they do not perceive themselves to be any different from any other student within the school. The way they look or the motivational incentives offered to them to complete high school are viewed simply as a bonus and not something that is provided to them based on race or culture. Despite having these cultural differences highlighted for them by their peers, each of them handles their situation differently. According to one participant: 'Well, people notice because I am darker than all of them. They don't really say anything to me at school. It doesn't seem to be a big deal to me. It just doesn't matter.'

The other student reported:

I don't really notice it that much. A lot of people are just like 'you get a bunch of free stuff and everything,' but I try not to listen to that too much. There really is no difference at our school, there is no racism or stereotyping at least none to me. I find I'm just like everyone else, [but] with some benefits.



*Cultural remarks.* Non-Native students comment about how unfair it is that Aboriginal people get certain items for free such as, an opportunity to earn a financial incentive to attend and complete high school, having tuition fees for post-secondary education paid for, and tax exemptions. These economic incentives and inherent Aboriginal rights can be and are often misinterpreted by non-natives. These misconceptions have resulted in issues of labeling. As a result of these negative labels the determination to educationally succeed at both the high school and the university level has grown stronger. As indicated by one participant:

Like student allowance, they [friends] mostly just joke around about it, but it just makes you aware kind of that you are [Native]. Like I don't go around thinking every minute of the day 'oh I'm Native, I'm Native.' Sometimes I just don't really realize it. I'm just like everybody else. I don't really think about it that much. Getting school [post-secondary education] paid for, some people say stuff about that. Like how it's not fair. I don't really think it is either, but might as well take advantage of it. You have too. There's student allowance, there's getting your school paid for and taxes. They say how you got it so easily made [and] you don't have to worry about stuff. Some people just say that we are 'spoiled,' so this is kind of why I want to go and get my education. So I don't have to depend on stuff [Band Hall]. So I don't have to hear people say that. I can be like 'no I'm not [spoiled] I did this on my own.... [Or] like when people tell you that you're spoiled... but you really don't want to be. I just don't want to be labelled like a 'spoiled Native person' that lives off of other people. I don't really want people to say that, and I don't want to depend on them [Band Hall]. I want to be independent,

on my own and do stuff for me. I know I have to do that [depend on others] for university, ... but after that I don't want to live on the reserve and have everything paid for. And if I do live on one, I would be paying for myself and not getting free stuff all of the time. I don't mind it so much now because it helps my mom and it helps raise me. [I] get to do all this stuff [extra curricular activities and attend university and then] . . . not be so dependent later on.

A final aspect of racism was related to sports, in particular, high school hockey. While competing on the ice, one student was subjected to racial comments from players on the opposing team. These disgraceful acts have led to aggressive retaliatory behaviour on part of the Native student resulting in players of the opposing team counteracting creating a viscous cycle. According to one participant: 'when I play hockey . . . they usually call me stupid Indian or something like that. Then I just . . . usually crack up or something. I end up hitting them or . . . try to punch them in the mouth.'

When the student is not playing a good hockey game or if the team loses, then racial comments can be heard again. For example as stated by one student:

when I play my game bad they tell me to 'go back to the reserve where you belong' and I crack up again. I go after them to check, to fight them. I just get mad. I don't act that way to other white people, so I don't understand why they do it [abuse] to me.

Once the hockey game is completed, the incidents that occurred on the ice are often forgotten about by the student. As stated by one participant:

I just forget about it. I don't worry about it because they're . . . idiots. People are like that every where's, so I try to get use to it. Not everyone is going to expect that

it's Aboriginal people that's going to act like an idiot. No matter where you go there's going to be idiots. That's what my dad told me, so I just said 'okay.' He said he did the same thing when he played hockey, so I just said 'okay.'

*Community – lack of awareness.*

A final area of barriers and challenges involves the lack of awareness concerning community events and programs. Although community leaders have implemented various resources to provide students with every opportunity to achieve academic success, community members are not always aware of some of the provided services. Since the community's political system has undergone internal structural changes, important information is no longer communicated throughout the community. As a result, members may not receive information regarding community events and services that are provided, so students may not initially experience the benefits of that particular service. According to one participant: 'it's hard to think of stuff around here because . . . I don't know a lot of the services [or] how they would really help me. It [the information] is not really broadcasted enough.'

More than a year ago, news letters were provided to community members informing them of any up-coming events for the month and of any new information or services that will be provided. As stated by one student:

Before they had like fliers of everything that was happening in the community, . . . just like a newspaper. They don't do that anymore so I don't really know what's going on. If I did I could use it to further me along. Ya I would use it. . . . I don't really do that much stuff around here cause then again I don't really know everything that goes on. I use to . . . whenever I was like a little kid. I was

involved in a lot of stuff around here like before, but now I don't really think there's many activities . . . and cubs. . . .Before they use to have cubs, karate, and teen retreats, [but] they stopped that. If there are [any activities] it's more for the younger kids.

### Community

In this section, findings about various resources that are provided by the community's political leaders for the participants to utilize in order to achieve academic success are presented. First, descriptions of the different resources that are made available to students are discussed in each section. Following these descriptions, the research categories and themes about the resources provided to the Aboriginal students would be presented.

#### *Community - cultural values and beliefs*

Aboriginal students who have partaken in the current study are from a small Native community in New Brunswick. Less than half of the community's population consists of adults. In terms of educational attainment, a few adults have a university degree while many others earned a high school diploma. Unfortunately, some others have limited educational training. Despite one's level of education, most of the adults have found work within the community doing several different types of jobs such as political leader, a ranger, fishermen etc. Regardless of one's job, most of the adults realize the importance of education and how it can help make the community a stronger and better place to live, so they encourage youth to obtain an education and to continue on with additional training beyond high school. Successful students are viewed positively by adults within the community and they are treated with respect. Their peers however, have

mixed emotions concerning the participants academic success. Some of the less successful students resented the participants for their academic achievements, while others were supportive or have decided to become supportive of them. These students did not identify whether their interactions with adults and with their peers were the result of cultural values. As a result of the data analysis, two different themes emerged in relation to student success (a) adults and (b) peers.

*Adults.* With regards to adults, both participants have indicated positive relations. As one student indicated:

[With] adults, I get along pretty well with them. I find they think [that] I'm more responsible, more trustworthy. They just interact with me better. They trust me with certain things. Like my job right now, if I probably wasn't academically successful they would think I wouldn't do good, and I would be kind of rude or something.

The other participant stated:

[My experience,] it's positive. There's not . . . a lot or people around here who actually got an education, not a university degree anyways. [If you get educated] people will show you a bit more respect. They know I'm a good kid [that] I don't do nothing wrong. [It's] not like I am a bad kid into drugs and alcohol. [If I were] they won't think too positively about me, [but] I don't do none of that.

According to these students, not being academically successful can lead to negative labelling and stereotyping by adults within the community. As stated by one participant: 'Well, they're [bad kids] treated different. They're probably not [viewed as] good kids cause they're into drugs and alcohol and probably school isn't important.'

The other student indicated:

If you have bad in school people automatically think that you're into drugs that you drink, that you're like a rude person and everything. But if you're good, they like think that you are responsible . . . and trustworthy, . . . but I find they [adult] treat me well. [As a person] They trust me, . . . I'm like involved in stuff, so they know that they can trust me. I'm responsible so if I want to volunteer for something and help out they would be like 'oh okay.' They wouldn't give me this big interview and everything first . . . like they would for other people. [They know] that I'm good and if I need help . . . they would just help me a lot.

*Peers.* Academic success can sometimes lead to feelings of alienation and isolation and also resentment by other less successful students. As a result of this, participants sometimes had to encounter negative peer interactions. As one participant indicated:

Well, I don't really interact that much with people my age around here cause there's not very many [of them] and a lot of them are into bad stuff like drugs and alcohol. Some people think I'm a 'little goody two shoes,' so I don't really talk to them people. . . .

The other participant stated:

Ya, I don't know, I guess they are kind of jealous that I'm smarter than them. They usually say something like 'why are you such a prep' or something like that. [I'd] just let them be. I [would] just say 'oh well I'll be able to get a better education than you then.' They'll be the ones paying for not paying attention in class in the long run.

Although participants experienced resentment by some of their peers, not all interactions were negative. For instance as one student indicated: 'The only one I talk to around here is Althea, and she just says I'm smart and stuff. And I'm just like 'okay,' she doesn't put me down just because I know stuff.' As time past, some peers began to change their perceptions of the successful students and developed a relationship. According to the other participant: '[Now it is] just pretty normal I guess. I'm getting to know everybody really good.'

*Community [education department] – financial support*

A second area of community support involves the education department within the community's political government. This department has provided various types of financial support for students. These factors are (a) student allowance (b) educational training incentives and (c) money to participate in sports. This support is perceived as a motivation tool to encourage students to achieve an education as well as an opportunity to participate in extra-curricular activities at school. Student allowance is a source of encouragement provided to students who attend school on a regular basis. An allowance is accumulated on a daily basis and the amount given to a student is dependent on grade level. For example, a student in grade nine earns 0.95 cents a day, and a student in grade ten earns \$1.05 cents a day and so on. If a student is absent once or twice in one month they are financially penalized. For instance, a student in grade nine is penalized 0.95 cents a day and a student in grade ten is penalized \$1.05 cents a day and so on. If a student is absent three times or more in one month then the opportunity to earn the reward is revoked.

In addition to student allowance, financial resources are provided for students (ages 6-24) who would like to participate in extra-curricular activities at school. This is done in the hopes that students will maintain a certain grade point average, which is required by the school in order for a student to be a member of any sports team. Finally, a financial training incentive in the form of a monthly allowance is available to any student who wishes to obtain educational training beyond high school such as community college or university.

*Student allowance.* One form of financial support that is provided for all Aboriginal students within the community is student allowance. As indicated by one participant:

Ya, they [education department within the community] want you to do good in school. It's like a bonus. We usually get it about once every five months. [They] give it to us before Christmas, so . . . you could like get gifts, and [then again] at the end of the year.'

*Educational training incentive.* A second form of financial support includes an educational training incentive. This is designed to encourage students to obtain educational training beyond high school in the hopes that they will return to the community as a skilled member who is willing to contribute to the betterment of the community. The need for skilled workers in any discipline or trade is great for this community. According to one high school participant:

I don't have to worry so much [about money], and instead of getting a job and working all the time . . . I can just focus on my studies and [on] doing good [because] the band pays for your schooling, so it's not a big issue. Like for other



people [Non-Natives] they have to pay . . . to get an education, but I know I could just go and get my education with no worries and just try hard. . . .

*Sports money.* A third form of economic support is sports money. The significance for students to participate in extra-curricular activities is viewed as important because it provides students with a way to relieve stress and active participation in sports can be used as a motivational tool to continue to achieve good grades. As stated by one student:

I can participate in extra-curricular activities because I have that financial support and it encourages me [to do well in school] because my mom works at [a convenience] store. If that [help] wasn't there I wouldn't have the extra money to spend on it [sports], so it's good.

#### *Community – resource centre*

Another area of community support is a resource centre, which is established at the participant's high school. This room provides students with computers to work on, a quiet space to complete homework assignments, and a tutor to provide assistance with any academic difficulties. Both students have used the services provided by the resource centre but only under certain circumstances. For example, as stated by one student: 'I don't really go there much, unless I really really need to cause it [an assignment] is like due the next day or something.' The other participant indicated: 'I usually just work in class, but when I have a supply teacher, I don't work in class. Ya, it's usually the only time I use it, or when our class goes down to the computer lab. I go in the room to go on the computers.'

The availability of a tutor is also viewed as being helpful. As indicated by one student: 'Well, whenever I like have trouble with problems he'll help me out. You can learn easier, it's pretty much just one on one.'

*Community –access centre*

A fourth form of community support that is available to students and is designed to promote educational success is an access centre, which is located in the heart of the community. Access to computers is made available to all students after school. This allows them to do research and complete homework assignments if they do not have a computer at home. One participant stated:

'They have an access centre. My computer is like broken, so I can just go there and do my homework. That [availability] helps, instead of having to go all the way to town. This is something close by and something I could use and I do.'

The other student indicated: They have computers don't even work. I have a computer at home.

*Community – encouragement*

Another source of motivation provided by the community is in the form of encouragement. Through words of encouragement, one participant felt more inspired to achieve academic success, and become a positive role model for other youth in the community. Motivation, for one student, is derived from the helpful nature of community members and also through various programs and activities that are held within the community. Community encouragement is a source of academic motivation for one participant:

Support from like telling you that you could do good and they want you to do good . . . so you kind of do. I can do better in getting an education and make something for myself and be like a positive role models for others who can look up to me and do the same thing, so I just want to do better. [They] provide all the financial stuff. So there's really no reason not to do it [succeed].

Having community social gatherings also provided a source of motivation. As stated by one student:

[In the community, people] like supports each other in a little way. Well they have a lot of programs for kids, like to stay off of drugs and alcohol . . . They [also] have little activities like spaghetti night. Little dinners so the whole community could go and . . . it's just nice. So I know that if I did go off [to school] I have a lot of people behind me, knowing that I could succeed and do [it]. I mean if everyone was saying that I couldn't do it, I couldn't do it. I would think that I couldn't do it and I wouldn't go [to school]. So the support and everything [helps].

### Conclusion

Participants in this study explained the importance of achieving academic success in high school to ensure future economic security. To attain educational achievement, multiple and various learning methods and motivational tools were utilized. In addition, educational success was aided by resources that were available to participants from either school or within their community.

For these participants, academic success during high school is essential for attending university and earning a degree that would result in a well-paying career thus,

alleviating any future economic concerns. To improve educational performance, participants expressed the significance of implementing numerous methods to ensure learning. In fact, they preferred a multi-modal approach to acquiring knowledge, which included both visual and verbal methods of learning. In addition to implementing various learning strategies to achieve academic success participants utilized numerous motivational strategies as well. According to the participants, teacher and parent relationships are perceived as essential in increasing motivational levels. Other factors included future goals, self-motivation, friends and community members, which have all been viewed as important sources of motivation. These multiple motivational factors have been considered instrumental in the student's drive towards academically excelling. To further enhance the participant's academic performance, community leaders have set in place various academic resources. These resources are accessible in both the community and at school, which includes, access to computers and tutorial services, and to study to complete work assignments. In conclusion, participants of this study are highly motivated to scholastically excel. They utilized a multitude of learning methods and are provided with various sources of motivation and educational resources to increase academic performance and ultimately educational success.

## Chapter 4

## Discussion

This chapter focuses on the comparison between the findings of this research and the existing literature. After presenting a brief summary of the results, a comparison between the findings of this study and the existing literature will be addressed by pointing out the similarities and differences followed by a discussion of the conclusions drawn and the implications of this study. Finally, the limitations of this study and suggestions for future research will be addressed.

Aboriginal participants of the current study were able to describe experiences and factors that enhanced their academic performance resulting in educational success. The major finding of this study was a relationship between academic achievement and economic security. Participants of this study believed attaining an education would lead to a well-paying career that would result in economic security thus alleviating future economic concerns. A second finding of this study refuted the stereotypical label of Native students as being culturally reared towards a “visually oriented learning style.” The participants clearly explained a preference for a multi-modal approach to learning consisting of both visual and verbal instructional modes of learning.

Various motivational factors were implicated as influencing their educational performance. Such factors included teachers, friends, family and, cultural values such as cooperative learning and a future orientation. In addition, community political leaders provided other motivational tools used to enhance learning such as financial incentives and educational tools within the school and the community. Further, social gatherings within the community indirectly influenced learning for one participant. The final area of discussion was racism. In conclusion, Native students of this study were determined to

achieve academic success and they implemented various motivational tools to enhance educational performance.

As a result of the data analysis, school-related experiences of the participants in relation to learning strategies and educational success are summarized in five major themes: (a) academic achievement resulting in economic security, (b) multiple modes of learning, (c) motivational factors, (d) communities role in education, and (e) racism.

*Academic achievement results in economic security*

The results of this study revealed a relationship between academic success and economic security. A drive to achieve success was based on a desire to obtain a high status career to ensure economic security in the hopes that it would alleviate future economic concerns.

A major difference exists between the current literature and the results of this study. Participants described a relationship between educational success and economic security. These two categories were perceived as motivational tool and were considered interrelated. The motivational drive for the participants was to acquire educational achievement, in which a high status career can be obtained resulting, in economic stability and personal safety. These findings were contrary to Radda's research (1998) in which students did not view the importance of working hard at school for future purposes i.e., employment. On the other hand, the participants of this study stated that financial independence was important for alleviating future economic concerns such as eating on a daily basis, paying monthly bills, or having a place to live. By not having such concerns, life would be less stressful and more enjoyable. For the participants of this study, the results imply that educational attainment results in a high status career thus, alleviating certain difficulties associated with life.

*Multiple modes of learning*

The results of this study indicated Native student's preferred methods of learning in relation to educational success. Contrary to the stereotypical belief that Native students are culturally reared towards a "visually oriented" learning style, results of this study suggest that learning was approached through various modes of instruction. Students actually preferred a multi-modal approach to learning consisting of both visual and verbal methods of instruction.

In accordance with Macias' (1989) research on Native learning strategies and educational success, the participants of this study also preferred a multi-modal approach to learning. Much of the empirical research regarding Native learning styles indicated that students were more successful at processing visual information (Rougas, 2000) and had difficulties performing tasks that were verbally saturated (Kaulback, 1984). In Native cultures, parents or elders taught children skills through demonstrations. Children were expected to watch and then imitate the skills; they were not rewarded for curiosity and for asking questions (Bert & Bert, 1992; Red Horse, 1980; Little Lee Soldier 1985). Similarly, participants of this study indicated various observational strategies that were unique to each individual. One participant explained that watching movies in class helped to illustrate important concepts and teachers who demonstrated complex procedures aided in improving academic performance. These teaching methods enhanced learning by increasing attention and allowing the student to visually conceptualize important information. The other participant adopted a visual study technique, which included colour coding class notes. By assigning different colours to various concepts such as titles, procedures, and examples, locating pertinent information was quickly achieved and studying was easily accomplished. Through the implementation of these visual teaching

and study methods, participants were able to visualize information resulting in increased understanding and learning of content materials. The results of this study support a visual learning style but suggest that individual differences exist such that each student preferred different visual modes of learning in addition to multiple methods of learning.

Pepper and Henry (1986) asserted that Native cultural activities led to the development of certain perceptual skills in Native students particularly, visual skills. Some researchers believed that a child's tendency towards a visual orientation may limit their ability to succeed in a mainstream educational system because the instructional methods utilized in schools tend to cater to the auditory learner (Kaulback, 1984; Pepper et al., 1986). On the contrary, participants in the current study selected various types of learning strategies, not only visual strategies, which resulted in their ability to succeed. Strategy selection was based on the relative ease in which the technique can be applied and whether the strategy resulted in academic success. To improve academic performance, both participants believed a foundation for learning was necessary and had initial strategies for foundational development. These initial strategies consisted of: being on time for class, establishing a good rapport with teachers, paying attention during teaching sessions, asking questions, and sitting away from friends or other disruptive students that may hinder their ability to learn. While listening during teaching sessions was important, both students agreed that writing class notes especially, in an organized fashion was also a critical component of success. Organized class notes was an effective learning tool when studying for tests because they were able to quickly locate important information, and to easily review class notes thus, reducing the amount of study time. Participants reported reading class notes and self-testing were important study techniques. Implementing these two study methods were effective strategies for understanding and



remembering difficult concepts for a test. During testing, one participant indicated visualizing the answers to test questions on the notes papers as well as other testing information that were on the pages before and after. The results of this study suggests that implementing multiple methods of learning and having a positive attitude towards the importance of education did not limit these Native student's abilities to succeed but rather created and enhanced opportunities for success.

Westby et al. (1995) asserted that mainstream schools emphasize learning by trial and error whereas, Native societies place an emphasis on not attempting to perform a task until one is sure how to perform the task well. On the contrary, participants of this study used trial and error and applied this approach to learning. They perceived these techniques as effective and efficient methods to enhance skill mastery and to increase their chances of success. Both participants agreed that learning through a trial and error approach and making mistakes was an important and valuable experience because it allowed them to recognize or identify any problem areas they may or may not have. Through this identification process, they were able to either select or reject strategies that were either easy or difficult to implement and as a result, select techniques that matched their personal learning styles. In addition, applying oneself was viewed as an important learning technique because it allowed them to practice and reinforce newly taught skills and to determine which skills they were good at or where potential problems may occur. Strategies that lead to the identification of personal strengths and weaknesses were viewed as beneficial particularly in selecting appropriate learning techniques.

Taken together, these findings clearly demonstrate that Native students of this study are multi-modal in their approaches to learning. They were not culturally raised towards the stereotypically label of "a visual oriented learning style." They preferred to

learn by both visual and verbal modes. The implications of these results suggest that First Nation students, within this study, use diverse learning styles contrary to what was previously believed. As such, Native students can possess the necessary abilities to achieve academic success in a mainstream educational system.

*Motivation and associated factors*

Results of this study suggest that Native students were motivated and had the desire to achieve academic success. They drew upon several different resources that created their sense of academic motivation such as, social support network and cultural values. Data analysis provided multiple motivational factors utilized in achieving educational success, which resulted in four major themes: (a) teachers, (b) family, (c) cultural values of cooperative learning, and (d) future orientation.

Based on the existing literature, Native students' sense of motivation towards academic success yielded conflicting results. Radda and her colleagues (1998) found that Native students had low motivation and low academic achievement levels compared to their Non-Native peers thus, indicating that Native students academically underachieve because of a "lack of motivation" and "no desire to excel." On the other hand, other researchers have indicated that Native students were indeed concerned about obtaining an education and were persistent and motivated towards achieving academic success (Lin Lin, 1985; Rindone, 1988; Wauters et al., 1989). Similarly, participants of this study were concerned about achieving an education and were highly motivated to scholastically excel. In fact, their motivational drives were derived from multiple and variable sources. One such contributing factor resulting in school success was teachers.

*Teachers.* Various researchers have found that teachers played a significant role in the educational achievement of Native students. Pupils have indicated that teacher could

be counted on to provide assistance, to encourage them to succeed in school, (Clark, 1997) and students were likely to care about the opinions of their teachers (Lin Lin, 1985; Rindone, 1988). In a similar vein, both participants of this study perceived their teachers as a source of motivation. They valued their teachers' beliefs in them, and through their words of support, they were encouraged to academically excel. The role of teachers also extends the knowledge base of the literature. Within the classroom, students perceived their educators as being academically supportive and readily available for assistance when requested. When students were having difficulties, teachers stepped in to encourage them and communicated to them that they were intelligent students capable of achieving educational success in both high school and university and creating a good life for themselves. Their teachers' belief in them created a sense of determination to resolve their conflicts and to continue aiming towards improving academic performance. Teacher's academic assistance, words of encouragement, and beliefs in Native students' abilities are one source of motivation inspiring them to continue their drive towards academic achievement. The implications of these results suggest that interpersonal contact with the teacher is a significant factor in a student's educational success.

*Family influences.* Participants noted family as a second source of scholastic motivation. Based on the existing literature, parental assistance, and words of encouragement concerning the importance of attaining an education resulted in contradictory findings. Rindone (1988) maintained that parents were able to motivate and encourage their children to attain academic success. Willete (1999) indicated mothers, and not fathers, provided support, and encouragement that positively influenced their adolescent's educational success. Radda et al., (1998) on the other hand, stated that parental support was related to academic performance of children in grades 5 and 6 and

not for adolescents in grades 7 through 12. Similarly to Rindone's findings, the participants of this study perceived parents as a contributing force in their drive to academically excel (it should be noted that one participant had lost a parent at an early age). In fact, for one participant, parents were considered role models for success. Parents communicated clear educational expectations to their adolescents such as, the importance of attending school, paying attention in class, and completing work assignments. In an extension of the literature, parents also encouraged their children to perform to the best of their abilities and to earn good grades. One participant explained that parents also supervised their academic performance by contacting teachers on a regular basis throughout the academic year. Furthermore, parental availability was viewed as essential, particularly for receiving assistance and corrective feedback on written assignments. The result of this study implies that in addition to parental support, and encouragement, parents should also provide supervision and availability when requested.

#### *Cooperation as a motivational tool*

Cooperation was an important value in Native cultures and participants in this study used it as a motivational tool to achieve academic success. Within Native societies, individuals generally do not compete with others, they compete with their own performance. Standing out from one's peers was frowned upon, while competing with oneself was not (Swisher et al., 1989). This sense of interdependence and the well being of the group were valued in Native societies (Little Lee Soldier, 1985). Little Lee Soldier (1989) stated that Native children were more cooperative and less competitive than Non-Native students, within the classroom, and this sense of cooperative spirit produced lower achievement scores. On the contrary, other researchers have indicated that Native students who worked toward supporting the group and not standing out increased their

motivational levels and interest in school (Swisher et al., 1989). This reluctance to compete, however, was situation specific. When performance was socially defined as benefiting the peer society, Native students become excellent competitors (Little Lee Soldier, 1985; Swisher et al., 1989) and were just as likely as Non-Natives to participate in school activities (Lin Lin, 1985; Rindone, 1988).

Similarly, both individuals of this study explained that participating in extra-curricular activities was important, not for the sake of competing against others rather it motivated them and aided in their learning. By participating in school related activities a sense of school spirit and excitement was created, which indirectly inspired them and their peers to become more excited about attending school. For one participant, being elected to student council was considered very important; it was key in implementing positive changes around school. Peers expected council members to hear and support their ideas and this created the motivation to become a good student leader and an academically successful student. For these students extra-curricular activities were far more important than just a competitive act, it was about inspiring other students to become more engaged in school. For the participants of this study, these findings suggest that participating in school related activities helped to benefit one's peer society, which led to increased motivation and a desire to want to perform well thus, resulting in educational success.

In keeping with the co-operative value practices in Native cultures, Radda et al., (1998) stated that Native students who indicated the importance for people to help one another at school also had the intent to complete high school. In addition, Wauters et al., (1989) maintained that Native students were positively oriented to collaborative learning and working in small groups. Groups that promoted collaborated learning and concerns

for the well-being of other students also built feelings of competence therefore, peer tutoring might be a beneficial strategy. Both participants in this study indicated the effectiveness of peer collaborated learning in enhancing their academic performance. Although each individual engaged in peer tutoring they engaged in this process for different reasons and each played a different role within this process, one was a tutor and the other was being tutored. For one participant, after school tutoring was about problem solving and creating extra time to do class assignments. The assistance and availability of a tutor allowed for task completion to occur quickly and as a result of that, a greater amount of work was being completed. For the other participant, tutoring occurred within the classroom once class assignments were completed. The student was encouraged by the teacher to assist others who struggled with their assignments. This experience was described as a source of enjoyment and it increased self-esteem and reinforced learning. Non-Native students in the “competitive” classroom not only welcomed the assistance, but found it beneficial thus, enhancing their learning. Collaborative learning in the form of peer tutoring was beneficial to both Native and Non-Native students alike regardless of one’s role within the tutoring process. The implication of these findings suggests that cooperative learning can be an efficient use of time, be easily implemented in the classroom, is enjoyable and helpful, enhances self-confidence and self-esteem, and fosters learning.

As was previously mentioned, cooperation was an important value in Native cultures. Children were taught not to compete with others, but to compete with their own performance (Swisher et al., 1989). According to Rindone (1998), Native students contributed to their high academic achievement through self-motivation. Participants in this study described, self-motivation as similar to the notion of competing against oneself

in order to achieve a desired response. Participants of this study stated that they were academically driven by self-motivation. They understood their role as a student, which involved completing assigned class work and performing well on tests however, their desire to academically excel was not described as having a need to compete with their peers. In fact, they preferred to compete with oneself to either maintain or surpass their last evaluated performance. For these participants, competing with oneself was a more valuable learning experience than competing with a group as a whole. In light of these findings, teachers should consider incorporating this cultural value of cooperative learning within their classrooms. It lends itself to many positive benefits for both Native and Non-Native students.

*Future valued as source of motivation*

Native cultures have been stereotyped as being “now” oriented when in fact; the future was highly valued especially in planning for future social well-being (Begay & Beckett, 1990 as cited in McCarthy et al., 1991). In spite of this misconception, Yates (1987) indicated that Native students, particularly girls, tend to live in the moment and value present time, and as a result, they demonstrated disregard for future deadlines. On the contrary, Aboriginal students believed in the necessity of education (Lin Lin, 1985; Radda et al., 1998) and were inspired to attend university (Willete, 1999). Native youths perceived education as a tool and worked diligently at school in the hopes of someday getting ahead in life. They were motivated and determined to achieve their future dreams of completing high school, attending university and getting a good job (Radda et al., 1998).

Similarly, participants of this study noted future aspirations as being a fundamental aspect in their drive towards achieving academic success. Working hard and

planning for the future by wanting to obtain an education was considered extremely important. They believed the future would lead to opportunities that would make life less stressful specifically, by earning a university degree, which would result in a well paying career. As an extension of the existing literature, participants of this study explained that future financial independence was important. It would ensure a good and healthy lifestyle, as opposed to a lifestyle of worrying about whether or not one would need to live on social assistance, or would have to work at a menial job earning minimum wage. They also indicated that a future career needed to be based on personal interest that would bring about joy and excitement. For one participant, the interest in someday becoming a teacher was reinforced by a math teacher who created a learning situation where the student could provide assistance to other peers within the classroom. The other participant was interested in science and researched the university requirements of that discipline, then selected courses in high school to build a knowledge base for that particular field of interest. Both students described the future as being extremely important especially for economic security. They aspired to have careers that were personally interesting, enjoyable, and profitable. For the participants of this study, the results of these findings imply that Native students are indeed future oriented and that a great deal of thought concerning their future goals was considered.

### *Racism*

The results of this study indicated that Native students experienced racism at school and at school related sporting events. Fortunately, teachers did not communicate these comments; peers communicated it. Many remarks were the result of cultural misconceptions. In spite of these negative experiences, students were resilient and intelligent enough to not allow such comments to negatively affect them or their



continued drive to achieve educational success.

Some research has suggested that within the educational environment, cultural misconceptions between Non-Native teachers and Native students have created racial biases and discrimination, which tended to have a negative impact on Native students (Garrett, 1995). Contrary to these findings, participants of this study experienced racial biases and stereotypical beliefs, not from teachers, but from Non-Native peers. These negative encounters either occurred at school or at school related sporting events. Within the school, such comments focused on physical differences such as skin colour. Other comments supported common stereotypical beliefs “all Indians receive free stuff” and that Indians were “spoiled” people who lived off of others. While playing sports, racial remarks such as “stupid Indian” or “go back to the reserve where you belong” were commonly heard. One participant explained that these comments, while playing on the school’s hockey team, led to anger and resulted in physical retaliation. Although the participants were confused about why they were treated so poorly by their Non-Natives peers, they refused to allow these comments to negatively affect them. In spite of these adverse situations, they decided to focus on themselves and increase their sense of empowerment through educational achievement. For the participants of this study, the results suggests that educators should challenge these common misconceptions and inform youth by helping them understand and relate different cultural values to beliefs and behaviours by examining cultural biases and unfamiliar practices.

#### *A community’s role in education*

The results of this study suggested those members within the Native student’s community played an important role towards their academic attainment. Having positive relations with community members was perceived as important. The implementation of

various educational tools and resources created by the community's political leaders increased motivation and enhanced learning resulting in educational success

The role of community members was influential in youths attempt to attain an education. Participants expressed having positive relations with adult members of the community. Adults viewed them as smart and responsible individuals because they have chosen to become educated as oppose to succumbing to drug and alcohol abuse. On the contrary, most peers treated them negatively and labeled them as "little goody two shoes" or "a prep" with the exception of a few peers who were supportive and encouraging of their educational success. For the participants of this study, earning the respect of adults was far more important than entertaining the scrutiny expressed by their peers.

#### *Political leaders*

In addition, political leaders expressed the importance of educational attainment for both motivational and social reasons. Students within the community, regardless of academic level i.e., high school, or university were offered the opportunity to earn financial incentives in the hopes of increasing academic performance. The incentives were conceptualized differently depending on one's educational level. In high school, students were required to regularly attending school. The notion behind the financial incentive was to increase academic success, which can not be achieved unless a student attends school to benefit from instruction. At the post-secondary level, it was assumed that students were motivated to achieve an education. Therefore, the incentive was provided to decrease any financial concerns and to create extra time from having to work a part-time job in order to focus on their studies and earn high grades. Although political leaders realized the importance of attaining an education, they also recognized the importance of alleviating stress and having fun. As a result, financial assistance was also

provided to students (ages 6 – 24) who wanted to participate in sporting events outside of school. The distribution of financial resources was considered essential for academic achievement.

In addition to distributing financial resources, political leaders also understood the importance of implementing academic resources to further students in their educational endeavors. Participants have indicated that a resource room was established at their school. The purpose of the room was to provide tutorial assistance, computer stations, and a quiet environment to focus on class assignment. Furthermore, the participants stated that an access centre, a room with computers, was also established in the community. It was available to students in the evenings to help them with homework assignments. Although these academic tools have engaged students in their desires to attain success, other not so obvious activities grabbed the attention of one participant.

#### *Community leaders*

Social gatherings, organized by community leaders, were identified as an important element of achieving educational success. One participant explained that seeing the community come together to unite and support one another generated feelings of pride. This led to the notion that personal support and encouragement would be available once a post-secondary career was sought out, and this created feelings of being valued within the community.

Community gatherings were not only important for social reasons but for intrapersonal reasons as well. The need for unity was still of great importance for one participant and political leaders need to somehow rekindle this spirit within the community once again. For the participants of this study, the results seem to imply two important aspects: a) The importance of creating educational tools and distributing

financial resources to aid families in motivating their children to academically excel particularly in a modern world, where education is held in such high esteem, is key for this Native community; b) Community unity seems to be important for installing a sense of pride in the youth and for creating a support system in which they feel valued as a contributing member of this society. It seems like these findings are two-dimensional in nature, in other words, they traditional reflect the cooperative nature of Native people, and they reflect a changing society that indicates the importance of an education in this modern technological world.

### Summary and Conclusions

This case study addressed the importance of understanding from an “overall picture” point of view. It produced information regarding Aboriginal learning strategies and the motivational factors and influences that resulted in academic success. The major finding of this study was the relationship between academic success and future economic security. Academic success in high school was important for educational achievement in university resulting in a career and ultimately, financial stability.

The results of the current study also clarified some of the stereotypical beliefs that exist in today’s society. The learning styles of these Native students were not reared towards “visually oriented learning.” In fact, they were multi-modal in their approach to learning. Native people have also been stereotyped as being “now oriented.” Contrary to this belief, students expressed strong concerns regarding their future social well-being, so much so that it motivated them towards achieving academic success today so they could have a healthy and productive life tomorrow. Another popular stereotype involved the cultural value of co-operation. Since the mainstream education system values competition

in the classroom a notion exists that Native students would not achieve academic success due to their non-competitive nature. On the other hand, Native students of this study found cooperative learning to be an effective strategy within the classroom. It provided motivational and beneficial tools, which aided in their academic learning and success. A lack of motivation to succeed at school was another common stereotyped belief characteristic of Native students. Again, this argument was refuted in this study because these students drew upon many influential factors that lead to their high levels of academic motivation resulting in increased educational performance. A final stereotypical belief was the notion that Native students could not succeed in a mainstream educational system due to cultural differences. Based on the academic achievements of these Native students, the aforementioned stereotypical belief could not be supported in this study.

#### *Contribution and implications*

This study has extended the existing literature of Aboriginal students education success in a mainstream educational system by providing information on the different learning strategies that Native student of this study implemented in order to achieve academic success. This study also takes an affirmative approach towards Aboriginal students' educational experiences as oppose to a negative approach. It provides information about tools that aided in developing students abilities to achieve educational success. In addition, the important roles that community plays in aiding students to increase academic performances addressed.

One implication of this study is that it provides insight towards Aboriginal students learning styles. Teachers need to understand that successful Native students are multi-modal in their approaches to learning and that diverse instructional methods should be implemented to enhance their educational performance. Thus, it is important to assist

Aboriginal students to develop diverse methods of learning.

*Limitations and future directions*

One limitation of the study is sample size. If the study were to be replicated it should be important to have a larger pool of participants. In addition, both participants were from the same Native community, thus it would be important to replicate this study with other Native communities who have different cultural values. Further, the Native participants of this study were from a rural environment therefore additional research is necessary to understand students' experiences from other tribes or Natives from a urban environment.

The results of this study warrant further qualitative research on the learning strategies and motivational factors Aboriginal students use to achieve academic success. Longitudinal research would be an ideal research method to determine whether possible differences in learning strategies occur for Aboriginal students after high school and whether academic success changes as a result. Additional work is needed to verify the applicability of these results to other aboriginal students from different Native populations.

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APPENDICES

- 5) Tapes will be transcribed by the researcher and all identifying information removed (tapes will be erased after transcripts are validated.)
- 6) The product of this research will be distributed through a thesis, professional presentation, publication and within the researcher's community.

I have read this document and understand:

- 1) The purpose of the study and know about the risks and benefits.
- 2) That I am free to withdraw my consent at anytime without any penalty or prejudice to my son/daughter.
- 3) How confidentiality will be remained during this research project.
- 4) The way the information collected will be used and reported.

I have read the above and I understand all of the above conditions and agree to allow my son/daughter to participate in the study "Learning Strategies of Aboriginal Students."

Students Name \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

Parents Name \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

Appendix B

Demographic Information Sheet

Demographic information of the Research Participants

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Questions

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Gender:

Female

Male

Family:

single parent

both parents

Annual Income:

Age:

Grade:

Grade Point Average:

Favorite Subject:

Least Favorite Subject:

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## Appendix C

### Interview Protocol

Semi-structured – Used guide for interview

All is covered – Questions not necessarily asked

Statements are broken into topic areas and inquires

#### Topic Areas

- 1) Background Information
  - How old are you?
  - When is your birthday?
  - What grade are you in?
  - What is your G.P.A?
- 2) Critical Incidence
  - Describe your school experiences and what helps you achieve academic success?
- 3) School experiences
  - Are you involved in any extracurricular activities at school? If so, what are they? Describe what it is like to participate in that activity?
  - Do you take part in any other activities at school? If so, what are they? Describe what it is like to participate in that activity?
  - What types of hobbies do you enjoy doing?
- 4) School Values & Beliefs
  - Describe your family's educational values? For example, attendance, homework, good nutrition and getting a proper amount of rest.
  - Describe your educational values?
  - Do you see yourself obtaining a higher level of education, once you graduate from high school?
- 5) Attitudes about learning (Values and Beliefs)
  - Describe your family's attitudes towards education? For example, attending school will aid in passing the school year, homework will

also aid in passing the school year?

- Describe your attitude towards education?
- Describe what your motivations are toward being an academically successful student?
- Describe what you think learning is?

#### 6) Strategies

- Describe the different things you do to help you learn?
- Describe how you go about learning a difficult task?
- When you decide to use a certain strategy, how do you arrive at that strategy?
- How do you know when to apply a certain strategy?
- Describe what you say to your self when you decide to choose a learning strategy that works for you?
- Describe the things that do not help you learn?
- How do you determine whether a strategy works for you or not?
- Describe what you say to your self when you decide to choose a learning strategy that does not work for you?
- Describe the different strategies you use to help you learn i.e., reading, listening or hands-on-experience?

#### 7) Barriers & Challenges

- Describe your experience of being an Aboriginal student within your school?
  - Racism
  - Lack of cultural understanding
  - Invisibility of Aboriginal differences
  - Hidden agenda
  - Stereotyping
  - Contextual variables/life events
- When you expect or are able to predict a learning situation, describe the strategies you use to deal with that particular learning situation?
- When you do not expect or are not able to predict a learning situation, describe the strategies you use to deal with that particular learning situation?

#### 8) Conflict Resolution

- When you are faced with a challenging task, how do you attempt to solve the problem?

#### 9) Cultural Values & Beliefs

- In being an academically success student is there a difference in the way other students from your community treat you. If so, describe your

experience?

- Describe your experience of being a successful aboriginal person in your community. Has it been positive/negative? Please Describe?

11) Community

- What role does your community plays in helping you achieve academic success? For example, is
- Describe the influences, outside of your community, that help you to achieve school success?

12) Role Models

- Have you had any role models to help you achieve school success?
- How have your role models influenced you in becoming a successful student?

13) Future Aspiration

- Describe what your future academic goals are?

14) Process Questions

- Describe what this process was like for you?
- What was helpful about the discussion? What was not?
- Describe what was meaningful about the discussion? What was not?
- Was anything important missing from this discussion?
- Is there anything else about your school experience that you might think would be important for me to know?