STRATEGIES FOR FACILITATING SUCCESS OF ABORIGINAL STUDENTS: THE CASE OF SIMON FRASER UNIVERSITY

by

James Alan Olooo
Bachelor of Education, Maseno University College 1998
Master of Education, University of Lethbridge 2003

PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF PUBLIC POLICY

In the Faculty of Arts

© James Alan Olooo, 2005

SIMON FRASER UNIVERSITY

Spring 2005

All rights reserved. This work may not be reproduced in whole or in part, by photocopy or other means, without permission of the author.
Approval

Name: James Alan Olow

Degree: Master of Public Policy

Title of Project: Strategies for facilitating success of Aboriginal students: The case of Simon Fraser University

Supervisory Committee:

Nancy Olewiler, Professor
Senior Supervisor
Public Policy Program

Kennedy Stewart, Assistant Professor
Supervisor
Public Policy Program

Date Approved: April 13, 2005
The author, whose copyright is declared on the title page of this work, has granted to Simon Fraser University the right to lend this thesis, project or extended essay to users of the Simon Fraser University Library, and to make partial or single copies only for such users or in response to a request from the library of any other university, or other educational institution, on its own behalf or for one of its users.

The author has further granted permission to Simon Fraser University to keep or make a digital copy for use in its circulating collection.

The author has further agreed that permission for multiple copying of this work for scholarly purposes may be granted by either the author or the Dean of Graduate Studies.

It is understood that copying or publication of this work for financial gain shall not be allowed without the author's written permission.

Permission for public performance, or limited permission for private scholarly use, of any multimedia materials forming part of this work, may have been granted by the author. This information may be found on the separately catalogued multimedia material and in the signed Partial Copyright Licence.

The original Partial Copyright Licence attesting to these terms, and signed by this author, may be found in the original bound copy of this work, retained in the Simon Fraser University Archive.

W. A. C. Bennett Library
Simon Fraser University
Burnaby, BC, Canada
The author, whose name appears on the title page of this work, has obtained human research ethics approval from the Simon Fraser University Office of Research Ethics for the research described in this work, or has conducted the research as a co-investigator of a project, or member of a course, approved by the Ethics Office.

A copy of the human research ethics approval letter has been filed at the Theses Office of the University Library at the time of submission of this thesis or project.

The original application for ethics approval and letter of approval is filed with the Office of Research Ethics. Inquiries may be directed to that Office.

W. A. C. Bennett Library
Simon Fraser University
Burnaby, BC, Canada
Abstract

Educational outcomes for Aboriginal students in Canada is a cause for considerable concern. High dropout rates, low completion and success, as well as personal and academic difficulties at educational institutions have challenged educators for decades. Solutions have included lowering admission requirements for Aboriginal candidates and establishing alternative programs that improve attendance and remedy learning problems. However, most of these policies have not offered a lasting solution to challenges facing Aboriginal students. This study presents findings from interviews conducted with 20 Aboriginal students, four professors, and two non-academic staff at Simon Fraser University. It presents their perceptions of student success and how this has been facilitated by the university. The study argues that positive student-teacher relationship, teacher’s understanding of Aboriginal students’ way of life, and including Aboriginal content in the curriculum are likely to enhance the successful completion of programs for Aboriginal students.
Executive Summary

The aim of the study is to identify ways in which Simon Fraser University can encourage successful completion of programs by Aboriginal students. Specific research objectives are: 1) to investigate, with Aboriginal students, areas where Simon Fraser University (SFU) has facilitated their academic success; 2) to learn from the SFU faculty members recommended by the said students as having facilitated student success, ways they have achieved this goal; and 3) to use material from the investigation to find specific strategies for universities to promote more positive learning experiences for Aboriginal students.

Attention to Aboriginal students as a special group is warranted for several reasons: 1) Aboriginal experience with formal education in Canada, which includes assimilation and residential schools; 2) Aboriginal demographics – Canada’s Aboriginal peoples have the highest population growth rates in the country. In 2001, the median age of Aboriginal population was 13 years younger than that of the non-Aboriginal population. Children aged 14 years and younger represented one third of the Aboriginal population compared to the corresponding share of 19 percent in the non-Aboriginal population.

1 The words Aboriginal and Native are used in this study interchangeably to describe all those registered under the Indian Act and those of any group who identify themselves as Aboriginal or Native in Canada. This capstone project does not intend to homogenize Aboriginal peoples into one category. Like in other population groups, diversity of opinions and cultural practices exist among Aboriginal peoples.

2 Residential schools were established to ‘civilize’ Aboriginal peoples so that they could eventually assimilate into mainstream Euro-Canadian society. Children, as young as six years old, were taken away from their homes and only saw their families a few times in a year until they were about 16 years old. At the residential schools, they were not allowed to speak their language or practice their culture. Children also suffered various forms of abuses. Residential schools thus, left a legacy of despair among Aboriginal peoples (see McNinch, 2001).
population. Further, while the Aboriginal population accounted for just 3.3 percent of Canada's total population, Aboriginal children aged 14 years and younger represented 5.6 percent of all children in Canada (Statistics Canada, 2003) (See Appendix 1); and 3) the under-representation of Aboriginal students in Canadian universities.

Qualitative methods are used to answer the research questions. Data was collected by open-ended interviews with 20 students attending SFU who self-identified as Aboriginal. The students were asked to define and identify 'success' incidents experienced at SFU. Non-student participants were four faculty members at SFU who were identified by the students as having had a direct positive influence on them, as well as two administrators at the SFU First Nations Student Centre. Faculty members were asked how they succeeded in facilitating success of students. The interviews were tape-recorded.

Interview data was individually transcribed and combined to generate strategic themes. Four major themes which describe strategies for facilitating the success of Aboriginal students were identified, namely: 1) a positive student-teacher relationship is likely to facilitate the success of Aboriginal students; 2) it is important that faculty members be familiar with and accept Aboriginal cultures; 3) include Aboriginal content in the curriculum; as well as 4) use culturally-appropriate teaching methods. Literature on Aboriginal education was consulted to 'check' the validity of the themes. The themes informed policy options which were then tested against nine sets of criteria using a multi-criteria analysis. As ranked by criteria, the following recommendations are made: 1) increase awareness and understanding of Aboriginal culture, 2) adopt teaching methods that take into consideration Aboriginal learning styles, 3) encourage a meaningful
student-instructor relationship both inside and outside classroom, and 4) where possible, include Aboriginal content in the curriculum. As noted elsewhere in this study, however, there is no single prescription on the best teaching method for Aboriginal students.
Dedication

This capstone project is dedicated to members of the Oloo family for their continuous support in my academic career.
Acknowledgements

I extend my sincere gratitude and appreciation to many people who made this capstone project possible. Special thanks are due to my supervisors Professor Nancy Olewiler and Professor Kennedy Stewart whose help, stimulating suggestions and encouragement helped me in all the time of research for and writing of this capstone. I am highly indebted to Mr. Rick Ouellet, Ms. Theresa Neel, Program Coordinator, First Nations Student Centre, Simon Fraser University, and all the anonymous participants in this study. Many thanks to Professor Jonathan R. Kesselman, Professor John Richards, Professor Doug McArthur, Ms. Karen McCredie and students in the Master of Public Policy Program.

Special thanks to Michele Oloo and Aliah Mahadev. I am sorry for all the problems I put you through. Last but not least, I tip my hat to Ms. Maureen Ojwang of Notre Dame University, Perth, WA, Australia.
Table of Contents

Approval ................................................................................................................................. ii
Abstract ................................................................................................................................. iii
Executive Summary .............................................................................................................. iv
Dedication ............................................................................................................................... vii
Acknowledgements ............................................................................................................... viii
Table of Contents ................................................................................................................... ix
List of Figures ......................................................................................................................... xii
List of Tables .......................................................................................................................... xii
Glossary ................................................................................................................................. xiv

1 Introduction ....................................................................................................................... 1
   1.1 The setting ....................................................................................................................... 3
       1.1.1 Institutional impediments to student success ...................................................... 4
       1.1.2 Lack of accessible data at grassroots level .......................................................... 4
       1.1.3 Aboriginal student voice absent in the organization .......................................... 5
       1.1.4 Few Aboriginal instructors ................................................................................. 6

2 Policy problem ................................................................................................................... 8
   2.1 Research question ......................................................................................................... 9
   2.2 Methodology ................................................................................................................. 10
   2.3 Hypotheses ................................................................................................................... 12

3 Recruitment procedures and population ...................................................................... 13
   3.1 Student participants .................................................................................................... 13
   3.2 Faculty participants ..................................................................................................... 14
   3.3 Data collection and analysis ....................................................................................... 15
   3.4 Results .......................................................................................................................... 16
   3.5 Themes emerging from student interviews ................................................................. 17
   3.6 Summary of the findings ............................................................................................. 24
   3.7 Major themes .............................................................................................................. 25
       3.7.1 Theme one: Student – instructor relationship .................................................... 25
       3.7.2 Theme two: Understand your students and be familiar with Aboriginal ways ... 27
       3.7.3 Theme three: Include Aboriginal content in the curriculum ......................... 30
       3.7.4 Theme four: Teaching methods that recognizes Aboriginal learning styles ...... 31
3.7.5 Summary ................................................................................................................. 35

4 Policy options ................................................................................................................. 37
  4.1 Option 1: Positive student-instructor relationship .................................................... 37
  4.2 Option 2: Increase awareness of Aboriginal cultures ............................................. 38
  4.3 Option 3: Including Aboriginal content in the curriculum ...................................... 38
  4.4 Option 4: Teaching methods that recognize Aboriginal learning styles .................... 39

5 Multi-criteria analysis of policy options ........................................................................... 41
  5.1 Definition and measurement of criteria ................................................................. 41
  5.2 Increase awareness and understanding of Aboriginal cultures ............................... 43
    5.2.1 Political acceptability of the policy ................................................................. 43
    5.2.2 Cost acceptability of the policy ..................................................................... 43
    5.2.3 Understanding of the policy ......................................................................... 44
    5.2.4 Administration of the policy ......................................................................... 44
    5.2.5 Monitoring of the policy .............................................................................. 45
    5.2.6 Organizational structure to implement the policy .......................................... 45
  5.3 Positive student-instructor relationship ..................................................................... 45
    5.3.1 Political acceptability .................................................................................... 45
    5.3.2 Cost acceptability ......................................................................................... 46
    5.3.3 Understanding of the policy ......................................................................... 46
    5.3.4 Administration of the policy ......................................................................... 46
    5.3.5 Monitoring of the policy .............................................................................. 47
    5.3.6 Organizational structure to implement the policy .......................................... 47
  5.4 Teaching methods that recognize Aboriginal learning styles .................................... 47
    5.4.1 Political acceptability .................................................................................... 47
    5.4.2 Cost acceptability ......................................................................................... 48
    5.4.3 Understanding of the policy ......................................................................... 48
    5.4.4 Administration of the policy ......................................................................... 48
    5.4.5 Monitoring of the policy .............................................................................. 49
    5.4.6 Organizational structure .............................................................................. 49
  5.5 Include Aboriginal content in the curriculum ........................................................... 49
    5.5.1 Political acceptability .................................................................................... 49
    5.5.2 Cost acceptability ......................................................................................... 50
    5.5.3 Understanding of the policy ......................................................................... 50
    5.5.4 Administration .............................................................................................. 50
    5.5.5 Monitoring .................................................................................................... 50
    5.5.6 Organizational structure .............................................................................. 51

6 Recommendations ......................................................................................................... 52
  6.1 Increase awareness and understanding of Aboriginal cultures ............................... 52
  6.2 Use teaching methods that consider Aboriginal learning styles .............................. 52
  6.3 Positive student-instructor relationship ................................................................. 52
  6.4 Include Aboriginal content in the curriculum ......................................................... 53
# Appendixes

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix 1</td>
<td>Median Age</td>
<td>56</td>
</tr>
<tr>
<td>Appendix 2</td>
<td>First Nations Guiding Principles, Simon Fraser University</td>
<td>58</td>
</tr>
<tr>
<td>Appendix 3</td>
<td>Letter of introduction</td>
<td>60</td>
</tr>
<tr>
<td>Appendix 4</td>
<td>Seeking participants for study on facilitating success of Aboriginal students</td>
<td>61</td>
</tr>
<tr>
<td>Bibliography</td>
<td></td>
<td>62</td>
</tr>
</tbody>
</table>
List of Figures

Figure 1: Aboriginal and non-Aboriginal populations with university degrees, Canada, 1981, 1991, 1996 ...

Figure 2: Median age for Aboriginal and non-Aboriginal population, Canada and provinces, 2001
## List of Tables

| Table 1: | Student experiences at SFU | .......................................................... | 7 |
| Table 2: | Student definitions of success | .......................................................... | 8 |
| Table 3: | Demographic characteristics of student participants | .......................................................... | 14 |
| Table 4 | Aboriginal elders and student success | .......................................................... | 17 |
| Table 5: | Teaching methods and student success | .......................................................... | 18 |
| Table 6 | Teacher accessibility and student success | .......................................................... | 19 |
| Table 7 | Teaching assistant and student success | .......................................................... | 19 |
| Table 8 | Aboriginal culture and student success | .......................................................... | 20 |
| Table 9 | Aboriginal teachers and student success | .......................................................... | 21 |
| Table 10 | Aboriginal content in the curriculum and student success | .......................................................... | 22 |
| Table 11 | Personal problems and student success | .......................................................... | 23 |
| Table 12 | Student-instructor relationship | .......................................................... | 25 |
| Table 13 | Familiarity with Aboriginal culture | .......................................................... | 27 |
| Table 14 | Aboriginal content in the curriculum quotations | .......................................................... | 30 |
| Table 15 | Teaching methodology and student success quotations | .......................................................... | 32 |
| Table 16 | Criteria definition and measurement | .......................................................... | 41 |
| Table 17 | Evaluation matrix for policy options | .......................................................... | 42 |
## Glossary

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aboriginal</td>
<td>The Constitution of Canada (Section 35, 1982) defines Aboriginal peoples as ‘Indian, Métis and Inuit’</td>
</tr>
<tr>
<td>Elder</td>
<td>An Aboriginal elder possesses sacred knowledge and wisdom about Aboriginal ways of life. This knowledge is transferred to the younger generations by word of mouth</td>
</tr>
<tr>
<td>First Nation</td>
<td>Refers to a treaty or status Indian. First Nations is often used to refer to a politically autonomous band under the <em>Indian Act</em></td>
</tr>
<tr>
<td>Indian</td>
<td>Refers to a treaty Indian under the <em>Indian Act</em> or a person of Indian ancestry</td>
</tr>
<tr>
<td>Indigenous</td>
<td>Refers to inhabitants indigenous to North America prior to contact with Europeans and their descendants</td>
</tr>
<tr>
<td>Inuit</td>
<td>Refers to the northern Aboriginal peoples (formally referred to as ‘Eskimos’)</td>
</tr>
<tr>
<td>Métis</td>
<td>Descendants of both European and Aboriginal parents</td>
</tr>
<tr>
<td>Native</td>
<td>A group of people with common ancestry and who are socially, culturally and politically united</td>
</tr>
<tr>
<td>Reserve</td>
<td>Blocks of land allotted for status Indians through provisions of the <em>Indian Act</em></td>
</tr>
</tbody>
</table>
1 Introduction

Perhaps no educational topic has generated more attention and debate than the phenomenon of racial and ethnic differences in academic achievement as measured by dropout rates, highest level of schooling completed, and grade point average (GPA) (Cokley, 2003). Aboriginal students at all levels of education have been the segment of the Canadian population most often at the center of this debate (Wotherspoon and Butler, 1999). The persistent academic underachievement of Aboriginal students continues to attract policy debate.

According to the 1981 Canada Census, two percent of the Aboriginal population as compared with 8.1 percent of the non-Aboriginal population held university degrees. The 1991 Canada Census indicates that the percentage has risen to 2.6 percent compared with 11.6 percent for the non-Aboriginal population. In 1996, 4.2 percent of the Aboriginal population had completed university degree programs compared with 15.5 percent of the non-Aboriginal Canadians (Figure 1) (R. A. Malatest and Associates, 2004; Statistics Canada, 2003b). The proportion of Aboriginal population with university degrees has increased over time. However, the gap between Aboriginal and non-Aboriginal Canadians with university degrees is still widening.

---

3 A comparison of Indigenous populations around the world shows that, Aboriginal peoples' share of Canada's total population is 3.3 percent. In New Zealand, Maori population accounts for 14 percent of the total population. In Australia and the United States, Aboriginal peoples account for 2.2 percent and 1.5 percent of the population respectively (Statistics Canada, 2003b).
Many analysts have established a positive correlation between formal schooling and socioeconomic challenges facing Aboriginal peoples (Binglong, 2002). Hunter (1997) found education to be the single most important factor associated with improving employment outcomes for Aboriginal Australians and reducing rates of arrest. Dorion and Yang (2000) found that postsecondary education plays an important role in opening employment opportunities and reinforcing Aboriginal identity (see also Richards and Vining, 2004). Partington (1998), however, highlights the problematic nature of a western education for Aboriginal people, which he describes as a double-edged sword.

Historically, education has been used as a tool of assimilation, and this has been the Aboriginal experience with formal western education. However, education also provides the key to self-determination as well as active and more equal participation in society (Mellor and Corrigan, 2004; Richards and Vining, 2004). As the Royal Commission on Aboriginal Peoples (RCAP) succinctly puts it, “Despite the painful
experiences Aboriginal people carry with them from formal education systems, they still see education as the hope for the future and they are determined to see education fulfil its promise” (RCAP, 1996). The common thread between writers such as Binglong (2002), Hunter (1997), Partington (1998) and Richards and Vining (2004) is the importance of education to Aboriginal people. This liberative nature of education underscores the importance of making policies that promote equity and efficiency in Aboriginal educational outcomes.

The topic of this capstone project was reached after initial attempts to investigate educational experiences of Aboriginal students in high school were not successful. I applied for permission to carry out a study at a predominantly Aboriginal high school at the Squamish First Nations, British Columbia to investigate factors that determine the students’ likelihood of going on for postsecondary education upon graduating from high school. However, Squamish School Board had 74 prior requests from researchers for permission to conduct research there. Because I could not wait one year to get approval, I decided to conduct this study at Simon Fraser University following consultations with my supervisors.

1.1 The setting

The setting for this study is Simon Fraser University (SFU) in Burnaby, British Columbia, Canada. SFU has a student population of about 20,000, about two percent of which are Aboriginal. To provide an enabling environment for the successful educational experience of Aboriginal students, SFU “recognizes the unique educational needs and identities of First Nations students … provides a supportive academic and community environment for First Nations people at SFU, and acknowledges, respects and
incorporates First Nations values and tradition in the programs of the University” (First Nations Advisory Council of Simon Fraser University, 2003) (see Appendix 2). To this end, SFU has a First Nations Student Centre which provides such services to Aboriginal students as counseling, academic advice and recruitment of new students. As well, there is First Nations Student Centre Elders Council, First Nations Student Association, Student Lounge, and an Aboriginal professor who is a special advisor to SFU Vice-President Academic on Aboriginal issues.

1.1.1 Institutional impediments to student success

Despite SFU’s efforts to facilitate the success of Aboriginal students, the following organizational impediments were identified as likely to inhibit quality learning opportunities for Aboriginal students at SFU: 1) lack of easily accessible data about Aboriginal students’ learning experiences; 2) limited (or lack of an) effective medium for Aboriginal student voice in mainstream programs to be heard; and 3) few Aboriginal faculty members. These are briefly discussed below.

1.1.2 Lack of accessible data at grassroots level

Most data collected at SFU are quantitative. Qualitative data do not seem to be collected in any systematic way. Although the objective of this study was not to use the SFU database as its primary source of data, this study found that existing data – at least concerning Aboriginal student participation at the university – are not easily accessible to the faculty. When they are available, they do not seem to be used to effect changes at the grassroots level.
Existing data are mainly collected from students through enrolment forms. An examination of the information on course/instructor evaluation sheets (completed by all students at the end of every semester) was not found to be particularly useful in improving Aboriginal student success. This is especially because the evaluation forms are anonymous so the professor or chair of department has no way of knowing the respondent’s identity, whether they are Aboriginal or not. Effective ways of seeking culturally appropriate qualitative feedback from students are not part of SFU practice. This study argues that group interviews, peer reviews, and group discussions facilitated by a trusted third party is likely to be an effective way of collecting useful information. This suggestion is based on the fact that at the 2004 SFU Aboriginal students Christmas dinner party there was a banner in bold letters to the effect that if anyone asked them, “Aboriginal students would give SFU a C+ grade” on its Aboriginal educational policies.

1.1.3 Aboriginal student voice absent in the organization

Aboriginal composition of certain classes varies from courses where there may one or no Aboriginal student in the group to those where one half or more of the cohort is Aboriginal. Often faculty members are not aware which of their students is Aboriginal (as enrolment lists do not include the information) unless the class is small or a student self identifies as Aboriginal. Some teachers prefer not to know; “When, in my Native studies class I said that I was Aboriginal, the instructor was so surprised … he said, ‘really!’ Although he later apologized for his reaction, I thought it was so funny. But, yeah, I am a Métis woman” (SFU student).

Although unintentional, the general lack of a ‘big proportion’ of Aboriginal students in any given mainstream course or program leads to institutional silence
regarding Aboriginal students’ perceptions. Rarely, if ever, is the Aboriginal students’ combined voice regarding their experience, expectations and suggestions for change sought by the university. “Our concerns are usually expressed to (SFU) Students Society through the First Nations Students Association … there has never been a direct dialogue (between Aboriginal students) and the University. But, the future looks promising now that we have one of us (an Aboriginal woman) as the advisor to the (Vice) President (Academic)” (SFU student). For a number of Aboriginal students, the first time they were asked, either individually or as a group, what they thought about their experiences at SFU came through an ‘informal’ question by the researcher when he was introduced to them at the Christmas dinner party.

1.1.4 Few Aboriginal instructors

There are relatively very few Aboriginal professors at SFU. Five student interviewees (25 percent of student participants) perceived this as an impediment to effective learning. Consistently for many years, both Aboriginal education literature and government policy have suggested a positive correlation between Aboriginal teachers and Aboriginal student outcomes (at least for kindergarten to grade 12) (Cinch, 1994). Such an argument suggests that non-Aboriginal teachers are not capable of teaching Aboriginal students effectively and, by implication, brings into question the broader issue of the validity and effectiveness of multicultural classrooms (McConaghy, 1994; Mellor and Corrigan, 2004).

As well, it should be noted that it is not viable to have only Aboriginal teachers teach Aboriginal students given that a vast majority of Aboriginal students attend

---

4 While a number of Aboriginal students at SFU are enrolled in such courses as Native studies, criminology, and sociology, they are underrepresented in such areas engineering and biochemistry.
educational institutions where they are a small minority or the majority of teachers are non-Aboriginal (Richards and Vining, 2004). Evidence on teacher effectiveness shows that both Aboriginal and non-Aboriginal teachers can effectively teach Aboriginal students (Osbourne, 1996). Osbourne and Tait (1998) argue that it is necessary “to distinguish between the legitimate political aspirations of indigenous spokespersons and research findings, which show that some non-indigenous teachers can successfully teach students from marginalized groups” (p. 89). Table 1 summarizes student experiences at SFU as indicated during interviews.

Table 1:  Student experiences at SFU

```
| Quote                                                                 |
|-----------------------------------------------------------------------|---|
| “He (instructor) is, um, cooperative and down to earth, you know. He  |
  doesn’t put himself above you, I really like that about him.”          |
| “I find the professors are willing to be your friend!”                 |
| “Whenever I need an advice, I go to the First Nations Student Centre...”|
| “The First Nations Student Centre, that really did help.”              |
| “We have Aboriginal lounge, women’s room, Aboriginal elders on campus |
  and the staff at the (First Nations) Student Centre are very helpful.|
  So, it is really nice.”                                               |
| “Most classes I’ve taken have touched on Aboriginal issues, hence     |
  quite satisfying.”                                                    |
```
2 Policy problem

The aim of this study is to identify ways in which SFU can encourage successful completion of programs for Aboriginal students. Specific research objectives are: 1) to investigate, with Aboriginal students, areas where SFU has facilitated their academic success as well as areas where they think changes ought to be made; 2) to learn from SFU faculty, recommended by the said students, how they have achieved this goal; and 3) based on the findings of the investigations, to suggest ways in which universities can enhance more successful completion of programs for Aboriginal students. Table 2 summarizes students' definitions of success.

<table>
<thead>
<tr>
<th>Table 2: Student definitions of success</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Success? I'll be graduating in spring!”</td>
</tr>
<tr>
<td>“I’ve successfully finished my first year (at SFU) ... I’m a single mother of two. Now, that is success to me.”</td>
</tr>
<tr>
<td>“Even if I quit (dropout from SFU) now, the knowledge I’ve gained here guarantees me a bigger pay-cheque in my reserve.”</td>
</tr>
<tr>
<td>“All my friends from up north quit in their first year, I’m in my second year and I’m keeping my chin up!”</td>
</tr>
<tr>
<td>“My family was afraid that by coming here I’ll lose my culture. I’m happy to be in school while at the same time participate in sun dance, tea dance and powwow.”</td>
</tr>
<tr>
<td>“My first semester as university student has been so fulfilling. I am the first person in my extended family to come to university, you know.”</td>
</tr>
<tr>
<td>“A number of profs know me by name. They are my friends!”</td>
</tr>
<tr>
<td>“I’m able to learn about other cultures ... it is amazing.”</td>
</tr>
</tbody>
</table>
“Things have not been easy for me, but I’m still here. After this (university experience), I can survive almost anything in life.”

“I came back last semester after being away for 11 years. Although it is challenging, I am doing just as well as these young men and women in my class.”

“…definitely passing math course. Otherwise, I wouldn’t be here today.”

Most studies of Aboriginal educational experience often measure success by graduation rates and dropout rates (Barman, Hebert, and McCaskill, 1987; Bell, 2004). This study, however, asked the students themselves what they regard as success. The responses range from meeting the requirements for one course and perseverance in school to learning other cultures and meeting requirement for graduation. It follows that success means different things to different students. These could be tested continually and adjustments made a long the way rather than waiting until graduation time to examine completion and/or dropout rates.

2.1 Research question

This study looks at the problem of Aboriginal student participation and successful completion of academic programs at SFU. It observes that: There is too little Aboriginal participation and completion rates at SFU. While Aboriginal peoples account for just over four percent of the population of British Columbia, only about two percent of the student population at SFU self-identify as Aboriginal (British Columbia, 2004; Colcleugh, 2003).

This study recognizes the fact that non-completion in postsecondary education student experience does not necessarily equate with failure. Non-completion may signify
the achievement of desired goals, either in the sense that skills have been gained, employment outcomes realized or articulation to further or higher studies successfully negotiated. Given that a number of students return to study after initially dropping out from a course or program, the notion of non-completion from a lifelong learning perspective is less meaningful than it once was (Ministère de l’Éducation, 2001). However, for the most part, non-completion remains a serious problem, especially for students from disadvantaged backgrounds including Aboriginal peoples (Bazylak, 2002a).

2.2 Methodology

Qualitative methodology is used because it is well suited to an exploratory study of a population about which ‘little’ is known for two main reasons:\footnote{Inasmuch as a lot of research has been done on Aboriginal educational disadvantage (Groome, 1998; James and Mannette, 2000), only a few such studies have sought Aboriginal students’ opinions and perceptions of what works and what does not work for them (Bazylak, 2002a, 2002b). Guno (2001) points out that despite an emerging body of research on Aboriginal educational experience, there remains “a minimal amount of research that exists that specifically document the contemporary experiences of First Nations students” (p. 5).} First, open-ended interviews provide an opportunity to gain insights into the dynamics of behaviour and experience of the group. Second, the researcher is able to assess subtle interactions between an individual student’s behaviours and the larger social context. Data collection was guided by the participants’ experiences (Berg, 1998). It was assumed that 1) Aboriginal students themselves could provide the most relevant accounts of their personal experiences and feelings, 2) a small sample (N=26) could yield sufficient data as each participant had potential to provide information on all the various aspects of the phenomenon being explored, and 3) the study would inform future, larger scale research.
Seeking the participants' voices was thought to be relevant to this study because “education is the construction and reconstruction of personal and social stories” (Connelly and Clandinin, 1990, p. 2). Further, the personal experiences as told by the participants elucidated experiences of success and frustration as defined by the individual participants themselves (Denzin, 1989).

The expression of an individual’s voice is a positive step toward emancipation (Gilliland, 1995; Noel, 1994). The personal stories, reflection, and expression by the students allowed them to re-examine their educational success and environment (Bazylak, 2002a). As Reinharz (1992) rightly puts it, “Interviewing offers researchers access to people’s ideas, thoughts, and memories in their own words rather than in the words of the researcher” (as cited in Guno, 2001, p. 50).

During the interview process, it was evident that Aboriginal students longed to be heard, and were grateful to have their opinions and experiences sought and valued. One student who heard from her friend about my study sent me an email stating her interest in participating in the study. She wrote, “Finally, there is someone who is willing to listen to my story!” (SFU student).

Writing about Aboriginal research, Smith (1999) argues, “The term ‘research’ is inextricably linked to European imperialism and colonialism” (p. 1). Indeed, while Aboriginal peoples are the most studied ethnic group in the world (Smith, 1999), most Aboriginal studies have been done by non-Aboriginal people who have at times misrepresented the truth for the purpose of propagating, maintaining and justifying control and domination of Aboriginal peoples (Absolon and Willett, 2004; Churchill, 1992). Hence, it was not surprising to me when an Aboriginal student participant
commented that, “your methodology is very … respectful. I hope my story will help you with your thesis…. I am looking forward to reading the final product.” Its is suggested that future research with Aboriginal students at SFU use methodologies that seek the students voices and that respects Aboriginal oral tradition as a valid way of knowledge.

2.3 Hypotheses

This study examines the correlation between Aboriginal student success and explanatory variables hypothesized in education literature. It is hypothesized that:

1) There is a positive correlation between the number of Aboriginal instructors and Aboriginal students’ success (Bazylak, 2002a; Cinch, 1994; McConaghy, 1994);

2) Including Aboriginal content in the curriculum is likely to enhance Aboriginal student success (Brennan, 1998; Purves and Beach, 1972; Standing Committee on Aboriginal Affairs, 1990);

3) Teaching methodologies that acknowledge Aboriginal ways of learning are positively correlated with Aboriginal student success (Rowe and Rowe, 2002); and that

4) Higher instructor expectation of and accessibility to the students is likely to lead to student success (Astin, 1993; Barman, Hebert and McCaskill, 1987; Leach and Zepke, 2003; Sleeter and Grant, 1986). Because most graduate schools in Canada (including those at University of British Columbia and SFU) offer teaching assistantships to their students, a positive correlation between teaching assistants and student success is hypothesised.
3  Recruitment procedures and population

3.1  Student participants

Letters of request for participation were sent to First Nations Student Lounge room at SFU. The letters addressed confidentiality and purpose of soliciting information in personal interviews (see Appendices 3 and 4). Potential participants were asked to contact the researcher and/or his supervisors about their questions or interest in participating. The researcher was invited to the Aboriginal students’ end-year dinner party at SFU where Ms. Theresa Neel, who is the program coordinator at the First Nations Student Centre, SFU, introduced him to the students.

Initially, 25 students agreed to participate in the study. However, five were lost to the study because of other commitments including preparing for end of semester examinations. Thus, interviews were conducted with 20 students - 15 female and five male. Each participant selected the interview site. Of the 20 interviewees, 18 chose to have the interview at the First Nations Student Lounge while two (both male) chose restaurants. Permission was granted by each participant to audiotape the interviews. SFU Ethics Committee approved this study. The researcher conducted all the interviews, which lasted from 25 to 40 minutes.

All student participants were undergraduates. Their ages ranged from 21 years to 34 years old. 80 percent of the participants (16) graduated from off-reserve high schools while 20 percent (four) went to high schools on reserve. 45 percent of the students (nine)
lived alone or with roommates on or off campus residences while 55 percent (11) were living with partners. As well, 40 percent of the students (8) reported that they had children (see Table 1). The students identified professors who had facilitated a ‘successful’ incident in them.

Table 3: Demographic characteristics of student participants

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Average</th>
<th>Range</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (Years)</td>
<td>24</td>
<td>21-34</td>
<td>20</td>
</tr>
<tr>
<td>High school attended:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On-reserve</td>
<td>20%</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Off-reserve</td>
<td>80%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Living arrangement:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alone</td>
<td>45%</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>With partner</td>
<td>55%</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Has children</td>
<td>40%</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Gender:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>25%</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>75%</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

3.2 Faculty participants

Because this study focuses on facilitating student success, student participants were asked for names of faculty who they identify has having worked successfully with them. Invitations to participate were sent by e-mail to these faculty members, all of whom (seven in total) agreed to participate if their schedule allowed.
Four faculty members participated in the study. The other three were unable to participate due to teaching conflicts and time constraints. Three of the participants were male, one was female. One male faculty identified himself as Caucasian, the remainder of the faculty participants self-identified as Aboriginal. They all (four of them) stated that they have attended or participated in Aboriginal cultural events at least once. Disciplines represented in this group were Archaeology, Sociology, Native Studies and Criminology.

As well, two members of non-academic staff at the First Nations Student Centre participated in the study. The program director at the Centre not only introduced the researcher to the students but also participated in the study. The other participant was mentioned by a number of students as having helped them with their writing and research. The two were male and female, and both identified themselves as Aboriginal.

3.3 Data collection and analysis

All participants were given a cover letter and consent form. Data collection was by open-ended interview questions. The questions and probes were: Think about your experiences as a student at SFU. Describe a ‘success’ incident you have had at SFU. What would you say have been your major concerns of problems? Whom/what did you find most helpful in dealing with these problems? Faculty members were asked to describe an experience when they had facilitated success of an Aboriginal student.

Because of its role in coordinating Aboriginal student activities, such as Aboriginal student recruitment, help with student funding applications, and coordinating Aboriginal writing and research, First Nations Student Centre is in frequent contact with

---

6 At the time these interviews were being conducted, the seven professors had their offices and conducted their classes at the Burnaby Mountain campus, while the researcher takes his classes at the Downtown (Harbour Centre) campus.
Aboriginal students. The staff at the First Nations Student Centre was asked to describe some of the problems reported by the students and measures taken to reverse them.

Qualitative analysis was inductive in nature and conducted simultaneously with data collection. Data were analyzed manually using the sequence of analytic procedures for qualitative research described by Miles and Huberman (1994) as a guide. First, codes were assigned to units of transcribed data to condense and describe the data. Then, coded passages with similar content were grouped together so as to form categories. Finally, thematic analysis was conducted and common themes were identified. Data analysis relied on direct quotations to validate emerging themes. These themes were in turn explored in the literature.

3.4 Results

Interview results are tabulated below using SPSS Crosstabs (Figure 2). The themes are grouped into eight categories, all of which were mentioned by the students. These are: 1) importance attached by the student to an Aboriginal elder, 2) importance of teaching methods to the student’s success, 3) teacher accessibility, 4) teaching assistant, 5) Aboriginal culture, 6) Aboriginal instructor, 7) Aboriginal content, 8) personal challenges over and above that which ‘average’ university students go through.
3.5 Themes emerging from student interviews

These results are briefly explained below:

Table 4 Aboriginal elders and student success

<table>
<thead>
<tr>
<th>Importance of Elder</th>
<th>Not mentioned</th>
<th>Mentioned important</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aboriginal students</td>
<td>9</td>
<td>11</td>
<td>20</td>
</tr>
<tr>
<td>% of Total</td>
<td>45.0%</td>
<td>55.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>20</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

55 percent of the students said that the presence of the elders at SFU has facilitated their success. This finding concurs with Bell’s (2004) and National Indian Brotherhood’s (1972) observation that there is a positive correlation between Aboriginal elders and Aboriginal student success. Elders are available at the First Nations Student Centre to provide culturally appropriate counseling on-campus. The Elders are also involved with the student orientation as well as other ceremonies including sweat lodges, powwow, pipe ceremonies, and traditional prayers for the sick.

Effect of Aboriginal elders on student success was not one of the study’s hypotheses. However, it came about from the content analysis of the interview data. While more than one half of the student participants indicated a positive link between elders and their success, the issue will not be pursued any further because the number of elders at SFU is similar to that at the University of Regina, Saskatchewan. The number of elders at SFU First Nations Student Centre should remain the same.
Table 5: Teaching methods and student success

<table>
<thead>
<tr>
<th>Aboriginal students * Teaching Method Crosstabulation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Teaching Method</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Less important</td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
</tr>
<tr>
<td>Aboriginal students</td>
</tr>
<tr>
<td>% of Total</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>% of Total</td>
</tr>
</tbody>
</table>

Three-quarters of the student respondents (75 percent) identified a positive correlation between teaching methodology and their academic success. Keefe (1987) describe learning style as the more or less consistent way in which a person perceives, conceptualizes and recalls information. Diaz and Cartnal (1999) argue that student learning styles are influenced by their genetic make-up; previous learning experiences, culture, and the society the student live in. They suggest that students learn better and more quickly if the teaching methods used match their preferred learning styles.

In his study of student learning styles across cultures, More (1990) concluded that there is a link between culture and learning styles. Hughes and More (1997), however, note that there is a lack of consensus on the definition and measurement of those links. More (1990) argues that the learning styles of an individual student are not determined solely by cultural background, but also by such factors as the individual’s life experiences and training. The result is significant individual differences in students’ learning styles within and between cultural groups. Harris (1995) and Hughes and More (1997) posit that there is considerable overlap in learning styles of individuals from various cultural groups, especially when there is overlap in lifestyles and contact between two cultures.

Hughes and More (1997) point out that while there is not evidence for a single Aboriginal learning style, there are some recurrent learning styles which are more likely
among Aboriginal students. Similarly there are also recurrent learning styles which appear to be more likely among Non-Aboriginal students. However there are wide variations amongst individuals in any cultural group and these must be taken into account. More (1990) posits that the recurrent styles among Aboriginal learners occur often enough to warrant careful attention by teachers provided teachers also attend to individual differences between students.

Table 6  Teacher accessibility and student success

<table>
<thead>
<tr>
<th></th>
<th>Teacher Accessibility</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less Important</td>
<td>Important</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>Aboriginal</td>
<td>Count</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>students</td>
<td>20</td>
<td>5</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>% of Total</td>
<td>25.0%</td>
<td>75.0%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>5</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>% of Total</td>
<td>25.0%</td>
<td>75.0%</td>
<td>100.0%</td>
<td></td>
</tr>
</tbody>
</table>

Seventy five percent of the student respondents stated during the interview that teacher accessibility- both for academic and non-academic consultations- is likely to lead to their success. This finding supports our hypothesis that there is a positive correlation between teacher accessibility and student success.

Table 7  Teaching assistant and student success

<table>
<thead>
<tr>
<th></th>
<th>Teacher Assistant</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less Helpful</td>
<td>Important</td>
<td>Total</td>
</tr>
<tr>
<td>Aboriginal</td>
<td>Count</td>
<td></td>
<td></td>
</tr>
<tr>
<td>students</td>
<td>20</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>% of Total</td>
<td>65.0%</td>
<td>35.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>% of Total</td>
<td>65.0%</td>
<td>35.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
Sixty five percent of students said that they found teacher assistants less helpful. This result contradicts our hypothesis that teacher assistants are likely to facilitate Aboriginal student success. Many graduate students at SFU hold teaching assistantship at some point during their graduate work. The work involved in this position usually includes assisting in the teaching of large sections of introductory classes, marking papers, holding office hours, serving as teaching assistants in senior undergraduate courses and occasionally as teachers of record. This study suggests that SFU should review its teaching assistantship policies with regards to teaching assistants’ prior teaching experience or teaching ability.\(^7\) As well, SFU should consider offering culturally sensitive teaching assistantship training especially in courses that are likely to have more Aboriginal students enrolled.

<table>
<thead>
<tr>
<th>Aboriginal students * Aboriginal Culture Crosstabulation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Aboriginal students</td>
</tr>
<tr>
<td>8</td>
</tr>
</tbody>
</table>

Sixty percent of students associated culturally-relevant curriculum with their success. This finding supports our hypothesis. Reynolds and Skilbeck (1976) discuss how individuals (both teachers and students) are shaped by culture, and how in turn people

\(^7\) Currently, criteria for teaching assistantship selection at SFU include number of semesters in which the student has been registered in courses; number of academic credits satisfactorily completed each semester, and the rate at which progress is being made on research requirements (School of Computing Science, SFU, 2005).
shape the culture. They suggest that in planning a curriculum it is important to be aware of the ways in which culture impinges on the curriculum. They conclude that there are “Social structures that function in school life which teachers cannot ignore, and there are hidden processes and connections in the imparting of cultural messages... The most honest way of regarding the curriculum is to see it partly as the outcomes of the plans, aspirations, ideas and feelings of individual teachers and pupils, partly as the outcomes and social processes with hidden patterns about which we can learn much more” (p. 40).

The view of Reynolds and Skilbeck (1976) is still relevant today. Hughes and More (1997) posit that cultural perspectives of Aboriginal people could contribute to the understanding of the nature of schooling and learning experiences. These perspectives are at the heart of contemporary advocacy by Aboriginal people for changes in Aboriginal education (see National Indian Brotherhood, 1972).

Table 9  Aboriginal teachers and student success

<table>
<thead>
<tr>
<th></th>
<th>Aboriginal Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not mentioned</td>
</tr>
<tr>
<td>Aboriginal students</td>
<td>15</td>
</tr>
<tr>
<td>% of Total</td>
<td>75.0%</td>
</tr>
</tbody>
</table>

Table 9 Aboriginal teachers and student success

Only 25 percent of the students indicated a positive correlation between Aboriginal members of faculty and the students' success. A review of literature found no consensus on the effect of Aboriginal teachers on academic success of Aboriginal students. While on the one hand some researchers contend that Aboriginal students are more likely to be successful when taught by an Aboriginal teacher (Brady, 1996), other
researchers argue that because most Aboriginal students are likely to attend schools where they are the minority or where majority of teachers are non-Aboriginal (Richards and Vining, 2004; Vandenberg, 2000). Thus, one student said, “Though totally underrepresented, First Nations professors are so helpful. I wish there were more of them,” while another student commented that, “the thing with that department is that ... (the interviewee covered the microphone)... it is not just the non-Native professors...” in describing an encounter with an Aboriginal member of faculty. This view helps explain the fact that one of the faculty participants in this study, who self-identified as Caucasian, was recommended by Aboriginal students as having facilitated their success. It follows that the issue is not about Aboriginal teachers, but any teacher, whether Aboriginal or not, who can teach Aboriginal students effectively. Despite these views, it is still surprising that only 25 percent of the students associated their success to an Aboriginal teacher.

Table 10  Aboriginal content in the curriculum and student success

<table>
<thead>
<tr>
<th></th>
<th>Aboriginal Content</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less Important</td>
<td>Important</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td></td>
<td>for Success</td>
<td>for Students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aboriginal students</td>
<td>2 (10.0%)</td>
<td>18 (90.0%)</td>
<td>20 (100.0%)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2 (10.0%)</td>
<td>18 (90.0%)</td>
<td>20 (100.0%)</td>
<td></td>
</tr>
</tbody>
</table>

Ninety percent of student respondents associated Aboriginal content in the curriculum with their success. This finding supports our hypothesis that curriculum that Aboriginal students can relate to is likely to enhance their success. According to McNinch (1992),
curriculum should include distinctly Aboriginal content, rather than broader multicultural content. A student participant in this study said that, “I wish we could learn more about Aboriginal economics and politics (for example) forestry and treat negotiations.” Another student said, “I like it when the professor mentions positive contributions made by Natives or when she acknowledges the wrongs done to my (Aboriginal) people.” A faculty participant suggested that “sometimes it takes just a little more effort to make a point of talking about the Indian Act or the federal government’s fiducial obligation to Status Indians in my criminology classes.” It follows that students are sometimes affected by the curriculum, and the more they can relate to what is being taught, the better are the chances of their success.

Table 11  Personal problems and student success

<table>
<thead>
<tr>
<th>Aboriginal students</th>
<th>Personal Challenges</th>
<th>Less Difficulty</th>
<th>Difficulty</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>9</td>
<td>11</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>% of Total</td>
<td>45.0%</td>
<td>55.0%</td>
<td>100.0%</td>
<td></td>
</tr>
</tbody>
</table>

Over one-half of student participants (55 percent) cited personal challenges as inhibiting their success. They mentioned family problems, loneliness because of being away from home for longer periods of time, financial problems and relationship difficulties. Although this was not one of the hypotheses, it came about as a result of the content analysis of the interview data. Thus, students need support with their problems.

Support is a critical aspect of the student participants’ experiences at SFU. Many students recognized the help they were getting from the First Nations Student Centre, in
the form of counselling, academic advice, and help with application for funding. Other sources of support included elders, faculty, fellow students, family and community members. It follows that in order to have a supportive university environment, it is important that everyone who is involved with Aboriginal students should recognize the importance of providing an enabling environment for academic and personal support to them.

3.6 Summary of the findings

Students of diverse backgrounds often feel they must choose between being successful in school and being true to their cultural identities. But if teachers use culturally responsive forms of instruction, they help students to be academically successful while still taking pride in their cultural identity. (Au, 1993, p. 13)

All but one hypothesis was supported by the results. The study found a positive correlation between Aboriginal elders and student success. As well, 75 percent of respondents indicated a positive link between teaching styles and their academic success. Teacher accessibility, awareness of Aboriginal cultures, and Aboriginal content in the curriculum were all positively correlated to student success. However, contrary to our hypothesis, the study found a negative correlation between teachings assistants and success. Further, it was surprising that only one-quarter (25 percent) of the students indicated a positive link between Aboriginal teachers and their success. These findings are grouped into four major themes in the next section.
3.7 Major themes

3.7.1 Theme one: Student – instructor relationship

One of the recurring suggestions during the interviews with both student and faculty participants was that outcomes improve where students have regular and meaningful contact with their professors, both inside and outside the classroom. This view is congruent with the findings of Astin (1993), Berger (2002), Kleinfeld (1975) and Laing and Robinson (2003) that because of their *in loco parentis* role, teachers not only nurture their students, but also mentor them. Leach and Zepke (2003) found that student success could be enhanced when teachers are available for both academic and non-academic discussions. Table 12 summarizes the results of the interview.

<table>
<thead>
<tr>
<th>Table 12 Student-instructor relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>“University ... is too institutional, very anonymous. Sometimes you crave ... to put a human face to the university. And it is one of your professors as they are the people you encounter more frequently” – SFU Faculty.</td>
</tr>
<tr>
<td>“Some faculty members have never interacted with an Aboriginal person in their life. Before they believe the stereotypes about Aboriginal people, I strongly urge them to get to know their (Aboriginal) students” – SFU Faculty.</td>
</tr>
<tr>
<td>“It helps when my teachers respect me for who I am. It is only after this that me and the professor will be able to have a meaningful working relationship” – Aboriginal student.</td>
</tr>
<tr>
<td>“Sometime you have a problem and you need to see a professor, and you can’t think of booking (an) appointment. In that case, professors should be accessible” – Aboriginal student.</td>
</tr>
</tbody>
</table>

These quotations elucidate the students’ need for a positive relationship with teachers. As Sleeter and Grant (1986) put it, “Students and teachers must view one
another as partners in the teaching-learning process.... Trust and openness must exist to encourage the sharing of ideas, the picking of brains and constructive disagreement.... Classroom should be viewed as a laboratory, not assembly line” (p. 298). Sleeter and Grant propose a classroom environment that enables students to develop the requisite skills and attitudes for effective cooperative. Bliss and Ogborn (1977) reported that students were likely to understand the content of lectures if instructors encourage involvement, commitment and interest in students. Ramsden (1992) showed that interest in undergraduate students’ individual needs, help with difficulties in understanding, learning, and creating a climate of trust between teachers and students are important in quality teaching and learning. Relations of cooperation are “central to the reciprocity of the student-teacher relationship” (Coady, 2000, p. 154). Barman, Hebert and McCaskill (1987) conclude that:

Successful teachers of Indian students, whether or not they are Indian, are characterized by their ability to create a climate of emotional warmth and to demand a high quality of academic work. They often take the role of a personal friend rather than that of impersonal professional .... After establishing positive interpersonal relationships ... these teachers become demanding, as an aspect of their personal concern in a reciprocal obligation to further learning.... Thus, these teachers are effective because of their instructional and interactional style (p. 13).
3.7.2 Theme two: Understand your students and be familiar with Aboriginal ways

As a number of interviews revealed, there is a positive correlation between awareness of Aboriginal ways and Aboriginal student success. Table 13 presents quotations from the interview:8

Table 13 Familiarity with Aboriginal culture

<table>
<thead>
<tr>
<th>Quotation</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>“In my class presentation, I brought in a circle. The professor made sarcastic remarks, ‘Oh, are we going to hold hands?’ … ‘Are you done with your circle?’ I felt that my culture is not honoured” — Aboriginal student.</td>
<td></td>
</tr>
<tr>
<td>“Try to understand where these folks are coming from. Aboriginal people experience some of the highest poverty rates and dropout rates in the country. It is not by accident that some of them have made it to the university. You should reach out for them” — SFU Faculty.</td>
<td></td>
</tr>
<tr>
<td>“Sometimes I feel like there is hidden racism from the way other students talk about us. They think that we Natives get everything from the government for free, and that we do not work hard. It is simply not right!” — Aboriginal student.</td>
<td></td>
</tr>
<tr>
<td>“Perhaps instructors should understand that Natives (students) may have certain unique problems, do you know what I am saying?” — SFU student</td>
<td></td>
</tr>
</tbody>
</table>

These quotations supports our hypotheses that being familiar with Aboriginal cultures, as well as understanding the socioeconomic challenges facing most Aboriginal peoples have a positive correlation to student success. Indeed, instructors should appreciate this because for many Aboriginal students, life experience is likely to be grounded in poverty (Cass, 1999). Guno (2001), an Aboriginal researcher, echoes this

8 ‘Awareness’ is used here to reflect the level of understanding of Aboriginal cultures and issues that exist amongst both Aboriginal and non-Aboriginal people at SFU.
sentiment: “I know first hand that the poor health status of our family members has a ‘rippling-effect’ to reach all of our community members” (p. 79).

Aboriginal people, whether individually or collectively, have continued to struggle for acceptance as members of the Canadian society. One student expressed his frustrations, “Folks just looking us funny, as if we Natives don’t belong here. At times, I wonder if I hate myself for being a Native. I’m just not sure, and this bothers me” (SFU Student). The participants in this study expressed their wish for more understanding amongst non-Aboriginal people and ‘non-traditional’ Aboriginal peoples of their history and struggles (for example with discrimination, racism, past institutionalized policies such as residential school), and by developing a more balanced appreciation of the contributions of Aboriginal cultures and knowledge both to North America and the world in general. Thus, information should be available to enable Canadians understand that what Aboriginal peoples have sought all along is mutual respect and coexistence (Cairns, 2000).

It is important that faculty members take an initiative to know their culturally diverse students and be prepared to “understand and accept as equally valid values and ways of life that may differ from which that they (the faculty) are accustomed to” (Gilliland, 1995, p. 6). The National Indian Brotherhood (1972) argues that “The Indian who learns about his heritage will be proud of it … the lessons he learns in school, his whole school experience, should reinforce and contribute to the image he has of himself as an Indian” (p. 72).

There is no question that most members of faculty are deeply committed to providing a quality education for Aboriginal students (Melnechenko and Horsman, 1998).
However, if the actions they take to achieve this goal occur within a deficit model, then they are likely to be less effective (Cokley, 2003). As Valencia (1997, p. x) explains, “the deficit thinking paradigm, as a whole posits that students who fail in school do so because of alleged internal deficiencies (such as cognitive and/or motivational limitations) or shortcomings socially linked to the student.” Valencia’s view of deficit thinking is that it is “tantamount to blaming the victim” (p. 80) Hence, if the teacher believes that students’ characteristics are barriers to successful education and acts on that belief, then the university is actively constructing the students to fail. By promoting the dominant Euro-Canadian as the norm and excluding minority group experience as deficient, mainstream students benefit at the expense of minority students, so those who already have considerable advantages are given even greater opportunities to succeed (Ogbu, 1987).

At the same time, instructors need to present their students with a multicultural view of the world, as opposed to an ethnocentric view. As one student said, “Back in the reserve you only see Natives and some white people ... here (at SFU) I have been able to befriend people from other parts of the world. I’ve learnt a lot from them” (SFU student). Learning what makes other cultures unique compared to their own enables all students to understand that they do not have to be alienated from their culture in order to be successful (Ferdman, 1990). This view is echoed by Ryan (1992) thus,

(Although) adjusting communicative and interactive modes and expectations in the classroom to mesh with Aboriginal ways will not necessarily guarantee student success, it can improve relationships between students and teachers, validate students’ heritage, motivate them to learn, and provide them with tools to master school discourse (p. 177).
Partly because too many teachers and administrators are not knowledgeable about Aboriginal ways, beliefs and ideals (Gilliland, 1995), the University of Regina developed an Aboriginal students’ faculty guide (McNinch, 2001). The guide provides a historical overview of Aboriginal peoples, information about Aboriginal peoples’ learning processes as well as tips on what to consider when teaching Aboriginal students. Changing the school to meet the needs of the student is likely to have positive outcomes for Aboriginal students in the long term (McNinch, 2001). However, the dominant culture is embedded in the school- the major objective of schooling is to socialize the young in to the norms of the society, that is, the dominant culture. It is unlikely that the majority of educational institutions could be sufficiently modified to be acceptable to students whose needs are very different from mainstream students (Ogbu, 1987).

3.7.3 Theme three: Include Aboriginal content in the curriculum

Interview results revealed that including Aboriginal content in the curriculum is likely to facilitate student success. Table 14 presents interview quotations.

<table>
<thead>
<tr>
<th>Table 14 Aboriginal content in the curriculum quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>“When it comes to Native issues, that’s when I talk in class” – SFU student</td>
</tr>
<tr>
<td>“It would be cool if SFU had a little more Native content in its courses” – SFU student</td>
</tr>
<tr>
<td>“Both Aboriginal students from on- and off-reserve benefit from Native courses (offered at SFU)…” – SFU non-academic staff</td>
</tr>
<tr>
<td>“Non-Aboriginal students have the opportunity to learn about Aboriginal issues …” – SFU non-academic staff</td>
</tr>
</tbody>
</table>
Purves and Beach (1972) found that students tend to respond more positively to literature when they identify with the characters. Brennan (1998) asserts that people of all ages need to read a variety of literature to help them understand the principles underpinning the values and traditions of their own culture and the cultures of others. Scarfe (1990) points out that culturally relevant curriculum fosters pride and a sense of identity for Aboriginal students. Effective teachers of Aboriginal students use culturally sensitive curriculum, vis-à-vis a curriculum to which the students cannot relate (Standing Committee on Aboriginal Affairs, 1990).

Richardson and Blanchet-Cohen (2000) argue that while there has been an increase in the number of Aboriginal students attending universities in Canada, their continued access has been hindered by among other barriers, “curriculum that does not reflect Aboriginal culture; programs that ignore Aboriginal perspectives, values, and issues and ... students feeling no ownership or control with regard to the education process” (p. 4). Regarding culturally relevant education, the National Indian Brotherhood (1972) articulates its philosophical vision for Aboriginal education that, "We want education to provide the setting in which our children can develop the fundamental attitudes and values which have an honoured place in Indian tradition and culture" (p. 2).

3.7.4 Theme four: Teaching methods that recognizes Aboriginal learning styles

As this study found, the importance of teachers in determining the quality of student education outcomes cannot be overemphasized. Table 15 summarizes interview quotations.
<table>
<thead>
<tr>
<th>Table 15  Teaching methodology and student success quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>“In my first semester, whenever I took a moment of silence to process a question asked before answering it. This professor was impatient with me. It was like I was wasting time. Silence is important sometime, you know?” – Aboriginal student.</td>
</tr>
<tr>
<td>“I like it when the class is kind of informal; for then I feel at ease and can open up” – Aboriginal student.</td>
</tr>
<tr>
<td>“My TA (teacher assistant) simply did not know how to teach. He was a smart guy, though. He thought I did not know anything about Aboriginal peoples! So we got into a big discussion. It escalated to the point where I just got up and left” – Aboriginal student.</td>
</tr>
<tr>
<td>“Let your student know that although you are a teacher and researcher, you are also a student, that you do not know everything and that you are willing to learn from them” – SFU Faculty.</td>
</tr>
<tr>
<td>“Remember that Aboriginal students are not victims who need to be rescued. Be humble, but have high expectations for achievement” – SFU Faculty.</td>
</tr>
</tbody>
</table>

These findings are supported in the literature: Rowe and Rowe (2002) suggest that teacher effects account for much of the variance in school achievement. Rowe and Rowe (2002) posit that educational effectiveness whether it be evidence based or case-study based cannot be reduced to simple blueprints for improvements such as ‘checklists’ of strategies. This argument concurs with Brizinski’s (1993) observation that there are no prescriptions on how to teach Aboriginal students. According to Vandenberg (2000), there are differences between the ways that Aboriginal students and their non-Aboriginal counterparts acquire knowledge and skills.

Vandenberg (2000) further notes that despite differences among individual Aboriginal students, there are similarities in their learning styles. For example, Aboriginal students need time to “observe and listen” before responding to a problem. Citing Council for Yukon Indians (1982), Vandenberg argues that many Aboriginal students’ immediate response to a question in the classroom is likely to be a “quiet stare.
or shrug, not necessarily because they do not know (the answer), but because they need time to process” (p. 55). However, while Vandenberg suggests that teachers should allow students sufficient time to organize their thoughts; she cites literature that found no significant difference between Aboriginal students and their non-Aboriginal counterparts in the area of response time. She concludes that because of conflicting evidence regarding learning styles for Aboriginal students, teachers ought to identify the most effective strategy for their individual students on a case-by-case basis. The current study notes that while Vandenberg’s (2000) suggestion could work in a small class, it is unlikely to be effective in a large classroom (such as those of first year undergraduates).

Pepper and Henry (1986) argue that Aboriginal students can often display several predominant “tendencies or learning style inclinations” that arise from their exposure to cultural practices and traditions in their homes (p. 58). These include: skill and a high frequency in processing visual and spatial information; preference for informal setting with freedom of movement; community learning style; and holistic processing of both verbal and non-verbal tasks (that is, are able to see the whole versus the parts) (p. 58). This observation is congruent with Gilliland (1988) findings that Aboriginal learning styles tend to be global, holistic, and intuitive.

Gilliland (1995) posits that while care should be taken not to make overgeneralizations about learning styles unique to Aboriginal students, there are consistencies that occur often enough which should encourage teachers of these students to pay careful attention. This sentiment is echoed by Peacock and Miller (1997) that “any attempt to categorize the ways humans learn is fundamentally flawed because humans are

---

9 Muck, Place and Giever (1994) define learning style as characteristic ways of processing information and behaving in learning situations.
inherently complicated beings. Putting ways of learning into categories is an attempt to make sense of it” (as cited in Vandenberg, 2000, p. 54).

As well, teaching process should also aim at improving self-esteem of the students. Ten percent of the student participants (two students) mentioned lack of self-esteem as a barrier to their academic success. One student said, “My self-esteem was so low, um, I did not have any confidence ... I was almost quitting the program” (SFU student). Another student stated that, “You know, self-doubt is always there. I think non-Aboriginal students have many advantages that we Natives don’t” (SFU student).

Cokley (2003) defines academic self-concept as an individual student’s perception of his or her academic ability when compared with other students. Graham (1994) found that students who think highly of themselves are likely to be more motivated to succeed. Consistent with Graham’s argument, academic self-concept has been correlated with academic achievement for all students (Witherspoon, Speight and Thomas, 1997) and with intrinsic motivation (Cokley, 2003). When students see themselves as academically and intellectually capable individuals, and when teachers reinforce this idea, then the students are more likely to want to do well in school (Graham, 1994). Cokley (2003) found a positive correlation between encouragement by teachers and academic self-concept of students. Cokley suggests that teachers, especially those of minority students, should not “underestimate the power of encouragement, as it serves as an important component of student-faculty interaction and speaks to the quality of the student-faculty relationship” (p. 556).

Psychologists posit that as well as having an academically challenging curriculum, teachers should have high expectation of their students (Gilliland, 1995;
Johnson and Ferguson, 1991; Seligman, 1998). Students are more likely to believe that they succeed if they can see that their teacher believes that they will (McKay and Fanning, 2000). Arguing that all students have strengths, Gilliland (1995) asserts, “It is up to the teachers to help the students see their own strengths and how they can use them in learning” (p. 89). Chief Dan George articulates this point succinctly:

Do you know what it is like to be without pride in your race ... and confidence in yourself? You don't know, for you never tasted its bitterness. ... You hold out your hand and you beckon me to come over. Come and integrate you say. But how can I come? How can I come in dignity? ... What is there in my culture you value? My poor treasure you can only scorn. Am I to come as beggar and receive all from your omnipotent hand? Somehow, I must wait ... until you want something of me ... until you need something that is me. Then I can raise my head and say to my wife and family: Listen ... they are calling. They need me. I must go. Then I can walk across the street and I will hold my head high for I will meet you as an equal ... you will not receive me in pity. Pity I can do without. My manhood I cannot do without! (p. 46).

3.7.5 Summary

Four major themes were identified in this section: 1) meaningful relationship between students and instructors is a foundation for facilitating student success; 2) link between awareness of Aboriginal cultures and student success was established; 3) Aboriginal content in the curriculum is correlated with student success; and 4) teaching methodologies that take into account Aboriginal learning styles, individual differences, and academic self-esteem of students was identified as a major theme. The four will be adopted as policy options as they represent what participants identified as strategies that
are likely to facilitate their success. These options are discussed in section 4 before being tested using a multi-criteria analysis in Section 5.
4 Policy options

Based on the findings of this study, the following four policy options are put forward. The options are then tested against seven sets of criteria using multi-criteria analysis. The criteria are: 1) political acceptability, 2) cost acceptability, 3) understanding, 4) administration, 5) monitoring, 6) organizational structure to implement the policy, and effectiveness of the policy. Table 16 summarizes definitions of criteria and how they are measured. Recommendations are then presented based on the multi-criteria analysis. It is reiterated that there are no prescriptions of the ideal way of teaching Aboriginal students.

4.1 Option 1: Positive student-instructor relationship

This study found that in addition to an instructor's knowledge and skills in teaching, positive instructor-student relationship that involves, among other things, approachability, fairness, and the concerned and caring attitude of teachers has a positive correlation with student success. This could be accomplished by creating a caring community at the university through Aboriginal-led seminars on human relationships from Aboriginal perspective. Educational institutions would benefit from emphasizing the importance of building and maintaining supportive, caring relationships between teachers and students. According to Valencia (1997), the organization of a school community greatly impacts the way teachers and students feel about the time they spend

10 For more information on positive student-instructor relationships see Battistich, Solomon, Watson and Schaps (1997).
at school. Valencia (1997) suggests that this could be accomplished by modeling caring relationships from the top down. Teachers who feel that administrators are genuinely interested and supportive of their work are likely to impart this same interest and support to their students (Battistich, Solomon, Watson and Schaps, 1997). As well, students and teachers can participate in non-academic activities together. Potential limitation of this suggestion is that some classes are too large.

4.2 Option 2: Increase awareness of Aboriginal cultures

The university should promote an understanding of Aboriginal students and awareness of Aboriginal cultures. To this end, the university should continue working in liaison with the First Nations Student Centre and First Nations Students Association to support Aboriginal cultural events at the university. As well, SFU should write an Aboriginal handbook- a guide to provide information to members of the university community who are interested in understanding Aboriginal students. The handbook should cover a brief history of Aboriginal peoples in British Columbia and in Canada, information about Aboriginal students' learning processes, tips on what to consider when teaching Aboriginal students, and dates when Aboriginal events are held on campus.

4.3 Option 3: Including Aboriginal content in the curriculum

Include Aboriginal content in all courses as appropriate. Where possible, use positive examples of Aboriginal achievements and contributions. Faculty may need help with this; hence the need for Aboriginal led seminars to discuss Aboriginal experiences. Further, faculty members could be encouraged to sought contemporary information and debates on Aboriginal issues and include this in the curriculum and teaching process. For
example, because there are a number of First Nations reserves near SFU (such as Squamish, Katzie, and Tsawwasen), a political science class may mention the difference in Aboriginal governance structure before and after negotiation of self-governance; or community versus private property rights among various First Nations. Such examples will not only be of interest to Aboriginal and non-Aboriginal students, but also relevant to the course being taught.

4.4 Option 4: Teaching methods that recognize Aboriginal learning styles

The theory of ‘Aboriginal learning styles’ states that there are significant differences in the ways in which Aboriginal and Caucasian students learn (Kuang-Ding and Ming-Fang, 2002). These differences mean that to be successful, teachers of Aboriginal students must modify their teaching approaches and practices while at the same time respecting the multicultural reality of Canadian classrooms. Hughes and More (1997) propose a four-step teaching methodology when teaching in classrooms with Aboriginal students: 1) identification of learning styles of students using classroom observations and research related to recurrent, culturally based learning styles, 2) matching teaching styles to learning styles, 3) strengthening weaker ways of learning, and 4) developing learning style selection strategies. Hughes and More (1997) assert that while learning style decisions are sometimes made unconsciously, in many cases it may be beneficial for students to learn how to make conscious decisions about appropriate ways of learning.

Study participants indicated a preference for teaching methods that 1) emphasizes cooperation rather than competition in the classroom (see also Maina, 2002); is holistic,
that is, the student concentrates on understanding the overall concept or task before getting down to the details (see Hughes, 1985). By contrast, Harris (1995) reported that non-Aboriginal students tend to emphasize sequential (or analytic) learning as a result of their verbal learning style; and 3) reflective learning style in which the student is slow to respond and thinks the answer through before responding, if at all. According to Hughes and More (1997), the motivation for reflective way of learning could be to avoid embarrassment; shame and ridicule if the student does not provide the ‘correct’ answer (see also Malin, 1990).

Further, SFU should redesign its teaching assistantship program to prepare graduate students for teaching undergraduates. This is because many students go directly from their bachelor’s degree into graduate school and may take teaching assistantships immediately with little or no training (The Boyer Commission on Educating Undergraduates in the Research University, 1998). Currently, the Centre for University Teaching and Continuing Studies at SFU offers workshops for teaching assistants on campus. However, participation in these workshops is not mandatory. As well, the teaching and technological skills that are covered in the workshops as being essential for teaching assistantship do not pay special attention to Aboriginal students (see Learning and Instructional Development Centre, 2005).
5 Multi-criteria analysis of policy options

The four policy options identified above are analyzed in this section using seven criteria to determine the consequences that are likely to follow if the options are implemented.

5.1 Definition and measurement of criteria

Table 16 summarizes the definitions and measurements of the criteria used to test the proposed policy options: organizational structure; cost acceptability; administration; monitoring; understanding of the policy; political acceptability; and effectiveness.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Definition</th>
<th>Measurements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational structure</td>
<td>What sort of organizational structure is needed to implement the policy, does it exist?</td>
<td>1 = Organizational structure exists  0 = Does not exist</td>
</tr>
<tr>
<td>Cost</td>
<td>a) Cost relative to other policy options; b) cost relative to that of similar project in other universities.</td>
<td>High / Medium / Low</td>
</tr>
<tr>
<td>Administration</td>
<td>Does administrative structure exist? Option to be implemented without excessive additional administrative inputs.</td>
<td>1 = Administrative structure exists/ less additional inputs  0 = Administrative structure does not exist</td>
</tr>
<tr>
<td>Monitoring</td>
<td>The option will be monitored with readily available management information</td>
<td>1 = Readily available information  0 = Information not readily available</td>
</tr>
<tr>
<td>Understanding of the policy</td>
<td>The option should be readily communicable to all stakeholders at minimal costs</td>
<td>1 = Readily communicable  0 = Not readily communicable</td>
</tr>
</tbody>
</table>
Having defined and established the unit of measurement for the criteria, the policy options are evaluated against the criteria (see Table 17 below). They are then ranked according to order of priority. The option, increasing awareness and understanding of Aboriginal cultures, is ranked first because it meets all the criteria. Including Aboriginal content in the curriculum is ranked third because it does not score as high against the criteria. It is noted that the options are not necessarily mutually exclusive.

Table 17   Evaluation matrix for policy options

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Policy Options</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Increase awareness of Aboriginal cultures</td>
</tr>
<tr>
<td>Organizational structure</td>
<td>1</td>
</tr>
<tr>
<td>Cost</td>
<td>Low/High</td>
</tr>
<tr>
<td>Administration</td>
<td>1</td>
</tr>
<tr>
<td>Monitoring</td>
<td>1</td>
</tr>
<tr>
<td>Understanding of the policy</td>
<td>1</td>
</tr>
<tr>
<td>Political acceptability</td>
<td>1</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
</tr>
</tbody>
</table>
5.2 Increase awareness and understanding of Aboriginal cultures

This policy option is evaluated against a set of criteria below:

5.2.1 Political acceptability of the policy

Political feasibility as used in this study refers to the a priori acceptance of the option by those who are directly or indirectly affected by the policy. These stakeholders include students, university administration, faculty, and the general public. This alternative is likely to be generally acceptable to the major stakeholders as Aboriginal cultures are the only truly indigenous cultures of Canada because all other Canadians were originally immigrants (Bedford and Irving, 2001). Further, Aboriginal peoples have always welcome and encouraged non-Aboriginal people to their ceremonies. This option could enhance mutual respect and understanding between Aboriginal and non-Aboriginal students thereby creating a school environment that is conducive to student success.

5.2.2 Cost acceptability of the policy

Aboriginal awareness campaigns are more visible during the new student orientation and Aboriginal Awareness Week. Aboriginal participation in the orientation program, welcome powwow and other ceremonies (such as sweat-lodge) currently costs about $7,000 per year.\textsuperscript{11} To expand the program to fully meet demand would require annual funding of $12,000. Aboriginal Awareness Week is designed to profile Aboriginal community on campus and in British Columbia. It involves lectures and panel discussions on a range of diversity issues, traditional dance performance and round dance. These activities take place on campus and are open to all students, faculty and

\textsuperscript{11} All monies cited here are in Canadian dollars.
staff at a cost of about $20,000.12 The lead to increasing Aboriginal and cross cultural awareness, help both to make Aboriginal students feel more connected to the university and to encourage non-Aboriginal students to become more interested and involved in the Aboriginal community around them.

5.2.3 Understanding of the policy

Joint effort by the university administration, First Nations Student Centre and the First Nations Student Association will design a webpage called ‘Aboriginal experience at Simon Fraser University’ that would be linked to the SFU homepage. This webpage will describe both academic and non-academic support programs available at SFU that promote awareness of Aboriginal culture on campus as well as provide opportunities to increase the recruitment, retention and success of Aboriginal students. This project will cost approximately $1,000.

5.2.4 Administration of the policy

There is an existing administrative structure at SFU to help increase Aboriginal awareness at the university. This includes the First Nations Student Centre, First Nations Student Association, and student recruitment office. The university has the authority, commitment and capacity to implement this policy. Already the university advertises itself to potential students hence, increasing awareness of Aboriginal students both to potential and current students will not require excessive additional administrative inputs.

---

12 These costs are calculated from First Nations Student Centre, First Nations Student Association (both at SFU) and Campaign for the University of Saskatchewan (2005).
5.2.5 Monitoring of the policy

This policy option can be monitored by the number of hits registered in the proposed Aboriginal experience at SFU webpage as well as the publicity campaign and attendance at the Aboriginal cultural activities on campus. These would be compared to the previous year's record and the targeted goal. This can be done by the First Nations Student Centre in conjunction with the First Nations Student Association.

5.2.6 Organizational structure to implement the policy

There is organizational structure on the ground to help with increased awareness of Aboriginal cultures on campus. This includes the First Nations Student Centre, First Nations Student Association, and the student recruitment department at the registrar's office.

5.3 Positive student-instructor relationship

This option was analyzed against criteria below:

5.3.1 Political acceptability

It is anticipated that this policy option will be acceptable to all major parties involved: administrators, faculty, students and First Nations. As stated earlier, there is a strong correlation between university education and employment opportunity (Richards and Vining, 2004). Based on the findings of this study (for example, students' expression of barriers to their academic success), there are adequate reasons to believe that this policy option could receive strong support among Aboriginal population, faculty and administrators. The option is also likely to evoke desirable response from Aboriginal
communities, that is, support for Aboriginal student enrolment in and successful completion of university programs.

5.3.2 Cost acceptability

As already discussed, meaningful student-instructor relationship will not only facilitate student success, but will also enhance student academic self-esteem. This policy option is unlikely to cost any additional funding to the university. However, instructors may need to spare at least one additional hour weekly for their students.

5.3.3 Understanding of the policy

The proposed policy option of healthy student-instructor relationship can be readily communicable to the students and faculty members. New faculty members and teaching assistants will be informed of this policy. As well, an Aboriginal student faculty guide that emphasizes the importance of a meaningful student-instructor relationship could be published in print or posted online.

5.3.4 Administration of the policy

SFU has a commitment to the success of its students. The proposed policy of positive student-teacher relationship can be carried out without requiring extra administrative inputs by the university. SFU already has policies that guide student-faculty relationship. It is about teachers and students having a constructive relationship aimed at facilitating student success.
5.3.5 Monitoring of the policy

The proposed option of positive student-instructor relationship does not meet the criteria of ‘monitoring of the policy.’ Relationships are largely personal by definition. While ‘negative’ relationship could be monitored by reported cases of complaints, positive relationships are hard to monitor.

5.3.6 Organizational structure to implement the policy

SFU has policies that guide the conduct of behaviour of its students and staff. Hence, the policy that promotes meaningful student-instructor relationship could be carried out under the existing organizational arrangements.

5.4 Teaching methods that recognize Aboriginal learning styles

The proposed policy of teaching methodology that takes in to account Aboriginal learning styles is hereby evaluated against criteria:

5.4.1 Political acceptability

Every student has his/her strengths and weaknesses, and this includes learning styles. This option is likely to be acceptable to all stakeholders (students, faculty members, administrators, and parents) for the fact that it employs teaching methods that take into consideration Aboriginal learning styles, individual differences of the students, and use the students’ strengths in the teaching-learning process to maximize their learning.
5.4.2 Cost acceptability

This option falls within acceptable university budget limitations: Hiring of faculty members will take into consideration their teaching ability, hence minimal additional costs required. However, offering teaching methods training to graduate students holding teaching assistantships will cost about $1,500 per person.\textsuperscript{13} Considering the benefits accruing to students (and the university) by not having to re-take a course, the cost of training a teaching assistant is far outweighed by the benefits. SFU currently offers workshops for teaching assistants on campus. Participation in the workshops should be mandatory. Aboriginal involvement in the workshop should be encouraged so as to have Aboriginal sensitive teaching techniques. University of Regina and University of Manitoba involve Aboriginal community in their teaching assistant training. SFU could borrow their example.

5.4.3 Understanding of the policy

The policy will be readily communicable to all faculty members and students in the Aboriginal student faculty guide. It could also be communicated to teaching assistants during their training.

5.4.4 Administration of the policy

The policy option may not be easy to administer because instructors could vary their teaching methods depending on variables like class size, course content, and their own teaching strengths.

\textsuperscript{13} This amount is based on the costs of training graduate student teaching assistants at Duke University and University of California at Los Angeles.
5.4.5 Monitoring of the policy

The policy will be monitored at the department and faculty level by the organizational structure already in place (see the organizational structure criteria). Students could be asked during the course/instructor evaluation about the teaching methods used in respective course.

5.4.6 Organizational structure

There are organizational structures at the departmental level that determines the courses to be taught in a given semester and by which instructor. These structures can enable the implementation of the teaching methods policy at minimal cost.

5.5 Include Aboriginal content in the curriculum

This proposed policy is evaluated below against the criteria:

5.5.1 Political acceptability

This policy is less likely to get broad support among stakeholders, especially students. SFU has a diverse student population from across Canada and from over 90 countries around the world (SFU International, 2005). As the number of students (and faculty members) from outside North America continue to increase at SFU, it is likely that the concerns and reactions of such stakeholders to this policy option may not be a favourable one. These stakeholders from diverse ethnic and cultural backgrounds may question the special status of their Aboriginal counterparts. This could be measured by targeted surveys at the end of the semester or academic year.
5.5.2 Cost acceptability

Having Aboriginal content in the curriculum will require additional costs. For example, professors will need more time to research on Aboriginal issues and prepare for their lessons. University could help by having an Aboriginal curriculum advisor for disciplines with more Aboriginal content such as history, criminology and sociology. Total costs involved in implementing this policy are likely to be significantly less than the benefits.

5.5.3 Understanding of the policy

The policy of broad Aboriginal content in the curriculum is readily communicable to stakeholders in the form of a handbook of Aboriginal student faculty guide. The handbook could be put online or in print at a cost of $10,000 or less.

5.5.4 Administration

The university has the authority and capacity to decide on what to include in its course outlines. Thus, implementation of this policy does not require additional administrative inputs.

5.5.5 Monitoring

It is very difficult to monitor the inclusion of ‘enough’ Aboriginal content in the curriculum as this is largely an individual instructor’s jurisdiction. As well, the definition of ‘enough Aboriginal content’ is unclear. Further, some disciplines tend to have more Aboriginal issues than others.
5.5.6 Organizational structure

Certain courses, such as mathematics and research methods, are less likely to have significant Aboriginal content. No organizational structure is needed to ensure that Aboriginal content appears in the curriculum for such courses. However, for the disciplines with more Aboriginal content, there is already organizational structure in place, which determines the courses offered each semester, to implement this policy.
6 Recommendations

Based of multi-criteria analysis of the policy options, the following recommendations are made. It should be noted that the recommendations are not necessarily mutually exclusive.

6.1 Increase awareness and understanding of Aboriginal cultures

This study found that for effective learning to take place, students must feel that the school reflects their cultural community. This policy option scored the highest in the evaluation matrix. Hence, it should be given the highest priority. It is cost effective, politically acceptable and does not need excessive additional administrative input to implement.

6.2 Use teaching methods that consider Aboriginal learning styles

Based on literature reviews and the findings of this study, it is observed that despite individual differences among Aboriginal students, there are learning styles that tend to be common among the said Aboriginal students. When taken into consideration during the teaching-learning process, are likely to facilitate Aboriginal student success. This policy option is likely to receive wide Aboriginal support, as it is easily communicable to various stakeholders in the form of a handbook or online. However, this policy option may not be easily administered as teaching methods may vary with course content (for example, fieldwork, or laboratory session versus a policy analysis class) and instructors teaching strengths and training.

6.3 Positive student-instructor relationship

This study found that positive student-instructor relationship could improve students’ academic self-confidence and facilitate their success. This option is likely to receive Aboriginal and other stakeholders’ support, is cost effective, and is easily
communicable (most educational institutions, including SFU, have policies on code of conduct of their students and staff). However, the policy may not be easily monitored, as people tend to report negative experiences rather than positive ones.

6.4 Include Aboriginal content in the curriculum

As shown in Section 6.1, including Aboriginal content in the curriculum is likely to facilitate Aboriginal success. While this option scored the lowest points in the analysis matrix, it is likely to be effective and is readily communicable to various stakeholders. However, the issue of how much Aboriginal content should be included is debatable.
Conclusion

Smith (1999) was right in her observation that “Indigenous research is a humble and humbling activity” (p. 5). Experience of conducting this study has led me to the conclusion that investigating ways of facilitating success of Aboriginal students is a complex area of study. The issues and challenges are more complicated than I had anticipated, yet they are as powerful and real as told by the study participants. It does not help that I have a non-Aboriginal background and that the first time I was ever in a class with an Aboriginal person (whether teacher or student) was just one year prior to conducting this study as a student in the Master of Public Policy Program at Simon Fraser University. Thus, my conclusion is based on my observations, limited exposure to Aboriginal students at SFU, as well as related literature.

Aboriginal students are different yet similar in many ways. This study found that facilitating success of Aboriginal students involves improving cross-cultural competence by increasing awareness of Aboriginal cultures, adopting teaching practices that are culturally relevant, appropriate, and sensitive to Aboriginal students, and encouraging a positive relationship between students and instructors.

As noted earlier, most studies of Aboriginal educational outcomes often use such indicators as dropout and completion rates. This study, however, asked Aboriginal students for their perception of success. Their response ranged from meeting graduation requirements and perseverance in school to learning other cultures and meeting requirements for one course. Thus, success has diverse meanings to the students.
Therefore, there should be on-going consultations between the university and Aboriginal students to ensure Aboriginal student success rather than wait until graduation time to determine the completion and or dropout rates for Aboriginal students.

As well, it was evident in this study that Aboriginal students appreciate being talked to (as opposed to being treated as numbers, for example, 10 percent of Aboriginal students graduated/ dropped out). Hence, future studies with Aboriginal students should use methodologies that seek the student voices and respect Aboriginal oral tradition as a valid way of knowledge.

SFU already has most administrative and organizational structures in place to implement the recommendations made at minimal costs. Most professors teach classes with students from diverse ethnic, racial, and cultural backgrounds. However, they will need support, for example, on Aboriginal sensitivity if they are to successfully implement the recommendations. Finally, it should be remembered that implementing these recommendations would not lead to immediate improvement in Aboriginal experience at SFU.
Appendices

Appendix 1: Median Age

Figure 2 Median age for Aboriginal and non-Aboriginal population, Canada and provinces, 2001

Median age is the point where exactly one-half of the population is older, and the other half is younger. In 2001, the median age of Canada's Aboriginal population was 13 years younger than that of non-Aboriginals (that is 24.7 versus 37.7 years old). Saskatchewan and Manitoba had the youngest Aboriginal populations - with the median age of about 20.1 and 22.8 respectively.

On-reserve population is also relatively young (not shown in the figure above). In 1996, 56 percent of all reserve residents were under age 25, compared to 50 percent of...
Aboriginal population living in census metropolitan areas (CMAs). Furthermore, seniors account for a relatively large share of the on-reserve population. In 1996, people aged 65 and over made up four percent of the on-reserve population, compared to less than three percent of Aboriginals in large urban areas. In contrast, relatively few on-reserve residents are in the prime working years of 25 to 44. In 1996, just 28 percent of those living on reserves, compared with 34 percent of Aboriginal peoples in CMAs, were in the 25-44 age range (Statistics Canada, 2003b).
Appendix 2:
First Nations Guiding Principles, Simon Fraser University

Preamble

The First Nations Advisory Council of Simon Fraser University has considered how the University could better serve First Nations students and communities, and offers the following principles as an initial guide for future actions in this endeavour. Some first steps toward implementation are subsequently outlined below in an action plan. For its part, the University appreciates the advice and wisdom the council offers, and will seek to follow this advice as it takes action to develop and improve this dimension of its educational mandate. When doing so, the University will recognize the diversity of the First Nations of Canada and the First Nations Advisory Council will recognize the academic authority of the University’s Senate.

Guiding Principles

I. The University recognizes the unique educational needs and identities of First Nations.

II. As First Nations acquire increased control over governance, education, health care, and other social and economic dimensions of their communities, the educational contribution of the University to First Nations should support their efforts in this process.

Encourage full and equitable participation by First Nations people at SFU.

Based on this principle, SFU will work to increase First Nations student enrolment to a proportion commensurate with that of the representation of First Nations people in the general population of British Columbia.

III. Provide a supportive academic and community environment for First Nations people at SFU.

First Nations students enrolled at SFU will have access to financial support programs, such as grants and fellowships, and non-financial support programs, such as mentorship and supportive social context.

IV. Acknowledge, respect and incorporate First Nations values and tradition in the programs of the University, subject to Senate approval.

As an institution dedicated to discovering and transmitting knowledge,
the University should make good use of the traditional knowledge developed over the years by First Nations people, and will support academic work that incorporate indigenous knowledge.

V. Address the higher education needs and aspirations of First Nations communities.

The University recognizes the range of educational needs of First Nations communities as they strive to protect their ancestral cultures and languages and as they develop new forms of governance.

VI. Collaborate and form partnerships to serve First Nations’ educational objectives

This principle guides SFU to seek out alliances with First Nations and with other institutions in the broader community to achieve educational objectives that benefit First Nations.

VII. Affirm the ongoing institutional commitment to higher education among First Nations’ communities.

The University will monitor progress in connection with these guiding principles and will report accordingly to the First Nations Advisory Council.

Appendix 3:
Letter of introduction

James Oloo
10-6395 Hawthorne Lane, Vancouver BC V6T 1Z4 E-mail: joloo@sfu.ca Tel: (604) 818 3145


My name is James Oloo. I am a student in the Master of Public Policy Program at Simon Fraser University. I am conducting research for my thesis. I am investigating strategies for facilitating success of Aboriginal students. To this end, I would like to conduct a focus group interview of 1) Simon Fraser University (SFU) students who identify themselves as Aboriginal, 2) SFU faculty members identified by the said student s as having had a positive influence on them as their professors, and 3) administrative staff at the SFU First Nations Student Centre.

Your participation is voluntary. You are not obliged to answer any question. The data collected will be confidential. Hence, participants' names are not required. Your participation is highly appreciated.

Should you have any concerns regarding this study, please contact my supervisors Professor Kennedy Stewart, telephone: (604) 268-7913, E-mail: kennedys@sfu.ca; or Professor Nancy Olewiler, telephone: (604) 291-5289, E-mail: olewiler@sfu.ca.

Yours truly,

James Oloo
Appendix 4:
Seeking participants for study on facilitating success of Aboriginal students

James Oloo, a student in the Master of Public Policy Program, Simon Fraser University, requests your participation in a study entitled:

‘Strategies for facilitating success of Aboriginal students: The case of Simon Fraser University’

Nature of the study
The objective of this study is to identify ways in which SFU can encourage successful completion of programs for Aboriginal students. Attention to the educational experience of Aboriginal students as a unique group is warranted for several reasons: 1) historical relationship between Aboriginal peoples and formal education, 2) Aboriginal demographics, and 3) under-representation of Aboriginal students at SFU (and other Canadian universities).

The investigator hopes to obtain a more complete picture of the present barriers faced by Aboriginal students, what 'success' incidents they have experienced at SFU, and what they think is likely to enhance the successful completion of their programs at SFU. The investigator will then formulate specific strategies for enhancing the success of Aboriginal students.

Type of participation sought
We are seeking participation from SFU students who identify themselves as Aboriginal.

How to participate
If you would like to contribute information to this study, please contact James Oloo at joloo@sfu.ca or phone: (604) 818-3145. Please note that your participation in the 15-20 minute interview is optional and all identifying information will be kept confidential. Thank you in advance.

James Oloo
Bibliography


Development Goals in Asia and the Pacific Region. Retrieved on February 1, 2005 from www.unescap.org/povertycentre/Papers/China_Binglong.doc


