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ABORIGINAL UNIVERSITY STUDENT SUCCESS *in* BRITISH COLUMBIA, CANADA: TIME *for* ACTION

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Abstract

Educational outcomes for Aboriginal students in British Columbia, and Canada in general, are a cause for considerable concern. High dropout rates, low participation, completion and success rates at educational institutions have challenged educators for decades. Solutions have included lowering admission requirements for Aboriginal candidates and establishing alternative programmes 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 undergraduate students, seven professors, and five non-academic staff at four universities in British Columbia, namely: Malaspina University College, University of Victoria, University of British Columbia, and Simon Fraser University. It presents their definitions of student success and how this could be improved. Four policy options are proposed. These are then tested against six criteria to determine the potential consequences of their implementation. Recommendations are made to British Columbia's universities based on the multicriteria analysis.

Introduction

Perhaps no educational topic has generated more attention and debate than the phenomenon of racial differences in academic achievement as measured by dropout rates and highest level of schooling completed (Cokley, 2003). Aboriginal students at all levels of education have been one of the segments of the Canadian population most often at the center of this debate (Association of Canadian Community Colleges, 2005; BC Stats, 2005; Human Capital Strategies, 2005). In 1980, 2% of the Aboriginal population as compared with 8.1% of their non-Aboriginal counterparts held university degrees in Canada. In 1990, the figure had risen to 2.6% compared with 11.6% for the non-Aboriginal population. In 1996, 4.2% of Aboriginal population had completed university degree programmes compared with 15.5% of non-Aboriginals (Statistics Canada, 2003). Although the proportion of Aboriginal population with university degrees has increased over time, the gap between Aboriginal and non-Aboriginals with university education is still widening. In 2001, Aboriginal peoples represented 4.4% of the population of British Columbia (BC). According to the Ministry of Advanced Education's 2002/3 baseline data, there were about 13,900 Aboriginal students in BC's public postsecondary institutions representing 3.7% of the student population (Ministry of Advanced Education, 2004).

Many analysts have established a positive correlation between formal schooling and socio-economic challenges facing Aboriginal peoples. For example, Hunter (1997) found education to be the single most important factor associated with improving employment outcomes for Aboriginal Australians and reducing rates of arrest. Partington (1998), however, highlights the problematic nature of a Western education for Aboriginal people, which he describes as a double-edged sword. On one hand, as Stonechild (2006) puts it, just as in the olden days the buffalo met virtually every need of Aboriginal peoples of Canada, from food to shelter, today, education is the "new buffalo" that will be the key to survival. On the other hand, unresolved trauma of Aboriginal people who experienced or witnessed physical and sexual abuse in the residential school system is passed on from one generation to the next (Aboriginal Healing Foundation,

1999). The ongoing cycle of intergenerational abuse in Aboriginal communities (Indian and Northern Affairs Canada, 2006; Public Health Agency of Canada, 2007; Ross, 1995; Stonechild, 2006), a legacy of abuse in residential schools (Aboriginal Healing Foundation, 1999) continues to adversely affect Aboriginal participation in schooling.

It is worth mentioning that, in general, locating historical data relevant to Aboriginal postsecondary education is not easy (Oloo, 2005; Richardson and Blanchet-Cohen, 2000; Walters et al., 2004). As Archibald et al. (1995) succinctly put it: "It has not been customary in Canada for many universities to keep records distinguishing First Nations people from others so that reports such as those reported by Association of Universities and Colleges of Canada provide little information about First Nations access and retention" (Archibald, 1995, cited in Richardson & Blanchet-Cohen, 2000, p. 16). Even where Aboriginal students are encouraged to self-identify as is the case in the four universities discussed here, the numbers are not always accurate or available because many Aboriginal students have concerns about "self-identifying" as Aboriginal when asked due to the fear of racism and racial stereotyping. This study hopes to counter the absence of this information by introducing the voices of Aboriginal students.

▓ The setting

This study was conducted at Malaspina University College, University of Victoria, University of British Columbia (UBC), and Simon Fraser University (SFU). The four institutions are located in the Province of British Columbia, Canada. To provide an enabling environment for the successful educational experience for Aboriginal students, SFU "recognises the unique educational needs and identities of First Nations students and incorporates First Nations values and tradition in the programs of the University" (First Nations Advisory Council of Simon Fraser University, 2003).

The UBC First Nations House of Learning advocates "the kind of education that will truly liberate us so we can have the independence once enjoyed by our ancestors" (Kirkness, 1996, as cited in Richardson & Blanchet-Cohen, 2000, p. 16). At Malaspina University College, an objective of the First Nations Student Services is to enable First Nations students to succeed in their academic endeavours by providing both direct and indirect services and appropriate referrals (Malaspina University College, 2006). The Le,nonet (a Sencoten word meaning "success after enduring many hardships") project at the University of Victoria has been designed to help create a space at the university where Aboriginal students feel "welcomed, can be successful in a community environment, and experience a beneficial educational experience" (Aboriginal Liaison Office, 2006). To achieve these

goals, the universities, through various programmes, provide services to Aboriginal students that include personal counselling, employment information and career planning, funding and student loan applications, day-care, as well as promoting cultural, recreational and social activities. Each of the universities' admission and policy frameworks are briefly discussed below.

▓ The University of British Columbia (UBC)

According to 2005 estimates, there were a total of 331 Aboriginal students attending UBC: 113 males and 218 females. Just over 1% of both faculty and staff at UBC identified themselves as Aboriginal (Holmes, 2006). A statement on the UBC web page for Aboriginal student applicants states that, "UBC is dedicated to making its resources more accessible to Aboriginal people, and to improving the university's ability to meet their educational needs" (UBC, 2006). To this end, Aboriginal students who do not meet the university-wide minimum grade of 67% for admission may be considered on an individual basis with input from First Nations House of Learning.

UBC has other programmes to help in Aboriginal student recruitment. These include a free two-week summer camp for Aboriginal middle school students to sensitise them on the importance of university education. Since 1988, the Institute of Aboriginal Health has been offering a one-week summer science programme for students in grades eight to eleven. As well, the Native Youth Program at the UBC Museum of Anthropology offers Aboriginal youth the chance to research and interpret their cultures in a museum setting. UBC has implemented curricular transformation to enhance relevancy for Aboriginal experience by incorporating First Nations content across disciplines. Further, UBC has developed a number of Aboriginal specific and focused programmes such as Aboriginal Residency Program (Faculty of Medicine); First Nations Legal Studies (Faculty of Law); Chinook Aboriginal Business Program (Sauder School of Business); and Tskel First Nations Graduate Studies in Education (Faculty of Education).

▓ Malaspina University College

About 10% of Malaspina University College students self identify as Aboriginal. The institution keeps records of retention, progression and graduation of its students. To increase Aboriginal student enrolment, Malaspina University College, through First Nations Student Services, organises campus visits and tours. The institution also offers academic programmes with an Aboriginal focus such as Bachelor of Arts degree in First Nations Studies, as well as "Arts One-First Nations", a multidisciplinary learning community for first year students. The latter targets students who are interested in the interaction between Aboriginal and

"non-Aboriginal" cultures within a broad "introduction to interdisciplinary study in humanities and social sciences" (Holmes, 2006).

Other initiatives to encourage Aboriginal student success at Malaspina University College include the establishment of the position of Educational Counsellor First Nations, First Nations students union, scholarships and bursaries for Aboriginal students, and three elder-in-residence positions. The university has also adopted an administrative and policy framework that includes cross-cultural sensitivity training offered to the members of the university community, a strategic plan for Aboriginal education, a First Nations advisory committee, and position of the director of Aboriginal education.

University of Victoria

In 2005, Aboriginal students accounted for about 2.5% of the University of Victoria's student population. Two percent of the faculty and less than 1% of the university staff self-identified as Aboriginal (University of Victoria, 2006). University of Victoria has a statement in its Calendar thus, "The University welcomes applications from those of First Nations, Metis, and Inuit ancestry. Applications from First Nations, Metis, and Inuit students who do not qualify under the other categories of admission will be considered on an individual basis" (University of Victoria, 2006). As well, the University's web page for the "Indigenous student community" has a section of FAQs (frequently asked questions) directed at Aboriginal applicants. Other programmes aimed at improving Aboriginal enrolment, retention, and success at the University of Victoria include training of staff and faculty to increase their ability to support Aboriginal students, office of Aboriginal recruitment officer, and Aboriginal-focused programmes such as Bachelor of Social Work: First Nations specialisation, and graduate Indigenous governance programme. Also, the Le,nonet project provides transition support to new students, peer mentoring, community internships, and research apprenticeships, among others.

A goal in the University of Victoria's strategic planning document, *A vision for the future*, is "To increase the number of Aboriginal students graduating from all faculties at University of Victoria, building on our commitment to and our unique relationship with First Nations communities" (University of Victoria, 2006). To achieve this goal, the University has implemented a number of policies to

> enhance the recruitment, retention and graduation of Aboriginal students; secure funding for and construct the First People's House, and enhance support services for Aboriginal students; and support the development of curriculum and methodologies supportive of the needs of the Aboriginal community (Aboriginal Liaison Office, 2006).

Simon Fraser University (SFU)

Simon Fraser University has a student population of about 20,000, approximately 2% of which is Aboriginal. To provide a conducive environment for the successful educational experience for Aboriginal students, SFU "recognises the unique educational needs and identities of First Nations students and incorporates First Nations values and tradition in the programs of the University" (First Nations Advisory Council of Simon Fraser University, 2003). To this end, SFU has a First Nations Student Centre, which provides such services to Aboriginal students as counselling, academic advice and recruitment. 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.

First Nations Student Centre at SFU publishes a list of over 30 undergraduate courses with Aboriginal content. These include First Nations studies, Seniors Program in Aboriginal Spirituality, and Undergraduate Semester in Dialogue on Aboriginal Issues. Currently, there are neither measures of student success, nor the number for Aboriginal faculty and staff.

Despite UBC, Malaspina University College, University of Victoria and SFU's efforts to facilitate the success of Aboriginal students, this study identified the following organisational impediments as likely to inhibit quality learning opportunities for Aboriginal students at the four institutions: (1) a general lack of readily accessible data about Aboriginal students' learning experiences; (2) limited (or lack of an) effective medium for Aboriginal student voice in mainstream programmes to be heard; and (3) few Aboriginal faculty members.

Policy problem

This study aims to identify ways in which University of British Columbia, University of Victoria, Malaspina University College, and Simon Fraser University can encourage successful completion of programmes for Aboriginal students. Specific research objectives were: (1) to investigate, with Aboriginal students, areas where the four institutions have facilitated their academic success as well as areas where they think changes ought to be made; (2) to learn from the institutions' 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 programmes for Aboriginal students. Student definitions of success included:

> "I'll be graduating in spring!"

> "I have successfully finished my first year. I'm a single mother of two ..."

"Even if I quit (dropout from university) now, the knowledge I have gained here guarantees me a bigger pay-cheque at my reserve."

"My first semester as [a] university student has been so fulfilling. I am the first person in my extended family to attend university."

Most studies of Aboriginal educational experience often measure success by graduation and dropout rates (see Bell, 2004). This study, however, asked the students what they regard as success. 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 various students define success differently. Such definitions and associated variables could be continuously tested by stakeholders and adjustments made along the way rather than waiting until graduation time to examine completion and/ or dropout rates. Berger, Motte and Parkin (2007) posit that such policy adjustments should especially address what they describe as barriers to Aboriginal postsecondary education. These include academic barriers (as measured by grades or standardised tests), financial barriers, and lack of career focus or interest in higher education among students.

Methodology

This study uses qualitative methodology. 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 individual student behaviours and the larger social context. It is assumed that (1) Aboriginal students themselves could provide the most relevant accounts of their personal experiences and feelings, (2) a small sample (n=32) could yield sufficient data, and (3) the study would inform future, larger scale research. Seeking the participants' voices is important in this study because "education is the construction and reconstruction of personal and social stories" (Connelly & Clandinin, 1990, p. 2). Further, the personal experiences as told by the participants elucidate experiences of success and frustration as defined by the participants themselves.

Hypothesis

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

1. There is a positive correlation between the number of Aboriginal instructors and Aboriginal student success (Bazylak, 2002).
2. Including Aboriginal content in the curriculum is likely to enhance Aboriginal student success (Standing Committee on Aboriginal Affairs, 1990).
3. Teaching methods that acknowledge Aboriginal ways of learning are positively correlated with Aboriginal student success (Rowe & Rowe, 2002).
4. Higher instructor expectation of and accessibility to the students is likely to lead to student success (Astin, 1993; Leach & Zepke, 2003).

Recruitment procedures

Letters of request for participation were sent to First Nations student offices in the four universities between December 2004 and January 2005. Interviews were conducted with 20 Aboriginal undergraduate students, five from each institution – 13 female and seven male. Seven professors (three female and four male), who were identified by the students as having successfully worked with them, also participated in the study. One female and two male faculty identified themselves as Caucasian, four self-identified as Aboriginal. Also, five members of non-academic staff who work with Aboriginal students participated in the study. The non-academic staff, two from SFU and one each from UBC, University of Victoria and Malaspina University College, were mentioned by students as having helped them succeed on at least two occasions. They were two male and three female; two self-identified as either Métis or Aboriginal, while two identified themselves as Caucasian and Black respectively.

Data collection and analysis

Data collection was by open-ended interviews. The questions and probes were:

• Describe a "success" incident you have had in the past year at your current university.
• What would you say have been your major concerns or problems?
• Whom/what did you find most helpful in dealing with these problems?

Faculty and non-academic staff were asked to describe an experience when they had facilitated success of an Aboriginal student. Qualitative analysis was inductive in nature and conducted simultaneously with data collection. Data were analysed 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 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.

Results

Interview results are tabulated below using SPSS Crosstabs. The themes are grouped into six categories: (1) importance of teaching methods to the student's success, (2) Aboriginal elder, (3) teacher accessibility, (4) Aboriginal culture, (5) Aboriginal instructor, and (6) Aboriginal content.

Table 1 shows that 55% of the student respondents said that the presence of Aboriginal elders on campus 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. All the four universities under discussion have elders to provide culturally-appropriate counselling on-campus. The 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. The issue will not be pursued any further because SFU, UBC, Malaspina University College and University of Victoria have a similar proportion of Aboriginal elders.

Table 2 indicates that 75% of the student respondents identified a positive correlation between teaching methodology and their success. Keefe (1987) describes learning style as a way in which a person perceives, conceptualises and recalls information. Erickson and Mohatt (1982) argue that the learning styles of an individual are not determined solely by cultural background, but also by such factors as the student's life experiences and training. The result is significant individual differences in students' learning styles within and between cultural groups. Hughes and More (1997) point out that while there is no evidence for a single Aboriginal learning style, there are some recurrent learning styles which are more likely among Aboriginal students.

Table 3 illustrates that 55% of the student respondents associated teacher accessibility with their success. This finding supports my hypothesis.

Table 4 shows that 60% of students associated culturally-relevant curriculum with their success. This finding supports our hypothesis. Reynolds and Skilbeck (1976) posit that because individuals are shaped by culture, in planning a curriculum it is important to be aware of the ways in which culture impinges on the curriculum.

Table 5 demonstrates that only 25% of the students attributed their success to Aboriginal instructors. A review of literature found no consensus on the effect of Aboriginal teachers on academic success of Aboriginal students. While some researchers contend that Aboriginal students are more likely to be successful when taught by an Aboriginal instructor (Brady, 1996), others argue that most Aboriginal students are likely to attend schools where they are a minority or where majority of teachers are non-Aboriginal (Oloo, 2005). It follows that the issue is

Table 1. Aboriginal elders and student success.

Aboriginal students * Importance of Elder Crosstabulation

| | | | Importance of Elder | | Total |
			Not mentionsed	Mentioned important	
Aboriginal students	20	Count	9	11	20
		% of Total	45%	55%	100%

Table 2. Teaching methods and student success.

Aboriginal students * Teaching Method Crosstabulation

| | | | Teaching Method | | Total |
			Less important	Important	
Aboriginal students	20	Count	5	15	20
		% of Total	25%	75%	100%

Table 3. Teacher accessibility and student success.

Aboriginal students * Teacher Accessibility Crosstabulation

| | | | Teacher Accessibility | | Total |
			Less important	Important	
Aboriginal students	20	Count	9	11	20
		% of Total	45%	55%	100%

not about Aboriginal teachers, but any teacher who can teach Aboriginal students effectively.

Table 6 highlights that 90% of student respondents associated Aboriginal content in the curriculum with their success. This finding supports my hypothesis.

Major themes

Theme 1: Student-instructor relationship

One of the recurring suggestions during the interviews 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) and Laing and Robinson (2003). Below are respondents' thoughts regarding student-instructor relationship:

> University is too institutional, very anonymous. Sometimes you crave to put a human face to it and it is one of your professors as they are the people you encounter more frequently (Faculty member).

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 know their (Aboriginal) students (Faculty member).

> Sometimes you have a problem and you need to see a professor, and you can't think of booking (an) appointment. In that case, professor should be accessible (Aboriginal student).

As Sleeter and Grant (1986) put it, "Students and teachers must view one another as partners in the teaching-learning process" (p. 298).

Theme 2: Understand your students and be familiar with Aboriginal ways

This study found a positive correlation between awareness of Aboriginal ways and student success. Below are quotations from interviews:

> In my class presentation, I brought in a circle. The professor made sarcastic remarks, 'Oh, are

Table 4. Aboriginal culture and student success.

			Aboriginal Culture		Total
			Not mentioned	Important	
Aboriginal students	20	Count	8	12	20
		% of Total	40%	60%	100%

Table 5. Aboriginal teachers and student success.

			Aboriginal Culture		Total
			Not mentioned	Mentioned	
Aboriginal students	20	Count	15	5	20
		% of Total	75%	25%	100%

Table 6. Aboriginal content in the curriculum and student success.

			Aboriginal Content		Total
			Less important for success	Important for success	
Aboriginal students	20	Count	2	18	20
		% of Total	10%	90%	100%

we going to hold hands?' ... 'Are you done with your circle?' I felt that my culture is not honoured (Aboriginal student).

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 (Faculty member).

Perhaps instructors should understand that Natives (students) may have certain unique problems, do you know what I am saying? (Aboriginal student).

These Aboriginal voices support our hypothesis that being familiar with Aboriginal cultures and understanding the socio-economic challenges facing most Aboriginal peoples have a positive correlation to student success. Research show that the Aboriginal population experiences a number of social issues and risks that work against them to succeed in education. In general, they encounter higher rates of poverty, suicides, onset of diabetes, alcohol and substance abuse, single parents, and children placed in foster homes (Czasz, 1999; HeavyRunner & Marshall, 2003). This further supports the value of academic and career sources of support for Aboriginal individuals.

There is no question that most teachers are committed to Aboriginal student success. 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, posits that students who fail in school do so because of alleged internal deficiencies (such as cognitive or motivational limitations) or shortcomings socially linked to the student".

Theme 3: Include Aboriginal content in the curriculum

Interview results revealed that including Aboriginal content in the curriculum is likely to facilitate student success:

Aboriginal students and their non-Aboriginal colleagues may learn from and about one another (Non-academic staff).

What I have learned about my (Aboriginal) people(s) in some of my courses are simply eye-opening (Aboriginal student).

I had an Aboriginal professor from my reserve teaching my class about historical and socioeconomic experiences of the Natives. Nothing else would be more relevant and real (Aboriginal student).

Aboriginal students ... benefit from First Nations courses (Aboriginal student).

It would be cool if SFU had a little more Native content in its courses (Aboriginal student).

Scarfe (1990) points out that culturally-relevant curriculum fosters pride and a sense of identity for Aboriginal students. As the National Indian Brotherhood (1972) succinctly puts it, "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).

Theme 4: Teaching methods that recognise Aboriginal learning styles

Some of the respondents' voices regarding the correlation between teaching methodology and student success included:

My teacher is a smart dude, no doubt. But he thought I did not know anything about Aboriginal peoples! So we got into a big discussion. It escalated to a point where I just got up and left (Aboriginal student).

Let your students know that although you are a teacher and a researcher, you are also a student, and that you are willing to learn from them (Faculty member).

Aboriginal students are not victims who need to be rescued. Be humble, but have high expectations for achievement (Faculty member).

While there are no prescriptions on how to teach Aboriginal students (Oloo, 2005), teacher effects account for much of the variance in school achievement (Rowe and Rowe, 2002). According to Vandenberg (2000), there are differences between the ways that Aboriginal students and their non-Aboriginal counterparts acquire knowledge and skills. Vandenberg (2000) posits that despite differences among individual Aboriginal students, there are similarities in their learning styles. 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.

As well, teaching process should aim at improving self-esteem of the students. Ten percent of the students mentioned lack or low self-confidence as a barrier to their success. One student said, "My self-esteem was so low ... I was almost quitting school". 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 a positive correlation between self-esteem and academic success, while Cokley (2003) found a link between encouragement by teachers and academic self-concept of students.

Policy options

Based on the findings of this study, the following options are put forward. It is reiterated that there are no prescriptions of the ideal way of teaching Aboriginal students.

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 others, approachability, fairness, and the concerned and caring attitude of instructors 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.

Option 2: Increase awareness of Aboriginal cultures

Although hard to quantify, universities should promote an understanding of Aboriginal students and awareness of Aboriginal cultures. To this end, the University of Victoria does a commendable job through its Le,nonet programme by offering training to staff and faculty to sensitise them on experiences and unique needs of Aboriginal students. Other universities should consider doing the same, while at the same time, work in liaison with the First Nations students to support Aboriginal cultural events on campus. As well, the institutions 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 as well as tips on what to consider when teaching Aboriginal students.

Option 3: Include Aboriginal content in the curriculum

Aboriginal content should be included in all courses as appropriate. Faculty may need help with this; hence the need for Aboriginal-led seminars to discuss Aboriginal experiences and expectations. Further, faculty members could be encouraged to seek 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 in British Columbia, a political science class may mention the difference in Aboriginal

governance structure before and after negotiation for self-governance; or community versus private property rights among various First Nations. Such examples will not only be of interest to both Aboriginal and non-Aboriginal students, but also relevant to the course being taught.

Option 4: Teaching methods that recognise Aboriginal learning styles

There is research that suggests significant differences in the ways in which Aboriginal and Caucasian students learn (see Vandenberg, 2000). These differences imply 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. Study participants indicated a preference for teaching methods that emphasise cooperation rather than competition, and are holistic and reflective. 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.

Further, universities in British Columbia should redesign their teaching assistantship programmes to prepare graduate students for teaching undergraduates. Currently, many students go directly from their bachelor's degree to graduate school and may take teaching assistantships immediately with little or no training (Learning and Instructional Development Centre, 2005). At SFU, the Centre for University Teaching and Continuing Studies offers workshops for teaching assistants. 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).

Multicriteria analysis of policy options

The four policy options are analysed below using six criteria to determine the consequences that are likely to follow if the options are implemented. These are: (1) political acceptability; (2) cost of the proposed policy; (3) whether the policy option is readily communicable to stakeholders; (4) whether administrative structures exist to ensure the implementation of the proposed

policy; (5) how the policy will me monitored; and (6) organisational structure needed to implement the policy and whether it exists.

Increase awareness and understanding of Aboriginal cultures

Political feasibility 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 option is likely to be generally acceptable as Aboriginal cultures are the only truly Indigenous cultures of Canada because all other Canadians were originally immigrants (Leishman, 1996). Further, Aboriginal peoples have always welcomed others to their ceremonies. This option will enhance mutual respect and understanding between Aboriginal and non-Aboriginal students thereby creating an environment that is conducive to student success.

Aboriginal awareness campaigns are more visible during the new student orientation and Aboriginal Awareness Week. Aboriginal participation in the orientation programme, welcome powwow and other ceremonies (such as sweat-lodge) currently costs about $7000 per year. To expand the programme to fully meet demand would require annual funding of about $12,000. These activities take place on campus and are open to all students, faculty and staff at a cost of about $20,000. Joint effort by the university administration, First Nations student centres and the First Nations student associations should design a web page called "Aboriginal student experience at our university". This web page would describe both academic and non-academic support programmes available at the university that promote awareness of Aboriginal culture on campus as well as provide opportunities to increase the recruitment, retention and success of Aboriginal students.

There is an existing administrative structure at British Columbia's universities to help promote Aboriginal awareness on campus. This includes the First Nations Student Centres, First Nations student unions, and courses with Aboriginal content, among others. The universities have the authority, commitment and capacity to implement this policy. Already the universities advertise themselves to potential students hence, increasing awareness of Aboriginal students both to potential and current students will not require excessive additional administrative inputs. This policy option can be monitored by the number of hits registered on the proposed Aboriginal experience at the university web page as well as the publicity campaign and attendance at the Aboriginal cultural activities on campus. These will be compared to the previous year's record and a targeted goal. All the British Columbia universities

under discussion have organisational structures in place to help promote awareness of Aboriginal cultures on campus. These include First Nations student associations, and various admission and policy frameworks such as Aboriginal student recruitment departments at the registrar's office.

Positive student-instructor relationship

It is anticipated that this policy will be acceptable to most stakeholders. As stated earlier, there is a strong correlation being university education and employment opportunity. Based on the findings of this study, there are adequate reasons to believe that this policy option will receive strong support among Aboriginal community, universities, and the public. Positive student-instructor relationship will not only facilitate student success, but will also enhance student academic self-esteem. This option is unlikely to cost any significant additional funding to the university. However, instructors may need to spare at least one additional hour weekly for their students. The proposed policy can be readily communicable to the students and faculty. New faculty members and teaching assistants will be informed of this policy. As well, an Aboriginal student faculty guide that emphasises the importance of a meaningful student-instructor relationship will be published in print or posted online.

As already stated, universities have a commitment to the success of their students. The proposed policy can be implemented without extra administrative inputs by the university. The four institutions already have policies that guide student-faculty relationship. The proposed policy will, however, be difficult to monitor as relationships are largely personal by definition. While "negative" relationship could be monitored by reported cases of complaints, positive relationships are hard to monitor. The British Columbia universities under discussion have policies that guide the conduct of behaviour of their students and staff. Hence, the policy that promotes meaningful student-instructor relationship could be carried out under the existing organisational framework.

Teaching methods that recognise Aboriginal learning styles

Every student has his/her strengths and weaknesses, and this includes learning styles. This policy is likely to be acceptable to major stakeholders 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 maximise their learning. This option falls within acceptable university budget limitations. Hiring of faculty members will take into consideration their teaching ability, hence minimal additional costs are required. However, offering

teaching methods training to graduate students holding teaching assistantships costs about $1500 per person (Queen's University, 2002). Considering the benefits accruing to students (and the university) by not having to retake a course, the cost of training a teaching assistant is far outweighed by the benefits. Universities should offer workshops for teaching assistants on campus. Participation in the workshops could be mandatory and Aboriginal involvement encouraged.

The policy will be readily communicable to all faculty members and students in the Aboriginal student guide. It will also be communicated to teaching assistants during their training. The policy may, however, not be easy to administer because instructors could vary their teaching methods depending on such variables as class size, course content, and their own teaching strengths. The policy will be monitored at the department and faculty level by the organisational framework already in place. Students could be asked during the course/ instructor evaluation about the teaching methods used in respective course. There are organisational structures at the developmental level that determine the courses to be taught in a given semester and by which instructor. These structures will enable the implementation of the teaching methods policy at minimal cost.

Include Aboriginal content in the curriculum

This policy is less likely to get broad support among stakeholders, especially non-Aboriginal students. Universities discussed here have a diverse student population from across Canada and the world. As the number of international students (and faculty) increases at the universities, it is likely that the concerns and reactions of such stakeholders to this option may not be favourable. These stakeholders from diverse ethnic and cultural backgrounds may, out of ignorance, question the special status of their Aboriginal counterparts. This could be measured by targeted surveys at the end of the semester or academic year.

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. Already SFU, UBC, University of Victoria and Malaspina University College are either in the process of developing, or have a position of Aboriginal curriculum advisor for disciplines with more Aboriginal content such as history, criminology and sociology. Total costs involved in implementing this policy are significantly less than the benefits. 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 posted online or printed at a cost of $10,000 or less.

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 significant additional administrative inputs. It is difficult to monitor the inclusion of "enough" Aboriginal content in the curriculum as the definition of "enough Aboriginal content" is unclear. Further, some disciplines tend to have more Aboriginal issues than others. Certain courses, such as mathematics and research methods, are less likely to have significant Aboriginal content. No organisational 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 organisational structure in place, which determines the courses offered each semester, to implement this policy.

▨ Recommendations

Based on the multicriteria analysis of policy options, the following recommendations are made. While this study focused on British Columbia, it hopes that the recommendations may, with some adjustments, be applicable on other jurisdictions:

1. Increase awareness and understanding of Aboriginal cultures

This study found that for effective learning to occur, students must feel that the school reflects their cultural community. It is cost effective, politically acceptable and does not need excessive additional administrative input to implement.

2. Use teaching methods that consider Aboriginal learning styles

Despite individual differences among Aboriginal students, there are learning styles that tend to be common among the said Aboriginal students (Valencia, 1997; Vandenberg, 2000). When taken into consideration during the teaching-learning process, this policy is likely to facilitate Aboriginal student success. However, this option may not be easily administered as teaching methods may vary with course content (for example, fieldwork, laboratory session or lecture) and instructor's teaching strengths and training.

3. Positive student-instructor relationship

This study found that positive student-instructor relationship could improve students' academic self-confidence and facilitate their success. The policy is likely to receive Aboriginal and other stakeholders' support, is cost effective, and is easily communicable (the universities under discussion have policies on code of conduct for its students and employees). However, the policy may not be easily monitored, as

people tend to report negative experiences rather than positive ones.

4. Include Aboriginal content in the curriculum

As discussed above, including Aboriginal content in the curriculum is likely to enhance Aboriginal student success. This policy is likely to be effective and is readily communicable. However, the issue of how much Aboriginal content should be included is debatable.

Conclusion

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. While most studies of Aboriginal educational outcomes often use such indicators as dropout and completion rates, this study sought Aboriginal voices regarding success and this could be improved. 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 ongoing consultations between a university and Aboriginal students to ensure the latter is successful rather than wait until graduation time to determine the completion and/or dropout rates for Aboriginal students.

It is evident in this study that Aboriginal students appreciate being talked to (as opposed to being treated as numbers, for example, "10% 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. Universities in British Columbia already have most administrative and organisational 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 is worth noting that successful Aboriginal participation at the university is not only a commendable goal in itself, but studies demonstrate convincingly that investments in postsecondary education in general, and university in particular, show a significant rate of return. There are direct returns in higher employment rates, additional income that follows from obtaining a higher credential, and increased income tax revenue flowing to government from higher incomes (see BC Ministry of Advanced Education, Training and Technology, 1999).

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