

**CULTURAL DIVERSITY AND SECONDARY SCHOOL  
CURRICULA**

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*PRINCIPAL RESEARCHERS, CULTURE AND CURRICULUM RESEARCH PROJECT*

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## **AVANT-PROPOS**

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Cette étude examine la pertinence des pratiques d'enseignement et du programme d'études pour les élèves des provinces des Prairies qui font partie d'une population de plus en plus diverse sur le plan ethnoculturel. Le programme d'études du palier secondaire n'accueille souvent pas bien les perspectives d'immigrants canadiens, ne favorise pas la compréhension des peuples autochtones et métis ou ne les inclut pas. Les sujets comme l'histoire, les mathématiques et les sciences sont souvent enseignés comme s'ils étaient « en quelque sorte dépourvus de culture, minimisant son rôle dans l'acquisition des connaissances, des compétences et des attitudes. »

La présente étude avait pour objectif de cerner les préoccupations ethnoculturelles dans les différents sujets que les enseignants jugent pertinents dans le cadre de l'enseignement et qui répondent aux besoins des élèves d'origine ethnoculturelle diverse et, par la suite, de formuler des recommandations sur les modifications à apporter aux politiques liées à l'établissement du programme d'études dans les écoles canadiennes.

Parmi les outils méthodologiques utilisés dans le cadre de cette recherche, mentionnons des entrevues menées auprès d'enseignants du palier secondaire en vue de cerner les questions qui se rapportaient à la diversité ethnoculturelle et au programme d'études. En tout, 24 enseignants de l'Alberta, 28 de la Saskatchewan et 33 du Manitoba ont participé à cette étude. Les écoles ont été choisies en fonction de la diversité ethnoculturelle des élèves. Par exemple, deux des écoles comptaient une importante population autochtone ou métis et d'autres commençaient à voir croître leur population immigrante.

Les résultats révèlent un certain nombre de similitudes d'un sujet à l'autre : le besoin de ressources adaptées aux différentes cultures, des programmes pour les élèves d'ALS et des possibilités pour les enseignants de comprendre l'interaction entre la race, le sexe, la culture et la pauvreté. Les réactions des enseignants aux antécédents culturels des élèves allaient d'une reconnaissance de la diversité caractérisée par l'inclusion des diverses perspectives dans leurs leçons et stratégies d'enseignement quotidiennes à une position plus réactive qui leur faisait percevoir la diversité comme une interruption dans le programme d'études établi. Au cours des entrevues, les enseignants qui considéraient leur sujet neutre sur le plan culturel, comme les mathématiques et les sciences, ont commencé à entrevoir des possibilités que présente un programme d'études plus inclusif. Ce résultat suggère que le perfectionnement professionnel de ces enseignants permettrait de répondre aux besoins des élèves.

Au cours des entrevues, les participants ont pu discuter de la complexité de la vie des élèves, comme la dichotomie que présentent les valeurs et les attentes au foyer et à l'école, la communication en salle de classe, les préjugés véhiculés par les livres et les possibilités de changement.

Finalement, l'étude formule des recommandations en vue de l'élaboration du programme d'études, du perfectionnement des enseignants, du développement de ressources d'enseignement et de recherche supplémentaire.

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## EXECUTIVE SUMMARY

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In this research study, a team of three researchers and three graduate students from the Department of Secondary Education at the University of Alberta sought to identify issues of ethnocultural difference related to specific curriculum areas considered by experienced teachers as significant for meeting the needs of all Canadian students. The *Culture and Curriculum Research Project*, examined understand classroom teachers' curriculum and pedagogical responses to issues of race, culture and ethnicity in secondary schools. Eighty-five high school teachers in five cities across the Prairie Provinces who taught a variety of subject areas participated in semi-structured one-on-one audiotaped interviews with researchers.

Many curricular and pedagogical issues emerged from these interviews with Western Canadian teachers. While teachers were generally aware of multicultural diversity in their classrooms and demonstrated sensitivity to the individual needs of students, the attentiveness to the cultural, ethnic and religious differences brought to the classroom by their students varied across subject areas. Teachers spoke about the importance and need for suitable resources for teaching and learning from a multicultural perspective. In some subject areas teachers were aware of the limitations of current resources for addressing the ethnocultural diversity of their students. Teachers in the humanities suggested that their subject areas provided opportunities to address issues of cultural difference. In contrast, teachers in sciences, mathematics, technology and physical education generally assumed the cultural neutrality of their subject. Many teachers expressed concerns about meeting the needs of students who spoke English as a Second Language. Permeating many of teachers' concerns were additional issues of how schools address the students' needs arising from poverty, crime and absenteeism.

Study findings suggest that teachers need support through curriculum policy changes, professional development opportunities, resource development and a supportive school climate in order for them to further expand their horizon of understanding to include the perspectives of cultures previously silent in the curricula of secondary schools.

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## INTRODUCTION

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Secondary school education in Canada responds to a wide diversity of provincial and national needs, such as meeting the requirements for post-secondary study and the demands of citizenship in a changing country. While aspects of this education may be immediately useful, generally the secondary school curriculum is oriented towards preparing students for post-secondary study. Consequently, this education tends to emphasise concepts that are often abstract and removed from specific contexts. For example, Canadian students typically study such familiar topics as Shakespeare in their Language Arts program or algebra as part of their mathematics education, each topic considered and presented as valuable aspects of a general education for Canadian citizens.

Although Canada has been influenced by an influx of immigrants and their accompanying cultural contributions, Canadian secondary school curriculum development continues to present an Eurocentric set of topics that in most cases does not invite or include the perspectives of other cultural understandings. In addition, the canon of topics comprising the curriculum was presented as if these topics were somehow devoid of culture, de-emphasising the role of culture in the presentation and development of ideas. For example, cultural views of the natural world held by various peoples of Aboriginal or Métis ancestry are not found in the resource materials of secondary school biology across the country, but neither do these resources admit their views of science reflect particular European views and values about nature.

As Canada enters the 21<sup>st</sup> century, issues of culture and curriculum have become increasingly acute. Educational leaders, school administrators, teachers, parents and community spokespersons continue to articulate a need to pay closer attention to the appropriateness of current teaching practices and curriculum content as the Canadian population increasingly becomes ethnoculturally diverse. These voices are especially significant in the three Prairie Provinces of Canada: Alberta, Saskatchewan and Manitoba. A location of cultural diversity since national confederation, this region in Canada has seen accelerated changes in its demographics in the past 25 years. All major cities in these provinces<sup>1</sup> have experienced increasing numbers of immigrants from China, the Philippines, Southeast Asia, Africa and South America, in addition to dramatic increases in the percentage of the population with an aboriginal or Métis ancestry. In Alberta, Calgary and Edmonton have populations close to the national averages for percentages of the population born outside of Canada; the Saskatchewan cities of Regina and Saskatoon have seen the most dramatic increases in percentages of citizens from with an aboriginal or Métis ancestry; while in Manitoba, Winnipeg has experienced the most significant shifts in populations of citizens born outside of Canada of all the prairie cities (*Statistics Canada* 1996).

At the same time, recent avenues of curriculum co-operation in Western Canada, including the Western Canadian protocols in mathematics, English language arts and social studies and the new national common frameworks for curriculum development in science education offer new possibilities for developing culturally-inclusive curriculum in the prairies. With further attention to ethnocultural diversity, these new curriculum

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<sup>1</sup> In this report, a major city is considered to have a population greater than 100,000 people.

documents could serve as a model for the entire country on how culturally diversity can be incorporated into teaching practice.

## **RESEARCH GOALS**

The opportunity to develop culturally inclusive curriculum perspectives requires a prior understanding of the current teaching practices and lived experiences of teachers who deal with the intersections of culture and the curriculum in their classrooms. Teachers, in their role as interpreters of curriculum requirements, can provide insights to the curriculum and teaching issues presented by an increasingly culturally diverse student population. The researchers endeavoured to illuminate these relationships by means of interviews with secondary school teachers working in major cities in Alberta, Saskatchewan and Manitoba.

The predominant question that directed the study: "What issues of ethnocultural difference related to specific curriculum areas are identified by experienced secondary school teachers as significant for meeting the diverse needs of all Canadian students?", also reflects the intent of the project to discover possibilities for developing a more equitable, culturally responsive curriculum for secondary schools in the 21<sup>st</sup> century.

Overall, the objective of the research study can be summarized by two major goals:

1. To discover the significant ethnocultural issues in secondary school subject areas that teachers identify as particularly relevant for student learning and meeting the diverse needs of Canada's multicultural school population.
2. To develop recommendations for curriculum policy changes as Canadian schools seek to meet the needs presented by the cultural diversity of school populations.



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## **SECTION 1: RESEARCH PROCEDURES**

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### **SIGNIFICANCE OF THE RESEARCH**

The study is situated within the larger context of international research on questions of multicultural and anti-racist education.<sup>2</sup> Much of the research of Canadian theorists collaborates with the work of leading curriculum researchers in the United States.<sup>3</sup> Other researchers in countries such as South Africa, Australia, New Zealand and South America emphasise a need for research to support a critical antiracism that is sensitive to multiple notions of difference in identity and to particular social and political contexts.<sup>4</sup>

Research by curricular scholars working within specific curriculum disciplines also points to the need to consider cultural difference in curriculum policy and classroom practice. These scholars include educational researchers in the humanities,<sup>5</sup> in science and technology,<sup>6</sup> in mathematics,<sup>7</sup> in physical education<sup>8</sup> and in the fine arts.<sup>9</sup> There remains, however, a particular need for research that links theory, policy, and practice more effectively through studies that explore the perspectives and experiences of teachers and students in multiethnic schools on issues of identity, race and culture.<sup>10</sup> This research report addresses this need by adding significant new data on the perspectives and experiences of teachers on questions on race, culture and the secondary school curriculum.

### **METHODOLOGY**

Guided by insights from critical theory and the antiracist educational theories presented in the work of the noted scholars, researchers adopted an approach to educational research that provided the opportunity for secondary school teachers to share their perspectives and experiences of culture in the context of their subject area teaching. To understand the complex world of teaching in a secondary school setting the researchers elected to collect teachers' stories of their everyday experiences of teaching and learning through semi-structured interviews. Each interview was transcribed and then examined for emergent themes that provided a set of codes for data analysis.

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<sup>2</sup> Canadian curriculum researchers such as Dei (1996), Alladin (1996), Ghosh (1996) and McLeod (1993-96) offer theoretical perspectives on anti-racism education that adopt a proactive approach to negotiating racial and ethnocultural differences in the classroom. Critical theorists such as Britzman (1991,1993) and Aoki (1996) add valuable insights and cautions about the complexities of multicultural education and the difficulties of engaging in educational efforts that attempt to bridge theory and practice.

<sup>3</sup> Such as Banks (1989), Banks & Banks (1995), Giroux (1992), Ladson-Billings (1995a, 1995b), McCarthy and Crichlow (1993), Pinar (1993), Sleeter (1991), and Sleeter & McLaren (1995).

<sup>4</sup> See Carrim & Soudien (1999), Clyne (1997), Kalantzis (1998), May (1998) and Soudien (1996).

<sup>5</sup> Such as Carson & Lange (1997), Cochran-Smith (1995), Dias (1992), Evans (1992), Johnston (1996, 1999), Kaltsounis (1997), and Smith & Carson (1998).

<sup>6</sup> For example, Aikenhead (1996), Blades (1997a, 1997b), Hodson (1993, 1999) and Pomeroy (1994).

<sup>7</sup> Including Bishop (1988), D'Ambrosio (1998), Frankenstein (1989, 1997), Gerdes (1998), Simmt (1999), and Walker & McCoy (1997).

<sup>8</sup> Such as Sparks and Wayman (1993) and Stanley (1997).

<sup>9</sup> For example, Delacruz (1995), Norris (1999), Pacino and Pacino (1996) and Saldaña (1995).

<sup>10</sup> This need has is discussed by scholars such as Davies (1999), Gillborn (1995), May (1999), and Short and Carrington (1996).

## RESEARCH CHRONOLOGY

The Culture and Curriculum research project extended over a period of two and a half years (Table 1) during which researchers developed a theoretical framework, formulated research questions, formed an extended research team and research participants, conducted the study and analysed data leading to this final report.

**Table 1. Chronology of the Research Project**

<b>Period</b>	<b>Phase</b>
Fall 1997	Formulation of research team and research issues
Fall 1997	Funding request to Canadian Race Relations Foundation (CRRF)
Spring 1998	Funding received from the CRRF
Summer 1998	Identified potential research sites
Fall 1998	University of Alberta Ethics Board approval
Fall 1998 - Fall 1999	Co-operative activities permission from each participating school board
	Data Collection
Summer 1998 - Winter 2000	Data Analysis and Interpretation
Spring 2000	Research report

## THE RESEARCH TEAM

The principal researchers of the *Culture and Curriculum Research Project* are all faculty members in the Department of Secondary Education, University of Alberta. These researchers collaboratively managed the study from its conceptualisation to its dissemination and provided expertise across curriculum areas, with particular experience in secondary school English language arts, mathematics, and science and an overall interest in multicultural education. Three senior graduate students with expertise in peace education, aboriginal education and research on students who speak English as a second language (ESL) were also hired to assist the research team. These students attended all research team meetings, compiled relevant literature, conducted interviews, participated in the data reduction and helped in data analysis.

## DATA COLLECTION

The major sources for data for this research were teacher interviews. For each research site outside of Edmonton<sup>11</sup> a facilitator from the city had the responsibility of identifying schools and teachers who were willing to participate in our project. Once the schools and teachers were identified, the local facilitator arranged interviews. The research team then travelled to the locale to conduct the interviews.

In each of these schools teachers volunteered for a one-on-one interview with a member of the research team. These interviews generally took an hour each, although some were longer. A total of 85 teachers from five

cities in the three Prairie Provinces volunteered to be interviewed: 24 in Alberta, 28 in Saskatchewan and 33 in Manitoba. After a day of interviewing the research team met to debrief and share insights arising from interview sessions. Research interviews were conducted over a fourteen-month period, from October 1998 to December 1999.

All interviews were semi-structured, thus allowing the interview to remain open-ended while providing structure when needed. The following questions that guided the interviews were sent to the teachers in advance:

- What cultural and/or racial diversity exists in your classroom?
- In what ways have issues of culture and/or race impacted your planning for teaching in your subject area?
- Describe from your experience a significant teaching situation that you believe relates to cultural and/or racial differences.
- Describe a teaching situation when you found cultural and/or racial differences led you to reflect on and/or change your teaching practice.
- In what ways do you feel current curriculum documents and/or resource materials facilitate or constrain your teaching?

## DATA REDUCTION

Each interview was carefully transcribed and then organised according to curricular subject areas. Each member of the research team read the transcripts for the purpose of identifying themes that could be used to develop a coding system for interview analysis. According to our analysis, the following themes emerged from the interviews with secondary school teachers:

- teacher awareness of issues of culture (including tensions between teachers' philosophy and practice)
- teacher background (culture, professional education)
- pedagogical questions (what works, according to teachers, constraints due to the subject)
- communication issues (such as ESL)
- resources (appropriateness, needs)
- administrative support for ethnocultural diversity (scheduling, programming, hiring)
- related issues of youth culture, poverty, gender and religion.

Although we were tempted to transfer the recurrent themes into categories, we were cautious of the danger of relying on categories that are unstable. As researchers such as Trinh Minh-ha (1989) remind us, "categories always leak" (94). Categories became fluid as we attempted to apply our coding system. As our analysis continued through the coding system they developed, categories were transformed to reveal significant underlying issues that were not immediately apparent in the earlier coding. For example, we observed that teacher awareness of issues of culture is not a simply dichotomy of aware/not aware. Considerations of such subtleties form the basis of the interpretation that follows in the next section of teachers' experiences and understandings of issues of culture and curriculum.

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<sup>11</sup> In Edmonton the principal researchers acted as facilitators.

## DATA ANALYSIS

To ensure the confidentiality of the 85 participating teachers, this report will focus on developing a perspective at the level of the Prairie Provinces; individual schools are not identified. The schools selected for the study reflect the wide variety in the cultural diversity among the students attending secondary schools across the country. Two of the schools have a large percentage of students with Aboriginal or Métis ancestry. In two other schools, ESL programs were in place to meet the needs of a growing immigrant population. The remaining nine schools had populations with students from a variety of cultural backgrounds including recent immigrants and first and second generation Canadians. In every case, however, the teachers interviewed claimed that the demographics of the student population had changed since they first started teaching.<sup>12</sup>

Many of the schools we visited had a variety of programmes in place to address the needs of diverse school populations. Two schools, for example, modularised courses to adapt to a transient school population and to enhance learning for students with high rates of absenteeism. In another school, teachers use Native Studies Programs that have been developed by the province in collaboration with Aboriginal and Métis leaders. ESL programs were in place in a number of the schools and were organised in a variety of ways. An international program that brought in students from foreign countries for a year or two at a time was in place in one of the schools we visited.

Our interviews with secondary school teachers revealed common themes across subject areas, such as the need for culturally appropriate resources, programming for ESL students and opportunities for teachers to better understand the complex of issues of race, gender, culture and poverty within school subject areas. Some themes were specific to particular subject areas, suggesting a matrix of reporting: first by subject area, then situating these themes in the broader context of the curriculum of secondary schools.

The next section of this report focuses on the subject-specific themes that emerged from interviews with teachers. School subjects have been grouped together by the research team and are presented alphabetically in the next section:

- Career and Technology Education (practical arts)
- English Language Arts
- Fine Arts (drama, visual art, music)
- Mathematics
- Physical Education
- Sciences (general science, biology, chemistry and physics)
- Social Studies (including history and geography)

A short discussion on the views of school administrators, counsellors and librarians appears at the end of this section.

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<sup>12</sup> With the exception of new teachers, who lacked the experience to make this observation.

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## SECTION 2: THEMES BY SECONDARY SCHOOL SUBJECT AREAS

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### **CAREER AND TECHNOLOGY STUDIES**

Career and technology studies (CTS), formerly known as the practical arts, constitute a very broad area in secondary school education. Included in this group are teachers of business education (word processing, accounting, and marketing), vocational education (automotive, construction, and electronics education) and family studies education (foods and nutrition, clothing and textiles and nursing). In our study we interviewed several teachers whose primary responsibility was instruction in CTS, but we also interviewed others who taught a course or two in the CTS area but taught primarily in another content area.

In this section some themes that arose from the interviews with the CTS teachers are discussed. However, because there are very significant distinctions among the teachers in terms of the content areas they teach it is important to note that the contexts are very different and afford very different opportunities for the teachers' instructional practices. To begin this section, there is a discussion about the manner in which content area and ethnocultural diversity is related. This is followed by a discussion of some specific issues that emerged from the interviews with CTS teachers.

#### ***The CTS Curriculum and Ethnocultural Diversity***

The interviews with CTS teachers provide an insight to the diverse understandings teachers have of the relationships between “content” and “culture.” The CTS area is a microcosm of the situation found across the content areas in the secondary school curriculum. Since issues and insights from the secondary school curriculum content areas, such as mathematics or social studies, will be specifically discussed with each area, the perceptions of CTS teachers serves to highlight a general pattern that emerges when we look across content areas. As will see, some CTS teachers view their particular area of instruction as one that specifically addresses cultural diversity or “multiculturalism” in Canada, whereas in other areas teachers suggest that the students' ethnocultural backgrounds are significant to what is taught and how it is taught even though the content itself does not address issues of cultural diversity. Finally, some CTS teachers viewed their content area as culturally neutral and in one case a teacher even suggested that his content area served to neutralise any cultural differences among the students.

#### ***Specific CTS Content Areas that Include Curriculum and Instruction About Multiculturalism***

Teachers suggested that in the case of foods, textiles, and health care courses the ethnocultural diversity of the peoples of Canada, within their own provinces and cities, is specifically addressed in resource material—if available—and through teacher instruction and student assignments. For example, foods and textiles teachers suggested that they discuss how food and clothing are part of culture and how their courses offered the opportunity to introduce students to the clothing, food and cooking techniques of people from other cultures:

*You talk about it [differences among cultures] in terms of food and clothing.*

*In Canada we have food from all over the world. Students should try different things.*

A teacher who taught health care had specific lessons on a variety of dimensions of culture:

*The health care [class] is interesting because we really want to emphasise that people are from different cultural backgrounds and they [the students] have to respect the cultures. We do a lot of programming just to make other people aware of the different cultures.... For example, we do an assignment on death and dying and they [the students] have to pick a religion or culture that they're not familiar with. And they have to go and research this and what are the beliefs surrounding death. What are the rituals surrounding dying? So, I said like if you're walking into a room and a patient is dying and a woman wants to light a candle. And you think, "Oh my God, that's against fire regulations. You can't have an open flame in a hospital'. First you understand that maybe, I think it's for the Buddhist religion, the light from the flame is to supply energy for the soul to go from earth to heaven.*

*And then we do just a general multicultural [assignment], where again they have to pick up a culture that they're not familiar with and just look at things like food habits, dress habits, entertainment, things like that just so they have an understanding of their background and then [discuss] one adaptation they might make... to bring [the patients] culture more into the room... [They also need to] realise that there are stereotyped norms and that people fall out of these norms.*

Foods, clothing and health care appear to be content areas in which specific cultures are investigated and student understanding of Canada's multicultural society is developed. This, however, is not the case across the content areas in CTS.

### ***Specific Content Areas Open to Students' Cultural Differences and that Provide Opportunities to Promote Understanding***

The examples above suggest that in some cases teachers are specifically addressing cultural diversity as a topic of study or as a dimension of the topics they teach. Other CTS teachers told us about how they modify the content they teach because of the ethnocultural backgrounds of the particular students in their classes. For example, the need to be aware of and sensitive to dietary restrictions came up in the interviews with all of the Foods teachers:

*Because my area is Foods, I also ask the questions: Do you have any food restrictions? Do you have any faith restrictions in terms of what you can do and can't do and things you can participate in? That's usually part of the introduction to the class.*

*A lot of non-visible minorities also have cultural things or faith things are different and you don't always see the differences, but they are part of the person's make up.*

In a number of cases, a teacher commented on how much can be learned from students and how situations arise in the classroom that can be used to promote understanding among their students of different ethnocultural backgrounds and religious faiths:

*Muslim students were only eating meat slaughtered in a certain way. When these kinds of issues come up you talk about them and explain it to the kids.*

*I find that the cultural diversity provides so many neat discussions that happen in classes. For instance, right now Ramadan is going on. I don't know if I said that right. But anyway, where the kids fast during the day and they can't eat anything. And it's really interesting teaching them in foods and the control they have, not to taste the batter, not to eat their food and to actually take it go home because they can't eat until the sun goes down.*

*I had a student one year from Ethiopia and I'm not sure if it was Muslim or Islam or what he was, but he started putting up a fuss about the Jell-O. And so you know at first I was sort of felt like [he was trying to make excuses not to participate]... and then he explained to me—and I'd never even thought of this—of course, Jell-O comes from gelatine [animal product]. Therefore he couldn't do the assignment... I'd had Muslim students before but not one who was so aware.*

A few teachers who taught computers also provided some useful examples of how they modify their assignments to allow students to build from their interests and experiences and in doing so create an opportunity to promote understanding of ethnocultural diversity. Some of these teachers suggested that the content they taught was itself culturally neutral; however, they commented that the Internet provides students with the opportunity to learn about various cultures and cultural practices and this can be built into assignments:

*In computers, there's not a lot of ways, but I can diversify. One thing I've learned to do is...if I give them a computer project assignment where they have to complete a project... lots of times I will alter the project from the textbook or from the course material and say, "Do this project in respect to something that you're interested in." Because it brings out better work because there may be something that they're very, very interested in but they've never had a chance to express it. Maybe something in their culture. It may be something as simple as movies or professional athletes or actors or actresses that they like, but nobody else has heard of because some of these ...these athletes are from Eastern countries, you know, from the Far East.... We did an assignment for the start of the year that they had to ... build an access database, and then they had to print out a report on it. I said, "And you pick five male and five female celebrities, search them on the Internet, find out about these people, and print a report out on them." And I said, "Celebrities can be anything. It's just someone who's famous. It's in the news now." So that allowed cultural diversity because I had students do all kinds of celebrities. Because once they're on the Internet, they could research this information, and in some instances, if they had, a good background in their native language, they could probably go to web sites in their language... in the Far East and research this. That's a good example of what the Internet does. It allows a lot of flexibility that way. Combining that with computers because it allows them to go out and sometimes— In one case, one of the students ... did it on Indian movie stars. And lots of times students, were in web sites that were Hindi.*

A business teacher pointed out that the program, if kept current, could be especially relevant for immigrant students:

*The funny thing about marketing is that a lot of immigrant families start their own businesses. They may start small but they all start their businesses. Marketing fits with that. For example, I have a student that I know his family has a coffee shop franchise. So I let him work around that. He's an East Indian student. I let him work around that central theme in marketing, saying, "Okay, we're gonna do market research, you know, on the coffee franchise. Okay, if you're gonna do displays, how would you do displays? If you're going to do a display in the newspaper for your store, how would you do it?" and that sort of thing. And I think that marketing would lend itself very well to a multicultural school, but a marketing course is out of date.*

Within CTS instruction, teachers also suggested that some content areas are “culturally neutral” and that modification of instruction to consider ethnocultural difference was not needed.

### ***Content Areas Assumed to be Culturally Neutral***

Teachers in a variety of CTS areas expressed the view that their courses were culturally neutral and that there was little room and few reasons to modify those courses. These teachers indicated that the content of the

curriculum simply does not include topics related to multiculturalism or content that depends on the ethnocultural background of students. The electronics teacher, the automotives teacher, the wood working teacher and the computer teacher all suggested that their subject areas were, in the words of one teacher, “pretty straight forward.” For example, teachers told us:

*Computers and programming ...is pretty cut and dry.*

*In computers, you don't really ... there's not a lot of flexibility.... Well, if I teach Office '97, you're teaching the software.*

*Electronics is pretty straight forward... We do the three R's reduce, recycle and reuse... [The students will] bring in a VCR that they found in the garbage someplace or in a garage sale--25¢, clean it up, and it works....they sort of feed on each other. Because, if one kid finds a VCR—this happened last semester—and it was in the garbage and he brought it to school and he actually go the thing working and the rest of the kids in class all wanted to find VCRs but they had all kinds of other stuff because there was success.*

*I teach them automotives. They work on the mechanical parts and do some body work.*

*The students work on projects, for example, a set of stairs. Everyone does it.*

### **Content Areas that Neutralise Students' Cultural Differences**

Not only did some of the CTS teachers suggest that the content they teach is culturally neutral and hence there is no need to modify their instruction in response to their students' ethnocultural backgrounds, but some of the CTS teachers suggested that ESL students and students with poor academic skills were on an even playing field in CTS because these courses are practical and hands-on in orientation. In these courses few students come to the class with extensive experience. The comments of these CTS teachers suggest that such content areas have the potential to neutralise cultural diversity within the classroom:

*As far as racial and cultural diversity, computers are kind of an equaliser. I mean, no matter as long as the student has enough skill to operate the computer, okay.*

*I find that if my lesson plan works so that I'm not lecturing, then I'm actually demonstrating with the tool, it doesn't matter which one it is, they can associate the words with the tools and that gives them their understanding. It doesn't matter what background they came from.*

*Computer language is new to all kids. Even English speaking ones. I think it's the greatest thing in planning how I actually communicate my lesson. Being aware of their backgrounds so that, and especially if I'm teaching computers, I'm going into a completely different language, which they don't have a basis of, and it is no different for a white person than it is for anyone else; you're teaching a computer language and the course I teach involves teaching what a hard drive is, what a byte is, what a gigabyte is.*

Just because a number of CTS teachers expressed the opinion that CTS was culturally neutral this does not mean that they were unaffected by the diverse ethnocultural backgrounds and experiences of their students. For many CTS teachers, there are pedagogical issues related to teaching in a multicultural context and communication lies at the heart of these issues.



## ***The Pedagogy of CTS***

### ***Acknowledging Ethnocultural Diversity in the CTS Classroom***

The classroom was also viewed by teachers as a place where the ethnocultural diversity of the students needed to be acknowledged in order to create a more personal and respectful atmosphere:

*What I've really learned, for me, is to learn how to respect all the different students and give them time to respond to me. So I give them time to actually choose their answers and I do make them speak and I will wait. When I first started, "Oh come on, let's go." Snap, snap and get quick answer back. I really had to work on my patience in respect to these guys and sort of calm down, relax, let them come up with an answer, give them five minutes. I took some courses at the university... in Native Studies. I just bide my time and wait, and soon start to get a response. I do a lot of oral.*

Some teachers did report racial and gender conflicts that sometimes arise in classrooms due to ethnocultural differences that needed to be addressed:

*I had a couple of Lebanese students, who had been through all the wars and they were also big supporters of Sudam Hussein.... I also had two Croatian students at the same time. One of the Croatian students was Jewish. I didn't know it and neither did anybody else and these students were talking about killing the Jews and wiping them off the face of the map and he let it go on for quite a while and then he said, "Mr. X, can I talk to these guys?" And I said, "Yes."... He talked to them quietly [about his experiences with war] for about a half an hour; quietly one-on-one and he never had a conflict with those students again or another comment... and it's little things like that. If they have a chance to dialogue without getting their feathers up.*

*Another thing is the way they [boys of Middle Eastern descent] talk to women... [including] unsolicited touching.*

Another teacher shared about how he tried to make the environment familiar and welcome for all of his students:

*I have them bring in music. As long as it's not rude or insulting, something that would hurt other students. I have become familiar with some cultural music.*

One teacher expressed her stance in the classroom as open to the cultural differences students bring:

*I don't act like I know everything. And I am not afraid to admit that I need some information and that type of thing.*

But even for this teacher who is very sensitive to her students' differences and who views herself as a learner, there are frustrations working in a classroom with students whose experiences and understandings may be quite different from one's own:

*I got my hands slapped once because I was trying to understand about the regalia that they [Aboriginal people] wear for pow wows and things like that and I referred to it as a costume. And one of my more mature aboriginal students said, "Oh, it's not a costume." She said, "You're being derogatory by calling it that." And I said, "Well no. To me a costume doesn't mean a Halloween costume. I'm talking about for example, with Highland dancing they wear the kilts and the socks and the vests." I said, "If you look under the word costume in the dictionary, I'm not*

*degrading it by using it... it's not dress up. It's referring to a specific uniform or a type of whatever". So she said, "Okay." She bought in to that one.*

*One of my students is from Laos, [she's] about 40 years old. And she's got a daughter and a son. And she doesn't get her assignments done at home because she's expected to be the wife and the mother and her time is devoted to that completely. And so trying to get her to understand that she has to make time for herself and she's got to get these assignments back.... She had a three-day wedding where...you can tell that the husband, well I shouldn't blame it on the husband, but you can tell the culture is very much where the woman is subservient to her husband and to her children and she's got to be the perfect housewife. And so for me, coming from a fairly liberated standpoint...I am married and I have kids but I've also been able to do all this university training and stuff. I found that very difficult. Where I had to say, "Look, you need to take the time. You have to do this." But she can't because she's so in tune to her culture and the expectations.*

Clearly, some teachers in the CTS area are sensitive of the backgrounds and experiences of their students and use moments that arise in the day to-day course of events in their classrooms to promote understanding of ethnocultural diversity. Teachers also shared that one important factor in promoting understanding is an understanding of the communication issues related to cultural difference.

### ***Meeting Students' Needs: Communication Issues***

It is remarkable that while some teachers stressed the need to be able to communicate clearly with the students in their CTS classes, others saw CTS as an opportunity to teach ESL students, in particular, ways of communicating. In both cases the hands-on nature of the tasks provide valuable opportunities for communication:

*In the shops down here we have almost all of them [ESL students] because they're trying to learn the languages.*

In "shop" classes, however, the prevalence of ESL students causes concerns for the safety of those ESL students who might not understand instructions or who may not have any familiarity with power tools and are thereby put at risk of harm:

*They can be very, very difficult to teach because they don't have any—they don't have any tools where they came from.... And you get the, "Yes, I understand. Yes." "You know what I mean?" "Yes, yes, yes." They just want to be so agreeable. They try to be pleasing and then you walk away thinking [they know what to do]; that's really dangerous. Then you say, "You cannot use that machine until you come and get me."*

The quiet student was a concern of many of the teachers in our study. In spite of their content area most teachers mentioned the difficulty in teaching a quiet student:

*A few are quieter and you try to pull them out and pull them in and there are some students that are quieter by nature and don't [get through to them] but I also find too that they [need to be] feel free to say 'I don't want to say.' ... But I don't get that very often.*

Another CTS teacher had similar concerns about trying to communicate with ESL students. He explains:

*Well, one thing I've learned is that, because some of my students are new to Canada their language skills may be weak and they also have almost been trained not to say anything so if they don't understand, they won't put their hand up and say, "I don't understand." So what I have done, or what I do, is I will walk around and make sure that they know what they're doing*

*because, even if I ask them directly: “Do you understand this?” They will sometimes nod their head, meaning “yes,” but they don’t ‘cause they don’t know what else to do. So I make a point of...if I pick up that they’re not getting it, I will go over there and make a point of making sure they understand what’s happening...so instructions, I would say, are repeated a lot more. Once they understand, once they catch on, away they go. (emphasis by the teacher)*

Clearly, there was a great effort on the part of CTS teachers to meet the diverse needs of their students. In particular, foods teachers were very aware that some students have strict dietary restrictions arising from their religious beliefs. Shop teachers were aware of the safety issues that could arise if ESL students did not understand instructions. However, there were needs that the teachers recognised but that they could do little about, such as student poverty. One teacher put it simply: “[The] elite have more opportunities.”

The interviews with CTS teachers offer an important perspective on the issues and concerns of teachers with respect to the growing ethnocultural diversity of their students. Teaching students in courses where the focus is on practical and hands-on skills appears to offer a unique and valuable opportunity to attend to the diversity found in so many urban classrooms today. There is some indication that with the more ‘practical’ content of CTS courses, opportunities arise for dialogue and building understanding of the differences and similarities among Canadian youth. At the same time, CTS teachers share many of the same concerns and problems with their colleagues, such as: adequate resources for ESL students, attending to quiet students, and learning more about how people of different ethnocultural backgrounds live in the world.

## **ENGLISH LANGUAGE ARTS**

In general, English language arts teachers across the three Prairie Provinces expressed an interest in adapting their curriculum and pedagogy for the diverse needs of their students from a variety of ethnocultural backgrounds. It appeared that such adaptations were context dependent and varied according to the background and experience of the teacher and the specific needs of students in particular classrooms. Overarching themes emerging from the interviews included: curriculum and resources, pedagogy and teaching strategies, ESL, issues related to youth culture, and social issues, including poverty, crime and absenteeism.

### ***Resource Issues***

The English teachers interviewed in all three provinces raised questions about the issue of resources because they are seen as being crucial for teachers and students to become more culturally aware in the classroom. A tension emerged between teachers’ desire for culturally diverse resources and their actual teaching practice. Teachers commented on the need to be proactive in finding culturally diverse resources for heterogeneous classrooms, and for teaching texts outside the mainstream of white canonised literature. At the same time, they acknowledged that they still relied heavily on these canonised resources.

Texts mentioned show a high degree of similarity across provinces and classrooms. Much of the literature can be described as “school classics.” Examples include novels such as Lee’s *To Kill a Mockingbird*, Golding’s *Lord of the Flies*, Orwell’s *Animal Farm*, and Twain’s *Huckleberry Finn*; Shakespearean plays such as *Hamlet*,

*Julius Caesar* and *Merchant of Venice*, and twentieth century dramas such as *Death of a Salesman* and *The Glass Menagerie*. These texts were supplemented with contemporary young adult literary texts (predominantly in the less-academic streams) that have appeared on recommended reading lists in a number of provinces, including Bell's *Forbidden City*, Gordon's *Waiting for the Rain* and Halverson's *Dare*. Although a number of these texts mentioned above deal with issues of racism and culture, they are all written by white writers from North America or Britain.

In addition, a number of teachers mentioned a few texts written by non-white authors; these included novels such as Beatrice Culleton's *April Raintree*, and Amy Tan's *The Joy Luck Club*.

*All the grade 10 teachers had one common novel which they do which is called April Raintree, which deals with a young woman's struggle about her identity crisis. So what I've done...is a whole unit on racism. It's poetry, short stories, a novel and editorials from newspapers. ...I preach a lot against racism and try to teach that people are all equal and that doesn't just apply to race but gender and sexual orientation or religion or whatever.*

*In Grade 11 we look at the novel called Conspiracy of Silence which is about Betty Osborne...about 60 years ago, four white men were accused of assaulting a woman and killing her...so just uncovering that and realising how prevalent racism is today and just on a conscious level try to bring it more into the classroom.*

A few teachers discussed a range of multicultural anthologies that they used in their classrooms. Teachers often commented they would like to expand their text selection, but felt limited by the constraints of school budgets:

*There's probably lots of good literature out there that we could add to the curriculum, but we just can't afford it...we can't afford to buy new novels. So we are very limited by our textbook budget. I think at Grade 10 our novels deal with ethnic diversity. They deal with the native issues; they deal with the black/white issues. We don't do as well in the other grades.*

*I still think we're not quite as aware as we could be or should be...we must explore other cultures and make sure that everyone feels included and that people are properly educated about what happens and what life is like for people in other cultures and other places. And I think it would happen more if we had more liberal budgets to purchase materials...there are lots of cross cultural materials out there, but we can't afford to buy them. And therefore we tend to use the ones that have been in the book room for years because we own them, we can use them. So that's a problem.*

*I think we're moving to incorporating a whole host of writers through different cultures so that we're not just sticking with the old dead guys...I guess the main restriction would be budget.*

A few teachers spoke strongly about a need for flexibility in selecting resources and the necessity of moving beyond the recommended texts and finding literature from a variety of cultures:

*Language arts curriculum...it's very open. I think there's a lot of latitude that you have to move in certain directions and to achieve certain goals...We don't have resources per se for aboriginal culture or Vietnamese culture or African culture. We don't have those types of cultural resources, you have to go and look for them."*

*[A provincial Ministry of Education] has what they call the authorised novel list and it's pretty difficult to go outside of it. You have to go through the permission procedure....some choices are better than others.... One of the things we've added into the curriculum is *The Joy Luck Club* at the grade 11 level and of course for a lot of our Oriental students it is wonderful.*

*I suppose my heart is really in the English 30 course where you have a lot of the canon, like the British canon...but we've been working, especially at the Grade 12 level, in trying to select a*

*broader range of books, that we can keep maybe half a dozen copies of six different titles, in a box and use them for our class...at different levels, different voices, but again trying not to make it just one particular voice.*

*The next ten years there's going to be a lot of coloured faces in the classroom, whether they're Native, or whether they're Chinese or Japanese or East Indian. There's going to be a lot more in the classroom and teachers have to come to grips with providing material that reflects the experiences of those students.*

*Our curriculum is open enough that you can follow different kinds of resources. You can find your own resources to match the curriculum of the classroom....I went to some short stories that are a bit more global because we talk about the global experience...they did one yesterday from Trinidad....There's some anthologies with First Nations content...they tend to grab those first.*

*I try to use literature from as many parts of the world as I can...I never do a class novel which can be a pain... sometimes I have to keep five novels in my head and that's okay. ...Just because the curriculum suggests some novels, these are not always what we want for our school.*

### ***The Pedagogy of English Language Arts***

Closely linked with the issue of resources are questions of pedagogy. Several teachers told stories of how students and parents had challenged their choice of texts. In many cases, the expressed concern was over racist/inappropriate language in books frequently taught at the high school level—particularly the term “nigger” in *Huckleberry Finn*, *To Kill a Mockingbird*, *Death of a Salesman*, and *The Glass Menagerie*. Mostly, teachers felt justified in continuing to teach these texts but they were concerned about the effects such language might have on minority students:

*There was just a recent episode where I was teaching a play *The Glass Menagerie* and we were reading through it, and in the play it referred to the 1800s when there were slaves and one of the characters referred to a slave as a “blackie” and then a “nigger.” And the kids responded immediately. And it was something I expected because the words are very strong and this class has three African-Canadians in it, and I watched as their heads popped up and they couldn't believe when they saw the word, and it required explanation and to explain that the author was using a style here to set characters apart from others and once that was established, the kids went “Oh, I see.” They still weren't comfortable with it, but there was an explanation and it helped out the words. They see it and it impacts them. I had to research why the author had to use the words rather than any other word.*

*We were doing *Death of a Salesman* at one point and Willy Loman uses the word “nigger” and I had a student who was reading along just sit up, stop and say ‘I can't read that’.*

*One issue that I came across was from a family who did not want their son to study a particular book...The idea was that they didn't believe the book was going to be handled properly or could be made acceptable or palatable to a student of colour...It was *Huckleberry Finn*...I think the novel is so important to an understanding of racial difference and...it's a historical artefact and I wonder if the Civil Rights Movement in the sixties would have been possible had it not been for the ability of Mark Twain to demonstrate through the use of satire and humour his real agenda, which was obviously to show how ridiculous and tacitly unfair racism was. The suggestion that it shouldn't be taught at all was to me objectionable.*

Other issues of pedagogy mentioned included an awareness of the need to modify and adapt teaching strategies for varied learning styles and cultural differences, and the awareness that teachers may misunderstand or misinterpret a student's gesture, comment or behaviour:

*This young man at the end of the year, he didn't have his polished assignment, and...his mark is plummeting and he comes to me and said...his grandmother died, and he was of one of the Middle Eastern cultures, and so with much prodding, he began to explain the process of mourning, and so, sometimes, it really is a reminder to me to the degree that I really have to invite students to tell me these things that I want to know....if they don't tell me, I may very well make the wrong decision.*

Several other participants commented on the need to understand students as individuals and their personal situations in order to facilitate their learning. They spoke of the advantages of participating in students' lives outside school and the importance of developing contacts with parents. One teacher, for example, with an Aboriginal heritage, spoke about taking students to sweat lodges:

*One of my big focuses this year was we went out to a number of sweat lodges...that's where the oral tradition will come out. There's no paper, no pen in the sweat lodge and you can't bring that kind of thing, so it forces students to go back into themselves....I've done a lot of that this year, a lot of sharing circles, where students come in and we sit down and talk about what's going on in the world and how they're feeling and whether they relate.*

Several teachers said they tried to connect with students' personal backgrounds and experiences through giving students self-identified projects and research on internet and/or international news items and events and some form of response journals:

*We try and offer a lot of choices...we use what we call a response journal...so the students will read so much of their novel and then they respond. There's also the News Connection, and basically they take a quote out of a piece of literature that they're reading...and then they try to find either newspaper articles or pictures that connect to that quote and then they have to do a piece of writing to explain the connection. I've got a lot of my students saying, "Well, I've got some old news articles about what happened in Lebanon and I've got newspapers from Lebanon that I can translate; can I use them?" That sort of thing.*

While teachers acknowledged a need to understand and learn about varied customs, beliefs and traditions they also discussed the constraints of knowing very little about the cultures of many students in their classrooms and of non-Western texts:

*I think my constraints come from mostly not having the richness in my background in terms of awareness of other cultures.*

*I'm constantly struck with how little I know about other cultures, and...the point of view from which a student may be taking my course.*

One teacher commented that working with students from other cultures increased her awareness of her own culture and particular cultural viewpoints.

### ***English as a Second Language***

Many of the schools in the study had ESL students who were mostly mainstreamed into regular classes. Teachers spoke of the difficulties they encountered finding ways to acknowledge ESL students' home languages and

to help them to read and write in English. They tried to help immigrant and First Nations ESL students succeed by offering alternative texts, providing one-on-one tutoring on writing, setting up peer support in classrooms and giving extended time to complete assignments.

*Every year there are a few students who are really just learning English and...struggling in the program. Often quite intelligent students, but...maybe they would be more appropriately placed in a [modified] English class or an ESL class....It would be really nice to have an ESL program here....they mostly need individual attention...and come at lunch time as some are really interested in having someone proof-read their paper...I let students request extensions as long as they write me a memo twenty four hours ahead of the deadline....If they're having difficulty, I...recommend tutors, sometimes pairing with another student in class.*

Several teachers spoke about finding ways to acknowledge the oral traditions of their First Nations students:

*This whole idea of reading and writing is completely foreign to the Aboriginal culture. That oracy, the oral tradition is the method that we should be utilising with our children...it's one of the issues that I'm dealing with, how do I give my students that oracy, but ensure they still read and they can still write.*

### **Youth Culture and Students' Lives**

Many teachers acknowledged the mingling of youth culture and home culture in their students' lives. They saw how students live hybrid lives, moving between the culture of school/peers and the culture and expectations of their family. Teachers note this was a concern both for immigrant children and among students with an Aboriginal inheritance:

*Some students come in and they're of mixed ancestry, some Métis students, kind of mixed between Western and Native cultures...and a lot of these students get "passed" and are not viewed as Aboriginal....and they don't want to see themselves as Aboriginal because they're just so insecure, they're just influenced by a lot of the images that are out there.*

One teacher, who was African-Canadian, spoke of the importance of offering role models for students from minority cultures and the need for more teachers with diverse ethnocultural backgrounds:

*I think I was put here as a teacher to teach the curriculum, but also to say what I'm about, and this is what my people are about, and this is why I want you to look at us in a positive light, and at the same time, they're not just looking at my people, but people of colour...the contributions that other people have made.*

In a number of schools, poverty was raised as a factor in student learning and teachers felt they needed to understand students' individual situations and acknowledge how difficult and harrowing lives were factors in students' learning:

*It was really good for me to have an understanding of generational poverty. I had to learn to understand the kids differently here than maybe at a middle class school because they experience different kinds of poverty.*

In two schools, absenteeism and crime were discussed as serious learning issues. In both schools, regular school terms were modified into more flexible "modules" of learning across subject areas.

*I think teachers in any inner-city school, and I'm still learning, need to know the court system. You need to know the window. You need to know if you're going to lose your kids for two or three days 'cause they're either going in as witnesses, or they've been charged.*

English language arts teachers in the study expressed a strong interest in addressing issues of cultural difference in their classrooms in ways that would support the learning of students from all heritages. Many teachers spoke of their desire to be more knowledgeable about languages other than English, to find and use texts other than the white mainstream canon and of the need to incorporate cultural traditions that were not part of the Western tradition into English Language Arts teaching. In many cases teachers admitted that they felt constrained by their lack of knowledge and experience in these areas.

## **FINE ARTS EDUCATION**

The Fine Arts typically include a number of content areas such as music, drama, and the visual arts. We were only able to interview a small number of teachers instructing in the visual arts content area. Their comments, however, generally apply to issues involving expression and culture common across the Fine Arts curriculum.

The art and drama teachers we interviewed were aware of the need to address issues of ethnocultural diversity in their classes. While sharing how they directly incorporate cultural difference in art and drama education, they also discussed the difficulties of dealing with many cultures within the school, such as: immigrant cultures, aboriginal cultures, and youth cultures as well as the influence of popular culture, consumerism, poverty and crime.

### ***Curriculum and Ethnocultural Diversity***

A number of Fine Art teachers stressed that culture is complex and that understanding culture goes beyond considering racial issues to acknowledging how culture/race/gender are all mixed up together. They stressed the importance of debunking gender and racial myths and biases and the need to recognise all kinds of culture that surrounds us, such as the culture of consumerism or cultures of poverty and crime.

This expanded view of culture seems crucial to Fine Art education. Since artistic expression invites students to share their creativity, interviewed teachers noted that it is important to create classroom environments that are accepting and open, which requires teachers to be sensitive and understanding towards the cultural backgrounds students bring to the Fine Arts classroom.

The art teachers in the study seem to go beyond being open to cultural difference; the teachers we interviewed embrace cultural diversity as a way of demonstrating to students that art is an expression of culture. For example, teachers commented on how definitions of beauty, particularly related to body image, is a cultural construction.

*I find young women in my class are very fascinated with body image and many young men are really interested in the idea of women...so I've done a lot of things in art class to look at body image and how it's culturally constructed.*

These teachers worked to create space in their classrooms for art from different cultures, often having to move outside the prescribed curriculum. This may involve teachers bringing examples to the classroom of visual art forms outside the mainstream culture or encouraging students to explore art forms that connects with the students' lives and backgrounds.



*I try to have a space for culture of like, the First Nations peoples. We do units in all three grades about First Nations peoples' arts and spirituality. We do things around medicine wheels.*

Similarly, drama teachers spoke of encouraging students to work with poetry and stories of their own choice and material that they had written themselves, and of trying to bring in plays and scripts from different cultures into the classroom.

*We do read examples of plays from different cultures as part of the class, but I don't work with a lot of scripted materials...At the 20 level, the one scene that I assign them is from an English play, but other than that the majority of the material is stuff that they've written themselves or created themselves.*

This teacher also spoke of his interest in exploring the “cultural base of drama,” and trying to impress on students that any artistic production is “just somebody’s vision of life.”

One drama and media teacher, who described himself as “one of the few black teachers” in the system, spoke of his mission to encourage students to view minority cultures in a positive light and to appreciate the contributions that various cultures have made to the world. To this end, he is very proactive in introducing students to multicultural literature, films and other forms of media.

*There's the curriculum, there's the film, there's the technique, but there's also the social impact we talk about... they're looking at the contributions that other people have made ...that's my mission, to change people's opinions.*

In contrast, another drama teacher admitted that even though he encourages students to bring in a variety of texts, he feels most comfortable with material from Western cultures because he knows that the best:

*What am I most comfortable with? What do I know well? There's no doubt that I have a much stronger base in Western-based plays. I think that is what my training has taught me...so knowing that I have this Western bias, what do you do to evaluate other traditions?*

### ***The Pedagogy of the Fine Arts***

#### ***The Importance of Cultural Sensitivity when Teaching the Fine Arts***

Art teachers interviewed commented that Art education focuses on understanding and encouraging students' individual talents and interests. A key part of this pedagogy involved the ability to look beyond the outside of a student and to learn to privilege what's inside. Teachers indicated that this philosophy leads to an appreciation of the cultural differences students bring to class, but also that responses to art vary with individual students. For some students, art seems to be a craft but for others art serves as a form of therapy.

Teachers stressed the need in Art education for sensitivity to Aboriginal issues, especially when the teacher does not have an Aboriginal inheritance. Due to the rich artistic heritage of Canada's Aboriginal peoples, teachers told us that Art education requires a special political sensitivity when dealing with Aboriginal art.

### ***Specific Pedagogical Issues***

Art teachers informed us that art education involves finding a balance between structure and freedom in the classroom that allows students to solve their own problems and to work through ideas themselves. This requires cultural negotiations that are possible through artistic expression. To facilitate this expression, teachers told us that they worked hard to help all students to feel they belong in the classroom and school, often by finding ways that art connects home and school.

A number of these teachers spoke of their attempts to acknowledge and appreciate the difficulties of ESL in art education, a common theme in all the subject areas we researched. Teachers noted that oral and visual abilities varied considerably across and between cultures and that a large range of abilities was a normal state of affairs in Art education.

Several teachers noted that student attitudes of racism and homophobia sometimes emerged in art classes. To these teachers, this was part of a general concern about lack of respect and teachers interviewed indicated they actively work to increase student respect for each other.

### ***Resource Considerations***

Both Art and Drama teachers discussed their efforts to move outside the prescribed curriculum, stressing the importance of bringing in a variety of resources from a variety of cultures in a multiethnic school. One drama teacher explained that he was still searching for more material from “other cultures.” Several art teachers commented on the lack of art resource materials on artists of colour and female artists and the need for more resources with characters that aren’t only by White males.

*There aren’t a lot of resource materials on artists of colour. There’s not a lot of resource material on women artists....not a lot of resources with characters of colour or women characters, or Muslim characters or any characters that aren’t white males. I’ve tried really hard to seek out materials. I have a video on First Nations artists. I have sought very hard to find videos of artists of colour in the United States. It’s really hard to find these resources.*

## **MATHEMATICS EDUCATION**

Mathematics teachers revealed some telling attitudes and perceptions about the nature of mathematics and learning mathematics when asked about the impact the growing cultural diversity of classrooms is having on their curricular and pedagogical decisions. Almost all teachers interviewed commented on the growing cultural diversity of their classrooms, although some teachers needed to consider the question for a moment before they were able to respond. Our interviewers had the impression that some of the teachers had simply not thought about the question before. One teacher noted that, “The different cultures are much more visible than they were ten years ago.” On the other hand, the same teachers who acknowledged the growing diversity of their classes were quite adamant that the impact of this growth was minimal in mathematics education. In part, this may be because of the teacher perceptions of mathematics as a culturally independent discipline.

## ***Curriculum and Ethnocultural Diversity***

### ***Mathematics: A Culturally-Independent Discipline***

The comments of the teachers interviewed suggest that these teachers view mathematics as a universal language and thus consider the school subject of mathematics independent of culture and issues of culture:

*Math is just a technical subject. I mean when you go to math, or chemistry or physics, the culture is not a big thing.*

Of more concern to the teachers than the cultural experiences and perceptions students bring to the classroom are the previous mathematical experiences and skills the students bring to high school mathematics. Mathematics is a hierarchical subject; hence teacher maintain that a specific background knowledge is needed:

*I didn't take into consideration their ethnic background at all. I took into consideration their academic background.*

*In math, I didn't see any correlation between culture and how they're doing or anything or what extent they know anything.*

It is not surprising, then, that planning for teaching mathematics is considered independent of the cultural and ethnic background of students. Of the teachers we interviewed not one suggested that they take the cultural background of the students into consideration when planning to teach mathematics. We were told repeatedly that the cultural and ethnic background of their students had little impact on what mathematics teachers did with respect to teaching and planning for teaching:

*I can't think of anything I do [with respect to planning]. I just use what is there. I don't make up any [culturally dependent or relevant curricula] on my own.*

*I don't take culture into consideration and they [books and materials] don't either.*

*I don't think I have to use examples from this kind of culture and that kind of culture.*

*Truthfully, it [issues of culture and/or race] hasn't [affected planning for teaching].*

One teacher put it bluntly: "I don't usually ask kids where they are from." Even in the case of one teacher who was very aware of the cultural diversity in his classroom and had made many changes in the other subjects he taught this same teacher did not see any reason to alter the curriculum or his instruction in the mathematics classes he taught:

*I really don't change anything [in my teaching in a culturally diverse class]...basically. I think mathematics is one of those areas where it doesn't really matter a whole lot. So, the math there isn't a lot of altering.*

### ***Canadian Culture***

Paradoxically, a number of the teachers interviewed wrestled with the idea that the curricular materials and the choices they make for teacher are permeated with cultural remnants. A number of teachers acknowledged that youth and popular culture are represented in the examples teachers and textbook authors use. But one teacher in particular was struck by the "Canadian" examples that could be found in a text. This teacher wondered if maybe

there is a Canadian culture that is promoted in the textbooks at the expense of including examples that may represent other countries and/or cultures:

*I am thinking. There are a lot of different cultures and there's nothing representative of...we're worldly cultures. Maybe we've got the Canadian culture thing happening, but people move here from other places and become part of Canada. And there is nothing in here about coming from Japan and keeping up the culture [in the math textbooks].*

*Curling is a Canadian sport. It's where ice is. And so there was this kid, I can't remember his background and he said, 'What's a house?'*

Another teacher reflected on Canada and its multicultural nature:

*It's often been said that the United States is a melting pot and Canada aspires to something greater. But I think, in my experience most people, most teachers, sort of view it as a melting pot. You move to Canada, you can kind of fit in and not much extra consideration...is usually considered important.*

Although mathematics teachers indicated they did not alter their teaching practices in response to the growing diversity of the cultural and ethnicity of the students in their classes or in response to incidents related to culture and/or race, this is not to say that the teachers were inattentive to their students.

### ***The Pedagogy of Mathematics Education***

A few teachers considered that relationships among students of varied backgrounds and culturally heterogeneous classes of benefit overall to classroom climate and student learning. Even so, some mathematics teachers rejected incorporating cultural backgrounds into mathematics education:

*I feel it is inappropriate to refer to kids' cultural backgrounds in math class*

Some teachers' comments suggest that teachers believe they can escape the culturally biased classroom but others suggested they cannot escape their own culture or experience:

*I am almost certain that my examples come from my background, because that's what I know.*

*Anything, I think towards the end of cultural diversity is teacher initiated. You try to relate what you are teaching to something your students relate to. But the students don't necessarily have the common experience and I think probably as the teacher, I'm more likely to talk about something that I'm familiar with.*

These contradictory comments are characteristic of our interviews with mathematics educators. In most cases, teachers could see the benefits of considering students' cultural background when planning for teaching, yet at the same time most teachers felt such considerations were inappropriate for mathematics! Partially this may be due to a focus by mathematics teachers on individual instruction.

### ***One-on-One Interaction***

When it comes to teaching mathematics, teachers indicated that their relationships with students are based on an individual basis rather than on cultural, ethnic or racial grounds. Mathematics teachers were remarkably united

on the notion that more important than cultural considerations was the need to meet individual needs with respect to students' background knowledge in mathematics. Many of them noted that one-on-one interaction was the way in which they addressed students' individual needs:

*Everybody has their own learning style and everybody gets a chance to try out the different ways.*

*What I do is learner-centred.*

*If you find some students not ready [for the content] then you make special arrangements for extra help.*

*Kids who have stayed...when I talk to them one-on-one and it clears up what ever misunderstanding there is about the question or makes it clear and then they've had as much success as anyone else"*

*There's one thing I am learning...I am going to pick up on some things and I'm going to miss others that I should probably pick up on. That's how it is.*

In general, teachers assured us that one-on-one instruction in a mathematics classroom can be very important, especially to students with special needs such as a particular learning style or an inadequate background in mathematics. It is instructive that these teachers also considered culture and ESL issues deficiencies that can be overcome through one-on-one instruction.

### ***English as a Second Language***

In spite of telling us that they do not take culture into account as in their teaching and their planning for teaching, the teachers we interviewed did tell us about the impact of having English as a Second Language students in their schools and in their classes. In most of the schools with high ESL populations special programs were in place to meet the needs of the ESL students. Teachers observed that students in ESL programs may not be in ESL for mathematics. A couple of teachers indicated that new Canadians could often participate in mainstream mathematics classes with some support:

*I had two girls from China. They could hardly speak English. In math they were coming, I could show them numbers and how the problem works without having to use too much English.*

*Some of the Hong Kong kids are very well schooled, better than our students of their background.*

Even if students can participate in mathematics class with some support teachers suggest that one of the biggest problems is how quiet these students are in class. Teachers report that ESL students often sit quietly and rarely ask questions. In some cases the student's silence results in a form of passive withdrawal from the classroom interaction. At other times, the student's response is more active.

*A boy from Pakistan. If his hand is up and I don't see it he'll just wait.*

*I've had a couple of students in the various courses I've done, who have dropped a class because they don't understand and because they find it too hard from a language standpoint.*

*I was teaching a general class [in which ESL and Aboriginal students were over represented], and those have a reputation for being a little wild... and this class was not like that. It was the quietest class I ever had.*

Other times the students' silence is interpreted by the teacher as understanding:

*I checked with a couple of students who I knew were struggling with English a little bit. They spoke English but it wasn't completely fluent and so I checked to see if they had gotten what I asked and sometimes they had not.*

*So you just have to remember, when they're not asking questions you'd better wander over there and see what's going because probably they're quiet and not causing trouble, but they're not doing it, they've just shut down.*

The "new Canadian" student, silenced by inadequate command of the English language, is not the only one who is often silent in the mathematics class. Repeatedly, teachers said that that they experience a similar response from many of their students of Aboriginal and Métis ancestry. Like the new Canadians, many Aboriginal and Métis students are very quiet in class and are unlikely to ask questions in class. It is important to note that in fact these students may be ESL students.

*Two students came from up north...we knew their work was there but they didn't want to partake in saying anything out loud. And, it was because they had come from a small community into a larger school setting—the big city. And culturally because they were still young, they didn't speak up. It was part of their culture. I could see the kids were feeling bad. I talked to the kids.*

Along with the description of students who are quiet in class is that of the students who do not look the teacher in the eye. One teacher commented that this caused some tension:

*Someone who is shy or something and for a native kid or maybe a Central American kid, if you have a problem with them or you're really angry with them, they're not going to look you in the eyes very easily.*

### ***Issues of Attendance***

One of the pedagogical issues that was frequently raised by mathematics teachers was the irregular attendance of some students—in particular Aboriginal students.

*They [Aboriginal students] haven't been good attenders [sic]. Many of them are lacking some of the basics that you need to be doing some of the math.*

*Native people tend to be a lot more laid back. Like I said this is a generalisation and not everybody fits into this but they tend to be a lot more laid back and time restraints don't [matter]... If there are other work and things to do, they go to those and they are suppose to be at school.*

*The school system goes day by day and when they [native children] come back they're behind.*

Some of the teachers working in schools with serious student attendance problems indicated that their schools have structures in place for attending to this problem.

*If they miss a day they just go back to where they left off...I have checklists and it has all the work that I want done for that particular unit.*

*Those [computer class] books are very laid out. It's modules and they can go at their own pace. So that was facilitated but at the same time it constrained me because I didn't have to come up with my own creative examples.*

*We have a timetable that gives us the opportunity for students to re-enter back into the school, particularly if they are having difficulties or if they've move. It is a very transient neighbourhood.*

*Kids go to ESL programs and I don't see them for the first six months or so.*

## **Resource Considerations**

### **Curricular Materials**

Teachers were quite frank when asked about the level of support they received for teaching in a culturally diverse classroom. In almost every case, teachers told us that there are few special strategies and/or programs in their schools for teachers to attend to the growing cultural, ethnic and racial diversity in their schools. They also shared with us that their resource materials for high school mathematics do not address the multicultural nature of their urban classrooms. In particular, the textbooks do not specifically address the mathematics of other cultures nor use examples that may be relevant to youth that have experiences somewhat different to youth who have grown up in Canada. This, however, was not seen as problematic by most teachers interviewed. In fact, many teachers suggested that these resource materials were good in that they do address some of the potential interests of students by reflecting youth and popular culture.

*I don't know that they [curriculum resources] constrain my teaching in any way. But I don't think they support diversity because I think that is the way they are prepared. They're more likely to give a hockey example than I am. With all the examples, I think they are trying to appeal to a large number of students, so they pick what would be most popular.*

Many of the teachers interviewed suggested that they do expend effort to make mathematics relevant to their students' lives. This includes addressing the students' interests as youth, e.g. music, money, computers, athletics, and through making connections to popular culture.

*We'll do what relates to youth, not so much as what relates to Aboriginal culture.*

*I try to bring in something they are familiar with.*

*I might do something that is relevant to that particular person.*

*But for the most part [an assignment] ended up being about food and music and that's interesting to them.*

*There are a variety of different jobs [pointed to in the text materials] which is culture.*

*I am thinking about how important computers are in some cultures.*

It was surprising to find one teacher who claimed that in fact the textbooks provided a wide range of questions relevant to student's cultural backgrounds. However, this teacher has interpreted culture far more broadly than place

of origin, cultural, ethnic, or religious cultures. After some discussion with this teacher, it became clear that the teacher was referring to youth culture or popular culture:

*The [math] textbook I have is pretty good in terms of making the questions relevant to a wide range of cultural backgrounds. So it's very diverse in terms of questions on things that would be of interest to all students—sports, shopping [emphasis added] and those types of questions" [later the teacher included computers and employment].*

One teacher, while acknowledging that she did not attend to the cultural background of the students in her somewhat multicultural class, claimed she deliberately attempted to attend to students' gender. This teacher said, "I have always been conscious of my examples—to use boys and girls."

Overall, the teachers' comments suggest that they see more differences among students than simply considering students' cultural background. When they did think about students' culture, they interpreted culture to include students' participation in various athletics, choice of clothing, employment interests, taste in music and so on.

### ***Youth Culture and Students' Lives***

#### ***Relationships among Students***

Even though teachers felt individual differences were the most important factor in mathematics education, they paradoxically noted the importance of opportunities for students to work with others with different cultural backgrounds:

*One thing I do find. In math particularly. I do get groups of students who end up working together because they are working on the same thing.*

*Exposure to other cultures did the kids a world of good.*

Teachers also felt that student relationship seemed to transcend culture:

*From my perspective, they [students] seem to be accepting other people.*

*I noticed in the last few years, that students are much more open to other cultures.*

#### ***Aboriginal Students***

Some mathematics teachers drew particular attention to teaching students that have an Aboriginal or Métis inheritance. Some teachers felt a different pedagogical approach is required for these students:

*When you are working with those types of students [Aboriginal] you have to be aware of the different cultural backgrounds among them. Particularly when you are talking about social issues.*

*We have expectations but we do it in a different way.*

Teachers also noted that it is wrong to stereotype students from a particular cultural background, reminding interviewers that

*You can't treat all Aboriginals [sic] the same. There are distinctions within the Aboriginal population.*



Even still, some teachers also felt culture is not a factor in learning mathematics; ironically their comments that indicate culture is indeed a consideration:

*Just because they are poor or Aboriginal doesn't mean they should say it's okay, you don't have to do anything. I believe the reverse is probably true.*

*Our students [Aboriginal context] don't have a culture of doing work.*

### **Parents Make a Difference**

Teachers were clear that parental support makes a difference in student performance in mathematics, noting that here as well family support is more a factor than generalised culture:

*Where parents are supportive, it makes no difference as to cultural background [with respect to behaviour].*

*[Placing importance on the subject] I don't know if it is their culture or just that family or the kids.*

*In one family the culture is to go to university. And in another family, their culture would be not to push that far.*

*I remember talking to the students about graphing calculators which cost about \$120. One kid says he is going to look into it but it is kind of a waste of money...I know his family is able to afford it. Then I have another student who says, "There's just no way. My mom won't give me \$5 for lunch let alone \$120 for a calculator." The first student says to her, "But this is a calculator. It is for school. She won't give you lunch money is different." The student replied, "No we don't have that money. I'm not going to spend it on that." You could see that their families are in completely different places.*

### **Challenges**

It is clear that in mathematics education incorporating perspectives on cultural diversity is considered a challenge by teachers. Most did not indicate it was the nature of mathematics that held them back but felt the sheer magnitude of the potential diversity in their classes would be difficult to address.

*I think like the heritage cultures would be very difficult because you potentially have thirty different [cultures represented], probably not, but you could. So it's very difficult to do something like that.*

*There are things that you can do to help, but unless you have people in support, sometimes you know it is there and you can't really do anything.*

Finally, teachers spoke of the expense of altering their teaching strategies to take advantage or to highlight the cultural diversity of their students' experiences:

*We're very focused on doing well, but we really kind of resent the time being taken with almost anything else [bringing in culture to math class] away from our time.*

*Like I'm not prepared to do a lot of multicultural things in my class because I have so many demands on my time for math. So I'm here to do math. Multicultural can be done some place else. And I am reluctant to modify the standards or the way I go about evaluation in my room because I think that leads to substandard situations.*

## PHYSICAL EDUCATION

Four teachers of physical education were interviewed, all men. Each province was represented but given the small size of this sample, we caution readers to not generalise from what the teachers shared with us. It is perhaps instructive, however, that the three teachers stated essentially the same perspective and position on cultural differences when teaching physical education: physical activity is not related to culture. Remarkably, as the interviews progressed these teachers shared stories which contradicted their view that P.E. was not related to culture.

### *Curriculum and Ethnocultural Diversity*

#### *Physical Activity is Culturally Neutral*

In general, the Physical Education teachers we interviewed describe physical education in terms of teaching students certain skills related to sports, physical activity and healthy living. Since the teachers believe learning in physical education is related to the acquisition of skills, all three claimed students were treated the same in physical education classes.

While all teachers interviewed recognised a variety of cultures represented in their classes, they generally felt cultural background was not significant in learning activities and therefore the teachers do not actively seek ways to modify their methods or change their planning based on the cultural differences among their students. One teacher bluntly remarked,

*We're given certain skills that we're trying to have the students pick up and we work toward those.*

When asked about which cultural differences he saw when instructing students in P.E., one teacher claimed,

*I hardly even notice any differences. They all do the same activities.*

In general, the P.E. teachers we interviewed tend to see physical activity as culturally-neutral. One teacher, however did note that at the start of some units on team sports the cultural background of the sport was introduced:

*We do a unit on lacrosse, and...and we certainly talk about where it originated and who were the sort of founding group of the activity, much the same as curling began in Scotland...and why it began there and how the activity started, and so we talk about those types of things to give the kids some background, first of all, but also to talk a little bit about the fact that different races started them and played different activities.*

Clearly this teacher did see physical activity as part of culture, although the teacher had not incorporated cultural diversity beyond some introductory comments. Overall, the ethnocultural backgrounds of students was not a consideration in teacher planning. As the interviews progressed, however, a few exceptions to this perception were shared. These exceptions fell into two categories: Differences in aptitude and differences due to religious beliefs.

## ***The Pedagogy of Physical Education***

### ***Differences Due to Aptitude***

One teacher noted that the cultural background of students sometimes is related to the students' prior knowledge and ability in a particular sport. For example, students from South America may come to physical education classes quite skilled in soccer since this sport is such a large part of the everyday sport experience of these students. Realising that soccer, in particular, is played almost universally, one teacher ensured this team sport was a regular part of the P.E. curriculum. This teacher also included badminton, since "a lot of kids are familiar [with it], especially kids from Southeast Asia."

### ***Differences Due to Religious Beliefs***

Three examples were shared by teachers. In each case, the culture became an obstacle to student participation in physical education, requiring the teachers to modify their plans for the course or, in the final case, defy the cultural difference.

The first issue arose in a unit on social dance in co-educational classes. Students belonging to a particular religion were forbidden to dance, thus they could not participate. The teacher allowed the students to sit and watch during the unit and did not penalise the students in their overall grade for lack of participation. It is revealing that in most cases the students wanted to participate but expressed fear over the consequences of "being caught" dancing by someone from their religious community. One teacher also commented that this particular unit led to some conflict between home and school:

*I'd be talking to a father who does not want his daughter taking social dance, and the daughter's sitting over here saying, I want to be in social dance. I want to be. So tell him. (emphasis in the interview)*

The second example involved students participating in demanding activity during a time in their religious calendar that required fasting during the day. In this case, the teacher had to rearrange the schedule of the class to include a non-athletic unit on treating athletic injuries during the fast days. This seemed to satisfy the students and their parents. As the teacher notes, accommodating cultural differences this way is a matter of mutual respect:

*The whole thing boils down to respect...if I show respect by being able to alter my classroom somewhat then hopefully they'll (the students) show respect back.*

The final example may arise from other factors than strictly religious reasons. One teacher observed that male students from certain cultural backgrounds did not treat women students as equals in physical education classes. The teacher believes that this behaviour is reinforced at home, and reminded students of the need for equality between men and women. When this issue arises, the teacher tells students:

*Well, you're not in your native country anymore...you are in Canada, and this is the laws that we have, and this is the expectation for your behaviour, and, in my class, this is the way you will have to be.*

### ***Resource Considerations***

Curriculum guides and support resources for physical education are typically seen as culturally neutral, providing no help in considering student cultural background when planning. Teachers appreciate the flexibility of the physical education curriculum that could allow for modification to physical education programmes when they conflict with religious observances. In general, teachers did not complain about the lack of cultural insights for teaching physical education in their resources since they did not see a need for these insights.

## **SCIENCE EDUCATION**

Science education at the secondary school level is a general category that includes the secondary school courses of general science, biology, chemistry and physics. 15% of the teachers interviewed in our research taught high school science. Interviewees were struck with how these teachers, with few exceptions, had not really thought about teaching their particular science from a cultural perspective; in fact, the idea has not even occurred to them that this might be possible. When culture was a part of their planning, it was only to accommodate the differences that interrupted their normal pattern of teaching. In this section, the exceptions to this pattern provide useful insights to how science could be a subject area rich in cultural diversity.

### ***Curriculum and Ethnocultural Diversity***

#### *Assumption that Science Transcends Culture*

Science teachers overwhelmingly consider science culturally neutral—like colleagues in mathematics education. To the teachers we interviewed science is a “pure” subject that directly deals with the reality of nature: An atom is an atom or a lever a lever and this does not change, regardless of students’ culture. As one teacher explained about physics:

*It’s a sort of body of knowledge that really doesn’t have much to do with culture.*

Another teacher observed that science is

*Just content, content, content and very specific to the information that needs to be given out.*

One teacher neatly summarised what most science teachers believed about their content area:

*Science is science, it kind of crosses a lot of cultural boundaries.*

Others were surprised by questions asking about culture and science, admitting that cultural differences are not a consideration in their planning:

*I haven’t really found any trends though as far as if one culture would understand [science] this way, or another culture...I haven’t really been examining it that much.*

*I never really intentionally planned [to include cultural perspectives].*

A few teachers, when asked about how culture might be involved in science education, paused and then suggested ways that indicate the superficiality of their thinking about ethnocultural differences and science education:

*Well, I mean, we might, for example, look at...physics...I guess we can talk about, I don't know, skydive off a pyramid or something like that...[science is] more based on facts and calculations.*

It is revealing that throughout our interviews with science teachers, examples of how culture is a part of science education were given. A few teachers commented that the historical development of the science as presented in school science is heavily weighted towards European and American perspectives; however, most believe that even in these cases science concepts transcend culture. A few Biology teachers noted that topics in genetics, such as studies of blood groups or the rise of eugenics suggest a cultural view of science, but even in these cases the teachers did not reflect on how school science may present a particular cultural viewpoint. Commenting on the topic of skin colour, one teacher told us that even this topic

*It's more applied science...there's not much which touched culture or stuff like that. At least, I haven't encountered a case. (emphasis in interview)*

One teacher, musing on possibilities for including a cultural perspective in biology, noted that the topic of herbal medicine might be appropriate, but immediately reminded the interviewer that “the curriculum doesn't leave much room for getting into topics like this [cultural differences].”

Teachers in schools where the population is almost entirely Métis or Aboriginal in background found it is possible to develop a more cultural diverse approach to science education. One teacher noted that:

*With the First Nations group, I mean, for the topics I teach, like biology, stuff can fit in pretty easily, like, the whole idea of cycling and return and death and growth...I'd like to bring those things in...biology and ecology issues...[these topics] align themselves well with Native beliefs.*

### ***The Pedagogy of Science Education***

In general, most science teachers see modern science as free of culture and thus consider that cultural differences are not relevant to their pedagogy. In fact, teachers told us that they felt science offered an advantage for students since the language of science (numbers and symbol systems) is universal and this universality supersedes culture. When pressed on how culture might be a factor in their teaching, science educators often interpreted culture as a racial issue and immediately began to speak on how they deal with racism in their classrooms:

*Any student [who] would make a racial comment...I think the students know that I'm not inclined to hearing those kind of comments. You know, students are sensitive to a teacher's values, I find. They know that, if they ever do this [make a racist comment] this consequence will happen.*

As with teachers in the other subject areas in the secondary school curriculum, teachers pointed out in interviews that it is more important to attend to the individual difference present in their classrooms:

*it's [consideration of teaching styles] not just for the students that are of a different culture or socio-economic background. It's actually for all the students.*

In the reality of culturally diverse classes, science teachers tend to see students' cultural differences as opportunities to link the pre-determined curriculum to students' lives:

*If there's something that comes up that's specifically, like, that I'm planning out [for teaching science] and I find that this type of culture, you know, does this and I find that information out then I'll bring it up.*

*I think it's definitely important for a teacher to understand the cultural mix she has in her classroom.*

*I'm very sensitive to the "colour of the skin" issue, regardless of colour. Let's say, in Biology, in terms of colour of skin...I see myself dancing around where I don't want to say "black" because I don't want to offend...*

Often the students bring their cultural backgrounds to a class discussion, surprising the teacher with their questions or examples.

*[a student] customarily brings in moose meat [and this] brought up an interesting discussion about people eating moose and how that's completely different from what kids in the city eat or are accustomed to experiencing.*

One teacher was surprised at what he received when teaching students how to do a biological drawing. He chose a birch tree and asked students to make observations on paper, including a drawing. To his surprise, he found that students with an Aboriginal background "have a way of looking at things that are quite different" in that they tend to see considerably more detail about the tree and its surroundings.

### **Teachers' Background**

In two cases, teachers did adopt a pedagogy that considered to a limited extent cultural diversity when planning their science classes. With these teachers, background education in the history and philosophy of science was important.

*The history of science [textbook] I have goes through various areas of chemistry and biology but then it goes to central Asia, it goes to India, and so there are little things that I throw in [when teaching] now and then.*

Courses in cross-cultural education as part of their teacher education was useful, but only to the extent in helping a teacher avoid offending students:

*It [cultural diversity] was brought up under the category of something to incorporate with lessons and something to be sensitive to as far as being careful of the things you talk about because you might offend various religious or cultural individuals.*

### **Youth Culture and Students' Lives**

Science teachers noted a wide range of issues that affect teaching. A few teachers noted that some students are working to support their families and this affects their learning. Conversely, observed these teachers, students from wealthy families tend to do much better in science. A few commented that gender is still an issue in science education and that young women still struggle in physics.

Teachers report that students come to secondary schools already disliking science. A few, commenting further, found that hands-on approach and personal touch essential in overcoming this attitude:

*I had a lot of students who were very anti-science, very anti-school and what I tried to do was bridge that barrier...the first thing I did was got the students interested by taking a personal interest in them.*

Teachers noted that some students are habitually late for class and considered this a function of culture; others noted that some—by no means all—students with an Aboriginal or Métis inheritance “roam,” coming to class for a few months and then are off again, jeopardising their ability to complete the science course requirements.

### ***Religion and Students’ Beliefs***

Biology teachers typically used the topic of evolution to discuss cultural diversity in their classrooms. To most teachers, creationist views or alternates to the theory of evolution are not considered scientific and therefore do not belong in the biology classroom:

*If we’re talking about theories I’ll say, “Here’s a theory” [evolution], I talk about ways of knowing...empirical knowledge and rational knowledge, faith. So I would compare for example evolution to creation and say some of you believe in creation because it’s your faith. But you’re [the students] hard pressed to look for the evidence.*

Responding to students who said, “I don’t want you teaching evolution because Adam and Eve were the first ones created and the Earth is only six thousand years old” a teacher replied, “well, this is a science course and I am teaching you a scientific concept—it’s not a religious or cultural concept—it has to do with science.”

Another teacher shared that:

*several students put down [on an exam] that God created the oceans and this is another culture thing with religion and we try to steer clear of religion as much as possible [in science].*

### ***Language Issues***

Teachers realise that science is a language-intensive subject and that students who have low levels of reading ability or those that are learning English as a second language are disadvantaged in science classrooms. Speaking about an example a teacher used in physics, the teacher told us that

*you talk about hockey [but] a person from Tanzania [sic] wouldn’t know about hockey...that’s more of a language problem.*

One teacher shared this amusing, but instructive story:

*I was speaking about the speed of light in a vacuum...and she [a student from Vietnam] put up her hand, and she said, “Excuse me. What do you mean the speed of light in a vacuum? Do you mean the speed of light in a vacuum cleaner? And I laughed...and I thought it was very funny, and then I...had this pause. I thought, “Oh, wait a minute. What if she’s not the only one?...Then I said, “did anyone else have that conclusion?” Well, two whole rows of hands went up.*

From this experience, the teacher realised that

*It's not only the second language kids who have problems; it's often the first language kids who don't understand [the words and concepts].*

Another teacher shared a story about a question that appeared on a provincial exam about pH changes that used the example of mixing colours of Crayola™ crayons. The teacher noted that they had a student from Asia and had never seen the word “Crayola” before and therefore did not have any idea how to answer the question.

Speaking with insight, another teacher noted that when

*Students that have a language problem, a lot of times when people don't understand where they're coming from, a lot of times [they're] not saying anything, not responding to questions, not being able to understand a lot of times..[this] is taken as them being either ignorant, unintelligent, slow and really that's not the case at all. A lot of times it's just because, other cultures, they're shy.*

### **Resource Considerations**

Throughout most interviews with science teachers, those interviewed began by telling us that science does not have a cultural perspective; but as the interviews progressed teachers began to realise that ethnocultural perspectives towards science were possible and that this might be a more appropriate way to teach science. With this realisation teachers expressed concern that resources to help incorporate cultural perspectives in science are virtually non-existent. One teacher bluntly summarised the issue of resources for teaching science from a culturally diverse perspective: “There’s nothing out there, really.”

Teachers are looking, however, for such resources:

*I go on the Internet a lot to try and find different resources, but I find whenever I type in “sciences” it usually is the historical male, European people.*

*You really try hard and you scrounge and you grab at things if you can...it's a hard one...*

It was clear from our interviews that such support would enable teachers to develop more culturally inclusive science courses. There seemed to be a general openness to the idea of opening science education to more cultural diversity but due to an already crowded curriculum science teachers will need considerable resource support to make this change in their courses.

### **SOCIAL STUDIES EDUCATION**

Social Studies is a general term for the range of courses that include Canadian history, geography, sociology, and social issues. This subject area is directly related to considering ethnocultural diversity in a socio-historical context, thus it is not surprising that teachers were able to share how they incorporated cultural differences in their pedagogy and curriculum planning. Perhaps more than any other subject area, social studies provides a model for the role cultural differences might play in secondary school teaching. Even though teachers told us that most of the topics in the social studies curriculum related well to discussions on culture, teachers often felt frustrated with time restraints, informing us that there is not enough time in the school year to do justice to all the topics



expected to be covered in the curriculum. Other informative issues also emerged in the interviews, suggesting factors to consider when developing more culturally inclusive curricula and pedagogical approaches.

## ***Curriculum and Ethnocultural Diversity***

### ***Curriculum Freedom and Constraints***

Most teachers felt that social studies was a subject area which allowed them (in varying degrees) to relate issues of culture to the curriculum. Many of the topics in the curriculum related to culture, such as immigration trends, Aboriginal issues—such as land claims or residential schools—and globalisation.

However, variation was noted in terms of flexibility within the curriculum to take advantage of opportunities to relate students' experiences to course content. This flexibility varied by province. Teachers facing government-administered final exams generally felt more constrained than those who, without this pressure, could adopt a more flexible planning directly related to students' experiences:

*I think I have something in teaching Social Studies that probably a lot of teachers don't have, in terms of freedom, is that I don't have to worry about provincial exams (or exams for that matter). In our department exams are optional for teachers. It gives me a little more freedom so that I can take a little more time on an issue. I can present more viewpoints on an issue because I don't need to worry about having all these things done by a certain time line...that could be constraining for a teacher who has to teach to have an exam because now you're on limited time.*

Teachers in all provinces commented that the amount of content they are expected to include in their courses can delimit the flexibility needed to deal with cultural diversity:

*Actually what we do in Social Studies with the amount of content that we're expected to teach, is we don't do justice to any of it. So the kids learn a few words and a few concepts here and there, but they really don't come out of it, I don't think, with the kind of understanding that they could have if they focused on one or two things for the semester and spent some time exploring those things.*

There was some concern expressed over the nature of the content itself, although most Social Studies teachers did not feel particularly obligated to stick closely to this content, unless mandated by a government final exam:

*For the most part I think that our [province stated] curriculum is fairly Eurocentric. We spend a lot of time on European history and when we do touch on Asia, Africa, Latin American, different parts of the globe, I find it tends to be on more of a negative context...I don't think students from non-European backgrounds have a real sense of the importance of their culture and the significant contributions that have been made. Within the Social 20 curriculum also, we look at interdependence—again, both in terms of the resources that are available and the way the curriculum is designed, it sort of sets up this north/south, first world/third world kind of division, which again is something that isn't really an accurate reflection of the experience of most of the students that we have.*

*I've never been constrained in my teaching by what the curriculum would say I had to do. I always thought you could go beyond that, in fact I've done that. I think you have to be really, really caring. You really have to be attuned to the differences in cultures and not make outstanding, outlandish, sarcastic remarks. Some teachers do.*

Social Studies teachers in general were not greatly concerned over the stated curriculum, which most viewed as a general guideline for course development. Most teachers we interviewed identified resources as an area of more concern.

### ***The Pedagogy of Social Studies***

#### ***Cultural Diversity in the Social Studies Classroom***

A common theme in all the interviews was that of ‘student as resource.’ As one teacher put it, “students have a lot to offer culturally.” When discussing certain issues in the curriculum, students from various cultural backgrounds were able to offer their personal experiences/perspectives. For example, one teacher shared how an Inuit student asked to explain to classmates that the Inuit prefer not to be called Eskimo; one student who had lived in South Africa confirmed what the teacher had said about Apartheid; another teacher shared that a female Iranian student responded to the video, *Not Without My Daughter*; one teacher told us that students from Israel/Lebanon provide contrasting perspectives on the ‘situation’ in the Middle East; another teacher shared how a Vietnamese student described for classmates the experience of being a refugee. It was clear that Social Studies teachers generally work to create classrooms and curriculum experiences that make connections between students’ experiences/knowledge and course content.

One challenging aspect of having students from diverse backgrounds that social studies reported experiencing is that of having to ‘tread a fine line’ between feeling the need to present contrasting and perhaps controversial perspectives and being concerned to not offend any students in the process. Teachers pointed out that the best discussions require an atmosphere of mutual respect in the classroom. The most common example of how teachers work to create this atmosphere involved situations dealing with Aboriginal students/issues. For example, a teacher shared how several non-Native students made stereotypic comments in class about Aboriginal peoples living off Welfare, having it easy, etc. Teachers want students to be able to express themselves; at the same time, they make a point of providing them with information—both current and historical—to better understand the issues. If Aboriginal students were in the class, the issue became more sensitive and dealing with it was much more of a challenge:

*There is a lot of racial diversity in my class. It lends itself well I think to a lot of the teaching that I’m doing because the kids help each other. Like they can teach each other about themselves in social studies...but in social studies, we are so curriculum bound that you have to teach this content, there is no wavering from the content, very little.*

*The multicultural reality impacts directly every day in my planning and in my teaching...the most important thing that you need to understand is that you are teaching a group of individuals with a variety of backgrounds. So addressing where they come from, addressing their background and their experiences is something that we use, because when you’re trying to teach any student in any subject, I have to connect what I’m trying to teach with what they already know...in Social Studies in particular, it is a very rich element of our course and of our classroom, having all these diverse backgrounds—it makes the Social Studies more interesting. I think it actually makes our students have a more cosmopolitan outlook because not only are we studying other places in the world*

*and other cultures from an academic point of view, but also the students in those families that come from those places are in the school so they're our resource.*

*What I try to do is be sensitive to those kids that are in my class that may be related to some of the issues or may have left those countries, for one reason or another, or their parents may have. And most often what I find is those kids are very willing to share what they know because what I know is from the textbook and what they know is lived.*

*In terms of bringing up issues freely, dealing with race...I will think twice in terms of how sensitive things can be taken, so as not to offend any of the other kids in the classroom and also just not to drum up stereotypes...I want to discuss these things, but I want to do it in a way that it's not going to offend anybody or make anybody feel that they're less than equal to everybody else.*

Social studies teachers also noted that providing students with choices in terms of assignments and resources encouraged expression of cultural difference. One teacher wondered if creating more culturally-inclusive classrooms requires school boards hiring a more culturally diverse teaching staff.

Most teachers felt the provincially-mandate curriculum was suitable for encouraging an understanding and appreciation of cultural diversity, although a few teachers noted the need to update the curriculum since the content was considered to be irrelevant to some students' lives. Still others felt their students arrive at secondary school with gaps in their background, frustrating attempts by teachers to develop mature perspectives on cultural differences. One area where student background was a factor was for those students who are learning English as a second language.

### ***English as a Second Language (ESL)***

The teachers we interviewed observed that ESL students often struggled with the content material due to limited English language proficiency and lack of background knowledge. In fact, teachers shared that some ESL students were unable to complete course requirements in time to graduate.

*It's (the curriculum) mainly European history and kind of Caucasian cultural groups. I find that some of the Vietnamese students, some of the ones from South America, they are quite foreign to the experience of history in other parts...and our curriculum is focused on more of the Caucasian and European model I guess.*

In our interviews, teachers of Social Studies courses that have government prepared final diploma exams expressed the belief that these diploma exams are biased against ESL students.

*[It's]very difficult for students who come from ESL backgrounds because quite often by the time they get to grade twelve they still have not quite achieved their reading comprehension level that allows them to be very successful with diploma exams...this school tends to have a lot of difficulty with the [course mentioned] diploma exam.*

*I think the diploma exams are a little laden against ESL students. It is a male driven curriculum, like most of the social studies area. And so yes, for girls and especially for girls coming from an ethnic background or a different culture, again it is all European history.*

Compounding the problem are financial cutbacks to education experienced in each province; teachers told us that these cutbacks invariably affect programs and support for ESL students. It is clear this support is needed. Like their colleagues in every subject area, teachers shared the need for assistance and education on how to best help ESL

students. There is also a clear need for more adequate curriculum content and resources to help meet the needs of ESL students. Finally, teachers informed us that those schools with ESL programs continue to struggle to find a balance between ESL classes and the integration of ESL students into the regular school programme.

### ***Youth Culture and Students' Lives***

Many of the issues dealing with students' cultural diversity in Social Studies depended on the local situation of the students. For example, teachers reported that during discussions—in particular, regarding sensitive issues—students in “middle class” schools tended to be more concerned about political correctness whereas students from lower SES neighbourhoods were “not so concerned about social niceties.”

*It's not so much race and culture, it's also the age, economic backgrounds, where they come from, all those things together that makes it difficult.*

The teachers we interviewed were concerned that students from lower SES situations would be unfairly stereotyped or that their neighbourhoods might be unfairly labelled as “tough” or “bad.” This problem was particularly acute with students that have an Aboriginal or Métis inheritance. Even though the SES situation of this population of students varied considerably, one teacher noted that

*Our community is very against Natives. They have stereotyped 'Indians' and I work hard at teaching the full Native background before we look at land issues.*

In schools that are situated in lower SES areas of the city, poverty was an issue. Teachers reported that immigrant students, in particular, frequently had to work to help support the family. In some cases, this meant quitting school or problems with absenteeism. Teachers contrasted to a school in the suburbs where most students are university-bound.

These factors influence curriculum decisions and the possibilities for working with student cultural diversity. Nevertheless, interviews with Social Studies teachers clearly revealed that this area of the secondary school curriculum, largely due to the creative pedagogy of Social Studies teachers, provides rich opportunities for incorporating ethnocultural diversity to the established programmes of study.

### ***Resource Considerations***

Resource considerations emerged as a major issue for addressing cultural differences in the classroom. Social Studies teachers, unlike their colleagues in other subject areas, find a wide range of resources available for developing culturally inclusive approaches to teaching. In addition to standard textbooks, Social Studies teachers use newspapers, videos, CD-ROMs, the Internet and television to enrich their teaching. In fact, these teachers agreed that if they were limited to only using textbooks, such as in Mathematics education, then there would be a problem in developing the approaches needed to incorporate cultural diversity in their classrooms.

Even with such a wide selection of potentially useful resources, teachers shared some concerns. The Internet was acknowledged as a potentially great resource, but most teachers felt this resource needs to be approached with caution. In one province, most teachers expressed that they felt somewhat constrained regarding

resources they perceived to be too Eurocentric; these teachers commented that the authorised resources for teaching did not adequately address or reflect the increasingly culturally diverse nature of their students. Other teachers noted that more resources need to be available that adequately address Aboriginal issues. There was wide agreement that teachers lack the time to find resources and the support funds to acquire those resources that are available.

*I don't have a textbook, I don't use a textbook. And I'm sure if someone wanted to report me to the Department of Education they could. But what I'm trying to do is create levels of understanding...I'm lucky because I'm very aware of cultural differences. I studied them in sociology and I made sure I read about all religions and I encourage kids to openly share and to try to provide a safe environment.*

*Courses have a prescribed textbook and most of them are very good for dealing with general information, but I try to as much as possible incorporate different viewpoints from as many places as possible and let the students from there develop their own viewpoints, not just take what the textbook says for granted or necessarily correct.*

*We have an awesome collection of social studies materials—with the teacher resource room, within the department, in terms of textual material, magazines and videos. There's a marvellous video collection. There's Internet hook up in each social studies classroom, and there's also the capacity to hook up a computer to a TV screen in there, so that you can actually surf with a group, for doing things like current events and discussing things that are going on in the news.*

*I think the resources we use in social studies can be used to promote multiculturalism and awareness. We certainly use the newspaper a great deal, magazines, the Internet. What is exciting about the Internet is when you're studying these issues you can get the actual words of the opposing sides...the Internet has opened new pathways towards understanding, although you have to be very careful to understand that information on the net is by no means authoritative simply because it's on the Internet.*

## **INSIGHTS FROM ADMINISTRATORS, COUNSELLORS AND LIBRARIANS**

Administrators, counsellors and librarians in the schools we visited provided much of the support and resources for teaching a diverse student population. A number of these administrators, counsellors and teacher-librarians agreed to participate in our study.

The small number of administrators we interviewed all expressed concern and interest in creating a school climate that was open and welcoming to students from a range of ethnocultural backgrounds. All mentioned that the demographics of their schools had changed in recent years to include more immigrant and/or Aboriginal students. They spoke of their attempts to support teacher initiatives in curriculum development for a multicultural population and explained the particular constraints they faced in their communities. In some instances these included issues of poverty, crime, absenteeism and limited resources. Other administrators mentioned the need to attend to issues of language with their large ESL population and to find ways to involve parents more effectively in their children's education. Several schools had developed proactive initiatives to address specific needs of their community. For example, two schools had re-organised their school terms into modularised learning units. One principal explained:

*It was our experience that the kids would stay for six to seven weeks and then things would start piling up on them and the stress, and maybe other issues, home life and all those kinds of things, and their commitment would start to wane, I guess. And we would lose contact with them and they'd be gone...I guess that's why we moved to block scheduling, a quarter timetable system.*

In one school with a population of a thousand students drawn largely from the inner-city, the vice-principal spoke about ways the school celebrates cultural diversity through classroom instruction and through "Multicultural Days" which draw performers and speakers from the community. This administrator spoke too of a recent review of the school logo that depicts a Native chief's head in full head dress. The logo was revered by some alumni of the school but considered offensive by various members of the Aboriginal community. The school organised panels of students, parents and community members from various ethnocultural backgrounds to debate and answer questions over the issue of retaining or changing the school logo, and the teachers and students subsequently voted to retain the logo because of the strong school tradition that it represented. The vice-principal explained that the process of debate around the logo issue was valuable in raising issues of cultural sensitivity for teachers and students.

In another school, an administrator spoke about cross-disciplinary initiatives to promote school harmony and address issues of racism:

*We do International Day for the Elimination of Racism; it's a proactive way, I guess, of dealing with racism .... Last year we took a look at aboriginal issues and apartheid- looking at changes there. We had guest speakers come in. Our drama students performed. Art students showed their work on projects that they did based on issues of racism. The band played songs that tried to bring the school together in a more harmonious atmosphere....This year we're going to focus on poverty, and we're going to do an even more in-depth analysis of that issue through the social studies classes.*

Administrators spoke of the need to hire more teachers and consultants from Aboriginal and non-white backgrounds. In one school in particular with a large Aboriginal student population, the teaching staff was already quite diverse:

*There's two Métis teachers, but the school's vice principal is First Nations. And then we have two teacher associates on staff that work to liaison with community and act as positive role models for the students here. There's our community school coordinator and one of the requirements is that she be First Nations.*

Several administrators mentioned their efforts to counteract the negative perceptions some parents had about schools with large multicultural populations. All the administrators we interviewed were keenly aware of many of the issues around ethnocultural diversity and attempted to provide a supportive environment for their students and teachers. Many were working closely with school counsellors to attend to the individual needs of their students. The counsellors interviewed in the study confirmed the support received from their school administrators for developing a safe and caring environment for all their students, but they cautioned that there were still many challenges that immigrant students faced in the school. One counsellor explained:

*I've had a lot of counselling through the last fifteen years with girls whose fathers are from different cultures, mostly ESL students who are all fairly new arrivals....They will not allow them to have Canadian friends. Their values and their culture has to follow where they came from and it makes it very, very difficult for these students because they can't join in sports or they can't choose friends or do the activities, so they feel left out. They already feel left out because they've given everything up in their own lives and then to come and not feel they belong here either, and they really suffer from depression.*

A counsellor at another school explained her attempts to mediate between student and parent in some situations involving immigrant children in the school:

*As a counsellor, you have to respect the custom, the family's customs. However, you have to try to explain to the parents that their children are in contact with people from different customs. And you know it's going to cause conflicts at home, and so the parents are going to have to deal with that in their own way. I can't impose my beliefs on their family or their customs. I can't say their customs are any less valid than my customs are. And so, it's a matter of explaining to the parents why they (the students) are having the problems and then the parents have to deal with it themselves.*

Administrators were also keenly aware of the role their school librarians played in developing resources for a diverse student population. Librarians interviewed in the study spoke of the need for fiction at all reading levels to accommodate their ESL students, and the need for sensitivity in selecting cultural resources. Two librarians invited opinions of teachers from diverse ethnocultural backgrounds in making selections. They tried to provide resources that offer varying viewpoints on issues, and stressed the importance of including local authors in their library collections. Many struggle with library collections that are outdated and culturally inappropriate, and spoke about the fine line between selection and censorship in their efforts to provide resources that promote a multicultural perspective.

*As a librarian, I try to bring in as large a variety of information and resources for all cultural areas...We try to have authors from the different ethnic backgrounds and try to represent different viewpoints, so that it's not a biased viewpoint that students are getting.*

Librarians, too, are at the cutting edge of technology, working with students on accessing internet resources from around the world:

*As far as culture goes, the thing that is unique about our library too, I guess, is that it's fifty per cent print and fifty per cent technology. So the computers are a big asset for what we do. They're Internet connected, so we have a large variety of CD-Roms.*

Our interviews with administrators, counsellors and librarians emphasised for us their crucial role in supporting or constraining teachers' abilities to respond to the diverse needs of their students.

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### **SECTION 3: THE MESSINESS OF CULTURAL DIVERSITY — THE LIVED CURRICULUM AS CONVERSATION**

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The word curriculum typically refers to resources and government mandated documents that guide classroom instruction. Our interviews with teachers revealed how the curriculum is more than mere documents. Curriculum is the lived day to day practice as teachers and students negotiate meanings in the context of an education system dedicated to the development of a citizenship willing and able to participate in Canadian society. One way to understand the lived curriculum is to use the metaphor of curriculum as conversation. Like a conversation, the lived curriculum is dynamic. It involves voices, silences, interruptions and a fluid movement from topic to topic.

The most common response by teachers to our questions about ethnocultural diversity and curriculum was to emphasise the importance of seeing students as individuals with particular experiences and diverse needs. It was clear from our interviews that meeting the educational needs of students was of primary importance to teachers. While all teachers recognise ethnocultural and religious differences among their students, only some understand the implications of these differences for student learning. Like a conversation about the weather, most teachers' awareness of ethnocultural differences appears to be at a surface level, with little consideration for the role of such differences in understanding and interpreting the curriculum.

In this final section, we discuss how the curriculum both interrupts and is interrupted by the lived experiences that students and teachers bring to the classroom. We discuss how silence in the classroom is interpreted and misinterpreted, how the fabric of students' lives adds new voices to the curriculum, and how the horizon of the curriculum is expanded as teachers begin to actively acknowledge the culturally diverse richness of their students' lives.

#### **THE VOICES OF STUDENTS' LIVES**

Our interpretations of the interviews reveals that as teachers grew in their awareness of the rich diversity of students' backgrounds these teachers adapted their teaching in various ways to take account of the fabric of students' lives. Teachers shared with us that the fabric of student lives both constrains and enhances the curriculum.

Teachers who were faced directly with issues of cultural diversity spoke of the need to modify instruction for reasons of culture, religion and language. For example, a physical education teacher shared that he begins the term with a unit on soccer because in his experience children from many parts of the world are familiar and often skilled in this game. In biology teachers report that they invite religious concerns from students when introducing the theory of evolution. In a school with a large Aboriginal and Métis population an art teacher makes a point of including various art created by First Nations artists and craftspersons. These and other examples cited earlier in this report demonstrate that many teachers in the prairie regions have begun to modify their practice and the curriculum to attempt to address the needs of the cultural diversity in their classrooms.



In our research teachers indicated that students of immigrant families may struggle with conflicting demands, expectations and values of home and school. This dichotomy appears in the ways in which students negotiate their lives at home and at school. For example, some students speak a different language at home than at school. One teacher spoke of a student who leaves home in modest clothes approved by her family but who arrives at school in dress more reflective of youth culture. In another interview, a teacher noted that some girls who have relationships with boys that are not from their cultural heritage keep their relationships hidden from their families. Students with an Aboriginal or Métis ancestry may also experience the dichotomy between home and school. Some teachers commented that these students often miss months of school. In a few cases, the teachers interviewed acknowledged that some students miss school because they participate in family and community activities, including events and celebrations held on reservations. Teachers also commented that some Aboriginal students seem to live very transient lives, moving between the members of their extended family, consequently missing significant amounts of time at school. In a few schools there were specific program modifications in place which were intended to address student absenteeism and transience—the most common of which was the modularization of units.

Some teachers suggested that the influence of popular culture on students' lives was pervasive. Hence, many teachers made few distinctions between issues of ethnicity, heritage culture and popular culture as they described how they addressed issues of culture in the classroom. For example, some teachers spoke of their deliberate inclusion of popular culture as a way of relating to students: mathematics teachers indicated that they use examples and questions in mathematics which often include references to music, sport, entertainment, and clothing; English language arts teachers suggested the inclusion of rap lyrics in their poetry teaching; and some social studies teachers discussed how they might debate the use of corporate images in advertising in their classrooms.

Most teachers recognised that demographic changes may lead to racism and pointed out that they do not permit offensive stereotypic language in their classrooms. Often, teachers reported a reactive rather than a proactive approach to racism; for example, they responded to challenges about stereotypes in textbooks or inappropriate language in literature, but did not always take a stance to change the nature of their resources or their ways of teaching.

### **SILENCE INTERPRETED/MISINTERPRETED**

Teachers also assumed communication issues to be culturally specific. Many teachers commented on the reluctance of some Aboriginal students to make eye contact and actively participate in large group discussions in the classroom. A few teachers observed that students who are recent immigrants are often very quiet and do not participate in the social interaction of the classroom. Many teachers seemed to interpret this silence as grounded in the students' cultures rather than a result of shyness or possibly the reluctance to participate in conversation because of their limited English skills. In contrast, teachers with some experience and education working with Aboriginal and ESL students recognised that the silence cannot simply be attributed to differences in cultural beliefs, traditions and values; their silence may be intertwined with personality differences, learning difficulties, and inexperience with the language of the classroom. In addition, some teachers suggested that student silence may be promoted by

inappropriate textbook resources. For example, teachers spoke of the limitation of authorised resources to address ethnocultural issues; they were perturbed by the cultural bias of some textbooks and by the inappropriate language used in some of these texts.

## **INTERRUPTING CURRICULUM/INTERRUPTING LIVES**

Teaching is often interrupted by the mundane: bells, announcements, sporting events, field trips, etc. In this study we recognised the extent to which teaching is also interrupted by the traditions, beliefs and values that students bring to the classroom. Religious obligations were some of the most common and obvious interruptions to teacher planning. Teachers often needed to make allowances for religious holidays and students' dietary and lifestyle restrictions, such as dress obligations. A number of teachers commented on how perceived cultural beliefs about gender relationships influenced their interactions with students in their classrooms. For example, teachers perceived that some boys from a Middle Eastern background were often not as willing to accept the authority of a female teacher as that of a male teacher. Teachers also indicated that they had to discourage interactions between boys and girls where the boys displayed a sense of male superiority.

In general, we found that teachers accommodated these interruptions through flexible planning or adding topics to the subject area. For example, some physical education teachers adapted to students' religious observances by changing the timing of activity-oriented units to accommodate students who were fasting during Ramadan. Some science teachers accommodated cultural and religious differences by using students' understanding of evolution to invite conversations about ways of seeing the natural world.

Positive interruptions to curriculum often resulted from students' lived experiences which served as an opening to a richer understanding of the background of the students. For example, a Physical Education teacher shared with us an event that occurred when he was teaching a group of Grade 10 students from Vietnam:

*We were outside playing soccer and...had them in mini-games, about five different mini-games of soccer going on and lots of participation happening, and all of a sudden all these Vietnamese kids were out back, were running for [their lives] or hiding between trees and...we just couldn't figure out what was going on, and then, within about thirty seconds, a whole group of helicopters flew over the school...I didn't think anything of it... I hear the noise, but for me that's nothing. It could be [name of a local airbase] or STARS air ambulance...I don't think the kids, when they ran, knew what was in the air. They just knew the sound was there...these kids [the ones who ran] were part of the group that spent time in the boats and on water...and on and on and seen their, a parent die...in a camp. Yeah, you get those stories.*

## **POSSIBILITIES FOR A DEEPER CONVERSATION**

From our interviews, we discovered that the possibilities for a deeper curricular conversation in the multi-ethnic classroom may be limited by teachers' assumption of the cultural neutrality of particular curriculum areas, by assuming, for example, that mathematics is a universal language, that science is culturally neutral, that classics of literature are universal, that sports are sports, and that history consists of historical facts. Some teachers bought into stereotypes about students from certain ethnocultural backgrounds. For example, in mathematics education some teachers assumed that students who had recently arrived from Asia were likely able to participate and do well in

mathematics. Conversations were also constrained by the mandated, such as standardised testing and other external impositions that interrupted a teacher's ability to attend to student difference.

We found, however, that the possibility exists for enhancing the conversation through teachers viewing students' experiences as curricular resources, being sensitive to students' individual ethnocultural backgrounds and experiences and taking account of dietary and lifestyle differences among students from particular cultural and religious backgrounds. Recognising that demographic changes may lead to racism in schools, many teachers were quick to point out that they do not permit offensive stereotypic language in their classrooms and that they are sensitive to the need for respect for all cultures. More often, teachers in the Humanities discussed a more proactive stance that not only attends to racism but recognises the value and importance of multicultural diversity.

Often, what appeared to teachers at first as an unwelcome interruption to the mandated curriculum created an opportunity to enhance the conversation of the lived curriculum. In some classrooms, this conversation was still muted, while in others it already resonated with rich possibilities.

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## SECTION 4: RECOMMENDATIONS EXPANDING THE HORIZONS OF THE SECONDARY SCHOOL CURRICULUM

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### OVERVIEW

Our research offers rich insights and directions for developing a more multicultural inclusive pedagogy. We discovered that in every subject area most teachers work to create a climate that invites and supports ethnocultural differences. Their responses range in a continuum from reacting to the differences that appear in classrooms to taking a proactive approach to incorporating varied perspectives in their subject areas. At one end of this continuum, teachers do address overt manifestations of racism when they arise in their classrooms. Many of these teachers, however, assume their subject areas are culturally neutral and thus see multiculturalism as an interruption to the regular curriculum. Generally these teachers do not seek these interruptions or use them to expand their views of their subject areas to include multiple perspectives. This was particularly noticeable in the subject areas of science, mathematics, and physical education. Teachers of the humanities such as English Language Arts, Social Studies and Art typically adopt the more proactive stance on the opposite side of the spectrum. These initiatives include celebrating different cultures and traditions that their students bring to their classrooms and welcoming and seeking multicultural perspectives in resources and the development of their pedagogy.

It would be simplistic, however, to seek this spectrum as a dichotomy. Our findings suggest the picture is more complex and context related. For example, some teachers in the humanities believe that the canon of classic British and North American literature is appropriate for all students and that the culture that their students bring to the classroom is not a key factor in influencing what students should read. We also found that a few teachers of the humanities react to ethnocultural difference rather than seeking ways to be proactive in their teaching. Conversely, a number of the science teachers interviewed are in the process of developing a much more culturally inclusive teaching practice. In one secondary school biology class, for example, the teacher introduces students to the traditional schemes used by Aboriginal peoples of the Western Plains to classify living things as an example of how classification is culturally dependent.

Our interviews revealed that the context of school and community are key factors in the development of inclusive multicultural perspectives in secondary schools. It was clear that the administration and resource support staff, such as the school librarians and counsellors, play a crucial role in supporting teacher initiatives to advance multiculturalism. Administrators are able to develop the timetable flexibility to meet the varied needs of a diverse student population. Together with the support staff in a school, these professionals facilitate the acquisition of the personnel and resources necessary to encourage a school-wide climate that welcomes the perspectives of a variety of cultures. We noticed that such support was often in response to the changing demographics of the community served by the secondary school, while schools with a more homogenous student population seem to be less proactive in paying attention to issues of ethnocultural diversity.

It is important to recognise that schools are limited in their ability to address issues of cultural diversity, racism and difference. While Canadian children do spend a great deal of their lives attending school, the teachers we interviewed realised that many of the issues seemingly related to culture actually arise from broad, complex societal issues such as poverty or the natural consequences of families adjusting to a new life after immigrating to Canada. For example, a few teachers reported that some of their students are expected to work to help the family income and this, more than cultural difference, is a key factor in the ability of the student to manage his or her studies. In our interviews some teachers noted that it is not uncommon for students who have immigrated to Canada to have conflicts with their parents over the negotiation of cultural differences; this varied, however, considerably with the family. Some teachers complained that they have to constantly work against stereotypes of their school by the city population as “tough” or “bad” when, in fact, these schools simply have diverse cultural representations. Teachers also point out that stereotyping occurs within schools and between cliques of students, suggesting that addressing the issue of cultural diversity must directly involve student insights, voice and action.

The recommendations that follow are based on our interpretations of the research data and reflect the limitations and realities previously discussed. These recommendations are offered to support and encourage the development of a proactive secondary school curriculum where teachers in each subject area seek to incorporate a multicultural approach to teaching and learning. This means more than acknowledging the ethnocultural backgrounds students bring to secondary school classrooms or simply responding to overt racism when it appears. Rather, teachers should be supported through curriculum policy, professional development opportunities, resource development, and a supportive school climate to expand the horizon of their understanding to include the perspectives of cultures previously silent in the curricula of secondary schools.

## **RECOMMENDATIONS FOR CURRICULUM POLICY**

***Increase funding to schools to support a school-wide pedagogy that is responsive to the changing cultural demographics.***

We recognise that increased funding will be essential if schools are to work towards a more culturally inclusive curriculum. Teaching is a demanding profession and each year teachers are asked to take on additional responsibilities previously the providence of the home. Adding to these demands without adequate support systems will only frustrate an already exhausted profession.

***Recognise that for most of the secondary school curriculum it is the approach to the curriculum that needs to change, not the existing set of topics.***

Our interviews did not suggest that the existing secondary school curriculum needs to be radically changed, but that policy makers and curriculum developers need to add to curriculum documents advice on how to approach topics from a culturally-responsive perspective. For example, the topic of “metallurgy” in secondary school chemistry

curriculum could include discussions and research on the effects of the development of alloys on culture and studies on the development of metallurgy. Dance in physical education could be broadened to consider dance as a form of culture or Aboriginal Story-tellers could be invited to English Language Arts to share traditional stories and the role of an oral culture in preserving narratives that form and inform culture. We offer a caution that such approaches need to move beyond a “tourist” approach to curriculum, whereby students “sample” or read about different ethnocultural perspectives without any recognition that different points of views, traditions and forms of learning may be equally as valid as their own. From our interviews it was clear that opportunities exist within the present secondary school curriculum to address the needs for a citizenry that values and understands cultural difference.

***Extend support systems and special programmes to students who are learning English as a Second Language.***

Schools in the Prairie Provinces vary in their existing programmes to deal with students who arrive in Canada without a strong ability to speak and write English. Some schools have extensive support systems while others tend to deal with needs on a more individual basis. The majority of the teachers we interviewed noted that ESL students continue to need additional assistance and often more than they receive at present. Teachers recommend schools provide flexible programming for ESL students, including longer times for writing exams and more one-on-one direct tutoring. Teachers told us that they need support through teacher aides and professional development in their classrooms to help ESL students, especially in those schools that have recently experienced rapid increases in ESL students.

***Adopt school-wide more flexible approaches to secondary school curriculum development, programming and assessment.***

Teachers reminded us that initiatives to incorporate multicultural perspectives in secondary school subjects face an already crowded curriculum. Teachers commented that mandatory, government administered final exams for subjects reduce the flexibility needed to explore cultural diversity in an appropriate depth, if at all. Teachers generally hope for a more open, flexible curriculum that provides students with more choice in assignments. A few teachers mentioned that provincial curriculum guides could take leadership in this area by reducing the number of topics to be developed in school subjects and emphasising the importance of cultural diversity when teachers develop lesson plans.

## **RECOMMENDATIONS FOR TEACHER PROFESSIONAL DEVELOPMENT**

***Develop systems that support teacher reflection across subject areas on issues of ethnocultural diversity.***

Part of the on-going professional development of teachers should include opportunities for teachers to share their experiences dealing with ethnocultural issues and to discuss effective strategies for incorporating a diversity of cultural views into the existing curriculum. Our research indicates that reflection on cultural issues tends to be

related to subject areas. It is not surprising that teachers of the humanities consider issues of culture a normal part of their teaching practice while those more aligned to the sciences tend to see their subjects as culturally neutral. Given this situation, we believe there is much to be gained by bringing these two groups together for discussions on ways to address issues arising from the cultural diversity of secondary school students.

***Seek opportunities that help teachers understand that every secondary school subject contains knowledge, skills and attitudes developed from a particular cultural perspective.***

There is a need for teachers to critique the content they teach, challenging the “taken-for-granted” notions of the cultural neutrality of their curriculum. Teachers need to become more aware of their own ethnocultural identities and the way this plays out in their belief and values systems. Teachers with interests and experiences with multiculturalism can help to create a community sensitive and open to cultural diversity. In our interviews, teachers indicated a general awareness of multicultural diversity in classrooms arising from the changing demographics of cities in the prairie regions. Teachers who were faced directly with issues of cultural diversity spoke of the need to modify instruction for reasons of culture, religion and language.

***Provide professional development for secondary school teachers on pedagogical strategies for addressing ethnocultural differences.***

There is a need for professional development opportunities that offer teachers experiences which have the potential to foster the development of sensitive pedagogical strategies for use in their classrooms. Teachers need to have opportunities to engage in collaborative planning to address pedagogical issues related to ethnocultural difference.

***Hire more teachers from a range of ethnocultural backgrounds.***

With the growing ethnocultural diversity of the school populations there is a need for more teachers from a range of ethnocultural backgrounds

## **RECOMMENDATIONS FOR TEACHING RESOURCE DEVELOPMENT**

***Develop suitable teaching resources that incorporate a diversity of ethnocultural perspectives.***

The teachers we interviewed clearly stated that resources are crucial in addressing questions of cultural differences in the classroom. Many teachers mentioned the limitation of existing texts in their school which may present a British-American perspective to the subject or resources written by and from the perspective of white males.

There is a need for resources that demonstrate and reflect multicultural perspectives to curriculum topics. e.g. in biology classification systems by Aboriginal peoples, resources that help teachers include female artists and people of colour. Teachers can use resources beyond the text, including newspapers, videos, CD-ROMs, the internet and television, in order to present diverse viewpoints. The Internet is potentially a great resource, but one that needs to be approached with caution. Even when a wide variety of excellent resources are available, most teachers often lack both time and finances to be able to access them.

There is a need to bring in more/alternate resources to address Aboriginal issues adequately. In the Humanities teachers have extended selection of resources to include more global perspectives. For example, many English language arts teachers reported that they are aware that the existing canon of literature studies in schools primarily represents a western perspective. In response, many teachers are bringing multicultural literature to their classrooms to broaden the mandated curriculum.

***Consider students, parents and the local community a source of insight on cultural understandings.***

Students' from diverse cultural backgrounds sharing their experiences/perspectives is one of the most effective resources for making connections to the curriculum.

***Develop assessment materials that consider the diversity of students' ethnocultural backgrounds.***

Evaluation and standardised testing need to take account of the diverse ethnocultural backgrounds and experiences students bring to the classroom. This is actually a resource issue, since teachers need ideas and often take the lead from assessment materials.

## **RECOMMENDATIONS FOR FURTHER RESEARCH**

***Create a forum for teachers and policy makers to interact.***

Teachers need opportunities to come together to dialogue and reflect upon possibilities for responding to ethnocultural diversity in their classrooms in informed and sensitive ways.

***Encourage Canadian university undergraduate and graduate programmes in education to include studies that explore issues of cultural diversity.***

There is an urgent need for programmes in teacher education, educational leadership at the graduate level and curriculum development to address issues of ethnocultural difference.

***Develop theoretical frameworks that address the formation of teacher identity within the context of culturally diverse classrooms.***



Teachers are currently unaware of the crucial role their own identity formation plays in their teaching.

*Invite secondary school students to share their experiences of ethnocultural diversity.*

We recommend a further research study that focuses on the experiences of students as vital to further understanding the ways in which the growing ethnocultural diversity affects curriculum and teaching. The findings in this Report are based solely on teacher perceptions, and while these offer an insightful portrayal of our secondary school classrooms, the portrayal would be much richer with the added experiences and insights of students.

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