MORE THAN A NEW COUNTRY: EFFECTS OF IMMIGRATION, HOME LANGUAGE, AND SCHOOL MOBILITY ON ELEMENTARY STUDENTS’ ACADEMIC DEVELOPMENT

by

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Abstract

Few studies have quantified the effects on academic performance; none has investigated, as this study does, the effects of immigration, home language, and school mobility on academic development over time. What makes this study unique is its melding of sociological and psychometric perspectives – an approach that is still quite new. Logistic regression was used to analyze data from Ontario’s 2007-2008 Junior (Grade 6) Assessment of Reading, Writing and Mathematics, with linked assessment results from three years earlier, to investigate students’ academic achievement. The focus of this study is on whether the students maintained proficiency between Grades 3 and 6 or achieved proficiency in Grade 6 if they were not proficient in Grade 3. The results indicate that Grade 3 proficiency is the strongest predictor of Grade 6 proficiency and that home language or interactions with home language are also significant in most cases. In addition, students who speak a language other than or in addition to English at home are, in general, a little more likely to be proficient at Grade 6. Most students who were born outside of Canada were significantly more likely than students born in Canada to stay or become proficient in Reading, Writing, and Mathematics by Grade 6. These results highlight the importance of considering the enormous heterogeneity of immigrants’ experiences when studying the effects of immigration on academic performance.
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CHAPTER 1. INTRODUCTION

Much has been written about the challenges children face when moving between countries, including changes in culture, school organization and curriculum, and, often, language. Few studies, however, have quantified the effects on academic performance; none, to my knowledge, has investigated the effects of immigration, home language, and school mobility on academic performance at more than one point in time. This study seeks to fill that gap.

Changing Student Demographics

Accelerated immigration to Ontario’s cities over the past decade from countries, especially non-White countries, that have not traditionally been the sources of Ontario’s immigrants has resulted in a student body from increasingly linguistically and culturally diverse households. For example, the Toronto District School Board serves about 280,000 students in one of the most diverse and multicultural education systems in the world. More than 24% of the students were born outside of Canada (Yau & O’Reilly, 2007). According to Canada’s 2006 census (Statistics Canada, 2007), one in every five people living in Canada was born outside of Canada and 80.1% of the foreign-born population had a mother tongue other than English or French.

The linguistic profile of these immigrants reflects the diversity of the leading source countries sending immigrants to Canada. Citizenship and Immigration Canada (2008) reported the most common mother tongues\(^1\) spoken by permanent residents to Canada in 2008 (after English) were Mandarin, Arabic, Tagalog, Spanish, Punjabi, French, Urdu, Korean, Russian,

\(^1\) Statistics Canada (2009c) defines mother tongue as the first language a child learns at home and still understands
Chinese, Farsi, Hindi, and Tamil. It is clear that immigrants to Canada and to Canadian schools are a heterogeneous group.

**Immigration, School Mobility, Language, and Student Achievement**

Some studies on the effects of immigration on students’ academic success have yielded discouraging results. For example, the Programme for International Student Assessment (PISA) found that, although performances varied by country, in 14 selected member countries of the Organisation for Economic Co-operation and Development (OECD), the first- and second-generation immigrant students on average did not perform as well as the locally-born students. The performance gap was more than 39 score points or ‘the equivalent of a school year’s progress’ (Council of Ministers of Education Canada, 2006, p. 5). Other studies have been more positive, finding that generally immigrant students have higher levels of motivation (Suárez-Orozco & Qin-Hilliard, 2004), higher expectations for attending post-secondary institutions (Krahn & Taylor, 2005) and higher rates of university attainment than the non-immigrant students (Abada, Hou, & Ram, 2008).

Studying the effects of immigration on students’ academic performance is complicated by the enormous heterogeneity of immigration experiences (Noguera, 2004). Students vary widely in the amount of cultural change they face and they vary in whether they speak at home the language in which they receive their schooling. They may move before they reach school age or may begin their schooling in another country. Research on immigration is further complicated by the fact that many students who do not move between countries nevertheless experience school mobility and many who are the second or third generation speak the language of their country of origin when at home, sometimes to the exclusion of the language of classroom instruction (Glick & Hohmann-Marriott, 2007). The research on immigration is also complicated
by differences among the receiving countries in attitudes towards immigration and provisions made for supporting immigrants (OECD, 2006).

Research that distinguishes among country mobility, school mobility, and speaking at home a language other than the language of classroom instruction is needed. Developing an informed understanding of the performance in large-scale standardised assessment of students who have experienced country mobility, school mobility, and/or who speak another language (other than or in addition to English) at home has important policy ramifications for public schools and the Ontario Ministry of Education, including budget planning for instructional and operational resources, staffing, training, and research. Such information has the potential to help Ontario educators accomplish the goal of reaching every student, attaining and maintaining high levels of student achievement, closing the achievement gap, and ensuring that every student reaches her or his full potential (Ontario Ministry of Education, 2008a). The information may also point to broader public policy implications by uncovering limits to the ability of public schools to satisfy expectations of all parents and students. It is not sufficient to understand how students experiencing country mobility, school mobility, and/or language differences are achieving in standardised tests; we need an understanding of who these students are in order to better appreciate how their circumstances influence their achievement. But we cannot claim to understand how these students are performing until we have rationalised how the social and educational climates in which these children are being educated impact on their achievement. This study will address those issues and provide much needed information.

**This Study**

This study seeks to add to our understanding of elementary students’ academic development by investigating each child’s performance on large-scale assessments at two time
points (in Grades 3 and 6) in relation to three factors: (1) whether they immigrated to Ontario from another country, (2) whether they have changed schools since starting Grade 1, and (3) whether they speak the language of classroom instruction (English) at home. I believe that examining these factors in combination is important, as school mobility and not speaking the language of classroom instruction at home are often erroneously assumed to be perfectly related to immigrant status.

Ontario administers large-scale assessments in Reading, Writing, and Mathematics to all students in Grades 3 and 6 (about 140,000 students in each grade). Beginning in 2004-2005, a student identification number was attached to each student’s assessment results, so that 2007-2008 was the first year in which the performance of Grade 6 students could be linked to their performance in Grade 3. Other data available for each student include whether he or she was born in Canada, the number of years in Canada, the number of years in the current school, and how often English is spoken at home. These data provide a unique opportunity to study academic development for those students who have attended Ontario schools since at least Grade 3.

**Research Significance**

This study focuses on how students perform on an academic assessment. Of course, many other studies have also investigated students’ achievement. In addition to its separation of country mobility, school mobility, and language, what makes this study unique is its melding of sociological and psychometric perspectives – an approach that is still quite new (Moss, 2008). Many Canadian studies on immigrant students have used qualitative research methods to ‘give voice’ to the experiences of immigrant students in the school system. This study adds to the existing research by providing the quantitative analysis that policymakers may need to support
evidence-based decision making and at the same time describing the social context that is important to interpretation of the results of the study.

Using the available data, I seek to disentangle the effects of country mobility, school mobility, and the use at home of a language other than the language of classroom instruction. Just as importantly, I contextualise these analyses by reviewing the literatures on how students with these characteristics are viewed by schools and by society, how they view themselves, and the enormous variation in students’ circumstances and experiences.

**Organization of the Thesis**

This chapter has provided a brief introduction to the study. In Chapter 2, I describe who is an immigrant, a student speaking a language other than the language of classroom instruction, and a student who changes school. I then discuss the social forces that immigrants as strangers may experience when moving to a Western society and that indirectly shape their academic outcomes. Further, I examine the role of schooling and its implications for immigrants’ academic and social trajectories. Under the heading ‘Examining Predictors of Successful Achievement for Immigrant Students,’ I discuss how immigrants navigate the system for successful outcomes and I identify selected predictors of immigrant students’ academic achievement. I then look at the introduction of achievement standards and large-scale assessments that are used to monitor students’ performance in Ontario schools. Finally, I review research studies that have investigated the effect of one or more of the identified factors on students’ academic achievement, and describe how this study will build on previous research.

In Chapter 3, I describe the data and set out the methodological structure of the study, including the analysis approaches. In Chapter 4, I present the results, using tables and figures to summarise the findings as necessary. In Chapter 5, I discuss the results and their implications.
Finally, in Chapter 6, I discuss the limitations of this study and suggest future directions for research.
CHAPTER 2. LITERATURE REVIEW

My goal in this chapter is to describe and problematise the systems, circumstances, and assumptions immigrant children encounter in Ontario schools. I believe that students can do well if given the appropriate conditions for learning, a view that is supported by Moss (2008) and by Leithwood, Fullan, and Watson (2003). I will also describe the factors that support successful academic achievement for these children, despite the dire pronouncement of Leithwood, Fullan, and Watson (2003) that in Ontario, in a climate of educational reform with its emphasis on accountability, “the school system is becoming a harsh environment for less advantaged and diverse student populations. For example, the high failure rate in the Grade 10 literacy test, particularly for students in the applied program, may well lead discouraged students to drop out of school” (p. 7).

I have chosen to include the theoretical work of Bowles and Gintis (1977), Curtis, Livingstone and Smaller (1992), and Wotherspoon (2009) on the role of education and schools in a Western capitalist society. In moving from one country to another, one school to another and perhaps with a home language other than that spoken in the new country’s schools, children may experience discontinuities and contradictions in what and how they are taught, especially about themselves, their society (both current society and society of origin), and their position in the current society. Theories about education ideology, assimilation, social standing, standardised assessments, and accountability provide lenses through which we can observe the academic achievement of immigrant children in Ontario schools. Perhaps none of these in isolation can predict the students’ academic performance; however, understanding the social and school
context may allow us to have a deeper insight into the obstacles that confront students and what support systems could be beneficial.

It is beyond the scope of this study to examine the experiences of teachers. Nevertheless, the literature (Coelho, 2007; Fishman & McCarthy, 2005; Ryan, 2003) does indicate that some teachers and administrators in Ontario schools feel unprepared to teach students who recently moved to Canada and especially those who do not speak English. They may lack knowledge about the students’ ethnic backgrounds, cultural habits and ways of learning. This is particularly problematic where teachers’ instructional materials and approaches assume a culturally and ethnic homogenous population with Western middle class values and customs (Lareau, 2000).

Throughout this chapter, I use the term immigrant in its most general sense to refer to individuals who live in a country other than the country of their birth. Because this term in popular usage often includes assumptions not only about country mobility, but also about the language spoken at home, I will refer specifically to country mobility or language when a focus on one or the other is important. Because, historically, immigrants have often been singled out by and from the majority population by their accents, style of dress, religious practices, or skin, hair, or eye colour (Castles, 2000), I will also discuss the experiences of racialised and other minority groups. Where possible, I refer to studies and theoretical work performed in Ontario; however, I also draw on relevant literatures from other provinces and countries, especially those with educational systems that are similarly rooted in British traditions, such as the United Kingdom, the United States and Australia.

The study focuses on the relationship between academic achievement and the factors of moving between countries, speaking a language other than the language of classroom instruction and changing schools. These factors do not provide a complete picture of the immigrant learner
nor are they entirely responsible for the immigrant learner’s academic achievement. Students also vary in social class, cultural background, and access to financial and other resources; these factors have also been found to be directly correlated to student achievement.

In this chapter, I begin with a discussion of who is an immigrant, a student learning English as an additional language, or a student with disrupted schooling, and the social conceptualisations of these labels. I then examine the purpose of schooling; in doing so, I emphasise the division of social classes and acknowledge the social and economic distribution of the immigrant population. I continue with a description of recent developments in education, such as the emphasis on academic standards, large-scale testing, and school accountability for test results. I describe the experience of immigrant children in these school systems and summarise research that has examined the effects on students’ achievement of country mobility, school mobility, and speaking at home a language other than the language of classroom instruction. Finally, I situate this study in the context of previous research.

**Who is an Immigrant, an English Learner, a Student Changing Schools?**

**Who is an Immigrant?**

Immigrants are people who leave their country of birth and travel to other countries for extended periods of time (Castles, 2000). This broad definition includes people who move for a myriad of reasons including searching for economic opportunities for themselves and their children, family reunification, or because they are refugees. To illustrate the wide range of motivation and experiences of immigration, this section will begin with a review of several ways of categorizing immigrant status. However, as is the case for most studies of immigrant children, it will not be possible to apply these categories in this study, as the only information available is whether the child was born in Canada.
Within the last decade or so, immigrants to the major Westernised countries have included (among other categories) business and professional men and women who are highly skilled and educated and refugees from war-torn countries who have had little opportunity for schooling. Castles (2000), for example, lists eight categories of immigrants: (1) temporary labour migrants, (2) highly skilled and business migrants, (3) irregular migrants (also known as undocumented or illegal migrants), (4) refugees, (5) asylum-seekers, (6) migrants forced to move by environmental catastrophes or development projects, (7) family members, and (8) return migrants (people who return to their country of origin after having lived abroad). Immigrants to Canada include all eight categories. Citizenship and Immigration Canada (2008) reported that “family class” (those sponsored by a family member, such as parents, spouse, or children) and “independent class” (those admitted to Canada under the skilled and professional category) immigrants represented more than 80% of the immigrants entering Canada each year during the period 2000 to 2008.

Arzubiaga, Noguerón, and Sullivan (2009) reviewed how ‘immigrant status’ has been defined in educational research and policy and found that immigrants were classified in at least three different ways: (1) according to whether the individual was born in the country (“native-born” or “foreign-born”), (2) through reference to whether the individual’s parents were born in the country (“children of immigrants”), or (3) by the number of generations the individual’s direct ancestors have lived in the host country. For example, the OECD (2006) report of the 2003 PISA results identified first-generation immigrant youth as those who were born outside the host country and second-generation immigrant youth as those who were born in the host country to immigrant parents. A less common term is “one-and-a-half-generation immigrants” which refers to those individuals who entered the host country at an early age, usually before the age of 15. In
some instances those individuals are also known as second-generation immigrants. As Arzubiaga et al. (2009) observed, the term “immigrant” is not consistently applied to a fixed number of generations. In this study, because information about where students’ parents were born is not available, the focus is on where the children themselves were born.

In 1967, Canada’s restrictive immigration policies were revised and immigrants from numerous countries, ethnic groups, and cultures, many with languages other than English, were permitted to enter the country. The 2006 census shows that 20% of the population of Canada and 28% of the population of Ontario were born outside of Canada (Chui, Tran, & Maheux, 2009). Between 1981 and 2006, the main countries for sending immigrants to Canada shifted from the mainly White countries like the United Kingdom and the United States to the majority non-White Asian countries such as China, India, The Philippines and Pakistan (Statistics Canada, 2009b). Most of the immigrants to Canada settle in the big cities and the largest number live in Toronto (Heisz, 2006). Between 1986 and 2006, 50% of the new students in Vancouver and Toronto schools came from immigrant families. Statistics from the Toronto District School Board (Yau & O’Reilly, 2007) showed that the number of students in the Board who had lived in Canada for a year or less went from 10,000 in 1998 to over 16,000 in 2001. In the 2004-2005 academic year, 25% of elementary students in the TDSB were born outside of Canada, and almost 50% had a mother tongue other than English. For secondary students, 43% were born outside of Canada, and 49% had a mother tongue other than English.

The Ontario Ministry of Education (2008b) recognised the heterogeneity of immigrant students’ experiences and circumstances and identified three broad categories of students from other countries who enrol in schools in Ontario:
• “children who have arrived in Canada with their families as part of a voluntary, planned immigration process. If they are of school age, they have most often received formal education in their home countries, and some may have studied English as a foreign language. However, some of these students may have had limited or inconsistent access to schooling.”

• “children who have arrived in Canada as a result of a war or other crisis in their home country, and who may have left their homeland under conditions of extreme urgency. These children have often suffered traumatic experiences, and may also be separated from family members. They may have been in transit for a number of years, or may not have had access to formal education in their home country or while in transit.”

• “international, or visa, students who have paid fees to attend school in Ontario and often plan to attend a Canadian university. Most visa students are of secondary school age. These students typically arrive in Canada without their families, and may live with extended family, a host family, or alone. Because they often represent the aspirations of their families, and because of the expense involved in sending them to study in Canada, these students are often under great pressure to do well and progress through school as quickly as possible. Some have had instruction in English but may still have considerable difficulty learning English in Ontario classrooms.” (pp. 6-7)

Language Spoken at Home

In Ontario in 2007 to 2008, almost 96% of the students attending publicly-funded elementary and secondary schools, including Catholic schools, attended schools where the
language of classroom instruction was English. The remaining four percent attended French-language school (Ontario Ministry of Education, 2010). However, attending an English-language public school is not an indication that a student speaks English at home. According to Statistics Canada (2009a), almost 12% of people living in Canada and 16% of those living in Ontario in 2006 did not speak either one of the two official languages (English and French) at home. Neither did up to two-thirds of the children of recent immigrants who lived in Toronto in 2005 (Heisz, 2006). Further, the Toronto District School Board’s 2006 student census identified 25 languages that were spoken by groups of at least one hundred students in Grade 7 and Grade 8. The 2006 student census also found that about 50% of the Grade 7 and Grade 8 students spoke English only (Brown & Sinhay, 2008).

While Section 23 of the Canadian Charter of Rights and Freedoms dictates that students, even when in the minority (e.g., French in Ontario), where there are sufficient numbers, have the right to be taught in their first language of either French or English at publicly-funded elementary and secondary schools, this right does not extend to languages outside of the two official languages. (An exception is the provision of Ontario’s Ministry of Education, in its 2007 Aboriginal policy framework, for Aboriginal students to be taught in their First Nation’s language.) In areas where large numbers of students speak a common language, the schools or community groups may offer heritage language programs (these are usually classes held after school hours or on weekends). This means that many students in Ontario encounter a difference between their home language and the language of classroom instruction.

To support all English language learners in the province, the Ontario Ministry of Education (2007) created the Ontario language-acquisition policy. The policy is intended to “engage the students in learning that would enable them to develop their talents, meet their goals,
and acquire the knowledge and skills they would need to achieve personal success and to participate in and contribute to Ontario society” (p. 7). The policy defines English language learners as “students in provincially funded English language schools whose first language is a language other than English, or is a variety of English that is significantly different from the variety used for instruction in Ontario’s schools, and who may require focused educational supports to assist them in attaining proficiency in English” (p. 8). The policy recognizes that students may be Canadian-born, or have recently arrived from other countries; they may come from diverse backgrounds and previous school experiences, and have a wide variety of strengths and needs.

Whether students should be encouraged to use the classroom language of instruction and not their home language is controversial (Corson, 1993; Cummins, 1979). Corson (1993) discussed the fact that the choice of language of instruction may well be one of the most critical policy decisions that a school system can make. Referring to the UNESCO’s position in 1951 that teaching is more effective when done in the child’s mother tongue, he noted that there is little empirical research in this area and that the lack of evidence has made it easier for educators to ignore minority languages. When a student loses his or her cultural language, it can have a negative impact on the student’s school success (Beynon, Larocque, Ilieva, & Dagenais, 2005); Cummins (2001) noted the ramifications of not being able to use one’s own language, suggesting that teachers and schools exclude children and deny them their identity when they ask them, either implicitly or explicitly, not to bring their language or culture to school. The use of students’ home languages for at least some academic instruction is relevant because research studies on language acquisition have found that, on average, English language learners take five
or more years to catch up to same age peers in English language and literacy skills (Coelho, 2007; Garcia, 2000).

**Disrupted Schooling**

Student mobility may be defined as students moving from one school to another for reasons other than being promoted to the next school level (Rumberger, 2003). Mobility affects many of us at some point in our lives. Students may change schools but remain in the same residence or change both residence and school. School-aged immigrant children might have changed both countries and schools depending on the age at which they entered the host country and assuming that they had attended school in their country of origin. Often in provinces such as Ontario, because of the school neighbourhood attendance boundaries, a change in residence also means a change in schools for school-aged children. The 2000 US Census Report revealed that 15 to 18% of school-aged children changed residences from the previous year. In Canada, Statistics Canada reported that in 2006 14% of people had changed addresses during the previous year and 41% had moved at some time during the five years leading up to 2006. High school mobility can be associated with many demographic characteristics, including poverty; Melman Heinlein and Shinn (2000) analysed US Bureau of the Census figures from the late 1980s and found that poor families moved 50% more often than other families.

**Social Conceptualisations of Being a Stranger and the Process of Assimilation**

**The Stranger, the Other**

When a student moves, whether from one country to another or simply between schools, she or he may encounter differences in attitudes, customs, or ways of doing things. For some students, this creates a sense of ‘otherness,’ that is, a ‘differentness’ or social distance in
relationships. Sociologist George Simmel (1858 to 1918), a middle class Jew born in Vienna, wrote that, in a relationship that is based on human similarities, those who have characteristics of difference or otherness may be depicted as strangers. He described the stranger as being near and far at the same time or as having a simultaneous closeness and remoteness. The closeness comes from the fact that the stranger has traits in common with the group. On the other hand, the stranger does not possess all the traits the other members share. This puts him outside the circle of the group and causes the remoteness. Simmel states that a tension arises from the fact that the trait(s) that the stranger shares with the group are something that everybody has in common and, as such, are viewed by the group as nothing special. This knowledge serves to emphasize the trait(s) the stranger does not share. The difference could be as subtle as the nuances of speech or manner that distinguish one social class from another or as blatant as differences in language, culture, religion, or ethnicity, as is the case for many immigrant students.

As a stranger, the immigrant may find that differences in ethnicity and culture and the uneven distribution of power place him or her in a minority status (Arzubiaga, Noguerón, & Sullivan, 2009; Portes & Rumbaut, 2001; Ryan, 2003). They may also find that those born in the country resist further immigration, often citing economic or cultural reasons for reducing immigration. For example, Li (1990) describes how the assumption that biological and cultural traits provided scientific grounds for classifying people into ethnic and racial groups has historically been used in Canada to justify segregation and discrimination against Chinese, Jews, Ukrainians and Indians (p. 3). More recently, countries such as Canada and Australia have moved to recognize and incorporate the cultural and ethnic customs and languages of their immigrant populations and support social equality by passing legislation such as the Canadian Multiculturalism Act of 1988. However, critics argue that social inequities remain, and have
suggested that it is simplistic and misleading to think of Canada as a ‘nation of immigrants’ where people are encouraged to celebrate their differences and be proud of being a part of Canada’s cultural diversity (Elliott & Fleras, 1990). The Ontario Human Rights Commission continues to report incidents of religious and racial intolerance in Ontario schools, and places of employment, and housing. Letters to the editor, comments on media articles, and radio talk shows are critical about the ethnic dress and religious practices of diverse groups in the province.

How the immigrant chooses to react to his or her minority (and so less powerful) status and also to school could depend on the ties that bind the immigrant to his own minority community and on the conditions under which the immigrant arrived in the new country (Ogbu & Simons, 1998). Ogbu and Simons studied minority schoolchildren in the United States in the 1970s and suggested that the circumstances under which the immigrants originally arrived in the host country were important. They used the label “voluntary minority” to describe immigrants who moved from one country to another under their own will for economic or other reasons, while “involuntary minority” immigrants were those who came by force (for example, Blacks from Africa to North America and the Caribbean during the slave trade) or through colonisation. Even though their attitudes to school might be similar to immigrants’ attitudes, Ogbu and Simons (1998) did not classify refugees who were forced to come to the United States because of civil war or other crises in their places of origin as immigrants or voluntary minorities because they did not freely choose or plan to settle in the United States. Ogbu is credited with highlighting the heterogeneity within the broad category of “immigrant” (Garnett & Ungerleider, 2008; Noguera, 2004).
Assimilation

One way for immigrants to lose their stranger status is through the process of assimilation. Traditional assimilation, as described by Zhou (1997), was thought to be linear in nature and meant that the longer the immigrant lived in the new country, the more she or he adopted its language and culture; each subsequent generation would become more and more acculturated until the descendants of the immigrants were indistinguishable from the receiving community. The school is one of the major settings for immigrant students to become acculturated or assimilated into the country since it is where they have the most opportunity to interact with – or face ostracism by – their peers (Portes & Rumbaut, 2001).

Similar to their reception in the host country, as discussed above, the process of becoming a part of the new society may be affected by the cultural or social characteristics of the new immigrants. Zhou (1997) considered that the ease of traditional linear assimilation in North America was facilitated by the common ethnicity and culture (i.e., White, middle-class, and of European, Protestant origins) that were shared by many new immigrants and the majority of people already living there. Some first-generation immigrant groups, particularly from Italy, Ireland, and Eastern Europe, experienced discrimination because they did not share the social norms or socio-economic levels of the earlier immigrants from Western Europe. However, subsequent generations of these groups, as they gradually attained economic stability and social mobility and assumed the values and customs of the dominant group, were able to blend into the mainstream until they became indistinguishable. This pattern of assimilation experienced by White European immigrants, who were no longer identified as a hyphenated American or Canadian, is no longer experienced by immigrants who are members of diverse ethnic communities and may differ in race, ethnicity, and/or culture from the host community. These
immigrants are identified as “visible minorities” in Canada; this terminology, which effectively sets these immigrants apart from the mainstream, was a socially constructed term introduced by the Canadian Federal government (Boyd, 2002).

I would not want to convey the impression that all immigrants want to undergo the linear process of assimilation. In fact, Berry, Phinney, and Sam (2006) found that recent immigrants do not all want to be absorbed into the host culture. Berry et al. (2006) investigated how children of first-generation immigrants adapted to a new culture. They interviewed 5000 participants from 13 countries identified as former colonizing countries (such as England), settler countries (such as Canada) and new immigrant receiving countries (such as Finland). They found that 36% percent of the youths were comfortable in both their ethnic culture and the new culture, 23% associated mainly with their ethnic culture, and 19% had tried to assimilate into the host culture. The group wanting to assimilate had poorer self-esteem than the others and did not perform as well in school. The patterns of adaptation by immigrants conform somewhat to the three models of assimilation for contemporary immigrants identified by Portes and Zhou (1993) and which they termed segmented assimilation. One model of segmented assimilation involves retaining one’s own ethnic cultural ties and the related community support, while selecting specific aspects of the mainstream society to adopt. Another model involves relinquishing one’s ethnic cultural and community ties and becoming fully assimilated into another ethnic group with a culture and norms different from that found in the mainstream or even counter to the mainstream; for example, becoming a member of a group that rejects the mainstream norms and values. The third model can be described as deliberately remaining within ones’ cultural norms and community while at the same time achieving rapid educational and economic advancement in the new country.
In their study of Hispanic and East Asian immigrants in San Diego and Miami, Portes and Rumbaut (2001) discovered differences among ethnic groups in levels of assimilation and the time it took them to assimilate. They found that second-generation East Asian immigrants were more socially and economically mobile than Hispanic immigrants and generally performed better in school, matching or outperforming the non-immigrant students. Similarly, Suárez-Orozco and Qin-Hilliard (2004) studied Mexican and Hispanic students in the United States and found that newer immigrant children were highly motivated to attend and succeed at school, while more acculturated immigrants and their children had higher dropout rates. In addition, Portes and Zhou (1993) found evidence of deliberate associations with a counter-culture among first-generation Haitian youth who had immigrated to a Miami inner-city as small children. Any person who attempted to join the mainstream was ridiculed by other youth as being subservient or acting White. To avoid this condemnation, the immigrant youths joined underclass Black groups and in doing so rejected the high academic aspirations that their parents held for them and the support from their own communities.

Interestingly, in contrast to the American and international findings, Boyd (2002) argued that segmented assimilation such as in the joining of an underclass is not found in Canada because the racialised persons (specifically Blacks) are smaller in number and more scattered and therefore are less likely to develop an underclass with its implied anti-school stance and downward mobility. Boyd investigated whether the educational levels of visible minority children in Canada simply reflected their parents’ higher educational levels. The study found that parental education was an important predictor of a high school diploma or higher; the children of visible minorities had greater odds of obtaining at least a high school diploma than the entire population (ages 20 to 64) even after controlling for parental education; and the odds of
obtaining a high school diploma or higher were lower for those who immigrated at age 15 or older than for the general population. Boyd posited that assimilation in Canada is linear, with each generation doing better than the preceding one. Boyd’s argument is debatable since it implies that all immigrants to Canada, regardless of ethnicity and cultural background or social class, are successfully assimilated and are upwardly socially mobile. She neglects to mention that some groups, because of their different ethnic or cultural features, encounter social and racial barriers that thwart their attempts at assimilation. Her data (from 1996) did not include country of origin for the visible minority group.

In contrast to Boyd’s conclusions, Khandlou (2009) addresses the social and cultural exclusion, lack of a sense of belonging, and feelings of marginalisation (being at the periphery of the mainstream group because of one’s status, identity, or experiences) felt by racialised youth in Canada and suggests that second- and third-generation racialised youth encounter more discrimination than recent immigrants. He suggests that the feeling of exclusion result in a sense of not being socially integrated – that is, of not belonging, regardless of social, cultural or economic background – in the mainstream community.

Reitz and Somerville (2004) believe that more research into the social integration experiences of the recent (since the 1970s) cohorts of second- and third-generation racialised immigrants might contribute to an understanding of the long-term prospects of integration for racialised bodies in Canada. They describe in great detail the different experiences encountered by racialised first- and second-generation immigrants entering Canada between the 1960s and the 1970’s compared to the experiences of immigrants coming to Canada since the 1970s and suggest that previous studies (such as Boyd’s study) were limited by the small sample sizes of the difference racial and ethnic groups. They suggest that the employment opportunities for the
racialised first generation of immigrants coming into Canada before and during the 1970s were better because of the prevailing lower educational levels existing in the Canadian school and post secondary system in comparison to the United States. These first-generation immigrants enjoyed a higher level of earnings than successive cohorts and than even their comparative Canadian-born workers and they instilled a strong desire for education in their offspring. The economic stability of their established first-generation parents would have facilitated the academic achievement of the children. This economic stability was not experienced by succeeding cohorts of immigrants, who came to Canada with increasingly higher levels of education and of professional skills, or by their children. This lack of economic opportunity and subsequent social decline could be attributed to the widespread, increased educational levels in the Canadian-born population, due in part to educational reforms, and a weakening economy, resulting in fewer available jobs and increased discriminatory practices. At the same time, an increase in communication technology globally enabled immigrants to maintain stronger and longer ties with their source ethnic communities and perhaps lessened the need for their integration into the host community. Reitz and Somerville raise questions about the effects of these social and economic conditions for future generations of immigrants.

The next section addresses the social dynamics that differentiate immigrants and facilitate or hinder their assimilation.

Social Classification of Immigrants

The relationship between socio-economic status and school achievement has been well established, with a parallel association between school performances and economic and social status. Immigrants, like other social groups, can be classified as members of the upper, middle or working class, yet research suggests that an uneven distribution of economic resources means
that immigrants are more likely to be poor, even those who are highly skilled. According to the Ontario Council of Agencies Serving Immigrants (2007), recent immigrants to Ontario, the majority of whom are non-White, are predominantly living in poverty in urban areas; this has been referred to as “the colour of poverty” by social community networks campaigning to bring an awareness of the extent of poverty among racialised groups in Ontario. Many views have been expressed on the social stratification of society and the hierarchy of classes. Later, I will discuss Bowles and Gintis’s (1977) work on social classes and hierarchical socialization of schooling, as well as Apple’s (2004) concept of knowledge distribution, and Bourdieu’s (1984) discussion of the role of social capital in the structure of classes.

Classical theorists such Weber (2006) might argue that society is stratified based on power wielded through the interaction of classes (exemplified by the economic order through capital ownership versus non-owners), and status (exemplified by the social order; that is, a person’s perception of another person social worth based on their wealth, religion, race, physical attractiveness or social skills (Clark & Lipset, 2001). Earlier Karl Marx had delineated society mainly along the lines of capitalist owners, landowners and workers. While other views might differ somewhat about the presence or absence of a particular component (for example, wealth) across classes, there is some agreement among sociologists that there are at least two classes, the ruling class and the worker class with an emergent middle class. More recently, Anyon (1980) has proffered the theory that while a person’s income or occupation might be part of a person’s social class, they do not define it. Anyon defines social class in terms of “a person’s relationship to the processes in society which process the goods and services and a person’s relationship to other people at work and in society” (p. 69). The relationship to the means of production could be through ownership of physical capital, or conversely, being a worker with no capital...
ownership. Those with the most power and influence – and usually wealth – comprise the upper or ruling class; those people with little or no power, influence, or wealth comprise the lower or working class. A third class sandwiched between the two would be the middle class, which may contain elements of both the working class (earning a good salary or wage but having no control or input into ownership) and the ruling class (working for a living while at the same time owning sizable amounts of stock in the company). Social class membership carries a certain social status or stigma, and people aspire to social mobility, typically using education and occupations to facilitate their movement from one class to another. In this study, the term “ruling class” is sometimes used to represent middle or upper classes and “lower socio-economic background” is used to represent the working or lower class.

As previously indicated, immigrants can be well educated with professional occupations and economic stability; others have limited financial resources. The economic and social capital (resources) that various groups of immigrants bring with them to the receiving country may influence their social status and class membership in the new country, their ease of social mobility and ultimately their successful social, economic and educational outcomes (Portes & Rumbaut, 2001). In some cases immigrants find that their social capital is reduced in value and that their higher education or professional status does not always provide the expected social status or occupation (Waters, 1999). Immigrant children from economically stable families can attend good schools, live in safe neighbourhoods and benefit from the resources offered by formal and informal organizations. On the other hand, families who immigrated with limited financial or other social resources or whose professional qualifications are unrecognised may tend to live in poorer neighbourhoods with less access to resources that would support academic achievement (Abada & Tenkorang, 2009; Zhou, 1997).
However, not all highly skilled, professional or highly educated immigrants manage to use these attributes to enjoy a high-income living in Canada. A study (Picot, Hou, & Coulombe, 2007) of new immigrant income levels showed that many of the highly educated and skilled, professional immigrant families are unable to put their skills to economic use immediately in the new country. Within the first ten years of moving to Canada, 65% of them will find themselves in the lower income levels, particularly in their first year, although many of them will manage to climb out into a higher income level. In addition, the immigrant children of visible minorities could encounter social obstacles that hinder their pursuit of upward social mobility; these could be in the form of negative or discriminatory reactions to their physical characteristics or skin colour (Zhou, 1997). For instance, the 2002 Canadian Ethnic Diversity Survey revealed that, regardless of generation status or length of residence, 20% of persons who were visible minorities (non-White in colour) had experienced discrimination or unfair treatment due to their ethnicity, culture, race, skin colour, language, accent or religion in the five years preceding the survey (Statistics Canada, 2003).

Deficit Labelling

The question of identity has always been a salient one for the immigrant (Waters, 1999). When, as a stranger, the immigrant arrives in a new country, he or she must decide how to self-identify and the receiving country also decides how it will categorize or identify the immigrant. The social identities that immigrant students are assigned or adopt can have enormous consequences for them. Lee and Anderson (2009) suggested that labels are “socially or locally constructed assumptions or beliefs” (p. 191); these can influence the way teachers and other educators relate to the students.
“Deficit theory” is a term used by educational researchers to describe the negative identity characteristics (labels) that teachers and the school system often associate with students they view as unprepared to benefit from “normal” schooling. Deficit labelling has been applied to those students whose mother tongue is different from that of the mainstream (Cummins, 2001). Labels such as English language learner (ELL), English as a second language (ESL) learner, and linguistically diverse may carry negative connotations in classrooms and be associated with low academic ability (Arzubiaga, Noguerón, & Sullivan, 2009; Cummins, 2001; Portes & Rumbaut, 2006).

Corson (1993) points out that non-standard variations of the dominant language may be seen as incorrect use of the language resulting from the speaker’s ignorance, laziness, lack of education or perversity. Teachers who promote the dominant language as the correct language may devalue the non-standard language, regarding it as an indication of disadvantage, poverty, inferiority or even shame, and may inaccurately assess the student’s academic potential. For example, Gopaul-McNicol (1993) explained that students coming from the English-speaking Caribbean could have different dialects depending on their island of origin. When teachers find a student’s speech difficult to understand, they may erroneously classify the student as an English learner.

To explore whether teachers respond to labelling of children and to skin colour and teach according to the perceived labels, Rubovits and Maehr (1975) (replicating an earlier study) observed 66 White female pre-service teachers who were assigned to teach groups of White and Black children. The children were classified as gifted or non-gifted but, unknown to the teachers, were actually of similar ability. The study found that there was no difference in the amount of attention paid to each supposedly different ability group but there were differences in the quality
of the attention. Teachers called on the gifted White students more often, whereas the Black
gifted children were given the least attention and criticised more than all the other groups of
children including the Black non-gifted children.

An example of teachers’ negative, stereotypical attitudes is provided by James (2002, as
cited in James, 2004), who interviewed six new teachers in a study of Toronto high schools and
found low expectations and negative stereotyping reflected in how the teachers spoke about their
students:

students in the racially, ethnically and linguistically diverse “inner city” schools in which
they taught, were often described by educators or labelled as at risk, low achievers,
learning disabled, drop-outs, disruptive, trouble-makers, problem-students, rebellious,
and individuals who are likely to get into illegal activities. Students were also described
as coming from “working poor” families who “lived in government housing.” Some
students were thought to be growing up in immigrant, blue collar and/or single-parent
households on special assistance. (pp. 3-4; italics in original)

The deficit associations can be perpetuated by the media and the literature. For example,
Lee and Anderson (2009) noted that the word ‘immigrant’ in educational literature often “has a
deficit association with social problems, poverty, cultural deficits, linguistic deficits, low
achievement, low parental involvement and being at-risk for academic failure” (p. 191).
Furthermore, Arzubiaga, Noguerón, and Sullivan (2009) reviewed 32 peer-reviewed articles and
found that 25% of them specifically referred to children’s language differences as deficits.

Similarly, in a paper discussing educational reform and parental choice, Dehli (1996)
suggested that Ontario’s and particularly Toronto’s students and parents were consistently
depicted differently in the public arena and in the media depending on their social or cultural background. For example, according to Dehli,

> Media reports involving Black people or Portuguese youths were usually about stories in which there was disruption and failure so that Black students were associated with poor achievement, dropping out and acting violently. Concerned Black parents were seen to represent special-interest groups whose children’s difficulties were peculiar to them. On the other hand, White students and their parents were regarded as the norm, and White parents were assumed to speak for ordinary students. (p. 82)

Some studies (Dei, Mazzuca, McIsaac, & Zine, 1997; Ryan, 2003) have investigated the experiences of marginalised students – i.e., immigrants and racial and ethnic minorities – within the Ontario school system and Toronto in particular, and have indicated that students and their parents find the school system oppressive, specifically with regard to stereotyping and low expectations by educators. Nurturing, supportive relationships in schools are important for all students, but they are of particular importance for immigrant youth adjusting to a new country, a new language, and a new educational context. The Ontario Ministry of Education (2008b) endorses this need for support and might point to small class sizes, an emphasis on parent engagement, and the establishment of an Inclusive Education Branch as evidence that they are providing this support. They might also indicate that the establishment of the Literacy and Numeracy Secretariat and the subsequent development of the School Effectiveness Framework with its emphasis on improved student achievement through a focus on accountability and equity of outcomes for all students as initiatives to support student learning, including the learning of immigrant students, students who do not speak English, and students changing schools.
Moreover, regarding literacy supports for children not speaking English, Coelho (2007) suggests that, because literacy instruction in Ontario’s English-language schools is in English, children who speak a home language other than English require particular attention, consideration, and support in school in order to overcome the discrepancy between their first language and the language of classroom instruction. However, she also suggests that “they do not all receive support from an English as a second language teacher. In schools where there is an ESL teacher, support is usually provided only for the first year or two and mostly to newcomers rather than Canadian-born children” (p. 1).

Moreover, a qualitative study by The Hospital for Sick Children (2005) on high school dropouts and their disengagement from school reported that respondents in the study who were first-generation immigrants (newcomers) in Ontario, including some whose mother tongue was English, recounted experiencing ‘unfair practices’ in schools, including automatic placement in an English-as-a-Second-Language stream without prior checking of transcripts or evaluation of actual linguistic skills.

In addition to being singled out because of perceived language obstacles, some immigrant students who are not familiar with Ontario’s style of education might also be singled out and evaluated incorrectly. For example, Gopaul-McNicol (1993) explains that the Caribbean school system is much more structured and has much more discipline than the North American school system. The students in the Caribbean are traditionally taught to wait for the teacher to provide guidance and any necessary interpretation. In a Canadian school, the teacher might assume that the hesitant child is using delaying tactics. Because West Indian cultural norms include respecting a teacher’s judgement, the parents might not question a teachers’ evaluation.
As the research described in this section has demonstrated, deficit labelling of students based on their immigration status, language, race, ethnicity and culture is unfortunately common. However, it can be challenged. To illustrate this, the following section describes Ontario’s recently introduced policy on equity and inclusive education.

**Challenging Deficit Labelling**

To change the deficit labelling found in schools, teachers need to get sound firsthand knowledge about their students’ communities (Connell, Ashden, Kessler, & Dowsett, 1982). A prevailing question is whether providing all students with the opportunity to learn requires incorporating the students’ individual experiences from their home and community into the classroom experience so that learning becomes a more stimulating and engaging experience for all students. Dei (2002) and Ryan (2003) suggest that the answer is to develop a critical approach to leadership that promotes a culture of collaboration and sharing of knowledge between school and community. This leadership would include administrators who, through training or other means, recognize the power imbalance in schooling, the privileges accorded to the mainstream, predominantly White students and the oppressive, subjugating nature of the relationship between mainstream administrators, teachers, and staff and students of diverse backgrounds and cultures. Both Ryan (2003) and Dei (2002) have emphasised strongly the need for critical leaders in schools who acknowledge and respect the diversity of their students and staff and recognize the value that diverse experiences could add to teaching and learning. One of the crucial means of addressing this power imbalance, the uneven distribution of privileges, and the lack of inclusivity is through forging links with the school and the community leading to a process of collaboration and a sharing of leadership. Dei suggests that when schools begin to seek meaningful
connections with student communities, they are then able to recognize their shared values and trust on both sides can start to develop.

The recently implemented Ontario Equity and Inclusive Education Strategy (Ontario Ministry of Education, 2009) acknowledges that racism, religious intolerance, homophobia and gender-based violence are still prevalent in schools and contribute towards the achievement gap, low student achievement and student disengagement with school. The equity strategy is an attempt by the Ministry of Education to address aspects of the school environment that are not conducive to learning; it provides definitions for equity, diversity and inclusive education.

Diversity is defined as:

the presence of a wide range of human qualities and attributes within a group, organization, or society. The dimensions of diversity include, but are not limited to, ancestry, culture, ethnicity, gender, gender identity, language, physical and intellectual ability, race, religion, sex, sexual orientation, and socio-economic status. (p. 4)

Equity is defined as: “A condition or state of fair, inclusive, and respectful treatment of all people. Equity does not mean treating people the same without regard for individual differences” (p. 4). Inclusive education is defined as: “Education that is based on the principles of acceptance and inclusion of all students. Students see themselves reflected in their curriculum, their physical surroundings, and the broader environment, in which diversity is honoured and all individuals are respected” (p. 4).

The equity strategy was meant to address concerns and complaints by the Ontario Human Rights Commission about the disproportionate administration of discipline; in particular, Black students and students with special needs were allegedly being disproportionately suspended or expelled from public schools. The document provides a broad framework for equity and
inclusion in Ontario schools; however, some community organisations have cited concerns about its implementation in school boards, its sustainability, and the lack of accountability measures (Garro, 2009). For example, at a conference in 2009 held by the Antiracist, Multicultural Education Network of Ontario (AMENO), critics of the equity strategy referred to the role of politics in the policy development and implementation. They noted that schools and school boards had made progress in equity training and promoting conversations about diversity, anti-racism and anti-discrimination following the creation in the 1990s by Ontario’s National Democratic Party (NDP; then the ruling provincial party) of an anti-racism policy in the Ontario Education Act, only to have this progress stall after a Conservation government came into power. In 1991, the NDP had created an Anti-racism Secretariat that provided support around equity and diversity to schools and school boards in spite of the various factions in school and school boards that questioned the need for the policy and were still reluctant to see that schools were sites of non-inclusivity with oppressive attitudes towards students and even staff who were not part of the mainstream. Others saw it as reverse discrimination. The momentum in addressing equity and diversity gained while the NDP was in power was lost when the Conservative Party gained power in Ontario, dismantled the Anti-racism Secretariat and revised the policy, removing all references to anti-racism.

The newly implemented Ontario Equity and Inclusive Education Strategy is not a mandate for schools but a set of guiding principles with no accountability features. The fact that the principles are to be imbedded in all aspects of school life (i.e., teaching, learning, administration, and operations) leaves schools the opportunity to continue as usual with only a nodding acknowledgement of the equity framework. There is no requirement for curriculum or
staffing changes. I believe that it is simplistic to think that teachers’ and students’ attitudes will change because of the implementation of the equity strategy.

Acceptance and inclusion do not mean telling all students how to adopt Westernised ways of learning, but teachers adjusting their practice to accommodate all forms of learning. Children construct mental simulations of the world that enable them to experiment with possible actions and explore the relationships among things and people. Gee (2008) explained that if some children have had prior experiences that have enabled them to build more elaborated simulations or if the way in which new classroom information is being presented is more compatible with their already existing simulations, then they will be able to derive more benefit from new learning opportunities. Teachers may tend to assume that all children’s mental simulations resemble their own and may fail to recognize simulations based on different experiences. For example, immigrant students might have had linguistic and cultural experiences in their previous schools that are different from those in their new schools. Unfortunately, the prevailing practice is to not to seek to incorporate the immigrant students’ experience but to endeavour to change the immigrants’ language and habits to fit those of the school (Banks, 1993; Coelho, 2007). Thus, Ontario’s equity strategy (Ontario Ministry of Education, 2009) asserts that:

… Ontario’s diversity can be one of its greatest assets. To realize the promise of diversity, we must ensure that we respect and value the full range of our differences. Equitable, inclusive education is also central to creating a cohesive society and a strong economy that will secure Ontario’s future prosperity.

Our government is committed both to raising the bar for student achievement and to reducing achievement gaps. Recent immigrants, children from low-income families,
Aboriginal students, boys, and students with special education needs are just some of the groups that may be at risk of lower achievement. To improve outcomes for students at risk, all partners must work to identify and remove barriers and must actively seek to create the conditions needed for student success. In an increasingly diverse Ontario, that means ensuring that all of our students are engaged, included, and respected, and that they see themselves reflected in their learning environment. (p. 5)

In short, changes in policy and classroom practice can and should be implemented to make schooling a more positive experience for their student population. However, as we will see, there are other fundamental issues, such as differences in beliefs about the purposes of schooling that can affect the academic achievement and school outcomes of immigrant students, those who speak a language other than the language of classroom instruction, and those students who change schools.

What are the Purposes of Schooling?

In the preceding sections, I have begun to build a profile of students who have moved between countries and those who speak a language other than the language of instructions and to describe how these students are viewed by educators. Next, it is important to consider the goals of schooling at the level of educators as individuals and also to consider the stated goals of government policies, particularly as they influence what is prioritised in funding decisions and what is sanctioned in teaching and learning. The goals of policy-makers and of educators as individuals are not always consistent, and can be contested, as I will discuss.

Much has been written about the purposes of schooling. Goodlad (1979) reviewed the goal statements of states, school boards, and special commissions in the United States and distilled twelve goals of education: (1) mastery of basic skills or fundamental processes, (2)
training for work, (3) intellectual development, (4) enculturation, (5) interpersonal relations, (6) autonomy, (7) citizenship, (8) creativity and aesthetic perception, (9) self-concept, (10) emotional and physical well-being, (11) moral and ethical character, and (12) self-realization (pp. 46-52). These are not necessarily, as he points out, what schools do or what they should do, but some combination, informed by educational leaders’ judgements about what has been and may be possible. Wringe (1988) suggests that the goals of education should be examined in relation to whom they are intended to benefit: the individual or society.

In discussing the other purposes of schooling that are particularly relevant for immigrant children, I will focus on two other goals that have been portrayed as principally benefiting society: schooling as enculturation and schooling as training for work. Both of these are implied in the assertion by the Ontario Ministry of Education (2009), in describing its equity strategy, that “Ontarians share a belief in the need to develop students as learners and prepare them for their role in society as engaged, productive, and responsible citizens” (p. 6). In discussing the purposes of schooling and the implications for immigrant students, we should keep in mind that immigrants can be of the middle class, the ruling class or the working class.

**Schooling as Enculturation**

Public opinion can either be supportive or critical of the role of schooling as a mechanism for enforcing society’s norms and values, depending on whether the society’s norms and values are viewed as positive or as oppressive. Goodlad (1979) described schooling as a process that promotes enculturation in different ways, from developing awareness of and insight into a society’s values and characteristics to “acquir[ing] and accept[ing] the norms, values, standards, and traditions” (p. 48). Some argue that the hegemonic nature of education means that education is presented according to the traditions and values of the dominant culture (Apple, 2004; Dei &
Karumanchery, 1999; Wotherspoon, 2009). Bourdieu (1984) suggests that people possess differing levels of these values or traditions developed through interaction with their social groups over time; cultural capital, together with social and economic capital, plays a significant role in determining a person’s place in the social hierarchy. Cultural capital supports certain kinds of prior knowledge, abilities, and language forms that are unequally distributed throughout society (Lareau, 2000). Participants from outside the dominant culture and class are expected to assume these values if they want access to what that culture has also determined to be successful. This presents difficulties to people who are not part of the dominant group, including immigrants and those with another language.

The enculturative nature of education is exemplified in the school curriculum as well as in policies and administration processes. These have been criticised for their imbedded societal norms, values, and standards that are not inclusive of students coming from outside Canada or Western Europe (Arzubiaga, Noguerón, & Sullivan, 2009; Dei, 2002; Nieto & Bode, 2008). Apple (2004) and Dei and Karumanchery (1999) posed questions such as, “Whose knowledge is being presented in schools?,” challenging the assumption that the knowledge presented in schools is neutral. Apple (2004) also observed that, even within the same school, different knowledges are taught to different students:

Schools, therefore, “process” both knowledge and people. In essence, the formal and informal knowledge is used as a complex filter to process people, often by class; and, at the same time, different dispositions and values are taught to different school populations, again often by class. (pp. 5-6)

As discussed earlier, educators tend to view linguistic and cultural differences as deficits that prevent individual students from benefiting fully from the typically-available schooling
opportunities. For example, Taylor (1991) studied kindergarten children in the United States and reported that many young racialised children entered school lacking the social and cultural skills that teachers felt were necessary for the children to learn and interact with other children and the teachers. Many of these children came from homes where another language or non-standard version of English was spoken or where a different culture was maintained; some might not have had the resources, such as books or money, for organised after-school or other activities that would provide the opportunities for the students to learn the expected social norms. Taylor found that it took some time in the classroom before the children were able to adapt to the norms of the school and only then could they begin to develop positive relationships with the teacher and their peers.

Schooling as Training for Work

Franz Fanon (1963) saw a relationship between education as a reproduction of knowledge and labour under a dominant state, and the oppressive nature of colonialism with its lasting effects of the colonizer on the colonised. In this sense, education became the agent of the colonizer. Fanon asserted that education continually reinforces the message that colonised peoples should be subservient to the colonizer and that, over time, this role becomes harder to contest. Based on Fanon’s views, one might well observe evidence of modern-day colonisation in the relationship between Western countries, such as North America including Canada, as well as Western Europe and Australia (with their vast political, military, and financial power and resources), and the immigrants coming mainly from ‘lesser developed,’ poorer countries, such as East Asia, South Asia, Africa, and the Caribbean. These latter countries, historically, were colonies within the British, French, Dutch and Spanish empires and were/are peopled by inhabitants who differ by skin colour, culture and, by definition, class from their White
colonizers. Immigrants from colonies or former colonies have tended to move to settler countries that were/are their former colonisers (Castles, 2000). The exceptions would be Canada and the United States, now settler countries, which were themselves former colonies of Britain but whose majority populations have always been White and mainly of European origin. Because Canada was not a colonising country, in the Canadian schools, one would perhaps expect to find less of the hierarchical class structure divided along the lines of conqueror and conquered with its accompanying expectation of subservience by the conquered (immigrants from former colonies). What one does find in Canadian schools is a hierarchical structure of power and privilege based on social, cultural and racial differences (Curtis, Livingstone, & Smaller, 1992).

Bowles and Gintis (1977) have argued that in a capitalist country, such as the United States, there are essentially two classes of people, the owners of the economic wealth and its accompanying power (the ruling class) and the workers whose labour is needed to sustain the economy (the working class). In addition, the industrial revolution created a demand for a skilled labour force. Bowles and Gintis argued that one would be mistaken to believe that the school was performing a dual role of producing managers and workers for the labour market and also satisfying the workers’ demands for improved educational opportunities that would increase their socio-economic status. In reality, Bowles and Gintis posited, the capitalist class was always in full control, ensuring the hierarchy of power remained intact even with the perception of educational reforms. People believe in meritocracy, that individuals can achieve class mobility, but even if some people are able to move, the social and economic structure with its power imbalance remains.

Connell, Asheden, Kessler and Dowsett (1982) took a critical view of Bowles and Gintis’s argument that schools reproduced economic inequality, suggesting that this assumed a
static social and economic structure where teachers had no power and the working class was intellectually unable to understand what was happening to them. Even so, they acknowledged that schooling differentiated between the ruling class and the working class. They suggested that the ruling class used the market (demand and supply) as a medium for indirectly controlling the schools, especially private schools. In contrast, members of the working class have little influence on the schooling of their children.

Curtis, Livingstone and Smaller (1992) suggest that similar patterns of social class structure and control of the educational system can be seen in Ontario. They argue that the upper and professional classes have always benefited more from public schools than the working class, who tended to receive less schooling and a lower quality of education. The practice of streaming students perpetuates the division of the classes and provides little opportunity for students from working class families to obtain skilled or professional jobs. The pedagogical justifications that are often given for streaming would have us believe that teaching and learning are more effective when students with similar backgrounds, interests, and abilities are grouped together than when they are in a mixed classroom. In addition, streaming has been argued to have the potential to make education more relevant to the learner and better oriented to the students’ future, as students will receive training directly related to the kinds of the positions and jobs that they could expect to have (Wotherspoon, 2009).

However, arguments have been made that streaming increases the drop-out rate among working class, immigrant and non-White students (Curtis, Livingstone & Smaller, 1992; Mirza, 1992). Curtis, Livingstone and Smaller (1992) further pointed out that, in Ontario, the Basic-level program was a government policy attempt to teach students to want to work and to respect their employers, while the General program conveyed the perception that if students studied hard
they could aspire to attend a semi-professional college program and perhaps obtain a skilled job. In contrast, students who were selected for the Advanced program were expected to go on to university to become professionals or managers. The Basic, General and Advanced levels have since been replaced by what the Ontario Ministry of Education refers to as the locally developed, Applied and Academic programs. Ontario policymakers do not refer to this system as streaming, but as recognition that students have different pathways and destinations and the different school programs are a means of assisting the students in the achievement of their goals. However, some Ontario studies, such as a study by Elgie (2008) of secondary students in the Toronto District School Board, have found that immigrant and working class students are still over-represented in the Applied program, which has a workplace or college destination, and under-represented in the Academic or university-destined program. Similar examples of streaming have been found to exist in England and the United States (Gillborn & Youdell, 2000; Mirza, 1992).

Through their patterns of communication and engagement with parents, schools can demonstrate their role as enablers of the social hierarchy. While all parents might want their children to do well at school, they have very different experiences during meetings with school officials (Connell et al., 1982; Lareau, 2000). Schools exclude working class parents and include ruling class parents when they do not take the time or effort to properly address the concerns of working class parents, while being considerate to the needs of the ruling class parents (Connell et al., 1982). Teachers are perceived, both by themselves and by the working class parents, to be better educated and better off economically than the parents and to be the ultimate authority on knowledge. In contrast, parents from the middle or the ruling class, while acknowledging the professionalism of the teacher, are more likely to approach the school with the attitude that
teachers’ salaries come from them as taxpayers and that the teachers are, therefore, accountable to them (Connell et al., 1982).

**Meritocracy and its Implications for Student Outcomes**

The notion that the school is a training ground for the labour market might be considered in conjunction with the prevailing assumption that the education system in a liberal democratic society such as that in Canada is based on merit. Meritocracy presumes that equal opportunities to reach academic goals and to attain employment and social mobility are available for all students (regardless of their class, race, gender, or socio-economic status), according to their ability and their hard work (Apple, 2001). Moreover, societies benefit both economically and socially from supporting opportunities for social mobility (Learning Partnership, 2006). However, critiques of the competition and individualism that are integral components of meritocracy (Apple, 2001; Ball, 1993; Dei, 2002) argue that, in the publicly funded school system, competition and individualism are attached to power and privilege. In addition, competition and individualism presume that students and their families possess certain skills, competencies and material possibilities, such as access to time, transportation, and child care facilities, which are in fact unevenly distributed across populations. Indeed, while a few immigrants might have the social contacts and knowledge needed to negotiate the educational system (Darling-Hammond, 2000; Portes & Rumbaut, 2001), many students who experience immigration to a new country or/and language differences and poverty have less access to the necessary resources. Thus, the meritocratic model ignores differences in conditions and possibility and this leads to continued inequality and blaming those who do not succeed for their failure.
In Westernised countries, in particular, the commercialization of the school system and the portrayal of schools as places to prepare young citizens to compete (and win) in the global marketplace has been argued to be to the advantage of the ruling class and White, middle class parents who have the financial resources and social contacts either to send their children to private schools or to enhance their public school experiences (Apple, 2001; Connell et al., 1982; Lareau, 2000; Levine-Rasky, 2008).

Private schools, by the makeup of their student body, can emphasise the difference between social classes and foster the concept of differentness that can be used to assign the immigrant to the role of stranger. Van Pelt, Allison and Allison (2007) surveyed the parents of students attending Ontario private schools (religious and non-religious) in 2005 to 2006, investigating who chooses private schools and why. They found that, at the non-religious private schools, the majority of the parents (72%) were born in Canada, 70% reported that English was their mother tongue and 84% spoke English as the most frequent language at home. The most frequent home languages after English were Dutch (5%), German (5%), Italian (3%), and Chinese (3%). The majority of families appeared to have originated from Canada or Europe. In addition, close to 49% of non-religious private school parents were employed in white collar professions, twice the percentage for public schools. They also found that children from both high and low income families attended non-religious private schools, although the majority (77%) reported family incomes of $120,000 per year or over. These statistics differed for religiously-defined private schools (Christian, Jewish, Islamic or Sikh), where 89% of the parents of students attending these schools were reported to be from low-income backgrounds. These figures would imply that the majority of families attending non-religious private schools, including a minority born outside of Canada, tend to be in the middle and upper classes. More
recently, in her 2008 study of Jewish parents of students in a suburban Ontario public school, Levine-Rasky (2008) found that the parents surveyed, although they knew little about the immigrants entering the neighbourhood school, worried that the new students would lower the educational and social standards of the school. In fact, they openly discussed moving their children to private schools where they would be among children more similar to them and with purportedly higher academic goals.

In summary, in a meritocratic educational system, all members in society are not able to compete on an equal basis. We have seen that families with more knowledge about and experiences with a school system are better able to control their children’s educational opportunities; higher income also provides families with choices, such as sending their children to private schools, although, some families with lower incomes are choosing to send their children to religiously-affiliated private schools. As we consider students’ experiences of schooling, it is important to bear in mind that parents’ abilities to influence their children’s experiences varies widely and that new immigrant families may feel they have very little ability to influence their children’s schooling experiences.

Examining Predictors of Successful Achievement for Immigrant Students

Notwithstanding deficit labelling and the challenges immigrant families may face when trying to influence their children’s schooling, schooling is not a negative experience for all immigrant students. Many students, including racialised students and those who enter schools without having mastery of the language of instruction, do succeed in spite of the many obstacles I have described in the earlier sections of this chapter. School can serve as a source of support instead of a stressor for students who are experiencing other stressful situations, such as being
seen to be different from the mainstream (Clarke, 1991). Recall that earlier I discussed how schools can contest the negative environments such as those caused by deficit labelling.

It is not entirely surprising, then, that some studies (Abada, Hou, & Ram, 2008; Boyd, 2002; Chow, 2004) have found positive school achievements and successful post secondary outcomes for immigrant students, particularly non-White students. Success might also come from the existence of non-school factors in the students’ lives. These factors could include personal and community factors, such as positive attitudes and aspirations (Krahn & Taylor, 2007; OECD, 2006), strong peer support, strong support from one’s own cultural and ethnic community, and identification with, and a feeling of connectedness with one’s own culture (Chow, 2004). It is worth noting that the length of time that an immigrant student attends school is often unrelated to the parents’ years of schooling (Aydemir, Chen & Corak, 2008). For example, immigrant parents who are refugees may have had limited opportunities for schooling, but may want their children to complete high school and perhaps postsecondary education.

To illustrate this, in their study of the Ethnic Diversity Survey (EDS) dataset in conjunction with 2001 and 1981 Canadian Census data, Aydemir, Chen and Corak, (2008) explored questions related to the well-being of the children of immigrants and their performance in society. The results of the study showed that, in contrast to Canadian-born students, there was no relationship between the number of years that an immigrant child spent in school and the child’s parents’ years of schooling. This finding would support that deficit models are misplaced. They also found that immigrants and their children had, on average, more years of schooling than Canadians who have been in the country for more than two generations. The second-generation Canadians were found to be more educated than those whose parents were born in Canada. These patterns did not seem to be associated with how much money immigrant parents
earned. Similarly, Krahn and Taylor (2007) found that a higher proportion of immigrant youth than Canadian-born youth aspire to attend university instead of college.

Much earlier, I discussed that language and length of stay might influence immigrant student achievement; and later I noted that the number of years an immigrant student spends in school is not necessarily linked to his or her parents’ years of schooling. Now I will discuss several other factors that might also contribute to the academic success of immigrant students. Krahn and Taylor (2007) analysed Cycle 1 of the 2000 Youth in Transition Survey, a national study of 15-year-olds completed in 2000 by Statistics Canada. The findings showed that students’ academic placements in Grade 10 math, science and English courses were strongly related to their parents’ education and family income. Students’ academic placements determined if they would go to university, to college or to work after finishing high school. They also found that, although the relationship was not as strong, visible minority and immigrant students, and students for whom English or French was not their first language (i.e., ESL or FSL students), were somewhat more likely be enrolled in high school academic placements that gave them access to all the available postsecondary education options.

Chow (2004), in a study of the achievement of Chinese immigrant students in Calgary, asked the students to self-report their term marks and found that the majority of the students (two-thirds) reported marks in the 80% to 100% range. The study analysed the effects of 10 variables that could predict academic achievement: sex, father’s education, age, religion, socioeconomic status, country of birth, parental assistance with homework, self-identified ethnicity, ethnic language proficiency, and ethnic capital. (Ethnic capital was broadly defined as the person’s sense of ethnic connectedness and the internalization of ethnic cultural values that lead to academic success.) Four predictors of students’ academic performance were identified:
gender (girls performed better than the boys), Chinese language proficiency, ethnic self-
identification and ethnic capital.

Which schools immigrant students attend seems to be an important factor in their
achievement. Studies based on PISA and other large-scale assessment data have found that high
clustering of immigrants in some schools is not favourable for the educational achievement of
immigrants or native-born students attending these schools (Elgie, 2008).

Studies (Barnett & Boocock, 1998; Knapp & Shields, 1991) have also found that the
success of immigrant students may be related to factors such as additional financial or other
kinds of resources, special curriculum programs, parental and community involvement, teacher
skills training opportunities, or leadership from the principal. These represent the kinds of things
that Bourdieu (1984) would have referred to as cultural capital. Others are of the opinion that the
resources only matter insofar as they alleviate factors such as poverty (B. Levin, personal
communication, 2010).

Bushnik, Barr-Telford and Bussière (2004) concluded that frequent change in residence,
low parental educational aspirations for their children, repeating a grade and poor performance at
school increase the chances that a child will drop out of school when they reach age 16 or 17.
Brown and Bean (2006) also described the prejudice that immigrants who are from racialised
groups face as an important factor in their achievement. As discussed earlier, immigrant children
may face quite different assumptions about their academic and other abilities.

In summary, immigrant students’ academic success, or their failure to succeed, can be
related to both personal and school attributes. Well-established indicators like parents’ level of
education are likely to predict immigrant students’ success, although less strongly than they do
for non-immigrant students. Also predictive of success are students’ performance on large-scale standarised assessments, which I will discuss next.

**Using Large-Scale Standardised Assessments to Measure Students’ Achievement**

In this section, I review the implicit and explicit intent of large-scale standardised assessments and the implications for students who have changed countries, schools or have language differences (i.e., minoritised students).

**Standards and Standardised Assessments**

In the past decade, the word “standards” has been used in education in a variety of ways. For example, the US’s *No Child Left Behind Act of 2001* distinguishes between “content standards,” which “specify what children are expected to know and be able to do” and “achievement standards,” which “describe two levels of high achievement (proficient and advanced) … and a third level of achievement (basic)” (Sec. 1111). Marzano and Kendall (1996) suggest that “curriculum standards” describe “what should take place in the classroom” (p. 12).

To further complicate matters, other terms sometimes share these definitions. For example, in Ontario’s curriculum documents, “expectations” are “the knowledge and skills that students are expected to develop and demonstrate” – in other words, content standards – and “achievement levels” are brief descriptions of four levels of student achievement – analogous to achievement standards (Ontario Ministry of Education, 1999, p. 4).

The term “standardised” when used to refer to assessments is not related to either content or achievement standards. Rather, it refers to a standard protocol for test administration: Standardised assessments are intended to be administered in the same way across locations and students. Assessments that are mandated by a province or state and so administered on a large scale are typically standardised.
How are Large-Scale Standardised Assessments Used?

Large-scale standardised assessments can have high or low stakes. Low-stakes tests, such as Ontario’s Primary (Grade 3) and Junior (Grade 6) Assessments of Reading, Writing and Mathematics, generally do not have penalties or rewards attached to student performance. However, high-stakes tests, such as the Ontario Secondary School Literacy Test, are tests that have significant consequences for students and sometimes for the schools. Students are required to pass the Ontario Secondary School literacy test in order to graduate from high school. Other high-stakes tests might determine grade promotion or secondary school or university selection; for schools, funding may be based on students’ aggregated results.

Standardised assessments are also sometimes used to evaluate the effectiveness of educational programs implemented in schools, as well as provide information to the general public on how schools and students are performing, how they compare with other schools, and how their performance has changed over time. Stakeholders might examine school budgets, student attendance and the curriculum but it is the students’ scores on standardised tests that are used to measure school performance, make schools accountable, and help parents decide on where their child would attend school. Broadfoot (1981) wrote about the effects of assessments on what teachers teach and how and when they teach it, and ultimately the impact of assessments on children’s learning and on fostering competition in the classroom and among schools. She suggested that some secondary teachers believed that they would be judged by their students’ results on external exams and that this belief affected their methods of teaching. Further, Mehan (2008) describes a perception that large-scale standardised tests are more objective and reliable than teachers’ classroom assessments and resulting report card grades and so are more appropriate for monitoring students’ achievement and comparing schools. However, noted
British educational researcher and author Gillborn (2008) represents the view of many educators when he asserts that the belief that large-scale standardised assessments are fair, scientific or neutral is inherently ‘incorrect and dangerous’ (p. 90).

**Limitations of the Uses of Large-Scale Standardised Assessments**

The uses of large-scale standardised assessments, particularly as a tool for evaluating student learning, have been frequently criticised. Of particular concern are differences in average performance between groups of students. These “performance gaps” have become an increasing focus of education reform efforts with probable causes being the subject of many debates. Arguments include that the differences in performance suggest that some students are more prepared for school than others (Brown, 2002; Leithwood, Fullan, & Watson, 2003), that teachers are more effective in teaching some students than other (Arzubiaga, Noguerón, & Sullivan, 2009), that students have unequal opportunities to learn (Boundy, 1999), that the available opportunities to learn are designed to match the learning approaches and favour the prior knowledge of the White majority of students, or that the tests are systematically biased in favour of White students – or some combination of these factors. Mehan (2008) argued that the testing environment is supportive of middle class students, usually White, whose ‘hard work and effort’ and therefore meritorious achievements have benefited from their social and cultural and financial resources. Extending Mehan’s argument, one might posit that schools and the assessment process are designed for what they consider to be a “best case”: children who grow up in the host country (so are familiar with the culture), speak English at home (so the adults at home can help them with homework and interact with the school by attending parent teacher meetings, volunteering, etc.), and stay in the same school (so the school’s literacy and other initiatives have time to work). Students from the working class are likely to be disadvantaged in
this situation; in fact, this requirement of test readiness can be another way of limiting the opportunities for working class students, consistent with the observations of Curtis et al. (1992), Connell et al. (1982) and Lareau (2000), discussed earlier in this paper.

An example is provided by Gillborn (2008), who expressed grave misgivings about the new national standardised assessment system that was implemented in Britain in 2003. He strongly suggested that the assessments, with their reliance on teachers’ judgments in a system of institutionalised racism, are designed to re-enforce the image of minority students as low achievers with consistent performances throughout school below that of the White students. Gillborn condemned the new system for its apparently deliberate erasure of the critical questions raised by one of his previous studies of baseline assessments to address the issues of the obstacles that face Black students in the school system and hinder their learning.

Other researchers have argued that, instead of condemning large-scale standardised assessments because of the patterns of differences they show, we should use the test results to argue for greater equity in opportunities to learn. For example, Moss (2008) suggests that tests can help educators identify and address inequities in current educational systems. In conducting this study, I have chosen to examine the advantages and disadvantages associated with the use of large-scale assessments in schools. In interpreting the patterns of students’ test scores in relation to country mobility, home language and school mobility, I will be considering a wide range of possible interpretations, including bias in the test and in the educational system.

**The Use of Large-Scale Standardised Assessment Results in Ontario**

An illustration of the linking of large-scale standardised assessment results and demographic information was provided in 2009 by the Ontario Ministry of Education’s “School Finder” web tool. For each publicly-funded school in Ontario, the website showed the provincial
standardised assessment results for all elementary and secondary students, giving the percentage of students who have attained each level of the standards. Students participating in the Primary (Grade 3) and Junior (Grade 6) Assessments of Reading, Writing, and Mathematics and the Grade 9 Assessment of Mathematics are assigned to one of four achievement levels, from Level 1 to Level 4, with Level 3 being the provincial standard. The students taking the Ontario Secondary School Literary Test, which is a high school graduation requirement, are graded successful or unsuccessful. The student background information on the website includes such statistics as the percentage of students new to Canada, percentage of children whose first language is not English, percentage of children living in low income households, and parents’ education levels.

For example, Driftwood Public School is a kindergarten to Grade 5 public school located in the northwest suburbs of Toronto whose students attend a middle school for Grades 6 to 8. The School Finder displayed Driftwood P.S.’s 2007-08 results for the Primary Assessment in Reading, Writing and Mathematics; 48% of all the Grade 3 students achieved the provincial standard (Level 3 is the provincial standard) in Reading, 62% in Writing and 59% in Mathematics as compared to the provincial achievement of 61%, 66% and 68% respectively. The school’s scores revealed a downward trend over the last few years while the province overall showed an increase in scores over the same period of time. According to the website, the percentage of students whose first language is not English was a high 62% as compared to the provincial 22%, and 10% of the students were new to Canada, compared to 6% provincially. The site showed that 17% of the students had parents with some university education, compared to 37% provincially, and 57% of the students lived in low income households, compared to 16.5% provincially.
In contrast, Brown Junior Public School, located on Avenue Road in an upscale part of Toronto, enrolls children from junior kindergarten to Grade 6. Their School Finder test scores showed Grade 3 results of 74% in Reading and Writing and 93% in Mathematics, an upward trend of scores over the years in each subject area. Grade 6 results were 90% in Reading, 78% in Writing and 77% in Mathematics. The school had 20% of students whose first language was not English, 13% of the students were new to Canada, 71% had parents with some university education and only 12% of the schools’ students lived in low income households.

For schools in affluent neighbourhoods with the resultant high achievement and privileged background information, the students might not have feelings of dismay, but for poor immigrant students the statistics can be demoralising.

The efforts by the Ministry of Education to improve school performance by stipulating that students meet the Level 3 standard and with little emphasis on moving students from Level 1 to Level 2 further demonstrates the lack of recognition for schools who have students who are struggling and who need more resources to meet the provincial standard.

The Ontario Ministry of Education and EQAO repeatedly state that the public reporting of the provincial assessment results is not about ranking or comparisons, but about public accountability. However, the intent of the Ministry’s School Finder website with its assessment results and student demographics is to provide parents with a choice of schools. This in a province where students are supposed to attend neighbourhood schools demarcated by fixed boundaries. There is clearly a contradiction between the Ministry’s policy on not using the EQAO results for ranking schools and their practice of using public media to promote the use of the results for school choice decisions. The following online comment (Sarah, 2007) is a parent’s response to the publication of the provincial assessment results and the public ranking of schools.
This parent questions the publication of the results, the unfair negative portrayal of the child’s school, the class-based application of school choice, and the large ESL population attending the school. This comment was posted on a blog on TVO’s website after The Fraser Institute, a public, right wing policy think-tank, released its annual ranking of Ontario’s schools based on the Grade 3 and 6 provincial assessment results. So, in spite of what the government intends, others can (and do) use the EQAO assessment data to rank schools. I quote Sarah at length.

The Fraser Institute released its fifth annual report card that ranks the 2,812 schools in Ontario based on the grades 3 and 6 standardized tests – or the dreaded EQAO. ... My daughter’s school didn’t do well. It never does. And once again, I’m mad. I’m not mad at the school because it looks like it’s failing (it’s not). I’m mad at the ridiculous way they measure these things and I’m mad because they told me in the first place. I seriously question the publishing of this report for parents. I understand that the schools need the data to make improvements but I don’t know why I need to know. The Fraser Institute says they publish these reports so that parents have a guide when choosing a school for their children. I don’t know about you, but I don’t have a choice about where my daughter goes to school. I live in Toronto and I am told which public school my children can attend based on where I live. I don’t have the resources to go private so I have to follow the rules. I’ve tried to get her in the school a little further east in the swankier area of my neighbourhood [but it was] “closed” to outsiders. So what do these rankings do for parents like me? They make me feel bad. What’s the point in making parents everywhere feel guilty because their child doesn’t go to one of the top schools? ... I know that my school isn’t failing. My school has a large population of ESL and special needs students and that can alter results. (Sarah, 2007, February 13)
This excerpt highlights some significant issues about large-scale testing: the easy access that the public has to the results, the potential for misuse of the results, the potential for misinterpretation of the results, and the tendency to blame others for the results. The public has easy access to selected parts of the annual assessment results through publications on the EQAO public website, news releases by the EQAO office, school newsletters, and newspaper articles. Even though the news releases might state that the results only pinpoint the performance of the students (and by extension, the performance of the school at one point in time) and should be considered only in conjunction to other variables, the public does not consider these other factors. They make decisions based on misinterpretation of isolated results encouraged by the inappropriate ranking of the schools by organisations such as the Fraser Institute. The deficit mentality is very evident in the parent’s comment: The parent does not think that the school is failing but rather she blames the large ESL population and the special needs students for the results. She separates the students in the school into ‘normal’ students and the ESL and special needs students. She uses the students’ conditions of ‘ESL’ and ‘special needs’ to define them as if they had no attributes to contribute to the success of the school. Her solution is to remove her children from the school and send them to a school she perceives to be better because of its “swankier” location and her perception that it has better resources.

**Academic Achievement of Immigrant Students**

Studies that compare the academic performance of immigrant children versus native-born children at the elementary level in Canada are rare. An exception would be basic studies from the former Toronto Board of Education before its 1992 amalgamation with other area school boards; these studies included analyses of enrolment in relation to students’ country of origin (Wright & Tsuji, 1984). More recent studies have tended to focus on qualitative methods of data collection.
and selected ethnic groups. Results of available studies about middle school and secondary students vary: Large-scale international studies (e.g., OECD, 2006) show significant gaps in performance in some receiving countries, with the immigrant students and those with languages different from the language of instruction tending to be the lower performers. In other receiving countries, including Canada, the gaps tended to be smaller or even reversed, with the immigrant students performing better. The results also differed between different generations of immigrants. These varied results could also be seen in smaller national studies.

Huang (2000) discussed the influx of diverse immigrants into the Westernised societies and suggested that educators knew little about the schooling of immigrant children stating that it was not an area that was systematically studied and it was unclear how the new generations of immigrants were performing in the school system. It was not clear how schools were helping immigrant children learn math and science, subjects that are critical for competing in today’s technology-oriented labour market. Huang identified the need for baseline data that would summarize the performance of subgroups of immigrant students by generational status, sex, native language, and socioeconomic status. Other studies (e.g., OECD, 2006) have discussed the need for longitudinal data tracking the trajectories of subgroups of immigrant students as well as immigrant students versus non-immigrant students. Large-scale assessments such as The Third International Mathematics and Science Study (TIMSS) and the Programme for International Students Assessment (PISA) have provided databases that could enable researchers to explore and compare the school success of immigrant students at an international level.

The Organisation for Economic Co-operation and Development (OECD, 2006) analyzed the performance in Mathematics, Reading, Science, and Problem Solving and the self-reported academic engagement of 15-year-old first and second-generation students versus native-born
students (students born in the specified country) from 17 countries on the PISA 2003. The results for Reading and Mathematics showed that, although immigrant students generally displayed positive attitudes towards learning, there was considerable variation across countries in the differences in academic performance between the immigrant students and the native-born students, with immigrant students underperforming relative to native-born students, although these results varied by country. For example, immigrant and native-born students performed at similar levels in Australia, Canada, and New Zealand. The differences were most pronounced in Austria, Belgium, Denmark, France, Germany, the Netherlands and Switzerland. Also, in Canada, second-generation students performed significantly better than first-generation students and the gap between immigrant and native-born students in some countries appeared to decrease across immigrant generations.

In an earlier study, Huang (2000) performed cross-national comparison analyses on comprehensive and reliable test information from the TIMSS 1995 administration to eight- and nine-year-old students in Grades 3 and 4. The results indicated that in the United States, England, and Canada, immigrant children lagged behind in math and science achievement. In addition, the study found a strong negative relationship between speaking a language other than English (the language of instruction in the countries studied) at home and math and science performance.

Rumbaut (1996, 1997) had found results more favourable to immigrant students in a comparative study of a cohort of eighth and ninth grade students in San Diego at two time points. The sample consisted of 2,420 students in 1992 and 2063 of those students were re-interviewed in 1995-1996. The study collected student demographic, attitudinal and perception data as well as school achievement data on GPAs, Stanford Reading and Mathematics achievement scores and English language proficiency (limited versus fluent). The students were either born outside
of the United States (56%) or had at least one parent born outside of the country (44%). Half of those who were born outside of the United States had arrived in the country as preschoolers and the other half had reached elementary school age in their country of origin but had immigrated before reaching adolescence. When the entire cohort’s GPA results for each grade from 9 to 12 were compared to the GPA average of all the schools in the San Diego district, the study found that, when aggregated as a group, the cohort of immigrant students and children of immigrants outperformed the district norms at every grade level. For example in Grade 9, 29% of all the students in the district in that grade obtained GPAs above 3.0 compared to 44% of the children in the cohort. This gap narrowed over time and grades level so that by Grade 12 the difference was only a few percentage points (Rumbaut, 1997). Rumbaut attributed the narrowing of the gap to the 16.2% multiyear dropout rate (from Grade 9 to Grade 12) of all students in the district versus the 5.7% dropout rate of the original immigrant cohort.

Suárez-Orozco and Qin-Hilliard (2004) found that immigrant girls tend to outperform immigrant boys in educational settings. In order to obtain a deeper understanding of immigrant youths’ academic engagement and schooling outcomes, they conducted a study in the United States with 400 recent immigrant students, aged 9 to 14, recruited from fifty-one schools in seven school districts in Massachusetts and northern California. Participating schools provided access to students, teachers, staff, and school records. The study found strong evidence of poorer academic performance among immigrant boys than among immigrant girls. The data suggested that less internal motivation or less ability might not be the reason immigrant boys struggle in school, but the difficulty could arise from a non-supportive environment that did not provide guidance or encouragement to do well in school. The authors advised that any discussion of gender differences in academic outcomes among immigrant youth should consider cultural
factors, as well as factors related to school, home, and peers. I do not analyse gender differences in this study but it is an area for future research.

Limited studies have also been done investigating immigrant students’ school enrolment and dropout rates and the results are varied. In Ontario, The Hospital for Sick Children (2005) reported a link between dropping out of school and immigrant characteristics. They interviewed and conducted focus groups with students who had dropped out of school in Ontario and found that for first-generation immigrants some of the main risk factors leading to school dropouts included language difficulties, inappropriate linguistic assessment, lack of language instruction, non-recognition of prior educational achievements, and unfamiliarity with the Canadian school system. The study also found that the student’s age at immigration was a factor in whether the student dropped out of school or not.

Notwithstanding the dire picture of immigrants’ school experiences and the incidence of dropping out painted above, many immigrants are successful in school. Evidence of immigrant school enrolment was tracked to the university level in Canada. Using a sub-sample from the 2002 Statistics Canada Ethnic Diversity Survey, Abada, Hou, and Ram (2008) found that 38% of respondents who were the children of immigrants had a university education, compared to 28% of the children of Canadian-born parents. In addition, 94% of the children of immigrant parents had finished high school compared to 88% of children with Canadian-born parents. An analysis by ethnic group showed that some ethnic groups had similar rates of high school completion but big differences in university education attainment. The analysis of groups by parents’ source country revealed that 87.8% (source country: West Asia/Middle East) to 99.2% (source country: China) of the children in the study had at least completed high school. For university attainment, the results showed that 69.5% of the children of Chinese parents had obtained a university degree.
compared to 23.5% of the students with parents from Latin America and 27.5% of students with Canadian-born parents.

Similarly, Hirschman (2001) found evidence of high immigrant school enrolment when he examined 1990 Census data from the United States looking at patterns of school enrolment for foreign-born youths ages 15 to 17. The analysis showed that the majority of high-school-age immigrant youths were as likely as their native-born peers to be enrolled in school. However, there was a 10% to 40% variation when those not enrolled in school were compared by place of origin, age at arrival, and socioeconomic status.

**School Mobility and Academic Achievement**

Moving schools can be disruptive to children’s schooling and the impact might be experienced in several ways. School changes that are made during the school year can take children out of the normal school routine and force them to adjust to a new school environment, friends and teaching materials and teaching styles (Alexander, Entwisle & Dauber, 1996). For the immigrant student, as previously discussed, the move could also mean exposure to a new culture and to new school and country customs. Students need time to become adjusted to the new ways of teaching, learning and to the new environment and in the short-term this may adversely affect the students’ performance; especially if the students have other risk factors (for example, poverty) that are associated with low achievement (Mehanaa & Reynolds, 2004).

In a meta-analysis of 26 studies from the United States dated between 1975 and 1994, Mehanaa and Reynolds (2004) studied the effect of school mobility on academic achievement among elementary students and found that changing schools was significantly associated with lower academic achievement in Mathematics and Reading even when combined with other factors such as socio-economic conditions. The study did not include prior achievement in the
analysis. In another study, Melman Heinlein and Shinn (2000) analysed longitudinal data from 764 Grade 6 students in New York City (1996-1997) and found that, when the study controlled for prior Grade 3 achievement, students’ high mobility was found to have no association with Grade 6 achievement, not being promoted to the next grade, or declining in achievement. Grade 3 achievement proved to be a strong predictor of Grade 6 achievement. However, when there was no control for Grade 3 achievement, students’ high mobility had a strong negative association with Reading and Mathematics achievement.

Overall, the literature shows that although school mobility appears to be generally associated with low achievement, there seems to be less of an effect when prior grade achievement is controlled.

**Language and Academic Achievement**

Language also plays an important role in education and being able to understand the language of classroom instruction is critically important if the student is going to be successful in school (Ontario Ministry of Education, 2008b). Similarly, OECD (2006) also reported that language spoken at home was an important factor in students’ learning outcomes in almost all of the 17 countries included in a comparative study of PISA 2003 results. The PISA report found that, with the exception of students from Canada and Australia, immigrant students who spoke a different language at home than the language of instruction tended to perform at lower levels in Mathematics than immigrant students who spoke the language of instruction at home and than native-born students.

differences in performance between three groups of children varied according to the age of the children, the subject areas tested, and the number of years the child had been in Canada. The three groups were: (1) children of immigrant parents who did not speak English or French (Allophones); (2) children of Anglophone or Francophone immigrant parents; and (3) children of Canadian-born parents, whom the study assumed had a strong ability in the language of instruction before they started school. The results showed that immigrant children in the early grades of elementary school had lower vocabulary scores than those of the children of Canadian-born parents; however, differences in Reading and Mathematics scores were small. The study also investigated whether differences in academic performance vary in magnitude according to the immigrant status of the parent, the parent’s mother tongue, the child’s gender, and the education level of the parent.

Worswick’s (2004) analysis of the results of the vocabulary test showed that children with Allophone immigrant parents are at a substantial disadvantage in the early school years. The children of Anglophone or Francophone immigrant parents had a relatively better performance on the vocabulary test than the Allophone students but their performance was still below that of the children of Canadian-born parents. On the older children’s Reading and Mathematics tests, the performance of children of Allophone, Anglophone, or Francophone immigrant parents did not differ significantly from that of the children of Canadian-born parents. However, in Reading, the seven-year-old children of allophone immigrant parents who had only been in Canada for about three years scored lower than the other children. However, there was a positive linear relationship between years of residence in Canada and the children’s performance on the Reading test. For example, the child of an Allophone immigrant parent whose parent arrived in
Canada when the child was four had no significant difference in the reading performance relative to children of Canadian-born parents by the time the child reached age 14.

In Ontario, Toronto District School Board (Brown & Sinhay, 2008) linked the demographic information of 31,548 students comprising 92% of their Grade 7 and Grade 8 student body in 2006 with their individual report card achievement data for 2006. The results showed that the students’ academic achievement varied across language groups, with the majority of students from some language groups performing at or above the provincial standard (Level 3) for Reading and Writing. For example, the Reading results for the highest performing language group were: Romanian (82%), Korean (79%), Hindi (78%), Chinese (77%), Bengali (75%), and Serbian (75%). The scores can be compared to the 64% of English-speaking students who achieved the provincial standard.

In addition, when the Toronto District School Board (Brown, 2008) analysed achievement data spanning five years for three Grade 9 cohorts (2000, 2001, and 2002), the results showed that the drop-out rates at the end of five years of high school varied by region of origin. Students from the English-speaking Caribbean region and those born in Central/South America and Mexico consistently had the highest dropout rates (40% to 37%), while students from Eastern Asia had the lowest dropout rates (14% to 11%). This can be compared to the dropout rates of 23% to 20% for students born in Canada.

Similar studies looking at immigrant language and achievement were conducted in the United States. Rumbaut’s (1996, 1997) comparative study of a cohort of 2,420 eighth and ninth grade students in San Diego in 1992 and 1995-1996 found a difference in the achievements of the different ethnic groups in the cohort. The performance of Chinese, Korean, Japanese, Indian, and Vietnamese students was well above the national average on the mathematics section of the
Abbreviated Stanford Achievement Test. The performance of the Hmong, Mexican and Cambodian students was much lower than the national average on the same test. On the two four-item English tests, the Cambodians and Laos, two-thirds of whom were classified as having limited English proficiency, obtained the lowest scores nationally. The author of the study concluded that, based on this study and other similar studies, some minority groups do well in school in spite of differences in language and culture and socio-economic conditions; this could be attributed to the average 2 hours per night of homework that the immigrant students completed in comparison to the non-immigrant students’ average of less than one hour per night (Rumbaut, 1996).

The results of another study of recent immigrants and students with English as a second language in the School Board of Broward County, Florida showed that, at every school level, Limited English Proficient (LEP) recent immigrant students performed significantly lower on standardised Reading and Mathematics tests, than non-LEP recent immigrants (The School Board of Broward County, 2005). The study examined the academic achievement of recent immigrant students served under Title III of the No Child Left Behind Act of 2001—Language Instruction for Limited English Proficient and Immigrant Students (Title III provides funds for helping LEP and immigrant children attain English proficiency and meet the same challenging academic standards that all children are expected to meet).

Language also seemed to be a factor at the postsecondary level in Canada. A study by Abada and Tenkorang (2009) that used data from the 2002 Ethnic Diversity Survey (a survey conducted by Statistics Canada in Partnership with Heritage Canada) found that the proportion of students attending university varied across minority language groups as well as between those speaking English or French and was influenced by whether the participants spoke the minority
language at home or only among friends. For example, 43% of those who spoke only their minority language at home and 44% of the youths for whom English or French was not their native language but who grew up speaking one of the official languages attained a university education in comparison to 31% of those who spoke only English or only French at home. When the researchers looked at university education in relation to the language respondents used with their friends, they found that 46% of the respondents who spoke to their friends in another language as well as in English or French, 32% of those who spoke only English or only French, and 30% of those who spoke neither English nor French with their friends had a university education.

**Critical View on the Impact of Language on Results of Large Scale Assessments**

Cummins (2009) criticized the conclusions drawn from analyses of PISA 2003 results that suggested that knowing the language of classroom instruction was crucial to school success and that the low PISA results obtained by immigrant children meant that those children had not been given sufficient opportunities to be immersed in the language of classroom instruction. Cummins (2009) argued that policymakers should not interpret the 2003 PISA results as evidence that there should be cultural and linguistic assimilation and that the additional language was a demand detrimental to students’ academic success and a deterrent to their learning the language of instruction.

Cummins (2009) noted that, in Canada and Australia where the immigrant students actually performed better than the native students, no relationship was found between home language and student achievement. Further, he argued that any relationship between home language use and achievement disappeared in 10 of the 4 OECD-member countries when there were controls for SES and other background variables. Cummins also suggested that language
spoken at home did not account for achievement but that it might have been used by data analysts and policymakers as a proxy for variables such as socioeconomic status or length of residence in the new country.

Cummins (2009) provided classroom evidence to show that bilingual students (with various first languages; in elementary, middle and high school; with English as a second and as a foreign language) who were permitted to use their home language to complete classroom assignments were able to successfully transfer their reading comprehension ability to the new language. He suggested classrooms should make use of inspiration pedagogy which involved maintaining high levels of classroom engagement through providing adequate supports that would affirm the students’ identity and cognitively challenge their ability to succeed. Inspirational pedagogy also meant perceiving instruction not only as a means of transmitting the curriculum, but also as a means of using language to generate knowledge, create literature and art, and act on social realities.

From the results of Cummins’s research and other studies in Canada and internationally, it would appear that the association between academic achievement and using a home language other than the language of classroom instruction is not straightforward. There are many factors that must be considered, including subjects tested, language groups, length of stay in the new country, age of children at immigration, and social use of the language. However, these findings further reinforce that immigrant groups are not homogeneous.

**Limitations of Previous Research**

It is unclear why some immigrant groups perform better than others. Aggregated comparisons may mask crucial variation within the immigrant population (Huang, 2000). For example, a subgroup of immigrant students with a home language other than English may
represent immigrants from many different countries and difficulties might be encountered in analyses by ethnicity or culture (Clarkson, 2008) or even by gender or class.

The number of studies of the academic performance of immigrant children is small, with the same studies being constantly referred to in articles on the education of immigrant children. Moreover, some studies have used demographic data collected from national surveys conducted by Statistics Canada to explore issues related to labour market conditions, including the experiences of immigrants in the Canadian labour market. The data from these surveys have been used to explore the post secondary aspirations of immigrant youth and adults and the social and cultural attributes that foster or hinder successful outcomes for immigrants (Abada & Tenkorang, 2009). However, these data are not without their own limitations; for example, Thiessen (2009), in his examination of the data from Youth in Transition (YITS), a Statistics Canada survey of 15-year-old youth in 10 provinces in Canada noted the inadequacy of the survey to properly represent the large variation that exists within the groups surveyed. Furthermore, classifications by ethnicity and race often produced sample sizes that were too small to analyse. In addition, academic achievement was self-reported, which is less accurate than using primary documents such as report cards and school records.

It is not surprising, then, that few studies have investigated the academic performance of immigrant students over time and none has disentangled the effects of country mobility, school mobility, and home language.

**Research Question**

This study will address some of the limitations of previous studies by analyzing a large dataset with adequate numbers of students with combinations of country mobility, school mobility, and home language to permit the separation of these factors in the analyses. The study
seeks to answer the question: What is the likelihood that students in Ontario public schools who were born outside of Canada (that is, first-generation or 1.5-generation immigrants), speak a home language other than or in addition to English, and/or changed schools would have maintained proficiency between Grades 3 and 6 or achieved proficiency in the Grade 6 EQAO assessment if they did not in Grade 3 EQAO assessment?

A Description of the Main Concepts/Criteria That Inform My Perspectives

The Use of Sociological and Psychometric Perspectives

Combining the disciplines of psychometrics and sociology to examine student learning in an environment of assessments and high-stakes testing is still a relatively new venture that fills a void in educational research (Moss, 2008). Combining psychometric analysis with sociological theory gives educators the confidence that they are getting the information needed to make informed decisions. However, it is important for educational policymakers to recognize that psychometrics is not an exact science and that judgment also plays a role in the construction of assessments. The difficulty lies not in aligning the inputs (for example, student demographics, school demographics, instructional material) with the outputs (achievement results) but with the more fundamental issue of exactly whose knowledge is being assessed, and towards which end.

Framing the Study

Articulating a framework for the study of the education of students who have experienced changing countries, changing schools or language differences can be a challenging prospect. There are many different demographic, cultural and social characteristics and experiences to be found in groups and between groups of students even when they might seem to have a common factor such as changing schools or changing countries. In the literature that I reviewed for this
study, I identified the social and cultural reproduction theories related to the role of schools in the development of students and I will use these lens with others that I describe later to frame my study.

Bourdieu’s (1984) theory of social and capital reproduction identifies school as an agent for cultural reproduction where the success of the students depends on knowing and internalizing the norms and customs that are valued by the school (cultural capital). These norms and values are salient and shifting and are characteristic of the middle and ruling class of the dominant group (White, Anglo-Saxon in Canada). They are learnt through interaction with family and social acquaintances and reinforced by institutions such as the school. Teachers recognise the cultural capital of the dominant group as preferred in the classroom and a student’s success in school is determined in part by how much of that cultural capital the student has (Apple, 2004; Bourdieu, 1984).

One of the roles of school is to provide students with the social, cultural and academic skills that will not only enable them to become part of the mainstream society but also provide them with the opportunity to move up the socio-economic ladder, thus increasing their social capital. According to this view, schools do this through exposing students to and enculturating them into the mainstream’s societal norms and values (Goodlad, 1979). Because the system is hegemonic, the only system that the students are exposed to is that of the mainstream.

Goodlad’s (1979) concept of the role of schooling should facilitate the type of straight-line assimilation that Zhou (1997) described as the experience of the earlier immigrants from Europe to North America. In linear assimilation, there is thought to be a correlation between the length of time an immigrant lives in the new country and the degree of his or her becoming an accepted part of that society. For example, the students become more assimilated into the society
as they live longer in the country, and the school facilitates this through the reiteration of the norms and values of the society. More important for the purposes of this study, the social and economic mobility of successive generations of immigrants provides the means for them to acquire the social capital and other resources that will result in improved academic achievement and school success.

However, Reitz, and Somerville (2004) suggest the development of a new framework for researching assimilation and believe that current research must be done in Canada with the more recent second- and third-generation immigrants to determine the patterns of assimilation in the Canadian context. They argue that depressed economies, institutional changes in the host country, the development of global communication for facilitating ethnic community and source country ties, and better educated immigrants all determine assimilation patterns of the new generations.

Curtis, Livingstone and Smaller (1992) and Bowles and Gintis (1977) argue that schools do not provide social or economic advancement; instead, schools maintain the social and economic status quo. Students from the middle and upper classes are educated to obtain professional and managerial positions in the work force and students from the working class are educated for the factory and other menial jobs. The school system provides little opportunity for upward movement from the working class to the middle class; although a few students make the transition, most students enter school and leave school with their social position intact.

In addition to using the lens of schooling as a site for enculturation and reproduction, as well as incorporating the concept of assimilation, my investigation is also grounded in the theoretical works of Frantz Fanon and Michael Apple, who regarded school as an institution which perpetuated the ideology of the state. Franz Fanon later expanded this notion of the
ideology of education by linking the reproduction of knowledge and the continuance of a
dominant state with the oppressive nature of colonialisation and the lasting effects of the
colonizer on the colonised; in this sense, education became the agent of the colonizer. Fanon also
suggested that the colonized person is so powerless under the colonizer that he or she believes
that the characteristics of the colonizer embody ‘success’ and so, by assuming the characteristics
of the colonizer, they will achieve success. In the 1980s, Michael Apple continued to advance
the theory of the ideology of education, with questions such as, Whose knowledge is being
presented in schools?, still being very relevant to the discourse.

The question of knowledge reproduction might be a rhetorical one; nonetheless, as
educators, policymakers and stakeholders in education and in the future of our nation, we have to
acknowledge the importance of the answer and the implications for the teaching and learning of
a diverse student body in developed industrialised countries. Moreover, although historically
Canada was a colonised state, it has over time attained the values and mores of the Anglo-Saxon
colonizer to its indigenous peoples and some would argue to its immigrants of racialised
backgrounds. The current students coming from other countries (many of whom are non-Anglo-
Saxon in origin) have to contend with the ‘culture of difference,’ not having the cultural capital
that Pierre Bourdieu believed to be important components in classrooms and teachers’
assessments of students and their families.

All the aforementioned theorists describe an educational environment characterised by a
climate of power differentials and forced intake of alien knowledge by students. Are we to
believe in this ideology of education? If so, given these fundamental conditions in our education
system, how do students who come from another country, or another school, or another language
achieve? How do we measure success and high achievement? Are the measurement criteria fair
and accessible to all students? What characteristics must they bring to school in order to be successful?

Implicit in the theories of ideology, enculturation and social reproduction is the notion that schools either provide equal opportunities for all students to succeed or contribute towards the widening gaps in opportunities for students based on the social grouping of the student. Critical race theory (Gillborn, 2008) and anti-racism theory (Dei, 2002) posit that educational institutions are agents of systemic racism and this profoundly affects the schooling of racialised bodies, including the inequalities of opportunities for learning. The literature on the schooling of immigrant students (Dei, 2002; Gillborn, 2008) reveals that these students also encounter negative situations in school in the form of low teacher expectations, rejection of the students’ home language and culture, and covert systemic and institutionalised racism. Where the student immigrants face institutionalised and other learning obstacles, the hypothesis is that the students would have poor academic achievement.

The above is an overview of the ideological and cultural theories about the shape of schooling in Ontario. An important part of any study in sociology, particularly a study that seeks to contribute meaningfully to the process of researching the education of immigrants in Canada and endeavours to affect change in policy, is to provide evidence based on a theoretical framework that policymakers can rely on for decision-making. While there are multiple theories in sociological, no single theory adequately fit my study. In the end, to construct a meaningful framework for my study, I settled on combining concepts from Ogbu and Simon’s (1998) classification of immigrants and Portes and Zhou’s (1993) patterns of assimilation to examine the profile of the immigrant student in Ontario. I used the social and cultural capital and reproduction theories of Bourdieu (1984), Bowles and Gintis (1977) and Fanon (1963) to probe
the question posed earlier: How do we measure success and high achievement? The critical race
theory (Gillborn, 2008) and anti-racism theory (Dei, 2002) allows the framework to investigate
the overarching inequalities in Ontario school system. In the section following, I give a detailed
description of the theoretical framework and how it links to the study.

**Linking Theoretical Concepts to Variables in Study**

Table 1 shows how the various theories link to the pertinent variables in the study, the
attributes in the study that can be derived from the theories and the assumptions about probable
academic outcomes based on the attributes. I include Ogbu and Simon’s (1998) classification of
immigrants and Portes and Zhou’s (1993) patterns of assimilation in the theoretical framework
for this study to examine the profile of the immigrants. I link the variable which tells if students
were born outside Canada to Ogbu and Simon’s (1998) theory categorizing immigrants into
voluntary and involuntary immigrants, or refugees. Based on Ogbu and Simon’s theory, I assume
that some immigrants who attend Ontario’s schools have immigrated to Canada under the skilled
and professional class and the family class and can be determined to be in the voluntary
immigrants’ category. Some students might also be refugees. Based on Ogbu and Simon’s
definition of involuntary immigrations, it might be assumed that there are no students or very
few students who can be classified as involuntary immigrants. Using Ogbu and Simon’s theory
as part of the framework of this study, I can infer that, in my study, most students who come to
Canada as voluntary immigrants and are part of the Ontario public school system will have
positive aspirations towards school.
Table 1

*Links Between the Theoretical Framework and this Study*

<table>
<thead>
<tr>
<th>Links Between Theoretical Concepts and Variables in Study</th>
<th>Perceptions of Outcomes Derived from Theory</th>
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<tr>
<td>Theory</td>
<td>Selected Variable Categories in this Study</td>
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<td>Classification of Immigrants</td>
<td>Moved to Canada</td>
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<td>Assimilation Patterns</td>
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<td></td>
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<td>Social Capital and Cultural Reproduction</td>
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<td></td>
<td>English at home</td>
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<td></td>
<td>Same school</td>
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<td>Moved to Canada</td>
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<td></td>
<td>Another Language</td>
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<td>Changed School</td>
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<td>Coloniser and the Colonised</td>
<td>Moved to Canada</td>
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<td>School seen as coloniser, oppressor</td>
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<tr>
<td></td>
<td>Immigrant students seen as colonised, oppressed</td>
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</tbody>
</table>

Having used Ogbu and Simon’s theory to identify the category of immigrant students, the study uses Portes and Zhou’s (1993) patterns of assimilation concept linked to the variable “Country Change” (Moved to Canada, Born in Canada), to make assumptions about the process of assimilation that the students who moved to Canada might have undergone. The assumption could be made that some of the students might have undergone linear assimilation while others (the majority based on the non-White countries of origin) might have undergone some form of
segmented assimilation. The academic outcomes of the students would be related to their pattern of assimilation. Those students undergoing the process of linear assimilation would find that school outcomes tend to be more positive with the higher expectations from teachers and because there is less of a disconnect between the curriculum and its delivery and their own experience. On the other hand, the framework implies that students experiencing different forms of segmented assimilation can either have positive or negative school outcomes depending on the assimilation pattern (Portes & Zhou, 1993). The students who adopt selected cultural aspects of the host culture while retaining their own culture and the students who retain their own culture seem to be more likely to have positive school outcomes than students who join a counter-culture after they arrive in the host country, in this case, Ontario, Canada.

**Measuring Success and High Achievement**

In the study, the cultural and social reproduction theory is linked to the variables “Country Change” (Moved to Canada, Born in Canada), “Home Language” (English only, Another language instead of or in addition to English), and “School Change” (Changed schools, Did not change schools). Within Ontario, we can use Bourdieu’s (1984) theory to compare the probable cultural capital specifically of those who were born outside of Canada, those who speak a language, and those who change schools with those who were born in Canada, speak English, and did not change schools.

In Ontario, as discussed, the schooling is based on values and traditions originating from the Anglo-Saxons. Being born in Canada is only part of the picture; the First Nations peoples were born in Canada yet I cannot, nor can any other sociologist, argue that the First Nations have the cultural capital that is valued in Canada and Canadian classrooms. Canadians might not talk about their family coming on the Mayflower as the Americans do, but they still forge a strong
connection to Britain. Thus, a citizen of Canada not only pledges allegiance to the Canadian flag but to Queen of England. The history of Ontario schooling is very much connected to the history of Britain and Europe.

Students entering these schools traditionally would be expected not only to be versed in this history but also to have originated from this common historical base. Thus, having a curriculum where the geography and history are almost exclusively those of Western Europe and by progression, North America as experienced by the Europeans, would not appear ‘foreign’ to the students since it would be their social origins and thus their history or geography. Many of Ontario’s teachers received their training with the expectation that students either possessed this lineage or aspired to be part of it.

To possess Bourdieu’s cultural capital, one had to speak the requisite language. Language is an integral part of any society. It provides the mechanism for people to communicate to each other, to play, to dream, to pass down their heritage through oral stories telling, drama, music and books. It provides an instant identity with another person. Your home language provides a basis for your development as an individual and as a member of a specific community. It was the language that your mother spoke and that you responded to as a fetus in the womb and the language that she and others spoke as they nurtured and disciplined you during your childhood. For most people, their home language is the language of comfort and identity; it provides a sense of belonging.

According to Bourdieu’s concept of cultural capital, in the Ontario school system, you demonstrate that you belong if you speak English, the language of classroom instruction, in the acceptable middle class manner. In Bourdieu’s theory, where language is concerned, it is not sufficient to know the language; one must know and use the acceptable form of the language.
This means not having the working class vernacular and using an acceptable accent. For the student in Ontario, this also means not only having knowledge of the language of the dominant group, but having the ability to use that language in formal and informal communication in the classroom and the playgrounds of the school. Success can be assured only if the student is able to display an ability to communicate in the written and oral forms of the language of classroom instruction, which in this case is English.

Possession of all these attributes of social and cultural capital can result in more positive attention. It can also result in these students being placed in positions that will assure their academic success. To achieve successful school outcomes, it is not enough for the students to conform to the requirements of the known curriculum; they must also be in conformity with the ‘hidden curriculum’ (the unspoken values, norms and assumptions found in the curriculum materials, instructional delivery methods, teaching methods and organizational structure of the education system).

When immigrant children’s social and cultural characteristics are examined through the lens of Bourdieu’s framework, they may lack the cultural or social capital that could ensure their academic success. That these students were born outside of Canada, and might have originated from non-White countries place, many of them outside the heritage traditionally valued by teachers and the system.

For the student who speaks another language at home, the language of classroom instruction and of assessment can be daunting, not the least because their own language is relegated to an inferior position when compared to the English spoken by the dominant group. The procedure in Ontario schools is that students can qualify for language support designed for the English learner. The conditions for English support are very specific and students born in
Canada but who speak another language other than or in addition to English at home do not qualify.

In the study, Fanon’s (1963) colonised and coloniser theory can be linked to the variables “Country Change” (Moved to Canada, Born in Canada) and “Home Language” (English only, Another language instead of or in addition to English). The immigrant students and those speaking a language other than English would be regarded as the colonized students. These colonized students are regarded as inferior to the dominant group, as exemplified by the low expectations of success some teachers have for these groups of students and the institutionalized racism that exists in the educational system. In keeping with the role of colonizer, the school imposes its style of knowledge and ways of learning on the students, forcing them to conform in order to reap some measure of success. Non-conformity to the established status quo could result in school failure.

Part of the colonizing education system’s way of exerting power on the colonized student is the forced obliteration of the colonized students’ language. Taking away this essential part of the student not only takes away their means of communication but it also takes away their very identity (Cummins, 1979) and reinforces their status as an inferior person. It is another way of exerting control over these students. Under the rules of the colonizing school system, the student is permitted to receive only the type and depth of knowledge deemed appropriate for a colonized person. From the Ontario immigrant student’s perspective, this results in the student being placed in a tracking system that was determined by the school powers to fit the students’ role in life. This would be very much akin to the social reproduction system found in Bourdieu’s theory and supported by Bowles and Gintis (1977) and also Curtis, Livingstone and Smaller (1992).
However, still in keeping with Fanon’s view, the colonized student in Ontario strives to attain the values and norms of the colonizer including the reach for success as measured by the colonizer. As part of their quest to belong, the colonized students consciously seek to divorce themselves from the cultural norms and values of their own cultural community. Thus, they concur with the system that they should replace their language with that of the dominant mainstream, conform to the classroom rules and regulations, and strive for academic high achievement. Their high academic achievement is an indicator that they have made it in their new country and now ‘belong’. Of course, the colonizer does not readily accept this type of student who might also earn the label of ‘acting White’ by his or her fellow ethnic students already disillusioned by an oppressive system (Ogbu & Simons, 1998). Teachers might seek to negate the high achievements of the colonized students by questioning their abilities, and generally directing more negative attention towards these students than they would towards White students of similar or even lesser ability (Rubovits & Maehr, 1975).

In accordance with anti-racism and critical race concepts, it is perceived that students from non-White source countries who immigrated to Canada find it difficult to succeed in school because of the embedded racist elements in the educational system and schools, as discussed earlier.

In summary, this combination of concepts from several theories provides the theoretical framework needed to explore the data that track the academic development of students from immigrant families, to support evidence generated from the study, and to legitimize emergent policy decisions.
My Perspective on the Broader Education and Social Contexts in Which the Data are Generated and Become Meaningful

Proponents of standardised tests would argue that assessments are useful for measuring the knowledge and skills that all students would have had the opportunity to learn (OTL), and are important tools for monitoring equitable educational outcomes for all students. Opponents of standardised tests would assert that, in fact, schools have not provided equitable learning opportunities for all students and administering standardised testing to all students puts certain groups of students at a disadvantage. They would argue that standardised assessments have become a mechanism used in education to maintain the prevailing social hierarchy. Historically, immigrant populations, students with English as a second language, and certain students who change schools have been at a disadvantage in their school performance.

As an immigrant myself and a researcher, I feel compelled to challenge the prevailing stereotypes. As a sociologist interested in social and cultural research, I question whose knowledge is being assessed. Whose voices are dominant in assessment construction and evaluation and in education policy making? How can observed differences be explained? As a student of psychometrics, I would typically use statistical measures to explore the achievement of students and to answer such questions regarding the relationship between student achievement or student outcomes and school-related, community-related or personal factors. Is there a significant difference in the responses of the groups of students? What factors can be determined as predictors of the students’ achievement? Are specific groups of students perceived to be disadvantaged in standardised assessments? This current study explores the question: How much variation in student achievement can be attributed to immigration, home language, school mobility or the interaction of all three factors?
To properly address the effects of immigration, language and school mobility on student achievement, it is necessary to examine student achievement in the context of the educational and social system to which they are subjected. My choice of the word ‘subjected,’ is deliberate because students as a body have no say in the operations, policy development, or ideologies of the education system. Furthermore, the policies and leadership of the school systems tend to reflect the dominant population; in Canada, the dominant population is of Anglo-Saxon origins.

In this study, I need to examine the institution that the state provides to educate its students. What are its characteristics and ideologies and objectives? Some might wonder how this relates to the achievement of students, but I would suggest that real change in achievement cannot occur until we understand and address the core issues that make up the foundations of education. Trying to change curriculum, investing in instructional resources, or instituting standards to monitor student achievement without addressing core issues in education is not unlike putting serviceable furniture into rooms in a home built on shaky foundations and then expecting the furniture to remain in place during a storm.

The criticisms of current research on student achievement fall into one of two categories. One is that the research is too quantitative; the numbers are sterile, bare, devoid of feelings. They do not tell the story of the real people. A researcher can only work with the dataset that he or she has available and with the variables that are presented. Datasets can be analysed to give possible predictors of events, but the datasets do not often have the information to say why something happened. We do not hear the “voice” of the student and therefore do not have a complete context for our findings. The other criticism, of research that is qualitative, is that voices are fine, but voices do not provide the concreteness and certainty of numbers. In this study, I affirm the
importance of listening to student voices (through the literature) and I also acknowledge the
benefits of analyzing numbers.

I struggled with writing this study on the effects of immigration and home language and
school mobility on student achievement. I struggled because the sociological side of my
scholarship and the human side of who I am wanted to tell the students’ stories. The sociologist
in me cannot put a name to these people, but somehow it becomes distressing that, for example,
immigrant students are destined to be lumped as one group simply because the dataset that is
being used contains information that says only if the student was born inside or outside of
Canada. As a quantitative researcher, technical procedures and rules for data analysis tell me that
I can only work with the data that are available. I cannot go outside to bring in a concept that
cannot be seen in the dataset.

That left me stymied, my hands proverbially tied. Was I destined to reproduce the same
type of study that I deplored? One that tells only of the collective? A vague and formless entity
without substance that can be ignored and glossed over by the policymakers? For what purpose
was I going to go through this exercise? My psychometric scholarly colleagues told me that I
should not write about the social climate into which these immigrants were coming, that I should
not say who might be in the individual groupings who made up the immigrants, that I should not
talk about low incomes and immigrants’ positive attitudes and teachers’ low expectations and the
presence or absence of opportunities to learn. I could not speak of the ideology of education and
the fact that students come into an educational environment where the culture and knowledge of
the dominant group were being reproduced. I could not speak to any of those things because the
dataset that I was analyzing did not contain any of those variables.
Sure, I could discuss the achievement of immigrants as a collective group. Did they or did they not reach the standard set in the large-scale assessment? How much did immigration or language or mobility or the interactions of all three account for the variability in assessment scores? I could competently discuss these because I could get those figures from the dataset. Further, I might even be able to discuss whether the expectations of the assessments generally fail to take into account those students who do not have the language of instruction, those who are new to the country, and those who move from school to school; but I could not delve into adverse classroom or school climates or teacher expectations or the systemic, institutionalised barriers that students face. In short, according to my colleagues in the psychometric field I could not tell the students’ story or the social and ideological conditions that contributed to their performance in large-scale assessments. Not if I was using the EQAO 2007-2008 dataset with its limited demographic variables! I would be unable to tell the students’ stories using a purely psychometric approach.

That was my quandary. But could I do it another way? Could I meld the psychometric perspective with the sociological perspective? There was a precedent for this. Pamela Moss (2008) had discussed the advantages of melding these two perspectives and suggested that assessments can monitor and support learning, and standardised assessments can assist policy makers in making ‘evidence-based’ decisions. However, it is important to recognize that some decisions cannot be made only on the basis of the psychometric analysis of standardised assessments but must be informed by locally relevant evidence, that is, sociocultural perspectives. Therefore, in this rather lengthy review of the literature, my goal has been to create a picture of who the immigrant student is. The dataset I am using in this study aggregates the students into two categories (born in Canada, and born outside of Canada) and does not identify
the diversity of the students within these very broad categories. I have attempted to use the literature review to fill this gap.
CHAPTER 3. METHOD

Data Sources

This study uses data from Ontario’s 2007-2008 Junior (Grade 6) Assessment of Reading, Writing and Mathematics, with linked assessment results from the 2004-2005 Primary (Grade 3) Assessment. These assessments are administered to all Ontario students in the target grades in late May. The Grade 6 students who took the assessment in 2007-2008 became the first cohort to take the assessment in both Grade 3 and Grade 6 after the Ontario Education Number (OEN) (a unique number assigned to each Ontario public school student) made it possible to link a student’s results across years. The results of the assessments have no punitive consequences for students and the assessments are intended principally to measure school performance. The assessments consist of multiple-choice and constructed-response items that are aligned to the expectations of the Ontario curriculum. The Primary assessment is intended to test the students’ learning obtained in the primary division (Grades 1 to 3) and the Junior assessment tests the knowledge obtained in the junior division (Grades 4 to 6). The students also complete a questionnaire with questions on attitudes and self-efficacy.

The students’ performance is reported by the level attained for each of Reading, Writing and Mathematics. There are 4 levels, with Level 3 designated as the provincial standard; that is, students achieving Level 3 or Level 4 are considered proficient in the subject area. The results are reported to the schools privately by individual student and are publicly aggregated by school and by school district. The results also show demographic data for each student, including gender, grade, number of schools attended, whether or not the student were born in Canada, length of time in Canada, if English was mainly spoken at home, if a language other than English
was mainly spoken at home, whether or not the student had an individual education plan (IEP),
whether or not the student attended French school, whether or not the student attended an
English-language school and whether or not the student was enrolled in a French immersion
program.

The dataset that this study used was obtained upon request from the Education Quality
and Accountability Office (EQAO). The dataset initially contained records for 146,790 students;
of these 129,700 were receiving classroom instruction in English and the rest attended French-
language schools or French-immersion programs within English-language schools. After
removing students who were missing information about their home language, immigration status,
year they entered their current school, or their test performance, 121,037 students remained.

**Analysis**

Because the Grade 3 and Grade 6 assessments, although designed to measure the same
areas of the curriculum, are not assessed with the same rating scale, it is not possible to analyze
the differences in scores between the two assessments. For equating purposes, the administrators
of the EQAO assessments include matrixed items in the Grade 3 tests that allow them to equate
the scores in that test from year to year (Education Quality and Accountability Office, 2004). A
similar method of equating is done in the Grade 6 test. There is no similar link for the equating of
the Grade 3 test with the Grade 6 test. Therefore, even though both tests report achievement
scores ranging from Level 1 to Level 4, the components of these scores might differ between the
two tests. However, on each assessment, a grade-appropriate expected level of proficiency has
been defined (Level 3 and above). Whether this level of proficiency is met in each of the three
subject areas on the Grade 3 and Grade 6 assessments is the focus of the assessment reporting,
both for each student and for each school. Examining whether a student achieved the provincial standard at Grade 3 and at Grade 6 is possible.

Logistic regression was used to analyze the likelihood (odds) of achieving proficiency at Grade 6 in the Reading, Writing, and Mathematics assessments in relation to the assessment results obtained in Grade 3 and to a child’s country mobility, home language, and school mobility. Logistic regression is able to describe and test hypotheses about relationships between a categorical dependent variable and one or more categorical or continuous predictor (independent) variables and so is appropriate for this analysis. The dependent variable is dichotomous (whether or not the student achieved proficiency in a subject area at Grade 6). The Reading, Writing and Mathematics outcome variables were each coded 0 = Not Proficient and 1 = Proficient. The predictor variables are also dichotomous: whether or not the student achieved proficiency in Grade 3 (coded 0 = Not Proficient and 1 = Proficient), whether the student speaks another language at home instead of or in addition to English (coded 0 = English only at home and 1 = Another language instead of or in addition to English at home), whether the student was born in or moved to Canada (0 = Born in Canada and 1 = Moved to Canada), and whether the student has moved between schools since beginning Grade 1 (0 = Remained at same School and 1 = Changed Schools). The reference groups for the independent variables are Grade 3 Not Proficient, English at home, Born in Canada, and Remained at same School.

Logistic regression is flexible and, unlike linear regression, does not require that the predictor variables are normally distributed, linearly related, or have the same variance within each group. However, similar to linear regression, logistic regression is sensitive to multicollinearity and individual responses must be assumed independent of each other (Tabachnick & Fidell, 2001). Because the predictor variables in this study are categorical, the
requirement of a “linear relationship between continuous predictor variables and the logit
transform of the [dependent variable]” (Tabachnick & Fidell, 2001, p.522) does not apply. The
statistical software SPSS 17.0 was used for the computations.

**Modelling**

As this is an exploratory study, a series of logistic regression analyses were conducted to
determine the added predictive value of each of the four predictor variables. These analyses were
repeated separately for each subject area. The log odds of Grade 6 proficiency was first predicted
by Grade 3 proficiency, as Grade 3 proficiency was expected to be the strongest predictor of the
log odds of Grade 6 proficiency (in particular, those students who are proficient according to the
Grade 3 provincial standards are likely to also be proficient at Grade 6). Home Language and
School Change were added next so that the contribution of the final variable, Country Change,
could be determined controlling for the predictive power of these variables. If the difference in
the likelihood ratio test (also referred to as -2 log likelihood; it is distributed as chi-square with
degrees of freedom equal to the difference in number of parameters between the nested models)
between successive models was statistically significant at an alpha of .05, then the added variable
added significantly to the prediction of the log odds of Grade 6 proficiency. Specifically, the
following models were tested:

**Model 1**: \( L = \beta_0 + \beta_1 W \), where \( L = \text{logit (natural log of odds)} \), \( \beta_0 \) and \( \beta_1 \) are the coefficients
for the constant and the predictor \( W \); in this model, \( L \) is Grade 6 Proficiency and \( W \) is Grade 3
Proficiency. This model tested whether or not Grade 3 Proficiency was a significant predictor of
Grade 6 proficiency.

**Model 2**: In this model Home Language was added as a predictor to the previous model
to examine the relationship between Home language and Grade 6 Proficiency controlling for
Grade 3 Proficiency (i.e., whether students who spoke another language and/or English at home were proficient in Grade 6 controlling for Grade 3 proficiency. This is shown in the equation $L = \beta_0 + \beta_1 W + \beta_2 X$, where $X$ is Home Language.

Model 3: School Change was added as a predictor to Model 2 to examine the relationship between School Change and Grade 6 Proficiency controlling for Grade 3 Proficiency and Home Language (i.e., whether students who changed schools were proficient in Grade 6 controlling for Grade 3 proficiency and Home Language). This is shown in the equation $L = \beta_0 + \beta_1 W + \beta_2 X + \beta_3 Y$, where $Y$ is School Change.

Model 4: Country Change was added to Model 3. This model examines the relationship between Country Change and Grade 6 Proficiency controlling for Grade 3 Proficiency, Home Language and School Change (i.e., whether students who changed country were proficient in Grade 6 controlling for Grade 3 proficiency and Home Language, and School Change). The equation containing the four predictor variables is $L = \beta_0 + \beta_1 W + \beta_2 X + \beta_3 Y + \beta_4 Z$, where $Z$ is Country Change.

**Interaction Models**

The above models examine the overall effects of the predictor variables. However, it is possible that, for example, the effect of Country Change is different for students who have also changed schools than for those who have not changed schools. In this study, students could experience one, or all of, or none of the factors of Country Change, School Change and Home Language (other than or in addition to English) and previous studies have shown that these factors in combination with each other might have an impact on students’ academic achievement (e.g., OECD, 2006). Therefore it is important to examine how the effect of an individual variable differs depending on the status of another variable, that is, how the interactions between
predictor variables are related to the outcome variable. This study examined interactions for all combinations of predictor variables resulting in eleven interaction variables (this represents all possible two-way, three-way and four-way interactions of the four predictor variables). The interactions were obtained by computing the products of the selected variables and the variables were added one at a time to Model 4 (described above; the resulting models were labelled Models 5 to 15), beginning with the two-way interactions and ending with the four-way interaction. To test whether the interactions were contributing significantly to the full model, they were added sequentially (beginning with the two-way interaction and progressing to the four-way interaction) to successive models and the difference in the -2Likelihood (model chi-square) for the two models was computed. If the difference in the likelihood ratio test between successive models was statistically significant, then the interaction effect was deemed to be contributing significantly to the model.

Like all regression analyses, in logistic regression, prediction does not imply causation. The analyses in this paper investigate the relationships of school mobility, language difference and country mobility with academic proficiency, but this does not imply that these factors cause these academic outcomes. A positive coefficient in this research context means a higher likelihood of being proficient in the Grade 6 assessment, while a negative coefficient implies a lower likelihood of being proficient in the Grade 6 assessment.
CHAPTER 4. RESULTS

Table 2 shows that, of the 121,037 students included in this analysis, 106,917 (88%) were born in Canada and 14,120 (12%) had moved to Canada. In addition, 55% spoke English only and 45% spoke English and/or another language at home. More than half the students had changed schools since Grade 1. Of those who moved to Canada, 89.5% had changed schools, compared to 55.3% of the students who were born in Canada. The students, who were in Grade 3 in 2003-2004 and in Grade 6 in 2007-2008, were, with few exceptions, born in 1994.

Table 3a shows, for each subject area (Reading, Writing, and Mathematics), the numbers of students with each possible combination of academic proficiency in Grade 3, country mobility, school mobility, and home language. Overall, 54.1% of the students achieved academic proficiency in Reading in Grade 3, 56.0% in Writing, and 60.6% in Mathematics. Table 3b shows the parallel results for Grade 6. In Grade 6, higher percentages of students achieved proficiency: 68.0% in Reading, 68.9% in Writing, and 62.6% in Mathematics.

The focus of this study is on whether students maintained proficiency between Grades 3 and 6 or achieved proficiency in Grade 6 if they did not in Grade 3, given that they may have experienced one or more of the following: been born outside of Canada, speak a language at home other than English, or changed schools. Table 4, therefore, shows the likelihood (the number of students who achieved proficiency over the number who did not) and the probability (the number of students who achieved proficiency out of the total number of students) of achieving proficiency at Grade 6 for students with different combinations of proficiency at Grade 3, country mobility, school mobility, and home language.
Table 2

*Distribution of Students by Immigration, School Mobility, and Home Language*

<table>
<thead>
<tr>
<th>Home Language</th>
<th>Did not change schools</th>
<th>Changed schools</th>
<th>Total Born in Canada</th>
<th>Did not change schools</th>
<th>Changed schools</th>
<th>Total Moved to Canada</th>
<th>Total Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>English only</td>
<td>31539</td>
<td>33737</td>
<td>65276</td>
<td>299</td>
<td>1210</td>
<td>1509</td>
<td>66785</td>
</tr>
<tr>
<td></td>
<td>(53.9%)</td>
<td>(53.9%)</td>
<td>(53.9%)</td>
<td>(1.2%)</td>
<td>(1.2%)</td>
<td>(1.2%)</td>
<td>(55.1%)</td>
</tr>
<tr>
<td>Another language instead of or in addition to English</td>
<td>16148</td>
<td>25493</td>
<td>41641</td>
<td>1178</td>
<td>11433</td>
<td>12611</td>
<td>54252</td>
</tr>
<tr>
<td></td>
<td>(34.4%)</td>
<td>(34.4%)</td>
<td>(34.4%)</td>
<td>(10.4%)</td>
<td>(10.4%)</td>
<td>(10.4%)</td>
<td>(44.8%)</td>
</tr>
<tr>
<td>Total</td>
<td>47687</td>
<td>59230</td>
<td>106917</td>
<td>1477</td>
<td>12643</td>
<td>14120</td>
<td>121037</td>
</tr>
<tr>
<td></td>
<td>(88.3%)</td>
<td>(88.3%)</td>
<td>(88.3%)</td>
<td>(11.6%)</td>
<td>(11.6%)</td>
<td>(11.6%)</td>
<td>(100%)</td>
</tr>
</tbody>
</table>

*Note.* Percentages are calculated out of the total of 121,037 students.
Table 3a

*Distribution of Students by Grade 3 Proficiency, Immigration, School Mobility, and Home Language*

<table>
<thead>
<tr>
<th>Home Language</th>
<th>Proficient in Grade 3</th>
<th>Not Proficient in Grade 3</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Did not change schools</td>
<td>Changed schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Born in Canada</td>
<td>Moved to Canada</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English only</td>
<td>20521</td>
<td>17130</td>
<td>209</td>
<td>435</td>
<td>11018</td>
<td>16607</td>
</tr>
<tr>
<td>Another language instead of or in</td>
<td>9989</td>
<td>12407</td>
<td>753</td>
<td>4070</td>
<td>6159</td>
<td>13086</td>
</tr>
<tr>
<td>addition to English</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proficient in Reading: Frequency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English only</td>
<td>20370</td>
<td>16844</td>
<td>207</td>
<td>458</td>
<td>11169</td>
<td>16893</td>
</tr>
<tr>
<td>Another language instead of or in</td>
<td>10746</td>
<td>13809</td>
<td>820</td>
<td>4556</td>
<td>5402</td>
<td>11684</td>
</tr>
<tr>
<td>addition to English</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proficient in Writing: Frequency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English only</td>
<td>22373</td>
<td>18813</td>
<td>216</td>
<td>455</td>
<td>9166</td>
<td>14924</td>
</tr>
<tr>
<td>Another language instead of or in</td>
<td>11314</td>
<td>14526</td>
<td>819</td>
<td>4779</td>
<td>4834</td>
<td>10967</td>
</tr>
<tr>
<td>addition to English</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 3b

**Distribution of Students by Grade 6 Proficiency, Immigration, School Mobility, and Home Language**

<table>
<thead>
<tr>
<th>Home Language</th>
<th>Proficient in Grade 6</th>
<th>Not Proficient in Grade 6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Born in Canada</td>
<td>Moved to Canada</td>
</tr>
<tr>
<td><strong>Proficient in Reading: Frequency</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English only</td>
<td>22676</td>
<td>21337</td>
</tr>
<tr>
<td>Another language instead of or in addition to English</td>
<td>11545</td>
<td>16818</td>
</tr>
<tr>
<td><strong>Proficient in Writing: Frequency</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English only</td>
<td>22481</td>
<td>21078</td>
</tr>
<tr>
<td>Another language instead of or in addition to English</td>
<td>11958</td>
<td>17595</td>
</tr>
<tr>
<td><strong>Proficient in Mathematics: Frequency</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English only</td>
<td>20876</td>
<td>18274</td>
</tr>
<tr>
<td>Another language instead of or in addition to English</td>
<td>11083</td>
<td>15604</td>
</tr>
</tbody>
</table>
Table 4

Likelihood and Probability of Grade 6 Proficiency by Grade 3 Proficiency, Immigration, School Mobility, and Home Language

<table>
<thead>
<tr>
<th>Home Language</th>
<th>Proficient in Grade 3</th>
<th>Not Proficient in Grade 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Born in Canada</td>
<td>Moved to Canada</td>
</tr>
<tr>
<td></td>
<td>Did not change schools</td>
<td>Changed schools</td>
</tr>
<tr>
<td><strong>Proficient in Reading: Likelihood (Probability)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English only</td>
<td>6.89</td>
<td>5.25</td>
</tr>
<tr>
<td></td>
<td>(0.87)</td>
<td>(0.84)</td>
</tr>
<tr>
<td>Another language instead of or in addition to English</td>
<td>7.05</td>
<td>6.17</td>
</tr>
<tr>
<td></td>
<td>(0.88)</td>
<td>(0.86)</td>
</tr>
</tbody>
</table>

**Proficient in Writing: Likelihood (Probability)**

| English only  | 6.11          | 4.60            | 11.94      | 9.41         |
|              | (0.86)        | (0.82)         | (0.92)     | (0.90)       |
| Another language instead of or in addition to English | 6.65    | 6.07            | 9.93       | 9.77         |
|              | (0.87)        | (0.86)        | (0.91)     | (0.91)       |

**Proficient in Mathematics: Likelihood (Probability)**

| English only  | 4.18          | 2.80            | 7.00       | 4.17         |
|              | (0.81)        | (0.74)         | (0.88)     | (0.81)       |
| Another language instead of or in addition to English | 4.88    | 3.88            | 8.41       | 8.28         |
|              | (0.83)        | (0.80)        | (0.89)     | (0.89)       |


A quick perusal of Table 4 shows that, regardless of the other factors, those students who were academically proficient at Grade 3 were much more likely to be proficient at Grade 6 than those who were not proficient at Grade 3. Table 4 also shows that students who speak a language other than or in addition to English at home are, in general, a little more likely to be proficient at Grade 6, and that students who moved to Canada were more likely to be proficient than students who were born in Canada.

Logistic regressions were conducted to determine whether Grade 3 proficiency was a statistically significant predictor of Grade 6 proficiency. The results are summarised as Model 1 in Table 5. The logistic regressions for each of the subject areas indicate that Grade 3 proficiency is a strong predictor of Grade 6 proficiency. When Grade 3 was entered as the single predictor in Model 1, the results for Reading produced the equation $L = \beta_0 + \beta_1 W = -0.164 + 2.035W$. There was an 87% predicted probability of being proficient on the Grade 6 assessment of Reading for students who were proficient on the corresponding Grade 3 assessment. Converting the coefficients to odds ratios indicates that students who were proficient in Grade 3 Reading were 7.5 times more likely to be proficient in Grade 6 Reading than the students who were not proficient in Grade 3. Similarly, students who were proficient in Grade 3 Writing and Grade Mathematics were 6.5 times and 6.9 times more likely to be proficient in Grade 6 than the students who were not proficient in Grade 3.
Table 5

Parameter Estimates from the Logistic Regression Model Predicting Grade 6 Proficiency from the Independent Variables

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient</td>
<td>Standard Error</td>
</tr>
<tr>
<td><strong>Reading</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-.164</td>
<td>.014</td>
</tr>
<tr>
<td>Grade 3 Proficiency</td>
<td>2.035***</td>
<td>.014</td>
</tr>
<tr>
<td>Home Language</td>
<td>.135***</td>
<td>.015</td>
</tr>
<tr>
<td>School Change</td>
<td>-.087***</td>
<td>.015</td>
</tr>
<tr>
<td>Country Change</td>
<td>.474***</td>
<td>.023</td>
</tr>
<tr>
<td>n = 121037</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-2 Log Likelihood = 128070.698</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Writing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-0.092</td>
<td></td>
</tr>
<tr>
<td>Grade 3 Proficiency</td>
<td>1.872***</td>
<td>.014</td>
</tr>
<tr>
<td>Home Language</td>
<td>0.199***</td>
<td>.015</td>
</tr>
<tr>
<td>School Change</td>
<td>-0.105***</td>
<td>.015</td>
</tr>
<tr>
<td>Country Change</td>
<td>0.492***</td>
<td>.023</td>
</tr>
<tr>
<td>n = 121037</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-2 Log Likelihood = 129654.825</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mathematics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-0.560</td>
<td></td>
</tr>
<tr>
<td>Grade 3 Proficiency</td>
<td>1.927***</td>
<td>.013</td>
</tr>
<tr>
<td>Home Language</td>
<td>.271***</td>
<td>.014</td>
</tr>
<tr>
<td>School Change</td>
<td>-0.182***</td>
<td>.014</td>
</tr>
<tr>
<td>Country Change</td>
<td>.818***</td>
<td>.023</td>
</tr>
<tr>
<td>n = 121037</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-2 Log Likelihood = 136579.735</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*** p < .001.

Further analyses were conducted to explore the additional predictive power of Home Language, School Change, Country Change and Grade 6 Proficiency controlling for Grade 3
Proficiency. Table 5 shows the logistic regression coefficients for the models (Model 4) containing all of these predictor variables. The coefficients in Table 4 represent the log odds of being proficient on the Grade 6 assessments versus not proficient. Each of the predictors made a significant contribution to the model (Table 5 includes the comparisons between successive models for Models 1, 2, 3, and 4; each additional predictor variable adds significantly to the model, so the details of Models 2 and 3 are not provided here). Predicted probabilities were calculated from the coefficients.

When all the factors are entered in the model, the results for Reading are shown in the equation: 

\[ L = -0.244 + 2.074W + 0.135X - 0.087Y + 0.474Z, \]

where \( W \) is Grade 3 Proficiency, \( X \) is Language spoken at home, \( Y \) is School Change, and \( Z \) is Country Change. While the coefficients are significant, there appears to be very little difference in the odds for the two language groups or the school mobility groups (odds are close to 1). In contrast, students who move to Canada are more than one and half times more likely to be proficient on the Grade 6 Reading assessments than students born in Canada. Similar odds are found in Writing; in Mathematics, there is a small likelihood for students who remain in the same school to be more proficient in Grade 6 than students who change schools.

**Interactions**

This study is interested in the effects of Grade 3 results on the students’ Grade 6 assessment achievement and how this achievement differed for students by immigration, language spoken at home and/or school mobility. In the analysis, I therefore look at two-way interactions, three-way and four-way interactions. For each of Reading, Writing and Mathematics, a four-way interaction is investigated for Grade 3 proficiency by language by country change by school change. Three-way interactions were investigated for Grade 3
Proficiency × Home Language × Country Change, Grade 3 Proficiency × Home Language × School Change, and Grade 3 Proficiency × School Change × Country Change. Three two-way interactions were investigated for Grade 3 Proficiency × Home Language, Grade 3 Proficiency × School Change, and Grade 3 Proficiency × Country Change.

To test whether the interactions were contributing significantly to the full model, they were added sequentially (beginning with the two-way interaction and progressing to the four-way interaction) to successive models and the difference in the -2Likelihood (model chi-square) for the two models was computed. Table 6 shows the change in deviance between the models and the significance. For the assessments of Reading, Writing, and Mathematics, Table 6 shows that the interactions between the Grade 3 results and some of the other factors were statistically significant, suggesting that the factors had different effects for students who had achieved proficiency in Grade 3 and those who had not achieved proficiency in Grade 3. Whether English was the only language spoken at home also had significant interactions with other factors suggesting that there were different effects for students who spoke English only at home versus students who spoke another language and/or English at home.
Table 6

**Prediction of Grade 6 Proficiency by Grade 3 Proficiency, Country Mobility, School Mobility, and Home Language: Model Comparisons for Reading, Writing, and Mathematics**

<table>
<thead>
<tr>
<th>Model</th>
<th>Predictor Added to Preceding Model</th>
<th>Reading</th>
<th></th>
<th>Writing</th>
<th></th>
<th>Mathematics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Change in Deviance from Preceding Model ($G^2$)</td>
<td>$p$</td>
<td>Change in Deviance from Preceding Model ($G^2$)</td>
<td>$p$</td>
<td>Change in Deviance from Preceding Model ($G^2$)</td>
<td>$p$</td>
</tr>
<tr>
<td>1</td>
<td>Grade 3 Proficiency</td>
<td>23729.552</td>
<td>.000</td>
<td>20388.160</td>
<td>.000</td>
<td>23455.874</td>
<td>.000</td>
</tr>
<tr>
<td>2</td>
<td>Model 1 plus: Home Language</td>
<td>265.547</td>
<td>.000</td>
<td>446.464</td>
<td>.000</td>
<td>942.213</td>
<td>.000</td>
</tr>
<tr>
<td>3</td>
<td>Model 2 plus: School Change</td>
<td>5.067</td>
<td>.024</td>
<td>12.376</td>
<td>.000</td>
<td>46.796</td>
<td>.000</td>
</tr>
<tr>
<td>4</td>
<td>Model 3 plus: Country Change</td>
<td>439.616</td>
<td>.000</td>
<td>460.838</td>
<td>.000</td>
<td>1308.353</td>
<td>.000</td>
</tr>
<tr>
<td>5</td>
<td>Model 4 plus: Grade 3 Proficiency × School Change</td>
<td>45.675</td>
<td>.000</td>
<td>38.324</td>
<td>.000</td>
<td>175.291</td>
<td>.000</td>
</tr>
<tr>
<td>6</td>
<td>Model 5 plus: Grade 3 Proficiency × Country Change</td>
<td>15.935</td>
<td>.000</td>
<td>0.721</td>
<td>.396</td>
<td>5.314</td>
<td>.021</td>
</tr>
<tr>
<td>7</td>
<td>Model 6 plus: Home Language × School Change</td>
<td>15.506</td>
<td>.000</td>
<td>19.930</td>
<td>.000</td>
<td>40.212</td>
<td>.000</td>
</tr>
<tr>
<td>8</td>
<td>Model 7 plus: Country Change × School Change</td>
<td>1.928</td>
<td>.165</td>
<td>1.444</td>
<td>.229</td>
<td>22.149</td>
<td>.000</td>
</tr>
<tr>
<td>9</td>
<td>Model 8 plus: Home Language × Country Change</td>
<td>5.283</td>
<td>.022</td>
<td>8.363</td>
<td>.004</td>
<td>0.878</td>
<td>.349</td>
</tr>
<tr>
<td>10</td>
<td>Model 9 plus: Grade 3 Proficiency × Home Language</td>
<td>2.011</td>
<td>.156</td>
<td>0.259</td>
<td>.611</td>
<td>0.015</td>
<td>.903</td>
</tr>
<tr>
<td>11</td>
<td>Model 10 plus: Grade 3 Proficiency × Home Language × Country Change</td>
<td>4.767</td>
<td>.029</td>
<td>0.102</td>
<td>.750</td>
<td>4.039</td>
<td>.044</td>
</tr>
<tr>
<td>12</td>
<td>Model 11 plus: Home Language × School Change × Country Change</td>
<td>3.814</td>
<td>.051</td>
<td>0.304</td>
<td>.581</td>
<td>0.056</td>
<td>.812</td>
</tr>
<tr>
<td>13</td>
<td>Model 12 plus: Grade 3 Proficiency × Home Language × School Change</td>
<td>0.257</td>
<td>.612</td>
<td>2.429</td>
<td>.119</td>
<td>0.115</td>
<td>.735</td>
</tr>
</tbody>
</table>
Reading

The results for Reading are presented in Table 7a for students who were proficient on the Grade 3 assessment of Reading and in Table 7b for students not proficient on the Grade 3 assessment of Reading. These results are the same as the probabilities calculated in Table 4 which used the counts. Students who were proficient in Grade 3 (regardless of the presence of other factors) are clearly more likely to attain proficiency in Grade 6 than the students who were not proficient in Grade 3. The predicted probability of being proficient in Grade 6 is greater than 80% for students who were proficient in Grade 3 versus less than 60% for students who were not proficient in Grade 3.

Writing

Mathematics

<table>
<thead>
<tr>
<th>Model</th>
<th>Predictor Added to Preceding Model</th>
<th>Reading</th>
<th>Writing</th>
<th>Mathematics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Change in Deviance from Preceding Model ($G^2$)</td>
<td>$p$</td>
<td>Change in Deviance from Preceding Model ($G^2$)</td>
</tr>
<tr>
<td>14</td>
<td>Model 13 plus: Grade 3 Proficiency × School Change × Country Change</td>
<td>0.002</td>
<td>.967</td>
<td>0.172</td>
</tr>
<tr>
<td>15</td>
<td>Model 14 plus: Grade 3 Proficiency × Home Language × School Change × Country Change</td>
<td>0.486</td>
<td>.486</td>
<td>0.250</td>
</tr>
</tbody>
</table>

$G^2$ is distributed as chi-square with one degree of freedom.

If a higher-order interaction is statistically significant, then all of the possible interactions among its variables, even if not themselves significant, should be included in the analysis. Therefore, because the interaction among all the variables was significant for Mathematics, for consistency, all $\beta$ coefficients from the full model (Model 15) were included in calculating predicted probabilities for the students.
With the exception of students who spoke English only at home, students who were not proficient in Grade 3 assessment of Reading, and who moved to Canada had predicted probabilities greater than 50% of being proficient in Grade 6 compared to the less than 50% predicted probability for students who were not proficient in Grade 3 assessment of Reading, and who were born in Canada.

Table 7a

Prediction of Grade 6 Proficiency in Reading, Writing, and Mathematics by the Interactions of Language, Country Mobility and School Mobility for Students Proficient in Grade 3

<table>
<thead>
<tr>
<th>Main effects and Interaction Terms</th>
<th>Category Levels</th>
<th>Predicted Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proficient in Grade 3?</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Another language?</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Changed schools?</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Moved to Canada?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Predicted Probability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading</td>
<td>92.4</td>
<td>86.0</td>
</tr>
<tr>
<td>Writing</td>
<td>90.7</td>
<td>85.9</td>
</tr>
<tr>
<td>Mathematics</td>
<td>89.2</td>
<td>79.5</td>
</tr>
</tbody>
</table>
Table 7b

*Prediction of Grade 6 Proficiency in Reading, Writing, and Mathematics by the Interactions of Language, Country Mobility and School Mobility for Students Not Proficient in Grade 3*

<table>
<thead>
<tr>
<th>Main effects and Interaction Terms</th>
<th>Category Levels</th>
<th>Predicted Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proficient in Grade 3?</td>
<td>No No No No No No No No</td>
<td>Reading: 56.1 46.9 54.1 45.4 57.9 41.8 46.7 43.2</td>
</tr>
<tr>
<td>Another language?</td>
<td>Yes Yes Yes Yes No No No No</td>
<td>Writing: 59.9 49.1 56.7 48.4 58.5 42.9 53.3 44.6</td>
</tr>
<tr>
<td>Changed schools?</td>
<td>Yes Yes No No Yes Yes No No</td>
<td>Mathematics: 57.1 37.0 44.3 35.0 50.6 29.6 30.1 30.8</td>
</tr>
<tr>
<td>Moved to Canada?</td>
<td>Yes No Yes No Yes No Yes No</td>
<td></td>
</tr>
</tbody>
</table>
For students who were proficient in Grade 3 Reading, those students who had moved to Canada, changed schools and spoke a language other than and/or English had a predicted probability of 92% (odds = 12.13) of being proficient in Grade 6 Reading. Table 7a shows that the predicted probabilities decreased to 87% (odds = 6.89) for those students who were proficient in Grade 3 and were born in Canada, spoke English only and had not changed schools.

Changing schools did not seem to make a difference in the probabilities of achieving Grade 6 proficiency for the students who had achieved Grade 3 proficiency and spoke another language with or without English at home and had moved to Canada. Among these particular students, both those who changed schools and those who remained at the same school had a predicted probability of 92%.

**Writing**

The results are presented in Table 7a for students who were proficient on the Grade 3 assessment of Writing and in Table 7b for students not proficient on the Grade 3 assessment of Writing. Similar to the Reading results, these results are the same as the probabilities calculated in Table 3 which used the counts. Also similar to the Reading, students who were proficient in Grade 3 (regardless of the presence of other factors) are clearly more likely to attain proficiency in Grade 6 than the students who were not proficient in Grade 3. Students who were proficient in Grade 3 have probabilities greater than 80% of being proficient in Grade 6 versus less than 60% for students who were not proficient in Grade 3.

For students who were proficient in Grade 3 Writing, those students who had moved to Canada, changed schools and spoke a language other than and/or English had a predicted probability of 91% (odds = 9.77) of being proficient in Grade 6 Writing. Table 7a shows that the
predicted probabilities decreased to 86% (odds = 6.11) for those students who were proficient in Grade 3 and were born in Canada, spoke English only and had not changed schools.

Among the students who were proficient in Grade 3 Writing, students who moved to Canada generally had higher predicted probabilities (greater than 90%) of being proficient in Grade 6 than students who were born in Canada (less than 90%) regardless of the other interactive factors. Students who spoke English only at home, had remained at the same school and had moved to Canada had a 92% probability of being proficient in Grade 6. Changing schools did not seem to make a difference in the probabilities of achieving Grade 6 proficiency for the students who had achieved Grade 3 proficiency and spoke another language with or without English at home and had moved to Canada (probability = 91%).

**Mathematics**

The results are presented in Table 7a for students who were proficient on the Grade 3 assessment of Mathematics and in Table 7b for students not proficient on the Grade 3 assessment of Mathematics. Similar to the Reading and Writing results, these results are the same as the probabilities calculated in Table 4 which used the counts. Also similar to the Writing, students who were proficient in Grade 3 (regardless of the presence of other factors) are clearly more likely to attain proficiency in Grade 6 than the students who were not proficient in Grade 3. Students who were proficient in Grade 3 have probabilities greater than 70% of being proficient in Grade 6 versus less than 60% for students who were not proficient in Grade 3. These predicted probabilities are lower than those for Reading, or Writing.

For students who were proficient in Grade 3 Mathematics, those students who had moved to Canada, changed schools and spoke a language other than and/or English had a predicted probability of 89% (odds = 8.28) of being proficient in Grade 6 Writing. Table 7a shows that the
predicted probabilities decreased to 81% (odds = 4.18) for those students who were proficient in Grade 3 and were born in Canada, spoke English only and had not changed schools.

Among the students who were proficient in Grade 3 Mathematics, students who moved to Canada generally had higher predicted probabilities (greater than 80%) of being proficient in Grade 6 than students who were born in Canada (less than or equal to 80%), regardless of the other interactive factors. Students who spoke English only at home, had remained at the same school and had moved to Canada had a 88% probability of being proficient in Grade 6. Changing schools did not seem to make a difference in the probabilities of achieving Grade 6 proficiency for the students who had achieved Grade 3 proficiency and spoke another language with or without English at home and had moved to Canada (probability = 89%). Students who were born in Canada, had changed schools, and spoke English at home had the lowest predicted probabilities (73%) of all the students in being proficient in Grade 6 Mathematics.

For the students who were not proficient in Grade 3 Mathematics, changing schools seemed to have an impact on whether the students were proficient or not in Grade 6. The students who had changed schools, moved to Canada, and spoke another language at home had a probability of 57% of being proficient in Grade 6. Students who had changed schools, moved to Canada, and spoke English at home had a probability of 51% of being proficient in Grade 6. These predicted probabilities decreased to 44% for students who had remained at the same school, moved to Canada, and spoke another language at home, and 30% for the students who had remained at the same school, moved to Canada, and spoke English at home.
CHAPTER 5. DISCUSSION

The focus of this study is on whether students maintained proficiency in Reading, Writing, and Mathematics between Grades 3 and 6 or achieved proficiency in Grade 6 if they were not proficient in Grade 3. The study analysed the effects of the interaction of school change, country change and speaking English and or another language at home on the children’s change in performance from the Grade 3 assessment to the Grade 6 assessment. The results were presented as a comparison between students who were born in Canada, spoke English at home, and remained at the same school versus students who moved to Canada, spoke another language only or in addition to English at home, and/or changed schools, in any combination.

Did Students Maintain Proficiency from Grade 3 to Grade 6?

Overall, the results in assessments of Reading, Writing, and Mathematics indicate Grade 3 proficiency is the strongest predictor of students’ performance in Grade 6. If students are proficient in the early grade then their proficiency is likely to be maintained in the later grade regardless of other factors in the students’ lives. The students who were academically proficient at Grade 3 were much more likely to be proficient at Grade 6 than those who were not proficient at Grade 3.

The Reading and Writing results for students who were not proficient at Grade 3 showed that students who moved to Canada tended to be more likely to attain proficiency (predicted probability greater than 50%) in Grade 6 than to remain not proficient. The exception was students who spoke English at home; they were less likely to attain proficiency in Reading in Grade 6. The situation was different for Mathematics where school change seemed to have an effect on whether or not the students who moved to Canada were more likely to be proficient in
Grade 6. In this case, students who moved to Canada and remained at the same school had predicted probabilities less than 45% of being proficient in Grade 6.

**Did Country Change, Language Difference or School Changes Affect Students’ Results?**

The interactions with the Grade 3 results and some combinations of language difference, school change, and country change were statistically significant, suggesting that the factors had different effects for students who had achieved proficiency in Grade 3 and for those who had not. Whether English was the only language spoken at home also had significant interactions with other factors. Changing schools also had an effect, particularly in Mathematics.

Those students who moved to Canada had a greater probability of being proficient in Grade 6 when compared to the students born in Canada. The exception was Mathematics where students who were not proficient in Mathematics at Grade 3 and had not changed schools were less likely to be proficient in Grade 6 Mathematics. Whether students spoke English or not appeared to make no difference to being proficient in Mathematics in Grade 6 for those students who were not proficient in Grade 3 Mathematics. In all three subjects, among students proficient in Grade 3, the predicted probabilities were lowest for students who were born in Canada, spoke English at home and had changed schools.

All in all, there appeared to be some variability in the predicted probabilities across the groups of students who were not proficient in Grade 3 and little variability for the groups of students who were proficient in Grade 3.

**Demographics**

Only 12% students of the 121,037 students in the study had immigrated to Canada. This is somewhat lower than that the 50% of students in the metropolitan cities like Toronto (Yau & O’Reilly, 2007) or the 28% of Ontario residents (both adult and children) according to the 2006
census. However, it is important to remember that only students who attended Ontario schools and participated in the assessments in both Grade 3 and Grade 6 were included in this analysis. Students who moved to Ontario after Grade 3 were not included. In addition, some students who moved to Ontario before Grade 3 may have been exempted from the Grade 3 assessment because of lack of language proficiency. In addition, the data include students attending all Ontario’s public schools and not only Toronto schools. This study is unable to disaggregate the data by Ontario school district boards and so cannot compare the proportions of immigrants in the various school boards.

Students in the study were classified as immigrants if they were born outside of Canada. The students would have been born in about 1994 and would have been in Grade 3 in 2004-2005 and in Grade 6 in 2007-2008. Since the immigrant students had come to Canada at a very early age, they might also be referred to as one and half-generation immigrants. The demographic results show that more than one-third of the 121,037 students were born in Canada yet spoke a language other than or in addition to English at home. This could suggest the presence of adult immigrants in the home but there is no evidence to determine if that person is a parent or grandparent or a first- or second-generation immigrant. Therefore, the study is unable to determine the generation status of these particular children; however, the assumption can be made that these students, although born in Canada, are possibly of immigrant background.

Although the study cannot ascertain the origins of the immigrants, source country details from Statistics Canada (2009b) suggest that the majority of immigrant students entering Canada between 1991 and 2008 and attending schools in Ontario (including, for example, the students in this analysis) might have come from Eastern Asia, Southern Asia, and South-East Asia and might have spoken a language other than English or in addition to English.
The limitations of the data did not allow me to examine the cultural habits or ethnicity of the immigrants, or to find out whether their assimilation process was segmented or linear. One might assume, however, that despite the global movement of people in recent years, generally, the immigrant students from Eastern Asia, Southern Asia, and South-East Asia would be non-White and those from Europe would be mainly White. Moreover, the speaking of another language at home would suggest that some immigrants were retaining at least one aspect of their culture.

Similarly, there is no available data in the study about the education or income level of the immigrants. Statistics Canada states that a high percentage of immigrants to Canada are well educated; other studies have found that many recent immigrants, regardless of education or skill level, settle in urban areas and are in the low income bracket (the colour of poverty), particularly during their first year in Canada, although the vast majority of the skilled immigrants later succeed in moving to a higher income bracket (Picot, Hou, & Coulombe, 2007). This suggests that a similar pattern of education and income levels might be found among the immigrant students in the analysis.

**Academic Performance of Immigrant Students**

It is encouraging that, in all subject areas tested, immigrants are likely to be judged proficient on Ontario’s large-scale assessment in Grade 6; particularly if they were proficient in Grade 3, and particularly if they spoke a language other than, or in addition to, English. They are also more likely than Canadian-born students to be proficient in the Grade 6 assessment. The study cannot definitively provide reasons for the proficiency levels of the immigrants but can certainly point to areas of the literature that would support strong performance by immigrants to Canada. The results are counter to the OECD’s (2006) conclusion based on 2003 PISA results.
that immigrants are less likely than locally born students to do well but they do support the results of the OECD (2006) report that showed that Canada was one of the countries where immigrant students had similar or better performance than non-immigrant students.

The literature points to: the patterns of assimilation, length of stay in the country and school, and family and community support as contributing factors to immigrant students’ academic performance. Unfortunately this study cannot explore the students’ family or community ties to see if strong family or community supports help students navigate the Ontario school system. However, we do know from the literature (Krahn & Taylor, 2005) that immigrant parents in Canada have high aspirations regarding postsecondary education for their children and that the OECD (2006) also found that immigrants had very positive attitudes towards education even if those attitudes did not always result in high achievement.

In this study, the immigrant students would have been in the Ontario school system for at least four years (from Grade 3 to Grade 6) and many of them might have entered in Grade 1. This means that they would have had four years or more to absorb some of the enculturation that Goodlad (1979) identified as being one of the roles of schooling. During that time, they would have become more familiar with the habits and norms of the school system and the Canadian way of doing things. The positive results of this study for immigrant students, particularly those who improved their level of proficiency from Grade 3 to Grade 6, would also lend some credence to Boyd’s (2002) suggestion that immigrants in Canada enjoy a version of linear assimilation where length of stay results in increasing academic performance. Please be aware that I am not suggesting that, in Canada, immigrants generally become totally assimilated into the society. This caution holds even though Worswick’s 2004 study also found that there appears to be a positive linear relationship between years of residence in Canada and the children’s
academic performance. He found that younger Anglophone and Francophone immigrant children performed slightly below Canadian-born children but that they caught up so that there was no difference in performance between the older children who were born in Canada and those who had moved to Canada. He also found that the children of Allophone immigrant parents who arrived in Canada around the age of four had no significant difference in their reading performance relative to children of Canadian-born parents by the time the children reached age 14. By this time the Allophone children would have eliminated the disadvantages that they experienced in the first years.

For the immigrants in my study, Worswick’s conclusion that the students catch up seems to hold. For the most part, students who had moved to Canada and were not shown to be proficient in Grade 3 were more likely (than not) to have gained proficiency in Grade 6. In Writing, the results show that there was a probability of more than 50% that all the students who had moved to Canada and were not shown to be proficient in Grade 3 would be proficient in Grade 6. The results were similar for Reading, with the exception of students who spoke English only and had not changed schools. In Mathematics the probability of becoming proficient in Grade 6 fell below 50% only for those students who had not changed schools.

Were these immigrant students faced with negative expectations and stereotypical practices from teachers and an environment that saw them as strangers, the Other (Curtis, Livingstone & Smaller, 1992; Dei et al., 1997; James, 2004; Ryan, 2003)? If so, what resilience factors might they have used so that they became proficient despite possibly being in an unsupportive environment? The literature highlights non-school factors that might foster a student’s resilience. These factors could include personal and community factors, such as positive attitudes and aspirations (Krahn & Taylor, 2007; OECD, 2006), strong peer support,
strong positive support from one’s own cultural and ethnic community, and an identification and feeling of connectedness with one’s own culture (Chow, 2004). Research conducted in The United States (Rumbaut, 1996) with Punjabi students suggests a relationship between the strong ethnic community bonds that characterise that community and the high level of Punjabi student achievement despite the discrimination and language differences that the Punjabi students encountered in the California schools. The high aspirations of the immigrant students and their parents and their propensity to work harder at school are just some of the personal attributes that foster their resilience.

On the other hand, the students achieving proficiency in the study might have been in supportive learning environments that contributed to their eventual proficiency. This is an area of research for immigrant students in Canada that still needs to be explored, but Dei (2002) and Ryan (2003) do advocate for critical leadership in schools that would include leaders who recognize and respect the benefits that a diverse school community (staff and students) could bring, and who establish meaningful, positives ties with the parents and stakeholders’ communities outside of the school.

**Language**

The results of this study also underscore Cummins’s (1979) and Corson’s (1993) position that the use of a second language is not the cause of low achievement. In fact, Canada was found to be an exception in other studies such as the OECD’s (2006) PISA report where immigrant students who spoke a language at home different from the language of instruction tended to perform at lower levels in Mathematics than both immigrant students who spoke the language of instruction at home and locally-born students.
Why is Canada an exception? While this study supports the OECD’s findings regarding the academic performance of Canadian immigrants, an explanation for the causes is outside the parameters of the study. One possible explanation could be that, in recent years, Canadian immigration policy has focused on attracting skilled professionals with high levels of education. Even if these immigrants do not always enjoy a high socio-economic status following their arrival to the country, the correlations between parents’ educational levels and student achievement are well established. Therefore, it is possible that the children of these professional immigrants would have higher levels of achievement. Even for those immigrant parents with limited schooling, research conducted with the children of Canadian immigrants has shown that there is no relationship between a parent’s years of schooling and the length of time that their children spend in school. Therefore, even students whose parents have limited schooling might do well in Canada.

The Ontario Ministry of Education might also take some credit for the immigrants’ proficiency, perhaps citing the focused resources and policies (including the equity strategy and smaller class sizes) that were implemented to support the overall goal of improving achievement for all students and closing the achievement gap. While these might have some impact, one must still point out that the political nature of the Ministry of Education means that any change in government or even in ministers can be disruptive to the implementation of policies. For example, the Conservative government in the early 2000s brought sweeping, disruptive reforms to the Ontario education system, including the cancellations of programs and policies that advocated equity in public education. Therefore, one must be vigilant in observing the impact that the recent change in Ministers of Education will have on Ontario’s school boards’ implementation and practice of the equity strategy.
In this study, for Reading, Writing and Mathematics, language spoken at home had significant interactions with other factors. In fact, the individual factors of language spoken at home and Grade 3 proficiency accounted for all the significant interactions. The exception was in Mathematics, where the interaction between school change and country change was also significant.

Results from this study show that students who spoke another language at home tended to be more likely to be proficient in Grade 6. In this study, we do not know what these languages are or if different immigrant languages have different effects. However, we do know that the linguistic profile of these immigrants reflects the diversity of the leading source countries sending immigrants to Canada and that Citizenship and Immigration Canada (2008) reported that the most common mother tongues spoken by permanent residents to Canada in 2008 (after English) were Mandarin, Arabic, Tagalog, Spanish, Punjabi, French, Urdu, Korean, Russian, Chinese Farsi, Hindi, and Tamil. We also know from Brown’s (2008) study at the Toronto District School Board that students’ academic achievement varied across language groups, with the majority of students from some language groups performing above the provincial standard (proficiency) for Reading and Writing. For example, the language groups performing best in Reading were: Romanian, Korean, Hindi, Chinese, Bengali, and Serbian.

What is the cause of these results for students speaking a language other than English? Did the Ontario Ministry of Education succeed in implementing focused educational supports to assist students who did not speak English to attain proficiency in English? Or are there other factors at play? This again is an area that would benefit from more research. In any case, these results should further the conversation about the role of language and might provide some impetus for the Ontario Ministry of Education (2008b) to re-examine its position that a student’s
ability to understand the language of classroom instruction is critically important if the student is going to be successful in school. In light of these results, it might be time for the Ministry to evaluate how supports and resources are used with students who speak a language other than English.

School Changes

The literature shows that the effects of changing schools on students’ academic performance can be inconsistent (Mehanaa & Reynolds, 2004; Melman Heinlein & Shinn, 2000). That inconsistency is reflected in the results of this study, where changing schools created different effects in Reading, Writing, and Mathematics. Changing schools did not seem to have an effect in Reading or Writing but it had an effect on certain students in Mathematics. For the students who were not proficient in Grade 3 Mathematics, changing schools seems to have an impact on whether the students were proficient or not in Grade 6. For students who had moved to Canada, those who changed schools had a predicted probability greater than 50% regardless of the language spoken at home; this in contrast to the less than 45% predicted probability for the category of students who remained at the same school.

It would appear that schools do make a difference for students who were not proficient in mathematics though the reason for this is unclear. In the Ontario Secondary School literacy test, taken by all secondary students in Ontario, the schools that immigrants attend make a difference to their success or failure in the test (Elgie, 2008). If, in this study, the effect of school change was consistent across the three subject areas, and changing schools had resulted in increased numbers of immigrants being proficient on the assessments, then one might speculate that, as immigrants resided longer in the host country and they became more socially and
economically stable they might have been able to move to better neighbours and hence better schools. But, in this instance, that line of reasoning might be faulty.

**Differences in Achievement**

These results also reflect the heterogeneity of the students; as I have already discussed, the findings show that language difference, immigration, and school mobility and combinations of these factors have different effects on different groups of students. Further research that would disaggregate the groups of students would give us a more definitive idea of the demographic characteristic of the students and provide useful information to policy-makers. The students who moved to Canada and who spoke a language other than or in addition to English at home had very positive predictions for obtaining proficiency in the Grade 6 assessment. We know that the literature suggests that minority-language retention is not beneficial for Western origin groups but is beneficial to the non-Western groups (Abada, Hou, & Ram, 2008). In a Canadian study, Abada, Hou, and Ram found that a higher percentage of Chinese and Indian students who spoke their ethnic language at home had a university degree than those students who spoke English and French at home. They concluded, from the different effect between the two groups, that minority language was not beneficial for Western origin groups. However, in the absence of any other supporting criteria, their conclusion seems rather tenuous.

As mentioned before, in this study, it is not possible to identify the various ethnic or cultural groups, nor immigrants by country or origin. However, from the studies done at the Toronto District School Board (Brown, 2008), we are aware that students who have immigrated from the English-speaking Caribbean countries are at risk for lower academic achievement and higher rates of dropping out of school. The probable causes for the lower achievement could very well be assumed to be factors such as low expectations from teachers (James, 2004) and negative
classroom climates (Rubovits & Maehr, 1975). The literature does also suggest that some racialised groups – for example, immigrants from the English-speaking Caribbean – will never be assimilated into the White main-stream because of colour and racial barriers irrespective of their business and professional credentials and fluency in English (Portes & Zhou, 1993; Waters, 1999). However, on the other hand, the Punjabi students in California were also the targets of racism inside and outside of the school (Rumbaut, 1996) and yet their academic performance was above the class average and above that of the White students.

So, the question remains: What makes a group of immigrants perform differently from another immigrant group, given that immigrants generally appear to have high educational aspirations? Further research in the Canadian context is needed to substantiate Portes and Zhou’s (1993) contention that the establishment of same-ethnic community ties and the maintenance of strong cultural bonds could be key supportive factors for the immigrant student despite being in a publicly funded school system where competition and individualism are said to be attached to power and privilege (Apple, 2001; Ball, 1993; Dei, 2002).

**Large-scale Assessments and Applicability of the Framework**

In this study, one of the main findings is that immigrant groups, including those not proficient in Grade 3, are more likely to be proficient in Grade 6 than students born in Canada. This is in spite of the fact that the students born in Canada are presumed to be mainly from the dominant mainstream with the accompanying power and privileges (social, cultural and economic capital ensuring a comfort level with the curriculum, instructional methods and ways of doing) that provide them with an advantage that immigrant students do not have in the competitive and individualistic school environment and particularly in regard to standardised testing.
There are many conversations about the uses, misuses and limitations of large-scale standardised assessments and I have reviewed some of them in this study. Large-scale assessments have been used to identify performance gaps among groups of students and many debates have occurred (e.g., Gillborn, 2008) around the ability of the results of the assessments to fairly represent the academic performance of racialised or minoritised students. Indeed, some have argued that differences in performance suggest that some students are more prepared for school than others (Brown, 2002; Leithwood, Fullan, & Watson, 2003), and that the available opportunities to learn are designed to match the learning approaches and favour the prior knowledge of the White majority of students, who have also benefited from their social, cultural and financial resources (Mehan, 2008).

In my study, I questioned how achievement and success in schools are measured and used the social and cultural reproduction theories of Bourdieu, and Curtis, Livingstone and Smaller and the power imbalance theory of Fanon to structure my argument and provide the framework for discussing my results. Examining the results of this study brings into question the continuing applicability of these theories in today’s school environment. Rather than providing a straightforward answer to this important question, more questions arise. According to the framework, the students who immigrated to Canada and those who spoke a home language other than or in addition to English should have encountered obstacles in their learning from the delivery and content of the curriculum and the school environment stemming from power differentials and perceptions of cultural and social inferiority. According to the framework, these indicators of the measures of achievement should have pointed to less successful results for these students who had moved country and spoke another language. Does the fact that the results actually point a successful outcome for these students mean that we should be reconsidering
these frameworks and that other still unknown factors must be considered? I would be terribly remiss if I said that social reproduction and oppression do not still exist in our schools, when many recent studies such as those by Dei and Gillborn still provide strong evidence of their presence. I am, however, suggesting that there are other factors that appear to be counteracting the detrimental effects that social reproduction and power imbalances wreaked during the not very distant past. Could it be that, with global connections and previously unheard of advances in communication and instant information, students are beginning to establish a solidarity and a new type of community that provides the support that engenders success and lessens the influence of these other factors? We cannot ascertain this without further research.

What we do know from the results of this study is that, generally, the immigrant students, including those who speak a language at home other than English are capable of successfully completing the Ontario large-scale assessments. There are clearly other factors at work that promote proficiency in academic achievement among students who have changed schools and speak another language other than English or addition to English at home.

**Contribution to Sociology of Education**

This study has important findings for research on immigration and the sociology of education. To date, most of the research on immigrants in Canada has been conducted with immigrants over the age of 15, with a focus on the labour market or postsecondary education. Much of the quantitative research about immigrants in Canada has been conducted using large datasets with subgroup sample sizes that are too small or variables that are too limited to adequately address the important issues.

Other research has focused on immigrants as disadvantaged groups that face many social and economic challenges in a world dominated by an unequal distribution of power and
economic resources and a mainstream that regards ethnically and culturally different people as “visible minorities,” the Other, and strangers. In this environment, there is a hierarchy of knowledge, power and privilege and a social reproduction of the same. The reproduction theorists argue that, through the process of streaming, either formally or informally, the Westernised ideology of schooling, and the transfer of knowledge, the socially and economically disadvantaged working class youth (of which the immigrant student is a part) is destined for low academic performance reinforcing his or her working class position in society. Although a few working class students will break through the barriers to academic and social success, the majority would not.

Research grounded in critical race theory and anti-racism theory has been concerned with the inequalities in education fuelled by institutionalised and systemic racism and the unequal distribution of power and privilege. Qualitative studies in the sociology of education have reported on the struggles faced by immigrant youth and their ultimate failure as they try to navigate the often hostile world of schooling in the Western society.

Research on standardised testing has shown marginalised students to be at a disadvantage because the tests are biased towards the dominant knowledge and middle-class values to which the marginalised student is not privileged, due to immigrant status, language difference or socio-economic status. The disadvantaged youth are destined for low academic performance despite their positive attitudes and their parents’ high aspirations.

Some research into language differences and academic performance suggests that speaking a language other than the language of classroom instruction is not an indicator of poor academic performance. However, the results are not yet widely accepted.
A common element in much of the current research on immigrants in Canada is the lack of focussed empirical research on the academic performance of immigrant youth in elementary and secondary schools, including research tracking student academic trajectories across school panels, and the lack of research that focuses on the strength and resilience of these youth and not just on their marginalisation and challenges.

That this study has surprising and interesting results speaks to the prevailing assumptions of much of the current research. Somehow, we do not expect these students who moved to Canada and have language differences to have the potential to be more proficient in standardised testing than the students who were born in Canada, even though limited labour market research, postsecondary research and some recent research from the Toronto District School Board have pointed to academic success for pockets of immigrant students.

The results of this study indicate that research into the study of immigrant youth education must be grounded in a framework that adequately addresses the situation of today’s immigrant. They are more skilled, more professional, and more educated than past immigrants. They still encounter institutionalised and systemic racism in Western institutions, yet the traditional theoretical frameworks do not seem to adequately address their current situation.

The ideology and knowledge used in Canadian schools may be Westernised, but in today’s global economy with increasingly sophisticated technology and instant, widespread access to information, is this knowledge still the possession of a privileged few?

How do technological advances in communication contribute to the maintenance and strengthening of the immigrant youth’s ties to his or her own ethnic and cultural community? How do the assimilation patterns for today’s immigrants differ from the traditional linear and
segmented assimilation patterns? What is the relationship between these factors and immigrant youth academic achievement?

My study is important because it starts the conversation in sociology of education about the need for new ways of conducting research into the education of immigrant youth in Canada.

**Implications for Policy-Makers**

The results of this study pose several interesting questions for policy-makers. This study shows that, as a collective body, immigrants and students with a home language other than or in addition to English are more likely than Canadian-born students to be proficient in the Ontario Grade 6 assessments.

This implies that some strategies are working. What those strategies are needs further investigation. Given that the Ministry of Education’s emphasis is still on making students who do not speak English proficient in the language of classroom instruction, it bears exploring if this is the strategy that is working. Or perhaps Cummins (1979) and Corson (1993) are correct, and students do benefit from retaining their own language. How do we know?

Notwithstanding the positive outcomes of this study, we still have to wonder if the use of large-scale standardised assessments is the most appropriate method for evaluating students’ performance. If large-scale assessments are going to be used, it would be beneficial to include pertinent background data (now lacking) that would allow a more in-depth analysis of students’ performance. Demographic data, such as social identity data, can provide valuable information on academic performances; however, the reason or reasons for collecting and using these data must be properly communicated to the public, teachers, students and all other stakeholders. The pertinent, useful information that can potentially be gained from large-scale assessments can lead
to more effective allocation of resources both in the classroom and at the school administration level. This might ultimately lead to improved learning outcomes for all students.

This study ends with a caution to policy-makers. The positive results of this study regarding the education of immigrant students should not and must not be a reason to reduce funding and programming for immigrant students and those with English as an additional language. Like all students in Ontario schools, students who have experienced country mobility, language differences, and school mobility need an equal opportunity to learn. If the Ontario Ministry of Education is going to fulfill its stated goals of improving achievement and closing achievement gaps, then it must ensure that each student has the appropriate resources that will address his or her individual needs. For truly “a mind is a terrible thing to waste” (United Negro College Fund, 1999).
CHAPTER 6. CONCLUSION

In this study, I have focussed on children who themselves were born in another country. It is likely that there are many similarities between children born to parents after they moved to Canada and those born to the same parents before they moved, especially if the move happened when the child was very young. Because the data used in this study do not include when parents arrived in Canada, it is not possible to investigate the effect of parents’ length of time in Canada on children’s academic achievement.

Using country change as an aggregate group masks the variations in achievement that might be found among students from different countries or different social environments. There is a need for research in Canada that would further disaggregate the students and identify the variables that are correlated with academic success.

This study examined the academic performance of a cohort of students on a standardised test at two points in time (Grades 3 and 6). A fuller investigation of student development would have included aspects of development in addition to academic performance and would have included other factors (not available in the dataset) impacting on the students’ school experience, such as school climate and teachers’ expectations. This study, therefore, cannot provide reasons for the effects of school change, country change or language difference and their interactions on the change in or maintenance of academic proficiency from Grade 3 to Grade 6. However, the literature suggests that the likelihood of higher achievement can in some part be attributed to the students’ great motivation to succeed that is characteristic of both the immigrant students and their parents.
It is encouraging that, in spite of the perception by many educators (Coelho 2007; Ryan, 2003) that students from different countries and with first languages other than the language of instruction are less likely to succeed, these students are in fact very likely to be successful in Grade 6. There is however, a need for more research into the academic achievement of immigrant students particularly research investigating areas of resilience that support high achievement.
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