The Toronto Connection: Poverty, Perceived Ability, and Access to Education Equity

Gillian Parekh

York University

Isabel Killoran

York University

Cameron Crawford

York University

Abstract

This study explores the educational opportunities available to secondary high school students in the Toronto District School Board (TDSB), using both public TDSB and Ontario Ministry of Education data. Family income, parental education, and student participation in special education (excluding Gifted) are key units of analysis, as are the types of programs that the TDSB provides. The research found that low income students, students whose parents lack university education, and students in special education have less access to socially valued educational programs. The research found a significant overrepresentation of low income students receiving special education services and in other programs that offer few options for post-secondary education. Work-oriented programs were found to be most prominently available in the lowest income neighbourhoods in Toronto.

Key words: Neoliberalism, education, streaming, Toronto, disability, poverty, vocational

Résumé

Cette étude explore les opportunités éducatives offertes aux élèves des écoles secondaires du conseil scolaire du district de Toronto (TDSB), utilisant à la fois des données provenant de ce

même conseil scolaire et du ministère de l'Éducation de l'Ontario. Le revenu de la famille, l'éducation parentale, et la particiation des étudiant à des programmes d'éducation spécialisée (excluant les élèves surdoués) sont des unités clés de l'analyse, ainsi que les types de programmes proposés par le conseil scolaire du district de Toronto. La recherche a révélé que les étudiants à faible revenu, ceux dont les parents n'ont pas de diplôme universitaire, et les étudiants en éducation spécialisée, ont moins accès aux programmes éducatifs socialement valorisés. La recherche a constaté une surreprésentation importante des étudiants à faible revenu qui reçoivent des services de l'éducation spécialisée et inscrits dans d'autres programmes qui n'offrent que peu de possibilités pour une éducation postsecondaire. Les programmes professionalisants se sont révélés être les plus présents et disponibles dans les quartiers les plus pauvres de Toronto.

Mots clés: néolibéralisme, éducation, répartition, Toronto, handicap, pauvreté, formation professionnelle

Author's Note

Gillian Parekh is currently working on her PhD in Critical Disability Studies at York University. Isabel Killoran is an Associate Professor in the Faculty of Education at York University. Cameron Crawford is Director of Research and Knowledge Management at the Canadian Association for Community Living; President of the Institute for Research on Inclusion and Society (IRIS); past President of The Roeher Institute; PhD Candidate in Critical Disability Studies at York University; Course Director in Public Policy and Disabilities at York University; Instructor of "Disability and the State" at Ryerson University; and a consultant to federal and provincial governments. Thank you to SSHRC Small Grants for travel funds to present the preliminary data.

Note de l'auteur

Gillian Parekh travaille actuellement sur son doctorat en études critiques sur la situation des personnes handicapées à l'Université York. Isabel Killoran est maître de conférence à la Faculté de d'éducation et directrice des programmes de maîtrise et de doctorat d'études critiques sur la situation des personnes handicapées à l'Université York. Cameron Crawford est directeur de la recherche et de la gestion des connaissances de l'Association canadienne pour l'intégration communautaire, président de l'Institut de recherche sur l'inclusion et la société (IRIS), ancien président de l'Institut Roeher, candidat au doctorat en études critiques sur la situation des personnes handicapées à l'Université York, directeur de cours en politique publique et sur les handicaps à l'Université York, professeur du cours « Le handicap et l'état » à l'Université Ryerson, et consultant pour les gouvernements fédéral et provinciaux. Merci aux subventions du CRSH pour les frais de voyage afin de présenter les données préliminaires.

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For some time now, Canadian researchers (see Curtis, Livingstone, & Smaller, 1992; Martell, 2009) have been arguing that public school systems are structured to replicate the social stratification experienced by students who are poor, who are from minority groups, or who have disabilities. Not only does the evidence show that these students are being systematically streamed away from academic opportunities, but the bar for 'academic success' is continually on the rise. Research in Canada on equity issues related to secondary school opportunities and socio-economic status, disability, parent education, and disproportionate representation is limited. Education at the elementary, secondary, and post-secondary level is governed provincially/territorially. Consequently, available research is generally locally focused. The Toronto District School Board (TDSB), the largest in Canada and the fourth largest in North America (www.tdsb.on.ca/aboutus), is an excellent source of data. The student population is large (~250,000) and it has in the past (and again just recently) had data available for analysis on school-level student and parent characteristics, programs, and achievement levels.

In the following study, we examine educational programs available in public secondary schools and their relationship to school-level student and parent characteristics, specifically, low-income status, parental acquisition of university education, and student use of special education services. Poverty, disability, and lack of parental education have long been established as traits that diminish a student's perceived academic potential (Artiles, Kozleski, Trent, Osher, & Ortiz, 2010; Brown & Sinay, 2008). Our study investigates whether there is a relationship between the proportions of students who fall into these demographic categories and the availability of marketable programming at secondary school. We also explore which demographics are more strongly represented in schools offering selected programming such as French Immersion, Advanced Placement and certain vocational programs.

Conceptual Framework

Neoliberalism emerged in the Western hemisphere in the 1970's with the coordinated removal of market restrictions, thereby initiating an era of globalisation and international market competition (Coburn, 2006). Scholars have alluded to the possibly inescapable neoliberalist hold over international markets and economic ideologies (Bond, 2008). As the impact of unrestricted markets began to take effect on the global economy, as evidenced by the recent economic crisis, sceptics who have long called for more controlled markets have been left wondering whether there is any alternative to the neoliberal pathway.

Neoliberal principles and their emphasis on human capital are reshaping education policies worldwide (Peters, 2001). Instances of public institutions and services espousing neoliberalist principles in policies are being continuously monitored. "More recently, neoliberals have advocated the application of market principles to institutions formerly reserved as 'public,' such as schools, some medical services, or prisons" (Bartlett, Frederick, Gulbrandsen, & Murillo, 2002, p.1). According to Bartlett et. al. (2002), the influence of current welfare-state market ideologies on public institutions, such as schools, may be too powerful to circumvent. Public school systems situated within liberal welfare states are becoming further infused with market principles that dictate adherence to such concepts as "deregulation, competition and stratification" (Bartlett et. al., 2002, p.1). Essentially, adoption of neoliberal policies in schools promotes a framework of education that appears to be in direct conflict with principles of inclusion.

The impact of neoliberalism on the evolution of educational exclusion will be used as a lens for the interpretation of the results of the following study. Although neoliberal influences have been named as leading causes of increasingly restrictive education systems (Olssen & Peters, 2005), 'who' continues to be excluded is largely based on historical, deep-seated discrimination. Evidence of exclusion of students identified as racial minorities, with disabilities, or from lower socioeconomic groups has been clearly established in recent literature (Artiles, et al., 2010; De Valenzuela, Copeland, Huaqing Qi, & Park, 2006; Skiba, Poloni-Staudinger, Gallini, Simmons, & Feggins-Azziz, 2006; Webb-Johnson, 2003). In the past this has been done without focusing on the link to neoliberalism. The following study addresses this issue by exploring the exclusion of marginalized groups, with a focus on students from low-income households, whose parents have not acquired a university education, and those who use special education services.

Literature Review

Neoliberalism and Education

According to Pring and Walford (1997), when a Ministry of Education or privately governed school adopts market values as the overarching principles driving its education policies, a harsh and competitive environment is created for students, particularly for students the education system is not currently structured to support, such as students with disabilities and from low-income families. The authors argue that schools that adopt market values as guiding principles promote an education structure that fosters individual achievement, inter-student and inter-school competition, standardized and compulsory testing, narrow measures of performance, and exclusion from resources for lower-performing students.

Curtis et al. (1992) believe that one of the most commonly recognized earmarks of a school or school system that supports market values is the promotion of the stratification and streaming of students. They hypothesize that segregating lower-performing students into 'specialized' classes, streams and schools is a way of maintaining a mirrored version of the class and income stratification experienced by various social groups within society. Stratifying school children into various streams according to academic capability is a market-driven tactic to ensure that only those the market sees eligible for future economic contribution are granted access through training and higher education opportunities. Martell (2009) claims that streaming is a complex system. It can be embedded within seemingly appropriate modifications to academic expectations such as within English as a Second Language (ESL) programs, Individual Education Plans (IEPs), and within programs where expectations regarding both quality of work and behaviour are greatly reduced. Poor and minority students are greatly over-represented in the identification of students with learning and behavioural disabilities and are thus placed in programs and streams that offer fewer academic opportunities (Artiles, et al., 2010; De Valenzuela, et al., 2006; Martell, 2009; Skiba, et al., 2006; Webb-Johnson, 2003)

However, Peters (2001) suggests that these structures may be necessary in order for society to remain competitive within the new era of the 'knowledge economy.' He describes how neoliberal principles and their emphasis on human capital are reshaping education policies worldwide. The Organisation for Economic Co-operation and Development (OECD), as well as the World Bank, have renewed their focus on education development within the context of the 'knowledge economy' (Peters, 2001). The Ontario Ministry of Education (2009a, p. 6) states that "today's global knowledge based economy makes the ongoing work in schools critical to our students' success in life and to Ontario's economic future." In the age where knowledge is equated with economic success, human capital and the ability to manipulate knowledge is crucial to reaping rewards as a market contributor. Nonetheless, as the acquisition and manipulation of knowledge become more imperative to accessing material remuneration, the social exclusion of people who are unable to master these skills becomes even greater. Hargreaves (2000) agrees with Peters' (2001) assessment that, with the pressure to stay competitive in the job market, new forms of knowledge and knowledge management will have to be implemented and promoted within education systems in order to raise academic ability and ultimately economic success.

Furthering this line of thinking, Bartlett et. al. (2002) comment on the powerful neoliberal forces that have encouraged the application of market values in many public sectors, including schools. They claim that the marketization of public schools in pursuit of enhancing exclusive economic outcomes is creating a small but dominant elite group. Marketization contributes to an increasing group of people excluded from the market and an even larger material disparity between social groups. Olssen and Peters (2005) argue that the evolving concept of knowledge as a global commodity defines a new measure of international economics and creates further opportunities for social stratification and exclusion of those unable to access this growing market.

The Neoliberal Agenda in Ontario's Education System

Ontario's education system has faced extensive barriers to providing equitable education opportunities. Powerful neoliberal forces have driven policy and hampered reform of inequitable education structures (Basu, 2005). Bedard and Lawion (2000) describe how the execution of neoliberal reform in the Ontario education system under the Harris government eroded the previous government's commitment to equity in programming. The Harris government eliminated the Ministry's Anti-Racism, Equity and Access Division that had been incorporated to develop anti-racism and diversity programming within Ontario's schools. Bedard and Lawion (2000) report that, through the implementation of neoliberal policies within Ontario's school system, there occurred a re-streaming of Grade 9 students and a dramatic decrease in secondary education curriculum options.

Since the Harris regime, Ontario has attempted to initiate and amend policies to address inequities within the education system. Two of these are the Specialist High Skills Majors Programs (SHSMP) [Ontario Ministry of Education (OME), 2010] and the Ontario Youth Apprenticeship Program (OYAP) (OYAP, 2009a & 2009b), which are geared towards students looking to keep direct employment as an option following completion of secondary school. These vocational-focused programs offer skills and apprenticeship opportunities in the trades and service industries. One of the Ministry's foci has been to decrease dropout rates, based on the assumption that graduation will lead to greater marketability. The graduation rate has increased from 68% to 77% since 2003-4. The target is 85% for 2010-11 (OME, 2009a). The recent Ministry of Education document on equity and inclusive education (2009b) reiterates the focus on developing citizens "who can contribute to both a strong economy and a cohesive society" (p.2). That said, however, a recently released report states that the transition from secondary school to employment is particularly difficult for apprenticeship students due to the continued presence of systemic barriers in program delivery and difficulties students face in securing employment sponsors (King, Warren, King, Brook & Kocher, 2009).

History of Inequity within Ontario Schools

Inequitable education opportunities for certain social groups have been woven into the fabric of Ontario's education systems since their inception in the 1850's (Curtis et al., 1992). There is significant evidence that demonstrates how students from particular social groups continued to be denied access to academic opportunities. Research shows that poor, minority, and special education students were among those most likely to be streamed out of academic education and into lower performing, lower paying, and precarious jobs (Curtis et al., 1992).

Wright (1970) conducted a study based on demographic information from eight schools in Toronto, collected through the Every Student Survey. He looked specifically at the relationship between immigration status, first-language, and parental occupation on the representation of students within various educational programs. Wright's study determined that children whose parents were professionals were most likely to be found enrolled within academic five-year programs and least likely to be represented among over-age students and students within special education or vocational classes. Wright's study also demonstrated a strong relationship between students having a greater likelihood of being enrolled within "opportunity or special vocational" classes where their parents were unemployed, receiving welfare, or single mothers. As well, Wright found a strong correlation between parental occupation and student enrolment in vocational classes; in vocational programs, there was a higher representation of labourers' children and a lower representation of professionals' children (Wright, 1970). A further study conducted by Deosaran and Wright (1976), based upon the 1975 Every Student Survey, demonstrated the same stratification of class and parental occupation in relation to student program designation. That study also found a sharp increase in the percentage of students enrolled in special education and vocational classes.

According to a search one of the authors of this article conducted at the Ontario Institute for Studies in Education (OISE) library, it appears that the final *Every Student Survey* was conducted in 1997 – the year before the amalgamation of several school boards into one Toronto District School Board. There had been a long gap in the administration of these types of surveys but in 2006 the TDSB completed a census of students in Grades 7 through 12. A census of parents of children in kindergarten through Grade 6 was conducted in 2008. The Grade 9-10 achievement results, based on school-level student and parent characteristics from 2006-7, were released in April 2008. The data show large discrepancies by family socio-economic status of students who were successful on their first try at the Ontario Secondary School Literacy Test (OSSLT). Among children of professionals and people in senior management, 89% were successful; among children of semi-professionals, 84%; among skilled/semi-skilled clerical and trades jobs, 74%; and among unskilled clerical, 66%. For children of parents without remuneration, only 54% were successful on their first try (Brown & Sinay, 2008). Without passing the OSSLT or an equivalent course, students are unable to graduate from high school.

In terms of academic preparedness for post-secondary education for poor students in particular, "It is reported that of the 17-20 year olds (from the lowest 10% of income areas) who were in the TDSB in March 2004 only 13.4% registered at university and only 6.5% registered at community college" (Martell, 2009, para. 25). Close to 80% of students from Toronto's poorest neighbourhoods are not pursuing post-secondary education (Martell, 2009). In contrast, figures for 2003 demonstrate an overall registration rate for TDSB graduates of 26% in university and 5% in community college (TDSB, Student Success: Pathways, 2004-2005). A more recent report shows that 54% of students in Ontario go on to post-secondary school (King et al., 2009).

Martell (2009) explains the poor showing of lower SES students as a result of their lack of preparation due to bottom streaming, i.e., placement into groups directed to specific programming opportunities based on perceived ability/inability, compounded by the high costs associated with post-secondary education. According to a TDSB report released in 2008, there is an extreme disparity between levels of achievement and students considered at-risk in the three educational streams (academic, applied and essential) (Brown & Sinay, 2008). The report states that, while only 6% of Grade 9 students in the academic (university bound) stream are considered 'at-risk,' 31% of students in applied and 48% of students in the essential stream are considered to be 'at-risk' (Brown & Sinay, 2008, p. 50).

In terms of achievement for first-time eligible students taking the OSSLT, the results are even starker. While 87% of students from the academic stream pass on their first attempt, that number drops considerably to 38% in the applied stream and to a staggeringly low 8% in the essential or workplace stream (Brown & Sinay, 2008, p. 51). In conclusion to these dramatic findings, the TDSB research report (2008) acknowledges the presence of a continued if not widened gap in achievement between academic and non-academic streams by stating that, "the gap in achievement of university courses and non-university courses was observed a generation ago; it is still a key characteristic in the TDSB secondary panel" (Brown & Sinay, 2008, p. 50). The TDSB report also maintains that despite these findings, according to the Ministry of Education, streaming does not officially exist (Brown & Sinay, 2008, p.50). Martell (2009) has observed that, when post-secondary options are limited, graduating students are largely employed in dead-end, mindless jobs, precarious employment, or filling up the lines at the unemployment office.

Methods

The present study was designed to explore the current educational opportunities available within the TDSB secondary panel for students from lower income families, students whose parents have some university education, and students in special education. Specifically, we looked at: a) the relationship between available programs / services offered within the selected TDSB secondary schools and student and parent characteristics; b) over- and under-representation of student and parent characteristics for specific schools as determined through descriptive statistics and binary logistic regression; and c) the location patterns in schools offering the Specialist High Skills Major Program (SHSMP), the Ontario Youth Apprenticeship Program (OYAP), complete course loads, and French Immersion opportunities.

School Selection

Eighty-five TDSB secondary schools were the focus of this study. Adult education centres, alternative schools, junior high schools, and language-focused schools (English as a Second Language - ESL) were excluded.

Program and Service Selection

All information regarding programs and services was drawn from the Toronto District School Board's website (<u>www.tdsb.on.ca</u>) for the school year 2008-2009. Information on OSSLT, academic course offerings, gifted programming, Advanced Placement and OYAP was pulled from individual school profiles available through the same TDSB website. The information for the SHSMP programs was retrieved from the Ministry of Education's website, <u>http://www.edu.gov.on.ca/morestudentsuccess/SHSMresult.asp</u>.

Programs and services selected for the study included the following:

- 1. <u>Opportunity to participate in the Ontario Secondary School Literacy Test (OSSLT)</u>: The OSSLT is a test that is administered across the province targeting Grade 10 students. A passing grade on this test or equivalent course (if the test has already been failed) is required in order to achieve an Ontario Secondary School Diploma (OSSD).
- <u>Full Academic Course Offering</u>: Schools that were deemed to offer a full academic course load had to meet the requirement of offering university level courses in Grades 11 and 12 for English, Math and Science. It is important to note that all courses listed on Secondary School profiles were included.
- 3. <u>Gifted Program</u>: The gifted program is a specialized program to meet the needs of students who have been formally identified as gifted through an Identification, Placement, and Review Committee (IPRC) (TDSB, Gifted Program Differentiation, current website).
- 4. <u>French Immersion</u>: Completion of requirements for the French Immersion curriculum at the secondary school level provides the opportunity for students to graduate, along with their OSSD, with a certificate of Bilingual Studies in French Immersion from the TDSB as well as the opportunity to achieve an Honours Certificate in Bilingual Studies in French Immersion from the TDSB (TDSB, French Immersion, current website).
- 5. <u>The Advanced Placement Program</u>: The Advanced Placement Program offers students the opportunity to achieve university level accreditation while in high school. Exams are marked externally and participating universities are able to grant first year level credits in specified subject areas (Advanced Placements, current website).
- 6. <u>Ontario Youth Apprenticeship Program (OYAP)</u>: OYAP is a school-to-work (vocational focused) program offered to students interested in pursuing employment in the following trade sectors: motive power, construction, industrial, and services. The OYAP courses and program provide students with apprenticeship opportunities while they are working towards their OSSD (OYAP, 2009). For the present study, schools reported to host the OYAP program were schools that identified OYAP within their list of programs and services on their 2008-2009 TDSB profile.
- 7. <u>Specialist High Skills Major Program (SHSMP)</u> The SHSMP is a career path focused program intended to aid students in pursuing interests in various fields such as agriculture, business, construction, environment, forestry, and transportation (Ontario Ministry of Education, 2010).

School-level Student and Parent Characteristics

All demographic information used for this study was for October 2009 and was found on a school-by-school basis from the Ontario Ministry of Education School Information Finder

Website — <u>http://www.edu.gov.on.ca/eng/sift/</u>. The demographic information at the school level that the study used is defined as follows:

- Percentage of students who live in lower-income households. This is defined by the Ministry of Education as "the estimated percentage of children who attend the school and whose families devote a larger share of income to the necessities of food, shelter and clothing than the average family." The Ministry of Education states that the percentage is tabulated by students' postal code and then cross-referenced with relevant data from the 2006 Census. The indicator of low income is Statistics Canada's Low Income Cut Off measure (LICO), to which some researchers and analysts refer as the 'poverty line' (National Council of Welfare, 2010).
- Percentage of students who receive special education services: This percentage relates to the number of students in the school "who are in special education programs or receive special education services. This includes students with identified and non-identified exceptionalities, but excludes students identified as gifted" (OME, 2009b definitions).
- Percentage of students whose parents have some university education: This percentage relates to the number of students who have at least one parent who has achieved a university degree, certificate or diploma. The Ministry states that this percentage is tabulated using student postal code information and cross-referenced with relevant data from the 2006 Census.

Ideally, the research would also have included a focus on ethno-racial diversity at the school level. Such data were not available to the research team, however.

Statistical Analysis and Mapping of Geographic Location Patterns

Descriptive statistics and a regression analysis were generated for the present study. Schools hosting vocational-focused programs such as the SHSMP or OYAP programs were plotted on separate 2001 Low Income Neighbourhoods maps of Toronto (Social Policy Analysis & Research, 2003) to determine which neighbourhoods and income demographics vocational programs were targeting. Secondary schools that did not offer full academic course selections were also plotted, as were schools that offered French Immersion. Details are provided in the Results section of this study.

Results

Results for this study demonstrate significant disparities of educational program opportunities for students from low-income households, students whose parents have acquired university education, and students who participate in special education. Overall, students from poorer families are least likely to participate in university-bound programming while students with better-educated parents are more likely to do so. Students in schools with university-track programming are least likely to be in situations where high proportions of students are in special education. Geographic location patterns reveal that both lower and higher income areas around the Greater Toronto Area offer significantly different programming opportunities. Most notably, vocational-focused programs operate primarily in Toronto's lowest income neighbourhoods whereas French Immersion programming is more likely to be offered in more affluent areas.

Statistical Analysis

Independent sample t-tests were used to explore the relationships between types of educational programming and school-level student and parent characteristics. Table 1 shows the results. There are statistically significant relationships, with moderate to strong eta squared effect sizes (Cohen, 1988), between:

- The *lower mean proportions* of students from low-income households who are in schools with vs. without French Immersion (19.6% vs. 29.4%, eta squared = .14) and in schools with vs. without Full Course offerings (27.3% vs. 33%, eta squared = .17);
- The *higher mean proportions* of students whose parents have university education who are in schools with vs. without French Immersion (50.3% vs. 35%, eta squared = .14) and in schools with vs. without Full Course offerings (37.8% vs. 30.3%, eta squared = .10);
- The *higher mean proportion* of students from low-income households who are in schools with vs. without the Ontario Youth Apprenticeship Program (32.5% vs. 26.7%, eta squared = .14); and
- The *respective low mean proportions* of students in special education who are in schools with vs. without French Immersion (7.9% vs. 22.3%, eta squared = .23), with vs. without Advanced Placement (13.1% vs. 23.5%, eta squared = .09); with vs. without Full Course (12.7% vs. 78.4%, eta squared = .57) and with vs. without the Ontario Secondary School Literacy Test (18.3% vs. 99.6%, eta squared = .38).

It would appear, then, that students from more affluent households and where parents have some university education are more likely to be found in schools with French Immersion and Full Course offerings, and less likely to be found in schools that offer OYAP. Comparatively low proportions of students are in special education programming where the schools offer French Immersion, Advance Placement, Full Course, and the OSSLT.

In part, these results may be artefacts of the relationship between parental education and income; it is to be expected that where parents have university education, the households would be less likely to have incomes below the LICO. Indeed, the present study found that there is a fairly strong inverse correlation (r = -454, p < .01) between the proportions of students whose parents have university education and the proportions of students from low-income households.

There is a fairly weak positive correlation between the proportions of students in special education and the proportions from low-income households (r = .220, p < .05) and a fairly weak inverse correlation between the proportions of students in special education and the proportions of students whose parents have university education (r = -.290, p < .01). In other words, poorer youth are somewhat more likely than more affluent ones to be in schools that provide special education to large numbers of students. Further, youth with university-educated parents are somewhat less likely than youth of lower educated parents to be in schools that provide special education to large numbers of students.

Table 1.

Means and t-tests for proportions of students in low-income households, whose parents have university education and who are in schools with special education, by types of educational programming offered at school

					u		
Dependent Variables	French Immersion Sig	pə Jites Sig.	Advanced Placement sis	Specialist High Skills Major Program S	Ontario Youth Apprenticeship Program <u>se</u>	Full Course Big	Ontario Secondary School Literacy Test ⁵²
Low Income							
Households:							
Mean % in school	19.6 ***	23.6	27.5	30.8	32.5 ***	27.5 ***	28.1
with the program							
Mean % in school without the program	29.4 ***	28.7	28.5	27.3	26.7 ***	33.0 ***	31.3
Equal variances assumed?	Y	Y	Y	Y	N	N	Y
t	3.71	1.65	0.45	-1.75	-3.71	4.11	0.65
Eta ² (sig. only)	0.14				0.14	0.17	
Parents with University Education:							
Mean % in school with the program	50.3 ***	41.5	40.8	33.9	29.5 ***	37.8 **	37.0
Mean % in school without the program	35.0 ***	36.3	35.7	37.9	39.4 ***	30.3 **	31.3
Equal variances assumed?	Y	Y	Y	Ν	Ν	Ν	Y
t	-3.60	-1.03	-1.47	1.51	3.83	-2.98	-0.72
Eta ² (sig. only)	0.14				0.15	0.10	
Proportion of Students in Special Education:							
Mean % in school with the program	7.9***	12.3	13.1**	19.0	19.7	12.7 ***	18.3 ***
Mean % in school without the program	23.0***	22.1	23.5**	22.0	21.7	78.4 ***	99.6***
Equal variances assumed?	Ν	Y	Ν	Y	Ν	Ν	Ν
t	5.00	1.08	2.83	0.49	0.44	10.39	7.21
Eta ² (sig. only)	0.23		0.09			0.57	0.38

* $p \le 0.05$; ** $p \le 0.01$; *** $p \le 0.001$

Binary logistic regression was performed to explore the relationship between available education programming and school-level student and parent characteristics, i.e., percentage of students in low-income households, with parents who have university education and in special education. In order to facilitate interpretation, schools were categorized according to the programs/services they offered. Criteria were created to ensure that each school could only fit within one specific category with no overlapping characteristics. The initial criteria were: 1) special schools; 2) vocational only schools; 3) basic education only schools; 4) schools offering university preparation and vocational combination programming; 5) university preparation only schools; and 6) elite academic schools. However, with six categories, counts became very small in some cells, thus limiting possibilities for determining statistically significant relationships through the regression analysis. The original six school categories were accordingly collapsed into the four groups shown on Table 2.

Table 2.

Derived school categories

Derived School Categories, Grouped	Number of Schools	
Special, Vocational, Basic only * (i.e., Special Education focused schools, Vocational focused schools, Schools offering only Basic education)	11	
University preparation and vocational combination **	22	
University preparation only	23	
Elite (i.e., Schools offering French Immersion, Advanced Placement, and Gifted Programs)	29	

* Special education programming is offered within all TDSB schools therefore it is impossible to isolate schools that offer only special education classes aside from special education schools. Accordingly, we used schools that had a high percentage of students ($\geq 20.3\%$) using special education programming as an outcome variable.

** University preparation schools have indicated that there are enough available courses possibly offered throughout the year to ensure that a student has the eligibility to apply for post-secondary education. However, our data could not substantiate whether all the listed courses were actually offered.

To prepare data for the regression analysis, the demographic variables were divided into quartiles, i.e., upper 25%, upper-middle 25%, lower-middle 25% and lower 25%). Dividing the demographics into quartiles allowed for assessment of factors most predictive of schools having students with a given characteristic, e.g., schools with high student/parental poverty rates, high

rates of parental university education, and high rates of participation in special education. In this context we define 'high' to be the top quartile.

Table 3 provides descriptive statistics for the source variables that were used to construct the dichotomous outcome variables. The 'cut points' that were used for the highest quartiles for low income, parental education and special education were, respectively, 34%, 45%, and 20.3%.

Table 3.

Source variables used to derive dichotomous outcome variables for binary logistic regression, showing mean, minimum and maximum values, standard deviations and 'cut points' (shaded cells) for the top quartiles

	Low Income	Parent Education	Special Education
	(%)	(%)	(%)
Ν			
Valid	85	85	85
Missing	0	0	0
Mean	28.2	36.8	21.2
Std. Deviation	8.4	13.5	24.3
Minimum	10.0	14.0	3.8
Maximum	51.0	70.0	100.0
Percentiles			
25	22.0	27.5	7.8
50	29.0	34.0	11.8
75	34.0	45.0	20.3

A crosstab was run to explore how many schools had high proportions of students from low-income families (Table 4). The results demonstrated that 54.5% of Special, Vocational and Basic Education schools had the highest rates of students living below the poverty line, as compared to 40.9% of University Preparation and Vocational schools, 13% of University Preparation schools and 20.7% of schools offering Elite programming.

Low Income – Cros	s-labulations			
School Categories	Schools where fewer than 34% of students were from low income households	Schools where 34% of students or more were in low income households	Total	Row percentage of schools where 34% of students or more were in low income households
Special, Vocational, Basic Only	5	6	11	54.5%
University preparation and Vocational Combination	13	9	22	40.9%
University Preparation Only	20	3	23	13.0%
Elite	23	6	29	20.7%

Table 4.

Low Income – Cross-tabulations

Table 5 shows the number of schools where high percentages of students' parents had some university education. None of the Special, Vocational, and Basic education schools met that condition. Only 4.5% of schools offering combined University Preparation and Vocational programming had high percentages as compared to 26.1% of University Preparation schools and 48.3% of schools offering Elite programming.

Tal	ble	e 5.
1 4		

Parental Education – C	Cross-tabulations
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School Categories	Schools where fewer than 46% of students' parents have university	Schools where 46% or more of students' parents have university education	Total	Row percentage of schools where 46% or more of students' parents have university
Special, Vocational, Basic Only	education 11	0	11	education
University Preparation and Vocational Combination	21	1	22	4.5%
University Preparation Only	17	6	23	26.1%
Elite	15	14	29	48.3%

Table 6 shows how many schools had high percentages of students (20.3% or more) who used special education services. 100% of Special, Vocational and Basic only schools had students in the highest quartile for special education. This was the case for 22.7% of schools offering combined University Preparation and Vocational programming, 13% of schools offering only University Preparation and 13.7% of schools offering Elite programming.

Special Education	Cross-tubulations			
School	Schools where	Schools where	Total	Row percentage
Categories	fewer than	20.3% or more		of schools where
	20.3% of	students were in		20.3% of
	students were in	special education		students were in
	special education			special education
Special, Vocational, Basic Only	0	11	11	100%
University Preparation and Vocational Combination	17	5	22	22.7%
University Preparation Only	20	3	23	13.0%
Elite	25	4	29	13.7%

Table 6.

Special Education – Cross-tabulations

A binary logistic regression was performed to determine the relationship between the four school categories and the highest quartile of students living below the poverty line. Overall, the regression model was statistically significant, X^2 (3, N = 85) = 8.871, p < .05, and explained between 9.9% (Cox and Snell R Square) and 14.2% (Nagelkerke R Square) of the variance in the outcome variable. However, as shown in Table 7, only one independent variable proved statistically significant, i.e., Special, Vocational and Basic Education only, which was the strongest predictor of low income with an odds ratio of 4.6. The finding indicates that, other factors held constant, Special, Vocational, and Basic Education schools were almost five times more likely than Elite schools to have a high proportion of students (34% or more) from low-income households.

Table 7.

 come from low income households
 Odds

 B
 S.E.
 Wald
 Df
 Sig.
 Ratio

Binary logistic regression – Likelihood of students being in schools where 34% or more students

					0	
Elite (reference)		-	8.16	3	.043	
Special, Vocational, Basic *	1.53	.76	4.04	1	.045	4.60
University preparation and vocational combination	.98	.63	2.39	1	.122	2.65
University Preparation Only	55	.77	.52	1	.473	.58
Constant **	-1.34	.46	8.59	1	.003	.26

A second binary logistic regression was performed to examine the relationship between types of schools and the education of students' parents. This model also proved to be statistically significant overall, X^2 (3, N = 85) = 20.34, p < .001, and explained between 21.3% (Cox and Snell R Square) and 31.6% (Nagelkerke R Square) of the variance in the outcome variable. As shown in Table 8, only one independent variable yielded a significant result: schools offering both University Preparation and Vocational programming had an Odds Ratio of 0.051, indicating that, other factors held constant, these schools were about a twentieth as likely as Elite schools to have a high percentage of students (46% or more) whose parents have university education.

Table 8.

Binary logistic regression – Likelihood of students being in schools where 46% or more students have parents with some university education

	В	S.E.	Wald	Df	Sig.	Odds Ratio
Elite (reference)			8.594	3	.035	
Special, Vocational, Basic	-21.134	12,118.636	.000	1	.999	.000
University Preparation and Vocational Combination**	-2.976	1.089	7.467	1	.006	.051
University Preparation Only	972	.603	2.601	1	.107	.378
Constant	069	.372	.034	1	.853	.933

* p < 0.05; ** p < 0.01; *** p < 0.001

A third binary logistic regression was performed to determine the relationship between types of schools and high percentages of students (20.3% or more) receiving special education. As shown in Table 9, none of the independent variables yielded a statistically significant result. That finding is most likely due to the small numbers of cases in schools aside from Special, Vocational, and Basic only schools where 20.3% or more students participate in special education (see Table 6). Had we used another cut point, such as 11.8% or more (see Table 3) for deriving the special education outcome variable, we may have found some statistically significant predictors of participation in special education.

Table 9.

Odds Ratio В S.E. Wald Df Sig. Elite (reference) 3 .962 .810 Special, Vocational, Basic .000 1 .998 10.1 23.035 12,118.637 billion

.741

.821

.539

.675

.006

11.581

1

1

1

.411

.937

.001

1.838

.937

.160

.609

-.065

-1.833

Binary Logistic Regression – Likelihood of students being in schools where 20.3% or more students use special education services

* p < 0.05: ** p < 0.01: *** p < 0.001

University preparation and

University Preparation Only

Vocational Combination

Constant **

Geographic Location Patterns of Programs

To further explore the relationships between educational programming and student/parent demographics, schools hosting the OYAP, SHSMP, and French Immersion programs as well as schools that do not offer full academic course loads were plotted on Poverty Maps (Social Policy Analysis and Research (SPAR), 2003). In 2001, 19% of Toronto families lived beneath the poverty line (SPAR, 2004). The poverty maps demonstrate areas of affluence and low income in the Greater Toronto Area. The current study was able to determine that the majority of schools offering vocational programs, such as the OYAP or SHSMP, were located within or bordered neighbourhoods with higher incidences of poverty. For example, of the 22 schools offering the OYAP program, all but five (77%) were located in neighbourhoods where over 19% of families lived in low income households (see Figure 1). This trend was also observed for schools offering SHSMP (55%) and for the schools that did not offer full academic course loads (77%) and (see Figures 2 & 3). These location patterns were comparable to TDSB's earlier mapping of student enrolment within academic programs (Brown, 2005). .Schools offering French Immersion programs were plotted and revealed a distinctly different pattern (see Figure 4). The majority of schools offering the French Immersion program were found within Toronto's more affluent neighbourhoods whereas only 30% were located in lower income areas (see Figure 4).

Blank low income maps for both 2001 and 2006 have also been provided for reference (Figures 5 & 6).

Figure 1:

Schools hosting the OYAP are plotted on the 2001 Low Income Neighbourhoods Map of Toronto (Social Policy Analysis and Research, 2003).

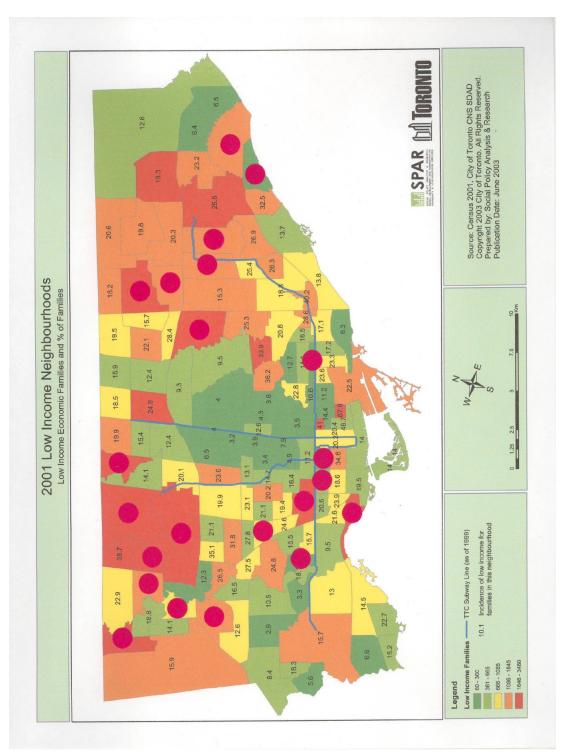
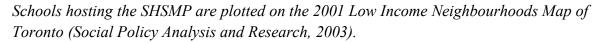


Figure 2:



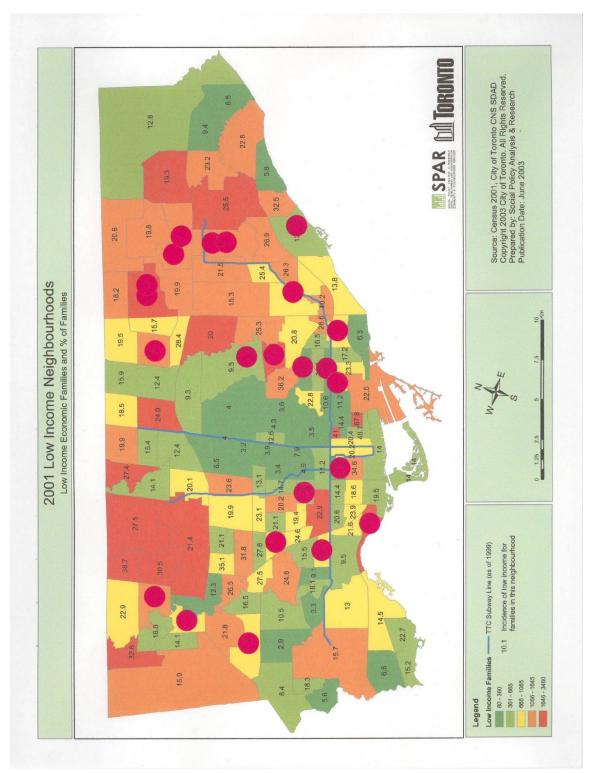
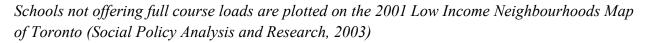


Figure 3.



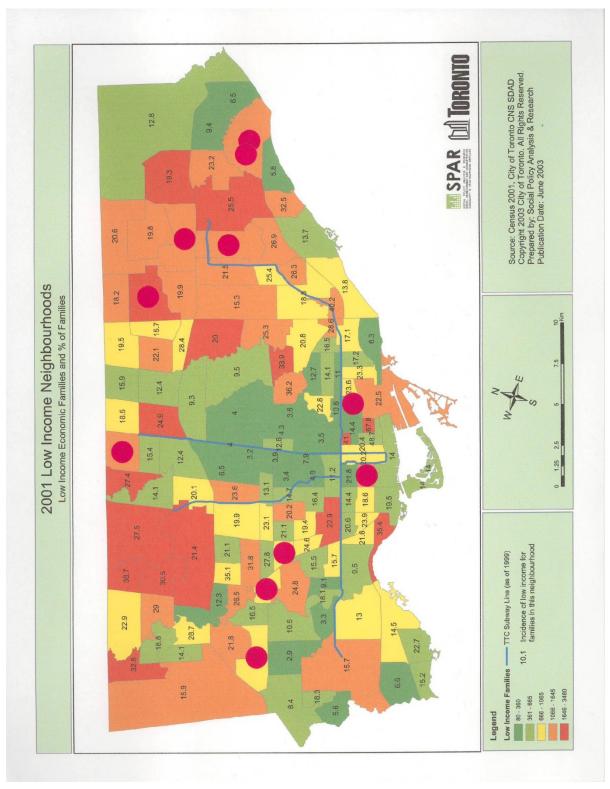
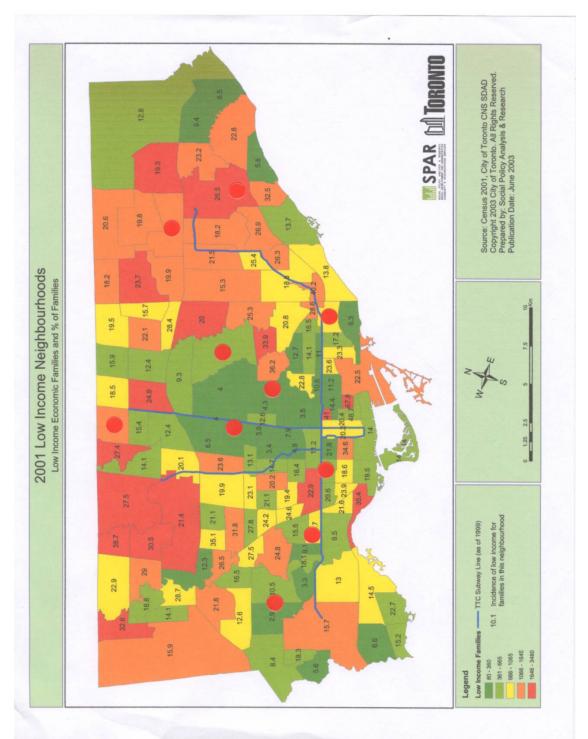


Figure 4.



Schools offering French Immersion programs are plotted on the 2001 Low Income Neighbourhoods Map of Toronto (Social Policy Analysis and Research, 2003).

Figure 5.

Blank map for reference (2001) (Social Policy Analysis and Research, 2003)

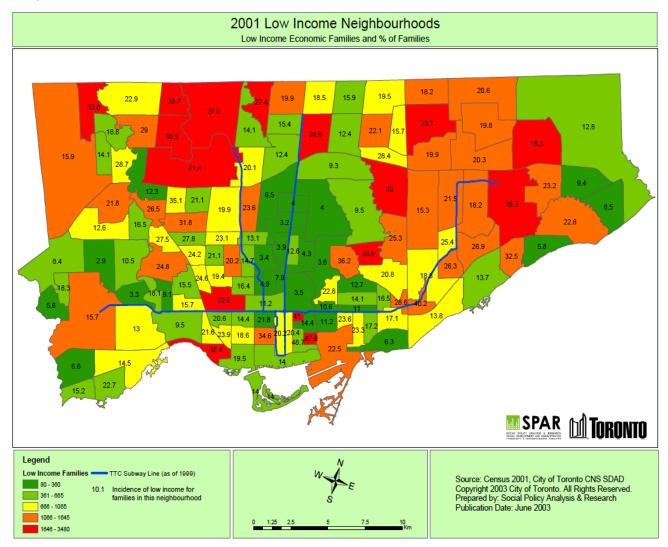
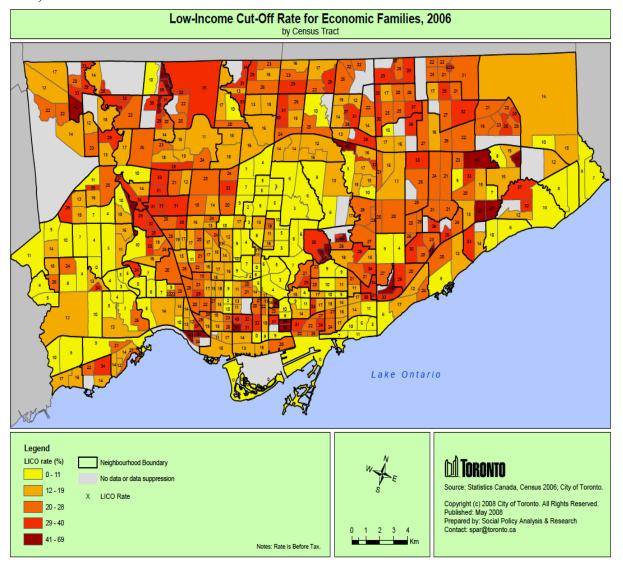


Figure 6.



Blank map for reference (2006) (Social Policy Analysis and Research, 2008)

Discussion

Low Income

Students from low-income families are less likely than those from wealthier families to attend schools with French Immersion and Full Course offerings. A strong predictor of being represented among the poorest 25% of families is student enrolment at schools that offer one or more of Special, Vocational, or Basic education programs. Such students are nearly five times more likely than students in Elite schools to be part of a student population where a quarter or more of students are from families that live below the poverty line.

These findings suggest a strong relationship between the acquisition of higher education and the successful navigation of the market, i.e., monetary remuneration. Reducing access to select social groups, such as students from lower income households as found within this study, is evidence of a marketized system that is reproducing the embedded inequities present in Ontario society as a whole — a system that apportions opportunities to students who already mirror the identity of those with economic power. Indeed, over half (54.5%) of students in Special, Vocational, and Basic Education schools are part of a student population where a quarter or more of students live below the poverty line as compared to 13% of students attending University Preparation schools and 20.7% of students attending Elite Schools. Curtis et al. (1992) also discuss similar findings for the French Immersion programs, which were introduced to Toronto Boards in the mid 1970's and which, the authors maintain, have always been representative of the middle and upper class "with rare exception" (Curtis et. al, 1992, p. 68).

The findings are particularly concerning; it appears that a divide has been drawn between programs geared towards students coming from higher and lower income households. There is a significant over-representation of the poorest students within programs that offer few options for post-secondary education and a significant under-representation of the poorest students within schools offering French Immersion. Similar patterns have been recognized in the research literature (see, for example, Curtis et al., 1992; Martell, 2009). The findings of the present research suggest that there are structural conditions within the school system that maintain such economic divides. Opportunities for students to develop more marketable skills and become future economic contributors appear to be reserved mainly for students who are already financially advantaged.

Parental Education

Family income is significantly correlated with parental education: schools with higher proportions of university-educated parents are less likely than other schools to have students from households that live below the poverty line. Accordingly, students from families where at least one parent has university education are more likely than students whose parents lack such education to attend schools with French Immersion and Full Course programming, findings that are statistically significant. Students with university educated parents are less likely to attend schools that offer the OYAP. A strong predictor that parents will lack university education is student attendance at schools that offer combination of University Preparation and Vocational programs. Regression analysis found that such students are about one-twentieth as likely as students in Elite programs to be in schools where a high percentage of parents have university education. Indeed, the present research found that none of the Special, Vocational, or Basic education schools' students had high percentages of parents with university education, while among students at Elite schools, nearly half of the students were in such situations. Overall, schools where high proportions of parents have university education are somewhat less likely than other schools to have high proportions of students in special education, although that correlation is not strong.

Special Education

Students are least likely to use special education services within schools that offer French Immersion, Advanced Placement, Full Course programming, and the OSSLT. Students from the poorest 25% of Ontario households are more likely than other students to be in schools that offer special education to a high proportion of students ($\geq 20.3\%$), a correlation that is statistically

significant but not very strong. That the regression analysis for the present research did not find statistically significant predictors of special education usage is most likely due to the small numbers of cases where 20.3% or more students participate in special education in schools aside from Special, Vocational, and Basic education schools. That said, the cluster of Special, Vocational, and Basic education schools included in the present research had very high proportions of students in special education, which indicates the board's approach of congregating special education students together.

Geographic Location Patterns of Schools Offering the SHSMP and OYAP (Vocational) Programs

According to Curtis et al. (1992), in Ontario during the 1970's, vocational programs consisted

almost entirely of students from working-class, ethnic/racial-minority and singleparent families...[A] working-class child ran a ten times greater chance of ending up in a vocational programme than did a child of the professional or managerial class. Similarly, over one-third of all children from unemployed families, and over half of those from families on welfare, ended up in these schools. (Curtis, et. al, 1992, p. 89)

As demonstrated by the plotting of programs in the maps shown in Figures 1, 2, 3, and 5, most of the school-to-work programs are located in the lower to lowest income neighbourhoods. If such programs present 'opportunities,' one must question why they are not distributed more evenly throughout all income brackets. The statistics clearly show that it is not by chance that these programs are offered where they are.

Summary

Demographic data from the Toronto District School Board reveal intersections between family income, parental education, and disability-related student use of special education that has been reported in other countries. Schools with higher proportions of university-educated parents are less likely than other schools to have students from households with incomes below the poverty line. Students from low-income families are less likely than those from wealthier families to attend schools with French Immersion and Full Course offerings. Students from families where at least one parent has university education are more likely than students with less highly educated parents to attend schools with French Immersion and Full Course programming. The present research found that none of the Special, Vocational, or Basic education schools had high percentages of parents with university education while nearly half of Elite schools met that condition. More specifically, percentages of students whose parents have some university education were markedly higher for schools hosting the French Immersion and Full Course programs as compared with schools hosting the OYAP. All of the Special, Vocational, and Basic education schools included in the present research provide special education programming to a high proportion of students ($\geq 20.3\%$) whereas this is the case for just over one in five schools that provide a combination of University Preparation and Vocational programming, one in eight University Preparation schools and one in seven Elite schools. A strong predictor of student lowincome status is their attendance at Special, Vocational, and Basic education schools. A strong predictor that parents will *not* have university education is where students attend schools that combine University Preparation and Vocational programming. Patterns in the geographic location of educational programs reflect current income disparities across Toronto.

One hypothesis that might explain such findings could be that, as students attempt to attain diplomas and academic accreditation, the level of competition for 'spots at the top' begins to grow. In addition to students increasingly needing to demonstrate strengths in marketable academics such as French Immersion and Advanced Placement, external factors such as parental education level and family income also seem to have a bearing on the range of programs available at the students' schools in the first place. In schools with a purely academic focus and more marketable program options are found low percentages of students from households living below the poverty line and higher percentages of students whose parents have some university education. The structure of the TDSB appears to be mirroring and supporting the socio-economic stratification found within society. In addition, these findings further support Pring and Walford's (1997) assertion that, in an education system that has adopted neoliberal ideologies, greater resources, such as more marketable programming, are directed towards those who are perceived to demonstrate greater potential or who come from households with more economic strength. Neoliberalism could be underpinning the economic rationale for a meritocratic system that determines which demographics are streamed into basic education tracks and away from more marketable education opportunities.

Our findings demonstrate an exclusion of students receiving special education services from highly valued academic / educational opportunities. Or to put matters a different way, our findings show that schools with educational programs that tend to be most highly valued are least likely to have high proportions of students in special education. This inequity appears to be embedded within the structure of programs and services throughout the Toronto District School Board. With the increased push towards inclusive and equitable education, it appears that the classroom may not be the best initial target for reform. Inequities, particularly for students with disabilities, need to be addressed at the School Board and Ministry levels if teachers are to have realistic chances of extending inclusive educational opportunities to all of their students irrespective of disability.

The significant inverse correlation that this study found between the percentage of students from low-income households and the percentage of students whose parents had university education suggests a strong relationship between the acquisition of higher education and the successful – as in more highly remunerated – navigation of the market. The restriction of students from low-income households, students whose parents lack university education, and students using special education services from gaining access to socially valued educational opportunities is evidence of a marketized system that is reproducing the embedded inequities present in Ontario's society as a whole – a system that apportions resources to students who mirror the identity of those who already have economic power and privilege.

Conclusion

This study has demonstrated that after 40 years not much has changed. There continues to be significant inequities in programming opportunities offered by the Toronto District School Board. These inequities, which have been shown to be associated with student and parental demographic characteristics – family low-income status, parental education level, and student

participation in special education because of disability – lead to which 'types' of students are granted access to the most marketable educational opportunities and which 'types' of students find their access restricted. The results of this study suggest that the TDSB continues to require further systemic reforms to ensure that *all* students have equitable access to program opportunities. Currently, students deemed less able to meet academic expectations are met with restricted access to resources and services that would otherwise provide them with greater career options and other conditions needed to participate as contributors to Ontario's economy and to society in general. The TDSB has the opportunity to serve as a powerful vehicle for reducing social inequities by prioritizing inclusive and equitable educational opportunities for *all* students, including students experiencing family poverty, parental academic disadvantage, and perceived disability.

References

Advanced Placement. (Current website). Retrieved from http://www.ap.ca/

- Artiles, A., Kozleski, E., Trent, S., Osher, D., & Ortiz, A. (2010). Justifying and explaining disproportionality, 1968- 2008. *Council for Exceptional Children*, 76(3), 279-299.
- Bartlett, L., Frederick, M., Gulbrandson, T., & Murillo, Enrique. (2002). The marketization of education: Public schools for private ends. *Anthropology and Education Quarterly*, 33(1), 1-25. Retrieved from http://www.tc.columbia.edu/faculty/bartlett/publications/pdf/33 1AEQ.pdf
- Basu, R. (2005). The rationalization of neoliberalism in Ontario's public education system, 1995-2000. *Geoforum, 35*(5), 621-624.
- Bedard, G. J., & Lawton, S. B. (2000). The struggle for power and control: Shifting policymaking models and the Harris agenda for education in Ontario. *Canadian Public Administration, 43*(3), 241-269.
- Bond, P. (2008). End of neoliberalism? Sorry, not yet. *The Monthly Review*. Retrieved from <u>http://monthlyreview.org/mrzine/bond261208.html</u>
- Brown, R. (2005) *TDSB achievement maps related to inner-city and achievement issues* (Research Report). Toronto District School Board. Retrieved from <u>http://www.tdsb.on.ca/wwwdocuments/about_us/external_research_application/docs/Inne_r%20City%20Maps%202005.pdf</u>
- Brown, R., & Sinay, E. (2008).2006 student census: Linking student demographic data with student achievement (Research Report). Toronto District School Board.
- Coburn, D. (2006). Health and health care: A political economy perspective. In D. Raphael, T. Bryant, & M. Rioux's (Eds.), *Staying Alive: Critical Perspectives on Health, Illness and Health Care* (pp. 59-84). Toronto: Canadian Scholar's Press Inc.
- Cohen, J.W. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hilldale, N.J.: Lawrence Erlbaum Associates.
- Curtis, B., Livingstone, D.W., & Smaller, H. J. (1992). *Stacking the deck: The streaming of working class kids in Ontario schools*. Toronto: Our Schools/Our Selves.
- Deosaran, R. A., & Wright, E.N. (1976). The 1975 every student survey: Student's background & its relationship to program placement (Research Service No. 138). Toronto Board of Education. Retrieved from http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/3 6/da/20.pdf
- De Valenzuela, J.S., Copeland, S. R., Huaqing Qi, C., & Park, M. (2006). Examining educational equity: Revisiting the disproportionate representation of minority students in special education. *Exceptional Children*, *72*(4), 425-441.

- Hargreaves, D. (2000). *Knowledge management in the learning society*. CERI, OECD. Paris: The Organisation. Retrieved from http://www.mszs.si/eurydice/pub/oecd/lnowledge.pdf
- King, A., Warren, W., King, M., Brook, J., and Kocher, P. (2009). *Who doesn't go to postsecondary education?* (Colleges Ontario Collaborative Research Project). Retrieved from http://www.collegesontario.org/research/who-doesnt-go-to-pse.pdf
- Martell, G. (2009). *It's the bottom streaming that matters most*. Retrieved from http://educationactiontoronto.com/discussions/it-s-the-bottom-streaming-that-mattersmost
- National Council of Welfare. (2010). Welfare incomes, 2009. Ottawa: Author.
- Olssen, M. & Peters, M. A. (2005). Neoliberalism, higher education and the knowledge economy: From the free market to knowledge capitalism. *Journal of Education Policy*, 20(3), 313-345.
- Ontario Ministry of Education. (2008). *School Information Finder*. Retrieved from http://www.edu.gov.on.ca/eng/sift/
- Ontario Ministry of Education. (2009a). *Getting results*. Retrieved from www.edu.gov.on.ca/eng/GettingResultsGrad.html
- Ontario Ministry of Education. (2009b). *Ontario's equity and inclusive education strategy. Realizing the promise of diversity*. Retrieved from http://cal2.edu.gov.on.ca/april2009/EquityEducationStrategy.pdf
- Ontario Ministry of Education. (2010). Specialist high skills major: Program specialist high skills major. Retrieved from http://www.edu.gov.on.ca/morestudentsuccess/SHSMresult.asp
- Ontario Youth Apprenticeship Program (OYAP). (2009). *Welcome to the Ontario youth apprenticeship program (OYAP)*. Retrieved from http://www.oyap.com/index.cfm?fuseaction=homepage&language=E
- Ontario Youth Apprenticeship Program.(2009). *Specialized tech and co-op programs*. Retrieved from http://www.oyaptdsb.com/UploadedFiles/File/2010%20specialized%20%20programs%2 0chartfin.pdf
- Peters, M. (2001). National education policy constructions of the 'knowledge economy': Towards a critique. *Journal of Educational Enquiry*, 2(1),1-22.

Pring, R., &Walford, G. (1997). *Affirming the comprehensive ideal* [Google Books version]. Retrieved from http://books.google.ca/books?hl=en&lr=&id=fo2VrTOld1QC&oi=fnd&p=PA69&dq=seg regated+education+neoliberalism&ots=jrXRG9vnkF&sig=-54HEIFStcNBTtiWdBUju8ZjGIY#PPA77,M1

- Skiba, R. J., Poloni-Staudinger, L., Gallini, S., Simmons, A. B., & Feggins-Azziz, R. (2006). The disproportionality of African American students with disabilities across educational environments. *Exceptional Children*, 72(4), 411-424.
- Social Policy Analysis and Research. (2003). 2001 Low income neighbourhoods. Retrieved from http://www.toronto.ca/demographics/atlas/hoods_lowincomefamilies.pdf
- Social Policy Analysis and Research. (2004). *City of Toronto: Social profile #3 Neighbourhoods households and incomes*. Retrieved from http://www.toronto.ca/demographics/pdf3/all_toronto.pdf
- Social Policy Analysis and Research. (2008). *Low income cut-off rate for economic families*. Retrieved from http://www.toronto.ca/demographics/atlas/cma/2006/income/ct06_income_lico_families_ percent.pdf
- Toronto District School Board. (Current website). *French immersion*. Retrieved from http://www.tdsb.on.ca/programs/French/default.asp?cat=1
- Toronto District School Board. (Current website). *Gifted program differentiation*. Retrieved from http://schools.tdsb.on.ca/donmillsci/dept/social global/gifted/diff.htm
- Toronto District School Board. (2004-2005). *Student success: Pathways*. Retrieved from http://www.tdsb.on.ca/wwwdocuments/students/pathways_for_success/docs/pathways.pd f
- Webb-Johnson, G. (2003). Behaving while black: A hazardous reality for African American learners? *Beyond Behavior* (Winter). Retrieved from http://www.ccbd.net/documents/bb/3-7behavingwhileblack5.pdf
- Wright, E. N. (1970). Students' background and its relationship to class and programme in school. *Toronto Board of Education: Research Department*. Retrieved from http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/3 7/83/e7.pdf