SOCIAL CITIZENSHIP AND DISABILITY: IDENTITY, BELONGING, AND THE STRUCTURAL ORGANIZATION OF EDUCATION

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Abstract

The framing of disability is an ongoing, negotiated discourse in which participants build upon, challenge, and reject the political, social, economic, and cultural influences that lead to constructions of impairment. Experiences of racialization, poverty, immigration, gender, and sexuality juxtaposed against defined institutionalized norms and dominant narratives speak to how disability is not only conceived but also experienced. Drawing upon transnational and citizenship theory, this thesis proposes employing a new framework of analysis, centralizing the experience of social citizenship and belonging as an indicator of broader structural equity. Situated in the field of education, theoretical considerations also explore how growing market fundamentalism shapes public schools and contributes to the systematic exclusion of poor and racialized students through mechanisms of disablement such as reduced academic programs and special education placement.

This body of work includes three separate, but related, studies exploring historical and current incidences of institutional exclusion. In particular, the nuanced relationship of exclusion to race, class, gender, generational status, and sexuality, complicated with the identification of impairment, is explored. One of the most profound findings of this research is that, although there is much discussion in Disability Studies of the construction of impairment labels, this is the first quantitative analysis to substantiate these claims. Results also indicate that the classroom represents the most stratified space in which student groups defined by race, exceptionality, class, and generational status experience the greatest sense of exclusion. Evidence shows that employing a lens of citizenship and belonging is an authoritative tool in identifying the existence

of inequities distributed among myriad identity groups. Furthermore, evidence lends credence to the notion that identification of disability is intimately linked to race, gender, and class contexts.

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Chapter 1: Introduction

Framing disability is an ongoing, negotiated discourse in which participants build upon, challenge, and reject the political, social, economic, and cultural influences that lead to constructions of impairment and disability. However, classical theory dominating Disability Studies is at once acknowledged for enabling greater mobilization towards emancipation (Oliver, 1990) while at the same time isolating disability as a discrete experience, devoid of relational context of complex and entrenched, multi-layered forms of oppression (Gorman, 2013). Experiences of racialization, poverty, immigration, gender, and sexuality juxtaposed against defined institutionalized norms and dominant culture speak to how impairment and disability are not only conceived, but also lived.

The goal of this thesis is to explore traditional disability theory against a backdrop of nuanced experiences of disablement, while proposing a theoretical framework of study that addresses the complexities of social, political, and economic exclusion of persons perceived as disabled. Drawing upon transnational and citizenship theory, the thesis proposes employing a new framework of analysis, centralizing the experience of citizenship and belonging, to more acutely identify and address observed inequities. The inter-relational constructions of impairment are explored through primary research studies situated in a historical (late-Victorian era) Ontario as well as within a current Toronto-based timeframe. A third study employs a quantitative analysis, which explores the strength of the concept of citizenship and belonging, consolidated in the proposed theoretical framework. To explore these notions further, the three aforementioned studies included in this dissertation are situated within education institutions.

Public schools are often conceived as a microcosm of society. Through the use of archival data on the Victoria Industrial School as well as from the rich database at the Toronto District School Board (TDSB), I have created substantive exploratory and quantitative studies to test whether the experience of social citizenship and belonging can accurately identify individual and systematic experiences of inequity. In addition, these studies aim to explore the close relationships between the identification of disability among racialized and minoritized youth, suggesting that the investigation of disability as a characteristic removed from racial, class, and gender contexts misrepresents the multi-layered and historical forms of oppression facing youth identified as disabled.

Theoretical Framework

Experiences of belonging and exclusion have been widely embedded within critical citizenship discourse and literature. Citizenship has been historically conceived as a concept that bounds citizens to the state (Janoski & Gran, 2002). However, as citizenship rights and entitlements become further contractualized due to sweeping global neoliberal policies, citizens are grasping to recentralize and democratize the social and political concepts of citizenship by advancing equitable opportunities for inclusion, membership, and recognition (Somers, 2008). Recent movements such as the Occupy Wall Street movement, the Arab Spring, and the Quebec student movement have demonstrated ways in which a democratized concept of citizenship can be enacted on a global scale. As new forms and understandings of citizenship emerge, institutions play a key role in determining which forms of citizenship are adopted into the public discourse. "As such, socially inclusive democratic citizenship regimes (including human rights) can thrive only to the extent that egalitarian and solidaristic principles, practices, and institutions of civil society and the public commons are able to act with equal force against the exclusionary

threats of market-driven politics" (Somers, 2008, p. 8). Yuval-Davis (2011) situates "belonging" within the concept of citizenship and defines citizenship as a "participatory dimension of belonging to a political community" (p. 46). However, she notes that within the construct of belonging there are identities who may enjoy formal recognition as citizens, but who continue to experience informal exclusion.

Straddling the divide between formal and informal citizenship discourses, Arnold (2004) identifies two key criteria that determine access and inclusion in contemporary citizenship. She critiques how economic participation and contribution are used as a primary factor in accessing citizenship, but also delves into the construction of nationalism to discuss the continued exclusion of certain groups. Arnold argues that nationalistic policies result in political exclusion based upon certain identity statuses as measured against an established homogenous norm. Discourses on national worthiness and exaltation (Thobani, 2007) as well as on the politics of belonging (Yuval-Davis, 2006) address the often-invisible hierarchies that are promoted within concepts of national belonging. Institutions play a significant role in the maintenance and sustenance of internal divisions such as gender, class, ability, and immigration status (Thobani, 2007). To "really" belong both socially and politically within a community, Yuval-Davis (2011) points to three axes upon which one's own identity becomes centralized. She notes that belonging is constructed based on one's social location, one's identity and attachments, and one's own "ethical and political value systems with which people judge their own and others' belonging" (p. 12).

As part of his discussion on power, Foucault (1995) presents the structure of schools largely as a mechanism of political technology. According to Foucault, schools function to establish hierarchical organization within society. He writes extensively on the function of

institutions, including schools. “It is a type of location of bodies in space, of distribution of individuals in relation to one another, of hierarchical organization, of disposition of centres and channels of power, of definition of the instruments and modes of intervention of power” (Foucault, 1995, p. 205). Even within a shared education institution, students’ experiences can be vastly different. Successful navigation of competing power structures can present insurmountable challenges, particularly for students whose own identities, social locations, and value systems have not been historically, socially, or politically privileged.

As discussed throughout the literature on citizenship (Somers, 2008) and belonging (Yuval-Davis, 2006, 2011), the effects of globalization and international diaspora movements have strained historically established constructions of “nation” and the accepted characteristics of who can belong and participate within the social, political, and economic structure of a boundaried nation. Although theories around cosmopolitanism are advancing and re-constructing notions of “citizen,” internal divisions and marked identities of difference are continuously privileged or rejected. Mechanisms that govern inclusion and exclusion are particularly complex in nations such as Canada, which has been built largely upon a colonial history and a diverse, immigrant labour force (Thobani, 2007). Despite hierarchical structures often devised upon lines of race, ethnicity, class, gender, and ability, economic contribution has functioned in many cases as a gateway towards greater social and political inclusion (Arnold, 2004).

Purpose

The purpose of the studies included in this doctoral thesis is to draw precise correlations between identity-based and structural characteristics in relation to students’ full realization of social citizenship, as defined by Somers (2008), as inclusion, membership, and recognition. The study will demonstrate, on a micro-scale, whether identity characteristics or structural practices

within a single public institution—a school board—impact students' realization of citizenship and experience of belonging. Results could be used to guide further policy changes throughout the field of public education and could enable more equitable access to civic membership and recognition, particularly for people with disabilities.

The paper will be parsed out into three discreet studies: The first study employs archival records from an industrial school in Ontario established at the end of the 19th century. This study highlights the historical and established relational experiences of poverty, class oppression, constructed masculinity, racialization, and religious morality on the perception of impairment and disability. The second study employs a four-step regression analysis to determine which identity-based, structural-based, or achievement-based characteristics are the most critical in students' experience of belonging and exclusion from school. The third study uses a quantitative analysis to explore statistical relationships between students' experience of belonging and programmatic participation. Although students identified as having a disability or "special education need" (SEN) are the primary focus of these studies and subsequent discussion, close attention will also be paid to the relational interactions of race, gender, sexuality, and class.

Overview of Chapters

This thesis consists of nine chapters, each contributing to the overall deconstruction of structural and identity-based relationships that, in this case, affect both the past and present lives of Ontario youth. In brief, chapter 2 provides a review of traditional theoretical models of disability, along with their critiques. To better illustrate identified theoretical gaps, chapter 3 provides an archival study of student records from the Victoria Industrial School in late-Victorian Ontario. Chapter 4 outlines the proposed theoretical framework centralizing citizenship and belonging.

The focus of oppression narrows in chapter 5 with a look at the current role of special education and its relationship with citizen formation through the employment of data from the TDSB. Chapter 6 describes the process involved in developing the scale of belonging as well as its intended purpose. This chapter also presents the regression analysis and results, including a thorough discussion of variables. Chapter 7 provides a data analysis of student and structural variables, exploring incidences of disproportionate representation across programmatic opportunities, while chapter 8 delves into the correlation of programming with the experience of belonging and exclusion.

Concluding this thesis, chapter 9 pulls together the theoretical frameworks and historical/current roles of education structure to unpack both the regression and correlative data results, while also proposing new research areas critical for the continuation of this work.

The goal of this thesis is to outline a new theoretical paradigm through which to explore the issue of disability and to test its potency in an identified microcosm of society. It is my hope that employing a citizenship lens can be used to better understand the sustained oppression of people with disabilities as well as the relational impact of race, gender, sexuality, and class. Once its strength is established, a lens of citizenship and belonging could inform larger policy frameworks enabling social, economic, and political equity for historically marginalized groups.

Chapter 2: Comparative Analysis of Traditional Models of Disability[1]

This chapter reviews the medical/individual, social, and human rights models of disability as they are often constructed within traditional Disability Studies literature. My general critique of these models is that they address disability and impairment through a decontextualized lens. By treating disability "as a fixed ontological state (rather than a social relation)" (Gorman, 2013, para. 5), isolated from its multi-layered context of oppression, the analysis and prescriptive narrative around disability and impairment becomes one dictated by dominant discourses. As Gorman (2013) eloquently stated, "In part, this bifurcation echoes and reinforces a preoccupation in white-focused disability studies with proving that disabled people (read as white) are 'as oppressed as' racialized people, or colonized people (read as non-disabled)" (para. 5). However, in order to demonstrate the importance and urgency of employing a theoretical lens that takes into account the multi-layered contexts of oppression and their relation to disability, I felt it important to first provide a review of popular theoretical models within Disability Studies.

Individual Deficit/Medical Model of Disability

From the literature, the emergence of the individual deficit model, often dubbed the medical model, of disability emerged from the convergence of four distinct economic and sociological developments beginning in the 1700s. These include the near-global shift from feudalist to capitalist political economic models (Abberley, 1987; Finkelstein, 1980; Gleeson, 1999; Oliver, 1990); the advancement of biomedicine (Samson, 1999; Stiker, 1997; Szasz, 2010); the rise of the professional (Foucault, 1988; French & Swain, 2001; Goffman, 1961;

[1] Portions of this chapter were extracted from my comprehensive exam paper, entitled "Models of Disability and Education Policy," and published in *The intersection of disability, achievement, and equity: A system review of*

Parens, 2006; Starr, 1982); and the growing prevalence of sociological theories around social coherence and social structure (Somers, 2008; Thomas, 2007).

The advent of capitalism as a contributing factor to the individual model

Finkelstein (1980) was among the first theorists to connect the construction of disability and disablement to shifting modes of production (Parekh, 2012). Following the theoretical direction outlined by Finkelstein, Oliver (1990) reiterated the causal links between the development of capitalism and the increased focus on the individual and their ability to perform labour. Gleeson (1999) situated his conception of disability firmly within a historical-materialist perspective. From this framework, Gleeson contributed to the growing field of knowledge by incorporating a geographical lens into his interpretations of political economy influences on the construction of disability. The increasing competiveness of the market and the subsequent normalization of heightened standards of ability aligning with the demands of material production were exclusionary to people with impairments and led to economic and social disablement (Oliver, 1990). Unable to compete in an inaccessible labour market, people with impairments became controlled and oppressed through their own exclusion (Oliver, 1990). Both Oliver (1990) and Gleeson (1997) interpreted exclusion from the market and from other social spheres not only as oppression, but as the true nature of disability. “From this disability is defined as a *social oppression* which any society *might* produce in its transformation of first nature—the bodies and materials received from previous social formations” (Gleeson, 1997, p. 193, original emphasis). Through these processes of exclusion, intense focus was then placed on the body as a suspected source of deviance and as a barrier to normative economic and social participation (Oliver, 1990).

Advances in biomedicine

Inspired by the philosophical revelations of the Enlightenment and closely aligning with the shift towards industrialization, new scientific conceptions of the body were established (Samson, 1999). The ability to systematically locate disease and dysfunction within the body or mind satisfied the new philosophical direction that aligned with the rational objectification of the natural world. This shift towards the scientific distinguished new forms of knowledge from earlier superstitious and mythical rationalizations of the Middle Ages (Samson, 1999). The aim of biomedicine was to advance new ways of identifying illness and injury while developing interventions and remedies for sickness and impairment (Samson, 1999). However, throughout this idyllic pursuit of optimal well-being, new normative standards of health and functionality were established.

Measures and assessments intended to identify deviance and deficiencies of the body expanded beyond the body to incorporate evaluations of intellectual and psychological functioning (Gould, 1996; Szasz, 2010). Citizens soon experienced Foucault's (1988) critical "gaze" throughout their involvement with various public institutions including health, social services, housing, education, and armed forces, establishing the medical expert as gatekeeper for access to available resources (French & Swain, 2001; Gould, 1996). As Foucault (1988, 1995) explored throughout his texts on madness and discipline, it was the scientific approach and objectification of the physical and conscious being that has enabled the body to become a site for control.

The rise of the professional

The sustainability of a capitalist society rested on the productive capabilities of its members and the reduction of state-funded supports. In many countries, Poor Laws were established to provide relief to citizens unable to find work (Braddock & Parish, 2001).

Restrictions to state-funded care and support created tiered systems of funding and led to increased institutionalization and means-testing in search of objective evidence of eligibility (Gleeson, 1999; Foucault, 1988). Coupled with the increasing precision and complexity around organic systems of the human body, as well as the growing need of the state to selectively distribute care, the role of determining who was capable of labour and who was eligible for support was often assigned to the medical practitioner (Starr, 1982). "The new diagnostic technologies also figured in the expanding role of physicians as gatekeepers to positions and benefits in the society" (Starr, 1982, p. 137). Once recognized as holding expertise on identifying deviance and procuring interventions, the medical field expanded its sovereignty beyond the body to also medicalize cognition and intellect (Gould, 1996) as well as the emotional and psychic being (Szasz, 2010).

Theories of social cohesion and social structure

Increasing industrialization and advances in capitalism provided the foundation for the development of structural-functional theories of society, highlighting the roles and interrelationships of various social groups (Thomas, 2007; Bourgeault, 2006). According to Thomas's (2007) interpretation of Parsons's social theory, only healthy and "normal" people could participate in sustaining "the economy, family life and other core fibers of the social organism. . . . [Therefore] Illness, especially mental illness, represents social deviance because ill people opt out of their productive and contributory social roles; their incapacity undermines the social structure" (p. 17). It is precisely the individual role defined by new modes of labour that placed people with impairments at a disadvantage. To maintain a functioning capitalist society, the expectation was that individuals will participate fully in the economy. In essence, reasons for non-participation, based on the perceived severity of impairment and subsequent incapacity,

were deflected away from capitalist modes of production and were located within the individual (Barnes, Mercer, & Shakespeare, 1999, p. 21). Despite the establishment of impairment and perceived incapacity through economic and social structures, the medical/individual model of disability continues to problematize the individual and embraces therapeutic practices and rehabilitation as a solution to address social and economic exclusion.

Within the medical model of disability, perceived impairment is addressed through "curative and rehabilitative" practices (Barnes et al., 1999, p. 21), overseen by professionals with the goal of social re-engagement. An example of this would be children who are placed in segregated classrooms due to the perception of a behaviour disorder addressed through rehabilitation approaches. The intense focus on rehabilitation as the sole pathway to social inclusion and participation reinforces the position of "health practitioners, psychologists, and educationalists" (Barnes et al., 1999, p. 21) not only as experts in curing the "faulty" body or mind, but as those responsible for securing the cohesiveness of society as a whole. Despite theoretical advances in deconstructing disability, the medical/individual model of disability, which supports the problematizing of individuals' physical, emotional, and intellectual beings, continues to be globally accepted today (Barnes & Sheldon, 2010).

Emergence of the Social Model of Disability

In the 1970s, disability discourse took a significant turn. Groups such as the Union of the Physically Impaired Against Segregation (UPIAS) began discussing disability as socially produced (Oliver, 1990; Barnes et al., 1999). The re-direction of impairment from the body/individual to social structures and organizations led several scholars to review the historical conflation between impairment and disability. According to Tremain (2006), "the term 'impairment' is generally taken to refer to an objective, transhistorical, and transcultural entity of

which modern bio-medicine has acquired knowledge and understanding and which it can accurately represent" (p. 185). Disability, in contrast, is defined by disability scholars and activists as "the disadvantage or restriction of activity caused by a contemporary social organization which takes no or little account of people who have physical impairments and thus excludes them from participation in the mainstream of social activities" (UPIAS, 1976, pp. 3-4, as cited in Barnes, Mercer, & Shakespeare, 1999, p. 28). As Shakespeare (2006) wrote, "Impairment is distinguished from disability. The former is individual and private, the latter is structural and public" (p. 198). It was the creation of the impairment/disability dichotomy that founded the social model of disability.

The social model works to shift the focus away from the body and onto the social structures and policies that "disable" people perceived as impaired. For example, instead of focusing on a person's inability to walk, the inaccessible stairs should be the focal point of change. If a child is not achieving in school, attention should be paid to the pedagogical approach of the teacher and the accessibility of the classroom environment and curriculum, as opposed to the child's intellectual functioning. Critical disability studies and the social model aim to examine and identify "the extent of social exclusion and disadvantages facing disabled people, and across different social contexts, as well as the impact of shifts in disability policy towards social barriers" (Barnes & Mercer, 2010, p. 33). Those who subscribe to and use the social model to address systemic exclusion understand the ties between the social theory of disability and political action; "They call for openly partisan and politically committed research that promotes citizenship rights, equal opportunities, and inclusion" (Barnes & Mercer, 2010, p. 33).

In his article entitled "The social model of disability," Shakespeare (2006) outlined three dichotomies that defined the social model. The first dichotomy, as mentioned, stated that

"impairment is distinguished from disability" (Shakespeare, 2006, p. 198). The second dichotomy was that "the social model is distinguished from the medical or individual model" (Shakespeare, 2006, p. 198). The social model identified sources of disablement within society and supports initiatives such as "barrier removal, anti-discrimination legislation, independent living and other responses to social oppression" (Shakespeare, 2006, p. 199). The third dichotomy was that "disabled people are distinguished from non-disabled people" as an oppressed group deserving of specific civil rights to ensure equity (Shakespeare, 2006, p. 199). According to the social model, individuals were disabled by social and public institutions that fail to account for human variance (Barnes & Mercer, 2010). Since its inception, the social model was used to assess and target barriers and exclusion within many social structures such as inaccessible employment, education, social services, transportation, built environments, political participation, and housing (Barnes & Mercer, 2010).

Although many activists and scholars embraced the social re-conception of disability, viewing its focus on social and systemic barriers as pivotal in advancing change (Oliver, 1990; Barnes & Mercer, 2010), the social model also drew heavy criticism. Shakespeare and Watson (2002) and Shakespeare (2006) argued that the social model has been politically, instrumentally, and psychologically effective in advancing social change; however, Shakespeare (2006), along with other scholars, such as Shildrick (2010), felt that the reality of impairment is overlooked and nullified through the extreme dissociation from the medical/individual perspective of disability. Shakespeare (2006) also critiqued the lack of opportunity to examine the intersection between the lived experience of impairment or chronic illness and social oppression and marginalization. He suggested that this lack of focus on impairment may wrongfully lead researchers to assume that all lived experiences of depression or anger stem from incidences of

social exclusion and ableism, when it could be related more closely to experiences of pain or physical discomfort (Shakespeare, 2006). It could be argued that there is truth embedded within both perspectives, lending further support to the development of a more nuanced and reflexive approach to impairment and disability.

Thomas (2007) cited Paul Hunt, Vic Finkelstein, and Michael Oliver as champions of breaking "the causal link between impairment and disability" (p. 121), selecting to address the social oppression and marginalization of people with impairments over the quality of life impacted by the experience of living with impairment. Thomas cited three reasons that the focus on impairment was pushed to the peripheries of Disability Studies, which could also be extrapolated to include the social model of disability:

> First, it was thought diversionary to dwell on impairment; second, illness and impairment were believed to be poor foci for political organization and campaigning—better to transcend impairment differences so as to make common cause against disablism; and third, illness, impairment, and their emotional sequelae were deemed by leading male materialists to belong to the "personal and private" domain. (Thomas, 2007, p. 122)

Thomas (2007) noted her allies in the materialist camp, Abberley and Gleeson, who, like herself, were attempting to situate the body back into the social theorization of disability without being "overshadowed by more vigorous poststructuralist and phenomenological endeavours" (p. 122), as evidenced in the work of Shildrick (2010). Gleeson (1997, 1999), drawing from Marx's theories of political economy and nature (first and second) as well as from Foucault's (1995) theories of bio-power and the body, correlated the evolution of industrial labour and material structures to the specific exclusion of particular impairments.

This is not to say that the materialist position ignores the real limits which nature, through

> impairment, places upon individuals. Rather, materialists seek to separate, both ontologically and politically, the oppressive social experience of disability from the unique functional limitations (and *capacities)* which impairment can pose for individuals. Impairment is a form of first nature which certainly embodies a given set of limitations and abilities which then places real and ineluctable conditions on the social capacities of certain individuals. However, the social capacities of impaired people can never be defined as a set of knowable and historically fixed "functional limitations." The capacities of impaired people are conditioned both culturally and historically and must therefore be defined through concrete spatiotemporal analyses. (Gleeson, 1997, p. 194)

Here, Gleeson (1997) attempted to include the body within a materialist framework. In his later work, Gleeson (1999) furthered the advancement of capitalism as largely responsible for the construction of impairment, since its function was largely based upon whose capacities were employable and apt for the sale of labour.

Shakespeare (2006) also saw the social model as too tautological, meaning that it already assumed what it set out to verify. The assumption that impairment must always be met with oppression has been challenged, much like whether being a woman always results in disadvantage based upon biased notions of gender. Finally, Shakespeare concluded his critique with the futility of striving for a "barrier-free utopia" (p. 201), particularly as it primarily focuses on accommodations and modifications addressing physical and sensory impairments over intellectual and emotional differences. Despite legislative establishment of accessibility mandates, such as the Accessibility for Ontarians with Disabilities Act (AODA, 2005), Shakespeare believed that a world fully structured upon the tenets of universal design (as cited in United Nations, 2006) was an impossibility.

Of little surprise, Shakespeare and Watson (2002) and Shakespeare (2006) critiqued the social model as being little more than a tool in furthering their research and theorization of disability and impairment. As a rebuttal, Barnes and Mercer (2010) positioned Shakespeare's critique of the social model as a "post-structuralist assault on the social model of disability" (p. 93). They charged Shakespeare with aligning his theoretical perspectives in support of the World Health Organization's ICF (International Classification of Functioning, Disability, and Health) approach to disability as well as with other relational constructions of disability (Barnes & Mercer, 2010). Barnes and Mercer warned that the pursuit of a more relational construct of disability runs dangerously parallel to the original perspectives established within the much-abhorred medical model.

Interestingly, the call for greater theoretical perspectives that embrace embodiment and impairment within the social model of disability may be over-reaching the original aim of the model itself. Oliver (1990) insisted that the social model was constructed as a tool to enable and mobilize social change. Shakespeare, Thomas, Oliver, Barnes, and Mercer would all agree that the sociological theorization of disability is important; however, the original design of the social model of disability was not intended to be conflated with, to be interpreted as, or to take the place of a solid theoretical framework.

Human Rights Model of Disability

The human rights model of disability could be interpreted as a progression of the social model emphasizing the importance of the "social determinants of disability" (Rioux & Valentine, 2006) and upholding rights as an evaluative mechanism of equity. The human rights approach to disability addressed the marginalization of people with disabilities through "the reformulation of social and political policy . . . recognizing the condition of disability as inherent to society"

(Rioux & Valentine, 2006, p.116). Within this construct, barriers to inclusion and equal economic, political, and social outcomes were addressed through the establishment and enactment of laws and policies (Rioux & Valentine, 2006). Formalized obligations to provide supports and accommodations were what made the human rights model distinct from the social model of disability. Rioux and Valentine (2006) wrote that "the human rights approach to disability is that it is a consequence of how society is organized and the relationship of the individual to society at large" (p. 120). Equality of outcome and well-being, supported by formalized obligatory and protection legislation, was the foundation of the rights approach to disability.

Seventeen years prior to the drafting of the United Nations Convention on the Rights for Persons with Disabilities (CRPD), Irving Zola (1989) called for a re-conceptualization of disability. Zola insisted that disability be positioned as a global human experience as opposed to a specialized group. Zola, and later Kayess (2008), interpreted a minority model of disability to be disadvantageous as it created tension over competing needs between both minority and majority groups. Situating disability within the social, political, economic, and attitudinal spheres, Zola concluded that a universal public policy could secure the rights and needs of people with disabilities. He stated, "Only when we acknowledge the near universality of disability and that all its dimensions (including the biomedical) are part of the social process by which the meanings of disability are negotiated will it be possible to fully appreciate how general public policy can affect this issue" (p. 420).

Rioux (2003) supported Zola's (1989) position on the benefits of an established public policy through the adoption of a human rights approach to disability. Through the adherence of human rights, governments could create legislation and entitlements that "aim to reduce civic

inequalities and address social and economic disadvantage" (Rioux, 2003, p. 295). However, a human rights approach to disability was only possible through the abandonment of the traditional biomedical or functional approach (Rioux, 2003). Both Rioux (2003) and Quinn and Degener (2002) suggested that although distributive mechanisms are important, ensuring access to political and social participation are also critically central to realizing greater equity. Rioux noted that principles addressing civil, political, economic, health, and social rights need consideration much like those outlined within the United Nations' Convention on the Rights of the Child. "The drafters of the Children's Convention were able to agree upon a text that treats the broad classification of rights as interdependent and morally equivalent" (Rioux, 2003, p. 313). Similar to Rioux, Quinn and Degener viewed the implementation of an international disability convention as not only an opportunity to create visibility for the disability community but also a way to facilitate the establishment of state obligations regarding provisions and accommodations.

Upon the establishment of the CRPD, new hope emerged (Kayess, 2008). The potential of advancing a model of disability that could now be justifiable according to international principles was heralded as a significant victory (Kayess, 2008). However, according to Kayess (2008) furthering social justice requires greater theoretical understanding of the complexity of disability, and may only be possible if the "CRPD interpretation and implementation efforts penetrate beyond populist social model ideas to a more sophisticated understanding of impairment and disability in its social context" (p. 34).

Critiques of Current Disability Models

Despite the promise embedded within the human rights approach to disability, the present-day circumstances of many people with disabilities remain dire. Many critics outside Disability Studies have noted the alarming "parallel spread of neoliberalism and the discourse of

human rights" (Speed, 2007, p. 176; see also Evans, 2011) and question whether the foundation of the rights approach grew from the same individual ideology as capitalist and individualist models. Other scholars criticized the legitimacy of rights governed by international conventions due to the absence of obligatory measures (Nagengast & Turner, 1997), as protectionist-oriented (Nussbaum, 2003; Klein, 2007) as well as largely immune to challenge due to inaccessible processes (Engel & Munger, 2003).

According to Merry (2004), the modern conception of rights aimed to be more egalitarian than individualistic. The human rights system has been conceived recently as pluralistic, responsive, and flexible to shifting cultural narratives and to the increasing demands of globalization (Messer, 1997). Simply stated, the human rights framework offered the potential to negate deepening structural inequity. However, further debate has emerged regarding whether a normative rights framework can adequately incorporate diversity as well as cultural difference. Can a framework that uses rights take into account the complexities of myriad social relations and experiences of oppression?

Skeptics, however, remain uncomfortable with the seemingly positive correlation between the heightened attention to universal human rights and the expansion of globalized capitalist social relationships (Evans, 2011). How human rights are/were interpreted, formalized, and enforced have been particularly vulnerable to market influences. Through the process of adopting individualized and protection-oriented rights, as well as through their application to corporate and market interests, social disadvantage and marginalization have increased. Critics of human rights doctrine have suggested that formalized rights and market fundamentalism have become unlikely bedfellows and that the dominant and often utopic narrative associated with rights philosophy can unwittingly serve to undermine actual atrocities being inflicted on citizens

through obligation-free, protectionist principles. Nussbaum (2003) identified the "negative liberty" aspect of rights discourse, which guarantees freedom from state intervention or criminal action as being intrinsic to neoliberal ideology. Both she and Klein (2007) critiqued the immunity enjoyed by markets and corporations for their part in widespread rights violations.

The development of international conventions addressing disability has been heralded as a monumental victory for the disability movement and its allies. However, despite the near global acknowledgement of the CRPD, through signatories and ratifications, people with disabilities still experience tremendous barriers in bringing forward formal rights challenges (Engel & Munger, 2003) and are far more likely to live in circumstances that present a perpetual breach of rights (Barnes & Sheldon, 2010), such as increased poverty, decreased security, greater degrees of hunger and material deprivation, and unemployment. The inequitable experiences faced by many people with disabilities have raised a call for greater attention to variables that prevent the realization of rights.

These are a few reasons why the engagement with the study of disability determinately requires a framework that encompasses the intricate and relational experiences of people with disabilities. The perception of disability and impairment is greatly influenced by the social location and identities of the individuals affected. In addition, the perceived presence and identification of disability can also be constructed largely through established institutional norms based on historical concepts of dominance. To provide a richer example of the historical entrenchment of inter-relational experiences of disability, class, race, and gender, I have included a primary research case study exploring these themes through institutional records of a late-Victorian industrial school in Ontario.

Chapter 3: Victoria Industrial School Study[2]

Throughout history, shifting ideologies encompassing religion, politics, employment, ability, and identity have organized society into groups of privilege and disadvantage. Generally, social tenets were constructed by the privileged and powerful few, structured to reinforce their selective values and attributes. To reify their dominance, the ruling class implemented mechanisms to further domesticate the disadvantaged. Fluctuating social expectations can be evidenced by the shared characteristics of citizens driven into the institutional system. When social hierarchy was structured by religion-infused, capitalist principles, those perceived as mad or immoral were sent to the asylum (Foucault, 1988; Ripa, 1990). When powerful figures were accused of political heresy, they were sent to prison. When modes of production shifted towards educated and skilled labour, the potentially employable were sent to the workhouse, the perceived unemployable to the poorhouse (Gleeson, 1999).

Due to established social and political mechanisms, incarcerations were generally legally justified. In late-Victorian Ontario, a new form of social selection designed to strengthen class hierarchy was gaining momentum. The eugenics movement established that poverty, petty and extreme defiance, and disability could all be linked to a defective biology. Therefore, segregation of the perceived afflicted was justified for the betterment of society. Specialized programming and institutions targeting the extinction of undesirable traits and behaviours flourished across Ontario.

[2] Research and excerpts from this section were prepared and submitted to Prof. John Radford as part of a final course paper in 2010. As it remains unpublished, it has been reprinted here with Dr. Killoran's permission.

Cultural and Social Climate of Late-Victorian Ontario

The cultural and social climate of late-Victorian Ontario reflected the discursive relationships between constructions of and stratification related to gender, faith, class, and race. Due to legislative amendments, the chronically poor were often housed within workhouses or in rural areas where their interference in urban progress was minimal. The United Kingdom's Poor Law Amendment Act of 1834 played a substantial role in the fostering of institutional systems as social solutions to such public ills as poverty and disability (Oliver, 1990). The Poor Laws were highly influential in reinforcing employment and labour as normative social measures (Oliver, 1990). They also established the criteria for who among the poor was deserving of specialized care. Any allocation of specialized programs or services was largely dependent upon the ability or inability to secure employment (Oliver, 1990). Oliver (1990) suggests that the New Poor Laws of 1834 were instrumental in the creation of specialized institutions tailored to treat children, the elderly, and people with disabilities.

As many scholars of institutional history have observed, the late Victorian period demonstrated an entrenchment of Judeo-Christian morality embedded within legally enforced civil legislation (Foucault, 1988; Ripa, 1990). Drawing from Foucault's historical analysis of the relationship between church and state in France, it was believed conversion to Catholicism could be indicative of institutional and criminal correction (Foucault, 1995. Mirroring these established normative, albeit largely Protestant, values and entitlements of the late-Victorian elite class in Ontario, wealth, whiteness, and an industrial work ethic were established as key to the development of the capitalistic structure of production. Within this context, the concern regarding defiant male youth was constructed alongside the normative behaviour expectations of the working-class male. Using intrinsic Christian-based morality as support, social welfare

programs swept across Ontario, targeting the reform of working-class deviance (Hogeveen, 2005). Programs supporting reform and eugenics worked to restructure societal conditions to look favourably upon the burgeoning era of industrialization and the accumulation of wealth. Along with economic and political persecution, these programs also necessitated the segregation of specific groups who threatened the meritocratic values of the elite and endangered their holistic approach to social reform.

Although the ideal male identity included wealth and self-determination, allowances for working-class men were made so long as they abided by established social expectations governing behaviour and attitude (Hogeveen, 2005). Hogeveen (2005) outlined what were the acceptable characteristics of a working-class male: "respectable working-class males were industrious, took their role as breadwinners seriously, ensured their children attended school, and followed a sober, law-abiding course of life" (para 10). In contrast, "dangerous" working-class males "lived in abject poverty as a result of their disconnection from the labour market. They dodged domestic obligations, were habitually criminal, fond of alcohol, and flouted what elites considered decent and honest conduct" (Hoegeveen, 2005, para 10).

Institutional History of Education and Disability

Education and disability share a tangled history. Parallel to the rise of the professional in combination with advancements in biomedicine that re-conceptualized the body as a machine, the initial approach to disability in education was steeped within a biomedical or individual deficit framework. According to Braddock and Parish's (2001) account of institutional history, at the time of burgeoning industrialization and philosophical development during the Enlightenment, students once perceived as "uneducable" were brought into the education system. In the 1700s, residential schools for students with blindness and deafness began to appear.

Braddock and Parish noted that schools for students who were deaf and blind proliferated at a comparable speed to the establishment of institutions addressing intellectual disability and psychiatric disorders. As the institutional systems were structured, therapeutic and rehabilitative approaches to disability and education were quickly being developed (Braddock & Parish, 2001). The first congregated school for the deaf established in North America was in Connecticut, in 1817 (Braddock & Parish, 2001). By the mid-1800s, institutions for people with intellectual disabilities were flourishing. Training programs were demonstrating to be successful and "many of the children with intellectual disabilities were returned to their communities as 'productive workers'" (Braddock & Parish, 2001, p. 36). However, as jobs became scarce and eugenic ideology grew, institutions no longer prioritized the goal of social re-integration, but rather focused on developing residents' skills to participate within the institution's own economy (Braddock & Parish, 2001).

History of Education and Disability in Ontario: The Medicalization of Students

In the early 1900s, the shift from re-integration to lifelong segregation was championed across Ontario by Dr. Helen MacMurchy. MacMurchy insisted that the establishment of farm colonies, exemplified in the United States, was the most "progressive" solution for people with intellectual disabilities (Radford & Park, 1993). MacMurchy—as an "Inspector of the Feebleminded"—campaigned for genetic cleansing across Ontario and Canada (McLaren, 1990). She recommended that the Binet intelligence test be employed throughout the province in order to accurately identify and classify people according to intellectual capabilities (Radford & Park, 1993). Although the Binet test was not officially used in Ontario until 1916, MacMurchy successfully lobbied to have it implemented earlier within segregated institutions, such as the Orillia Asylum (Radford & Park, 1993).

Reform schools were another site where MacMurchy pushed forward her eugenics agenda in an attempt to correlate criminality with defective biology (Hogeveen, 2003). Attempting to link genetics with deviant behaviour, MacMurchy lobbied for students to undergo further scientific assessment to determine the presence of any degree of perceived intellectual impairment. Once identified, MacMurchy pushed for their permanent segregation from mainstream society (Hogeveen, 2003). Drawn from primary research into student records from the Victoria Industrial School (now the Mimico Correctional Facility), I found that psychometric test scores were added to student intake records around 1926. Despite the inclusion of test scores in 1926, it was noted that descriptives around intelligence made a dramatic shift, donning new scientific terminology, after 1919. The shift in terminology suggested that even though intelligence quotient (IQ) testing may not have been formally administered, the use of intelligence classification was already being implemented.

Early identification of "feeblemindedness" was critically important to MacMurchy. In Toronto, formal intelligence testing began in the 1920s and children suspected of potential intellectual impairment were given specialized education instruction (Radford & Park, 1993). Students perceived as being unable to respond to instruction were sent to an institution, namely the Orillia Asylum (Radford & Park, 1993). "It was the Toronto Board of Education which responded earliest and most enthusiastically to this initiative, by founding auxiliary classes in 1911, when MacMurchy reported 'some forty children in four classes held in four different schools'" (Radford & Park, 1993, p. 385). Thus Toronto not only possessed a large metropolitan environment in which intellectual faculties were constantly challenged, but also an education system equipped with new "scientific" methods of detection" (Radford & Park, 1993, p. 385).

History of Biological Determinism, Race, Class, and Social Outcomes

The eugenics movement conflated the presence of difference with impairment and deviance to perpetuate the exclusion and marginalization of ethno-racial minority groups. Despite the movement's use of fraudulent assessments, it is important to review the cultural context within which these pseudo-scientific measures of cognitive ability and intelligence were developed. "In assessing the impact of science upon 18th- and 19th-century views of race, we must first recognize the cultural milieu of a society whose leaders and intellectuals did not doubt the propriety of racial ranking—with Indians below whites, and blacks below everybody else" (Gould, 1996, 63). In this vein, the biological determinism evidenced throughout the 18th and 19th centuries is what supported social atrocities such as the practices of slavery and eugenics (Gould, 1996).

Introduction of the IQ Test

Alfred Binet dedicated much of his career to the exploration of "intelligence" (Gould, 1996). Binet created an easily replicable scale measuring aspects of cognition for the purpose of "identifying those children whose lack of success in normal classrooms suggested the need for some form of special education" (Gould, 1996, p. 179). Binet had established an age-based scale of achievement, now recognized as the first iteration of an IQ test. Binet's measure of intelligence was quickly adopted and widely used within various institutions, including schools and the military, to determine levels of normative intelligence across populations. Binet had cautioned against using the IQ test beyond its original purpose and articulated that intelligence could not be captured by a single measure or number (Gould, 1996). Fearful his test was to be used to label and exclude certain populations from valuable education opportunities, Binet insisted that three principles should guide the implementation of the IQ test.

1. The scores are a practical device; they do not buttress any theory of intellect. They do not define anything innate or permanent. We may not designate what they measure as "intelligence" or any other reified entity.
2. The scale is a rough, empirical guide for identifying mildly retarded and learning-disabled children who need special help. It is not a device for ranking normal children.
3. Whatever the cause of difficulty in children identified for help, emphasis shall be placed upon improvement through special training. Low scores shall not be used to mark children as innately incapable. (Gould, 1996, p. 185)

Not only were Binet's cautions unheeded by educators and policy makers, but the measure of IQ continues to be at the foreground of diagnoses of intellectual, learning, and cognitive impairments (e.g., TDSB, Special Education & Section Programs, 2013). In the early 20th century, hereditarianism and eugenic ideology were prominent in Western society (Gould, 1996). The early work of Lewis Terman, an American scholar of that time, was used to advance the claim that race and class were also hereditarily linked to IQ (Gould, 1996). Although poorly supported through his own studies, Terman transferred his findings of individuals to the study of social classes and races (Gould, 1996). In 1916, Terman wrote,

> Among laboring men and servant girls there are thousands like them. . . . The tests have told the truth. These boys are ineducable beyond the merest rudiments of training. No amount of school instruction will ever make them intelligent voters or capable citizens. . . . They represent the level of intelligence which is very, very common among Spanish-Indian and Mexican families of the Southwest and also among [N]egroes. Their dullness seems to be racial, or at least inherent in the family stocks from which they came. The

> fact that one meets this type with such extraordinary frequency among Indians, Mexicans, and Negroes suggests quite forcibly that the whole question of racial differences in mental traits will have to be taken up anew and by experimental methods. The writer predicts that when this is done there will be discovered enormously significant racial differences in general intelligence, differences which cannot be wiped out by any scheme of mental culture. Children of this group should be segregated in special classes and be given instruction which is concrete and practical. They cannot master abstractions, but they can often be made efficient workers, able to look out for themselves. There is no possibility at present of convincing society that they should not be allowed to reproduce, although from a eugenic point of view they constitute a grave problem because of their unusually prolific breeding" (Terman, 1916, pp. 91–91)

As shocking as this passage reads, echoes of Terman's ideology are still evident in the education programming, opportunities, and outcomes for students perceived to have an intellectual impairment as well as for students identified as Black. Despite the historical American context, Terman's suggestion that Black students be segregated into special classes and denied rigorous academic programming, and instead be prepared for the direct labour force, reflects the current realities of the over-representation of Black youth in Essentials (basic/life skills curriculum) or special education programming across the TDSB.

Primary Research Case Study: Historical Analysis of Educational Strategies and Exclusion

This research study explored whether or not the rise of the eugenics movement in late-Victorian Ontario influenced policies and practices at the Victoria Industrial School (VIS). At its core, the case study of the VIS investigated the intersection of identities and structural influences that led to the mass incarceration and social exclusion of young boys. Archival documents,

acquired through a Freedom of Information request, were reviewed, including over 1,200 intake and case files from VIS case books. The school's Register of Offences and Punishments as well as the 1921 investigative Royal Commission Report were reviewed in depth. This study explored the modifications of intake information requests as well as the evolution of language used to describe students' perceived ability and value to industrial society. All primary research material was reviewed at the Archives of Ontario.

History of the Victoria Industrial School

The VIS opened in 1887. The industrial school provided education and housing for perceived delinquent or abandoned children. Placement was determined judicially, by the school board's truancy department or by Children's Aid. The most frequent convictions were for incorrigibility, larceny, burglary, vagrancy, and assault (Hogeveen, 2009).

Young boys between nine and 16 years of age were committed to the VIS. Voluntary committal to the school also occurred. Parents disturbed by their son's behaviour could petition for placement within the school, as exemplified by the case of Harry Rhodehouse (VIS, 1887–1929). Harry was brought to the school at the age of 14. His case file reveals his parents' aspirations for treatment. Harry was "sent here by his father for a brief period—Boy is not overly bright—He had formed the habit of leaving home and fears are entertained by his parents that he will lose his mind" (VIS, 1887–1929). Following the completion of their terms, the boys were paroled into the community. Attempts were made to place recent graduates within families who would be responsible for their well-being. Employment opportunities were also arranged (VIS, 1887–1929). Interestingly, the urban employment sector was booming in the city of Toronto; however, the trades taught within the school continued to focus on rural and farm skills

(Hogeveen, 2004). Not only did this ensure that the boys were economically segregated but that they were removed from the perceived moral temptations of the city.

Although the criteria for entry into the VIS were generally adjudication-related, the demographics of VIS students were starkly similar. Students (inmates) were largely boys from poor or low-wage-employed families, boys who were often themselves employed in precarious labour. Many boys attending the VIS were found poor, abandoned, and living on the streets. Although a formal analysis of proportionate representation of race was not conducted, the incidence of racial identification was often included in student records, along with correlating remarks on students' intellectual, industrial, or moral capacities. "The most obvious conclusion is that boys incarcerated at the school grew up in families that struggled to maintain even a basic economic existence in the face of uncertain financial times, war, and family instability" (Hogeveen, 2009). The boys' fathers often worked as labourers or farmhands. Often, one parent was either deceased or had disappeared; in some cases, the location of either parent was unknown (VIS, 1887–1929). Many of the students were employed prior to their arrival at the school (VIS, 1887–1929). According to Hogeveen (2009), 43% of boys were gainfully employed at the time of their committal. Many worked as messengers, couriers, newsboys, and farmhands (VIS, 1887–1929).

Further case studies highlighted extensive social barriers challenging identified young offenders. For example, William Johnston was committed to the VIS at the age of 11 years. His parents' status was recorded as "deserted." No offence was listed (VIS, 1887–1929). Percy Richardson was committed to the school at the age of 13 years. His father worked as a bricklayer and his mother was listed as dead. They had no known address. No offence was listed (VIS, 1887–1929). William J. Avery was committed to the school at the age of nine. He was charged

with committing truancy (i.e., missing school) and was sentenced to stay at the VIS until the age of 14 years (VIS, 1887–1929). The reviewed case books demonstrated the prevalence and depth of poverty and disadvantage that shaped the lives of VIS residents.

Violence at the Victoria Industrial School

The marketed objective of the VIS was to "recreate wayward youth into men who found employment in the country, attended church, and resisted temptations, as well as respecting and obeying their parents . . . to create boys in the image of image of a 19th-century masculine ideal" (Hogeveen, 2004, p. 208). However, the means by which these objectives were pursued involved intensive religious instruction and militaristic adherence to rules (Hogeveen, 2004). Review of the VIS Register of Offences and Punishments indicated that consequences for disobedience were swift and brutal (VIS, 1894–1902). Seemingly trivial misdeeds led to corporal punishment. Offences punishable by whipping included talking in line, general laziness, swearing, general bad behaviour, talking in school, plotting to run away, impertinence, being very troublesome, deceit, and falsehood (VIS, 1894–1902).

Accounts of brutality had surfaced throughout the school's history. Three separate occasions drew mass public attention and speculation as to the success of reformation through such draconian means. Over the period from 1887 to 1893, Mrs. Warburton, a teacher employed at the school, publicly accused the superintendent, Donald McKinnon, of sanctioning and subjecting students (inmates) to unwarranted and injurious modes of punishment (Hogeveen, 2009). In 1912, a Mrs. Spain arrived at the VIS to see her son, who had just escaped and been returned. She found him beaten and shackled to a bed where he had been held for over a month. Mrs. Spain's son had been starved and his body was covered in festering welts. Furious, Mrs. Spain immediately contacted the *Toronto Daily Star*, and public suspicion was raised once again.

In 1926, a student died under suspicious circumstances and a public trial ensued; following the student's death, staff began to come forward divulging accounts of students beaten for hours or until staff grew weak from exhaustion (Hogeveen, 2009). Stories of students forced to walk on all fours, starved, locked in isolation, and beaten mercilessly began to disturb even the most ardent of reformers (Hogeveen, 2009). Uncomfortable with the growing accounts of abuse, in 1921 the Royal Commission of Ontario was asked to investigate. It found the school in ruins and recommended it be put up for sale. Regardless of the unfavourable findings, the institution remained open until 1935.

Evolution of intake requests for information

In order to explore a shift in school policy congruent with the eugenics ideology, the changes to intake forms, student records (requests for student information), and templates were analyzed. Over the duration of the school's existence, the information required for intake files broadened to include a number of various student assessments. Samuel Bertram Johnson was the first student committed to the school, on June 14, 1887 (VIS, 1887–1929). He was 11 years old, fair with black hair and blue eyes. He worked as a message boy. His father was listed as away and his mother sewed and waitressed to make a living. Samuel was released almost four years later. After a short stint on a farm, Samuel worked on the street as a newsboy (most likely in Toronto). Shortly thereafter, he left for the United States and joined the American army. The case file speculated on the future of young Samuel's life: "Mrs. Boultbee who placed him in the School has good hopes that after he has had a taste of the roving life which he inherits from his father he will settle down and thanks the School for rescuing him from a criminal life. My [illegible] hope for this boy is that he will be honest and respectable. I don't think him capable of becoming a really industrious and energetic man" (VIS, 1887–1929). This projection

demonstrates a burgeoning conceptualization of the intersectionality of morality and heredity. It also reveals the ideals of the masculine construction—industrious and energetic—which Samuel, with his perceived class-based, inherited immorality, would surely fail to meet.

On the day of the school's opening, the intake file requested only the following information: date, file number, name, age, residence, size, complexion, eyes, occupation, birthplace, name of parent(s), residence, occupation, religion, nationality, and remarks. Roughly around 1894, administrators began to include more: by whom the student was committed, when their term would expire, and who was to be charged (generally a municipality) (VIS, 1887–1929). Around February 24, 1896, the intake form included a typed request for information regarding by whom the student was committed and who was to be charged (VIS, 1887–1929).

Case file no. 583, dated September 13, 1898, was the first to include a handwritten education assessment. According to the file, student Albert Corbett was assessed as "read[ing] well in Second book—rather slow in arith, can multiply by 3" (VIS, 1887–1929). This brief education report suggests that either prior to or at the time of intake, students committed to the school underwent some form of academic testing. Although academic ability was one of the newly pertinent pieces of information being added to case files, insinuations of racial bias and opinions regarding morality were also recorded. Case file no. 600 belonged to Henry Reid, an Irish boy, charged with incorrigibility. Henry's ability to read and write was recorded, as was judgment regarding his father's personal conduct: "Education—reads in the third book rather indifferently. Has not been in school for 3 years. Arithmetic poor also spelling—very backward. . . . Father drinks occasionally but not in excess" (VIS, 1887–1929). The inclusion of Henry's father's drinking habits demonstrated a possible bias towards the Irish.

The year 1910, arguably the height of the eugenics movement in Ontario, saw a dramatic shift in requested intake information (VIS, 1887-1929). Further detail regarding commitment, term, charges, previous arrests, and parole information was included. Categories also covered personal antecedents such as what church the student may have attended, bad habits, employment history, and the degree to which their parents exhibited "intemperance" or had previous arrests. Education descriptions had become more elaborate. The most striking difference was the enhanced degree of personal information. Under the category of "personal description," the student's physical characteristics were recorded. If their race deviated from Caucasian, it was generally penned in alongside (e.g., "Indian," "Coloured"). However, in accordance with Dr. MacMurchy's goal to identify and segregate those perceived as being of "subnormal" intelligence (McLaren, 1990), the VIS now began requesting and recording both mental and physical assessments of incoming students (VIS, 1887–1929). The newly implemented request for both mental and physical evaluations strongly suggests a eugenics influence. Identifying and labeling students perceived as having a deficient intellect was a critical step in the process of incapacitating "those with defective minds" (Hogeveen, 2005). The intake record templates remained unchanged until 1929. Case books from 1929 to 1935 (when the institution was officially closed) were not available.

Language analysis

The second approach in determining whether a eugenics influence impacted policy and practice at the VIS was to examine language used to describe the results of "mental condition" assessments of incoming students. Shifts in language can often reflect popular trends in social movements. For the purpose of analyzing the evolution of language, the following case books were examined: Case Book No. 5 (August 4, 1910 – November 14, 1912), Case Book No. 9

(August 16, 1919 – January 23, 1923), Case Book No. 10 (January 31, 1923 – September 4, 1926), and Case Book No. 11 (August 30, 1926 – July 31, 1929). Each case book contained approximately 299 to 326 student intake/case files. For every student whose mental condition was listed as other than "normal," the descriptive term was recorded. An approximate percentage of students deemed to have a mental condition other than "normal" was tabulated. Although intake files were generally completed in full, there were a few omissions regarding the mental condition evaluations. Despite partial omissions, incomplete case files were still included within the final count.

Within the files of Case Book No. 5 (1910–1912), the following descriptors were applied to students whose mental condition was listed as other than "normal": "below average" (30% of evaluations other than "normal" used this term), "childish," "doubtful," "not very bright," "dull," "somewhat rather simple," "undeveloped," "simple minded," "slow," "bright but faulty," "very dense," "bright but undeveloped," "not very bright," "seemingly deficient," "fair but backward," "somewhat dull," "weak," "dense," "subnormal," "bright intellectually but easily led," and "normal but despondent" (VIS, 1887-1929). The terminology used between 1910 and 1912 to describe the mental conditions of students was largely descriptive and varied. Variance in terms demonstrated subjectivity dependent on the administrator processing the student intake at the time. Terminology appeared to be based on attitudinal assumptions relating to prevalent social descriptors and not medically based. For example, between 1910 and 1912, the term "subnormal"—a term that had often been associated with a more scientific classification of mental functioning—was cited only once.

Descriptors used seven years later demonstrated a marked difference. Compiling the terminology from Case Book Nos. 9, 10, and 11, spanning from 1919 to 1929 and including

close to 1,000 student files, a significant shift in the categorization of mental conditions and capacity was evident. Again, a number of descriptives were applied to students whose mental condition was listed as other than "normal"; of these, "subnormal" was the most common (88% of evaluations determined to be other than "normal" used this term). Others were "backward," "dull," "feebleminded," "high grade mental defective," "high grade moron," "low," "mental defective," "mental retardation," "normal but retarded," "not normal," "not very bright," "probably normal," "probably subnormal," "reported as backward," and "subnormal?" (VIS, 1887–1929). Clearly, a shift towards a biomedical basis of evaluation had taken place. A biomedical diagnosis generally indicates previous objective assessment; however, prior to 1926 there was no evidence of formal evaluation (specific cognitive testing) other than rudimentary reading and arithmetic achievement. Often students listed as having a "subnormal" mental condition demonstrated a proficiency in both reading and math. It appears that despite the shift in terminology to more formal and medicalized diagnoses, subjectivity remained unchanged.

In the earlier years, when a student was listed as having an "abnormal mental condition," a direct correlation between lack of or negligent schooling was often cited as the cause. However, this petered out as the direction towards biomedical dominance increased. It appears that formal testing began within the school around 1926. Some cases included a numeric value alongside the mental condition descriptor. Although it appears to be related to intelligence quotient testing (the term IQ had been included), it could not be determined which test was administered. Assumptions could be made that it was the Stanford-Binet Intelligence Test, due to the timing and popularity of that specific assessment. However, the numeric values do not seem consistent with standard IQ measurements (e.g., "I 2.80," "I 2.69," "IQ 97," "I 259") (VIS, 1887–1929). It appears as though caution from Binet himself was not heeded. "Not only did

Binet decline to label IQ as inborn intelligence; he also refused to regard it as a general device for ranking all pupils according to mental worth" (Gould, 1986, p. 182).

Conclusion

As evidenced through the archival research into the student records of the VIS, disability and the perceived presence of impairment cannot be extricated from the lived experience of poverty, social marginalization, racial bias, and constructed notions of gender roles and expectations. Held up against a backdrop of a burgeoning capitalist society, the VIS demonstrates the delineation between identities perceived as potential market contributors and burdens to the economy. A key theme emerging from the archival research on the VIS was that children and youth who do not embody normative identities are ultimately constructed as dangerous to the capitalist structure. In response, institutions insisted on their subjugation and forced docility through means of segregation, labeling as disabled, and by force. The late-Victorian institutional system, set in place to address the behaviour (and education) of youth, demonstrated the ultimate form of social exclusion and devaluation of social worth.

Chapter 4: Theoretical Framework—Citizenship and Belonging

In this chapter, I propose a theoretical framework for Disability Studies that builds upon aspects of established models, largely social and rights based models, while highlighting the crucial social relations involved in the identification and experience of disability. A thorough literature review spanning several fields of study revealed that aspects of transnational theories of citizenship addressed some of the currently identified gaps within Disability Studies. Encompassing a framework that highlights the relational experience of multi-identity factors was essential to better understanding the stratified marginalization of disability. In order to import these concepts into the field of Disability Studies, it was important to first distinguish some key concepts.

This chapter is organized as follows. While the experience of belonging is centralized as an indicator of the actualization of social citizenship and broader social, political, and economic equity, it is important to first frame the field from which notions of social citizenship have emerged. A discussion on belonging, particularly the implications of belonging for youth, is taken up, followed by an overview of the proposed experiential citizenship model. In conclusion, the chapter explores the ways in which the model of experiential citizenship addresses complex forms of oppression in relation to myriad identities.

Citizenship: Formal and Informal Citizenship

To begin the deconstruction of citizenship, it was critical to identify the distinctions between formal and social citizenship as well as the ways in which citizenship as a concept is currently being democratized. Legal or formal citizenship has often been discussed as a formal recognition that includes specified rights and reciprocated duties as well as forms of civic

participation. Membership generally included a formal, legal status held by the citizen within a specified, boundaried region. There were expectations that a formal citizen would participate in certain activities, such as voting and serving as a juror within the legal system. However, along with these duties, a formal citizen could expect access to certain rights, such as legal and educational rights. Formal citizenship also offered other protections, such as access to unemployment insurance or welfare programs (Janoski & Gran, 2002).

The difference between legal and substantive citizenship was often conceived as citizenship equality on paper versus citizenship equality in reality. The gap between the two has been widely critiqued (Marshall, 2009; Sen, 1995). Substantive citizenship often reflected national policy and practices on collective provisions and cultural rights; examples include access to healthcare and education systems, and opportunities to develop social capital (Brodie, 2008). However, it is within this sphere of substantive or social citizenship where "invisible" inequities flourish and where groups struggle to claim agency, autonomy, and recognition. As Arnold (2004), Somers (2008), and Yuval-Davis (2011) discussed, many people can share formal citizenship and still experience exclusion, oppression, and violence from which others are protected.

Positioned as a counter-movement to contest predatory capitalism and to reclaim rights, citizenship has become a central piece in a shift of the global order, as highlighted by the recent Arab Spring and Occupy movements. Citizenship has become a foundational element within current human rights discourse and is steadily evolving beyond its classical legalistic interpretations to include newer conceptions of identity, structural justice, and collective resistance. Once considered to be an exclusionary mechanism, stratifying citizens (those who share accepted normative civic identities) from anti-citizens (those whose excluded identities

deviate from the normative standard), new forms of inclusive citizenship that actively challenge systemic marginalization are emerging.

In Somers's critical book *Genealogies of citizenship* (2008), she stated that her definition of citizenship does not need to include civil or juridical rights, but it "does require . . . the foundational right to political and social membership as well as de jure and de facto inclusion and recognition" (p. 6). Somers claimed that it is the "primary right of inclusion and membership that makes possible the mutual acknowledgement of the other as a moral equal, and thus worthy of equal social and political recognition" (p. 6). In this vein, Somers positioned citizenship as the "right to have rights." A focus on citizenship, particularly social citizenship, can present new challenges, particularly when the realities of globalization and of emergent forms of multi-layered and transnational identities are demanding a reconfiguration of what it means to belong and to be included within the body politic.

The Role of Inclusive Citizenship in Engaging the Complexity of Disability amidst Intersecting Forms of Oppression

The potential for actualizing an inclusive citizenship has been battered by ongoing neoliberal policies. The group model upon which citizenship was founded has been eroded into an individualized scheme of gaining individual rights. The focus on individuality leaves people vulnerable to historical bias and exclusion. How disability is taken up in this context is critical. As seen in the traditional Disability Studies literature, disability is often discussed as discrete and isolated or devoid of its historical, colonial context. "Transnational theoretical approaches allow us to understand disability as an assemblage of racialized and gendered narratives, national and postcolonial politics, and global capitalism" (Gorman, 2013, para. 9). Somers (2008) wrote that market fundamentalism "has served to radically exacerbate the exclusions of race and class by

first de-legitimating affirmative action and then grafting the impersonal cruelties of a 'color-blind' market onto these pre-existing 'primordially' defined differences" (p. 5). The "defined differences" that Somers described have been determined through the historical entrenchment of normative and ultimately dominant characteristics.

Sukarieh and Tannock (2008) stated that the determining factor of civic recognition lies in whether individuals are perceived to participate "inside the market system" or "outside the market system." It appears that it is the individual who is perceived to be "outside the system" that is identified as deviant and subsequently problematized. Sukarieh and Tannock wrote, "Teams of psychologists, educators and social workers have, throughout the history of capitalism, taken what are actually conflicts across the divisional lines of class, race, and competing social and economic systems, and reframed them as individualized problems" (p. 304).

There are myriad reasons for being perceived as "outside the market system"—a perception influenced by class, race, gender, sexuality, and age. However, current neoliberal rhetoric discerns that failure to participate in the market is often due to individual deficits characterized by developmental or biological "insufficiencies." In her work on vulnerable youth, McLeod (2012) identified the individual deficit model as a danger to civic recognition. She cited the increasing utilization of "biological and developmental discourses of identity" to determine who is "capable of meeting the neo-liberal indicators of individual and community well-being" (p. 23). As Somers (2008) stated, the individual deficit model is designed to "reassign responsibility and blame for social problems from structural conditions to alleged defects of individual moral character, such as dependency, indolence, irresponsibility, lack of initiative, promiscuity, and parasitism on the body politic" (p. 3). This is a particularly dangerous discourse

for people with disabilities as it constructs disability as deviant and naturalizes its exclusion. It is against this encroaching individualism that recent movements towards claiming citizenship have been contested.

The principles of radical democratic citizenship are that political struggles are impermanent and fluid. Gaining recognition as a citizen is a continual struggle determined by evolving relationships of power, and the location of political struggle is within the space of subject formation (Rasmussen & Brown, 2002). As the concept of citizenship becomes further democratized, various groups have come forward to stake claims involving areas of citizenship reflective of specific identities. Sexual citizenship, youth citizenship and ecological citizenship are but a few examples.

The establishment of obligations is a key conceptual area in which rights and citizenship deviate. As mentioned before, human rights critics, although heralding its protective assurances, critique the absence of measures that instate obligations to provide protections and accommodations. Due to the relational and dialectical nature of citizenship, however, obligations on behalf of the state are an important aspect to its potential. Social welfare and redistributive programs are instrumental to the functioning of a capitalist system. Without services buffering the effects of inequity and subsequent poverty produced by the market, capitalism would collapse (Brodie, 2008). Janine Brodie (2008) identified citizenship as a singular mechanism in advancing social welfare and in establishing protections against the ravages of the market.

Somers (2008) spoke to the myriad forces exerted over the public sphere stemming from the market, the state, and civil society. The extent to which each sector extends power over the public sphere depends largely on political, economic, and social ideologies and established practices. Somers discussed a balanced market, state, and civil society as a key feature in

enabling a public sphere within which citizenship can be actualized. However, according to the interpretation of Somers's discussion on citizenship, growing market fundamentalism has skewed this triadic model so that the market sphere dominates not only the state but the public sphere, isolating and disempowering civil society.

Giroux (2009) and Somers (2008) identified the growing submersion of the state under the overextending reach of a predatory market. This envelopment of state and market has led to the contractualization of citizenship and an extreme reduction in our valuation of social security measures and protections. The isolation of civil society results from the increasing contractualization between state and market. With depleting resources and reduced influence, matters of justice, political action, equity, and community fall onto an increasingly distanced and resource-depleted civil sector.

Belonging

Experiencing lived or substantive citizenship can be thwarted by a number of identity-based factors. Encounters with racism, sexism, ableism, homophobia, and other forms of discrimination can greatly impede one's access to rights and protections. Each individual denial of participation, each exclusion from membership and belonging, can lead to a suppression of citizenship for certain groups and identities. Who is granted power and a political voice (i.e., who belongs) and whose power is taken away (i.e., who is excluded) depends on constructions of nationalism, identity, labour, and class. It also depends on how belonging is defined. Yuval-Davis (2011) wrote extensively on citizenship and belonging. She proposed that belonging is multi-faceted and dynamic, meaning that there are many ways to belong, and how we experience belonging changes and evolves over time through various experiences.

Yuval-Davis (2011) stated that there are three ways in which belonging is constructed:

1. The first construct focused on social location. This applied to people's self-identification as belonging to a certain group that shares a similar race, gender, sexuality, ability, or class. Although this might appear to be a social identity instead of a location, Yuval-Davis discussed that each social identity falls "along axes of power that are higher or lower than other such categories" (p.13).
2. The second construction identified the beliefs and stories people embodied that shaped how they identified and found attachment to collectivities (or groups). Individuals' social relations to others and multi-layered identities were shaped through many external influences. Constructs of nationalism, ethnicity, culture, and faith often informed individuals' perception as to who they are/were in relation to others.
3. The third construction addressed the determination of value (by the self or others) of the ethical and political principles upheld by a specific collectivity (or group) to which one was related.

Belonging and social citizenship in the context of youth

Relations between social constructions of identity are fluid and are continuously subject to change. The central focus of this thesis is the institution of education; therefore, I felt it important to consider how the identity of "youth" inter-relates and intersects with the aspects of belonging outlined by Yuval-Davis (2011). Often defined by age, the concept of "youth" may seem intuitive. However, the concept does not exist as a stable or fixed category. It is highly changeable, defined in large part by social, economic, and political forces.

For youth, Yuval-Davis's (2011) conceptions of social location and attachments, as well as ethical and political values, are particularly relevant. Canadian youth find it more and more

difficult to belong within the idealized consumer culture due to the lack of employment opportunities spurred by corporate ideologies such as "downsizing," "streamlining," "lean management," and other constructs of market efficiency. Privileged youth can sometimes use their networks and forms of nepotism to secure employment, but for youth whose families "fill the least desirable places in society" (Duncan-Andrade & Morrell, 2008, p. 3), namely, families experiencing poverty, structural violence, and marginalization, opportunities for social mobility are close to non-existent. Youth whose privilege has not afforded them a pathway through school or post-secondary education are often problematized, scrutinized, and susceptible to intensified surveillance (Giroux, 2013).

Due to overarching free-market values, social citizenship and membership within a community or social network is often determined based upon economic participation (Arnold, 2004). Unemployment, poverty, and dependency on social assistance can all function as causes for alienation. McLeod (2012) uses the concept of citizenship to demonstrate the disaffection of youth within a free-market society where economic dependence is perceived as a personal failing. She challenges the notion of youth as a non-citizen and conceptual outsider, critiquing the position that "the non-citizen is not the national outsider, but the stranger within, the incompetent, biologically and emotionally vulnerable individual" (p. 23).

Regardless of McLeod's (2012) warnings, youth are often perceived as the outsiders within Canadian society. If not seen as "self-managing, and achieving positive personal and social outcomes" (p. 23), youth are often cast into the categorical abyss of suspicion and disposability. Since the privilege attributed to the successful navigation of the education-workplace pathway is not equitably distributed across groups, certain youth are further disadvantaged. The trajectory of criminalization and segregation begins as early as youth's

interaction with public school. Data shows that Black male youth are overrepresented within the population identified as having a "behavioural" disorder and are the population most likely to be suspended from school (Brown & Parekh, 2010, 2013). As an institution primarily serving youth, perhaps it is youth's "non-citizen" status that explains why educational inequities continue to exist, often unchecked and unacknowledged.

Many of our institutions are set up to continue privileging specific identities. White, male, middle-/upper-class, able-bodied identities are privileged in many of our institutions (Reid & Knight, 2006; Thobani, 2007). Gender, race, class, and their relationship to perceived (dis)ability play significant roles in shaping the construction of youth identity and youth's experiences with the education, employment, and criminal systems. In March 2013, the *Toronto Star* reported that

> in Ontario, aboriginal boys aged 12 to 17 make up 2.9% of the young male population. But in Ontario youth facilities they make up nearly 15% of young male admissions. In other words, there are, proportionally, five times more aboriginal boys in the young male jail population than what they represent in the general young male population. For black boys, the proportion of jail admissions is four times higher. For white boys and boys of other ethnicities, there is no such overrepresentation. When it comes to girls, only aboriginal girls are overrepresented. Their jail admissions population is 10 times higher than what they represent in the general Ontario population of young girls. (Rankin & Winsa, 2013, bullets removed)

When tested, over 70% of students who were part of the penal system scored below a Grade 8 reading level, providing greater insight into the characteristics of the population most likely to experience extreme social exclusion and incarceration (Prison Fellowship Canada, n.d.).

Experiential Citizenship Model

The model of experiential citizenship, forwarded by this research, uses the experience of belonging as an indicator of broader issues of equity and inequity. Although individuals' experiences are employed, it is a window into a larger analysis of cultural, political, social, and economic equity. From the literature and historical case studies, this proposed theoretical model centralizes and utilizes the experience of acceptance, membership, inclusion, safety, and shared power as a more precise measure of structural justice.

Drawing from critical and social citizenship literature, elements that could be further developed to complement and push aspects of critical disability theory emerged. The most influential contributions to the understanding of "experiential citizenship" are Marshall's (2009) establishment and discussion of social citizenship and Somers's (2011) centralization of membership, inclusion, and recognition as vital and implicit necessities for citizenship. Giroux's (2012, 2013) work on critical citizenship and its influence over the pedagogical development of leadership and empowerment as well as Yuval-Davis's (2011) concepts around the politics of belonging—a discursive relationship between historical and institutional influences shaping often intangible social hierarchies and exclusion—have greatly informed the conception of experiential citizenship and established the experience of belonging as key to citizenship actualization.

The Potential of Employing Experiential Citizenship as a Model to Evaluate Equity

A model of experiential citizenship draws from established social and human rights models of disability. However, it goes beyond the structural, environmental, and legislative boundaries of both models and centralizes (a) the experience of inclusion, (b) the perception of being valued, (c) the perception of sharing power, and (d) participation in collective struggle

towards greater emancipation. An example from the realm of education demonstrates how a model of experiential citizenship could be applied to deconstruct barriers experienced in the classroom. In a classroom, a social lens is useful for identifying barriers within the physical space (e.g., areas for universal design, assistive technology) and prevailing attitudes (e.g., discriminating perceptions of impairment). A human rights lens is critical in identifying key legislation and principles necessary for upholding human dignity and equality (e.g., establishing that policies are legislated to ensure accommodations are provided, that buildings are retrofitted according to accessibility legislation, and that human rights principles are included in policy development and implementation). In addition, a lens that centralizes experiential citizenship targets students' experience of being valued in the classroom and the extent to which they share power among their peers.

Employing a model of experiential citizenship carries the potential to challenge inequities on both a macro and micro level. On a macro level, an experiential citizenship lens can illuminate inequities within institutional policy and practices, societal values, priorities around sustainability and governance, as well as organization and distribution of public goods and services. On a micro level, employing an experiential citizenship framework can address how interpersonal/group dynamics are positioned as a site of struggle and how they are navigated; reveal spheres within which access to critical analysis and leadership are denied; and insist that accountability measures include individual value, safety, and inclusion, as well as the experience of sharing power.

A citizenship model of disability accounts for issues of accessibility and discrimination within the built or constructed environment as addressed in the social model; it also relies on the legislative influence embedded within the human rights model. However, what a citizenship

model offers that the others do not is the centralization of the complexities embedded within the experience of belonging—implicit experiences of shared power, the social relational aspects of recognition and inclusion, as well as safety. Accounting for the relational effects of exclusion experienced by marginalized identities, belonging captures individuals' experience of inclusion while removing external expectations around performance. Belonging, while potentially influenced through individual actions, can also be passively assessed, through an individual's assessment of his/her own recognition and acceptance within a given environment. Belonging seeks to target the intrinsic experience beyond "Have my needs been considered? Has my presence been accommodated?" to addressing the questions "Do I belong? Am I welcome here? Am I valued by others?" The focus on belonging centralizes the bearer as the one who determines the extent of successful inclusion. As acknowledged, an individual with an impairment can enter a fully accommodating environment and continue to experience exclusion (Goffman, 1963). Drawing comparisons, Thobani (2007) wrote of the complexities involving race and ethnicity. She identified that there are people born and educated in Canada who will be made to feel as though they will never really belong. A model, and subsequent measure, of citizenship and belonging captures the implicit forms of discrimination and marginalization experienced as a result of constructed difference. It empowers the oppressed by centralizing their experience of belonging as an outcome of the relational complexities embedded within institutional discrimination.

Chapter 5: Disability in Education and the Role of Special Education[3]

Mitchell (2010) wrote that, "until recently, special education has been dominated by a psycho-medical model paradigm, which focuses on the assumption that deficits are located within individual students (Clark et al., 1995)" (p. 24). Further, he added, citing Ackerman et al. (2000), that "in this model students receive a medical diagnosis based on their psychological and/or physical impairments across selected domains and both strengths and weakness are identified for education and training. Those with similar diagnoses and functional levels are grouped together for instructional purposes" (Mitchell, 2010, p. 24).

For many scholars, using the medical model to shape education policies and practices inappropriately problematizes students and builds constructed divisions among the student body. Mitchell listed the following concerns regarding the medicalized/individual approach to disability in schools: (1) The medical model places the focus and onus of student failure on an individual flaw or deficit. (2) The way in which the medical model identifies and congregates students according to a specific disability or exceptionality designation/classification wrongly assumes sameness within "diagnostic categories" (p. 24). (3). There is evidence that many students that hold special education status do not demonstrate any form of pathology. (4) Evidence shows that deficit-based instruction and curriculum are not successful strategies to ensure learning.

In Ontario, Bill 82, established within the Education Act of 1980, insisted that all students with identified exceptionalities receive appropriate accommodation within the public

[3] Portions of this chapter were extracted from my comprehensive exam paper, entitled "Models of disability and education policy," and published in *The intersection of disability, achievement, and equity: A system review of special education in the TDSB* (Report No. 12/13-13), by R. S. Brown & G. Parekh, 2013,Toronto: Toronto District School Board (TDSB).

school system (Ontario Ministry of Education [MOE], 2012). In 2005, the Ministry of Education released the document *Education for all: The report of the expert panel on literacy and numeracy instruction for students with special education needs, Kindergarten to Grade 6* (Ontario MOE, 2005). This document, along with its 2006 successor *Special education transformation: The report of the co-chairs with recommendations of the Working Table on Special Education*, insisted on approaching special education through differentiated instruction and universal design (Bennett, 2009). However, a recent report released by the TDSB stated that up to 87% of students with an identified exceptionality across the elementary panel continue to be educated in segregated special education classes (Brown & Parekh, 2010).

Based upon constructed normative measures reflecting White, middle-class, and able-bodied/minded ideals, deviation from these standards can lead educators and other professionals to perceive or misinterpret such deviance as disordered (Ishil-Jordan, 1997; O'Connor & Fernandez, 2006; Reid & Knight, 2006). "The medicalized structure of special education often requires multiple forms of assessment to occur prior to placement in a congregated special education class or receipt of support services" (Brown & Parekh, 2013, p. 10). However, it is apparent that there continues to be an over-representation in special education of minority students as well as students living in poverty (Brown & Parekh, 2010, 2013; De Valenzuela, Copeland, Qi, & Park, 2006; Oswald, Coutinho, & Best, 2002; Skiba, Poloni-Staudinger, Gallini, Simmons, & Feggins-Azziz, 2006). Reid and Knight (2006) write,

> Because most people in contemporary society perceive students with impairments as qualitatively distinct, . . . referral, diagnosis, labeling, sorting, and remediating . . . appears objective, fair, and benevolent. . . . One result of perceiving "different" others through this technical-rational lens (i.e., as defective) is that it seems natural . . . that

> students of color, the poor, and immigrants lie outside the predominant norm and, therefore, belong in *special* education." (p. 19)

Reid and Knight demonstrate the conflation between difference and ability as well as how the identification of any difference outside the norm can be conflated with ability. In their opinion, the medical model of disability justifies acts of racism and other forms of prejudice that would otherwise be outlawed.

Interestingly, the medical model and scientific assessment suggests a certain rigorous and measurable approach to ability. However, there are exceptionality designations that are largely based upon teacher perception. These classifications have been dubbed high incidence "judgment" categories (Artiles et al., 2010) and are most often associated with negative social connotations and parent/student blame. Behaviour disorders, mild intellectual disability, and language impairments are exceptionalities in which teacher perception can greatly influence identification. They are also categories in which minority students and students living in poverty are often over-represented (Brown & Parekh, 2010, 2013; De Valenzuela et al., 2006; Reid & Knight, 2006; Skiba et al., 2006). In contrast, exceptionality categories that are associated with more socially valued characteristics, such as brilliance, as represented within the gifted and autism spectrum disorders, are often over-represented by White, male, and upper-middle class students (Brown & Parekh, 2010; De Valenzuela et al., 2006).

Minority students and students living in poverty are also more likely to be identified and segregated from mainstream education than students from more privileged backgrounds. "This segregation continues to be condoned and defended by educators and the public alike, not on the basis of the students' race (which would be illegal) but because they are labeled *disabled"* (Reid & Knight, 2006, p. 19; Ferri & Connor, 2006). The evidence and theorization around education

and special education practices and outcomes points to a hierarchical structure positioned to socially reproduce experiences of advantage or disadvantage (Parekh, Killoran, & Crawford, 2011). As Brantlinger (2003) described, "hierarchies are structured into meritocracies, yet in theory schools are to operate in fair and impartial ways so that children have equal chances to move up in social class rank and improve their life conditions. In reality, educational circumstances are not equal; wealthy white children inevitably are advantaged" (p. 1). Set against growing market fundamentalism (Somers, 2008), the marketization of schools and programs has negative effects on students identified as exceptional (Mitchell, 2010). Under the premise of pursuing "academic excellence, choice and competition" (Mitchell, 2010, p. 65), marketization has rendered students identified as disabled as "non-marketable commodities" (Blackmore, 2000, p. 381).

Streaming and Post-Secondary Pathways: Implications for Ontario Youth

Special education is not the only form of hierarchical and meritocratic sorting processes functioning within Ontario education institutions. According to Curtis, Livingstone, and Smaller (1992), evidence demonstrates that certain student groups are systematically denied access to more marketable education opportunities, resulting in a reduction of post-secondary education access and an increase in more precarious forms of employment and income. Students living in under-resourced neighborhoods are less likely to have access to marketable programs such as second-language immersion and advanced-placement opportunities and are more likely to be bottom streamed and over-represented in vocational programming (Deosaran & Wright, 1976; Martell, 2009; Parekh, Killoran, & Crawford, 2011; Wright, 1970). King, Warren, King, Brook, and Kocher (2009) reported that under half of students who took college-preparation courses and under a sixth of students taking workplace preparation (including apprenticeship programs) went

to college. By contrast, close to three quarters of students who took university preparation courses went to university (King et al., 2009).

Looking at Toronto specifically, 58% of students without any special education status accessed post-secondary university education (Sweet, Anisef, Brown, Adamuti-Trache, & Parekh, 2011). In comparison, only 18% of students identified as having special education needs were accepted into university (Sweet et al., 2012). Although drawn from literature in the United States, Reid and Knight's (2006) discussion on equity within post-secondary access presents an area for greater research here in Canada. Reid and Knight noted that there has been an increase in post-secondary education enrolment of students identified as having a learning disability and that this rate has increased from 16% to 40%. However, as Henderson noted in 2001, students identified as having a learning disability in post-secondary education were more likely to be White and to come from households in which the annual income exceeded $100,000. This highlights the ways in which privilege influences access to post-secondary institutions and how systematic exclusion persists. It also reifies how the medicalized construction of ability, despite the rigorous processes structured to measure and determine potential, continues to be conflated with unrelated characteristics, such as gender, race, class, and privilege.

New Paradigms Relating to Disability and Special Education

Mitchell (2010) noted that the psycho-medical model is the most globally accepted paradigm applied to special education but suggests two alternative paradigms to consider: the socio-political and the organizational paradigms. The socio-political paradigm mirrors the tenets of the social model of disability by identifying disabling barriers within society. "Several writers regard disability as a socio-political construct, which focuses on structural inequalities at the macro-social level being reproduced at the institutional level" (Mitchell, 2010, p. 25). Critiques

of the socio-political paradigm are that it ignores cultural beliefs around disability and establishes specific views of disability that may not be shared by parents (Mitchell, 2010). Parent-based studies have shown that although parents often desire an emancipatory perspective on their child's experience of disability, many continue to uphold views steeped in biomedical and metaphysical ideology (Mitchell, 2010). According to some authors, insisting that parents abandon their beliefs and adopt a structural perspective on disability is culturally insensitive (Danesco, 1997; Kalyanpur, Harry, & Skrtic, 2000).

The organizational paradigm has only recently been included within educational approaches and is described as follows:

> In this newly emerged paradigm, special education is seen as the consequence of inadequacies in mainstream schools and, consequently, ways should be found to make them more capable of responding to student diversity. Disability is perceived as a function of the interaction between individual students and their physical, social and psychological environments. Instructional techniques and learning opportunities should be structured to compensate for environmental deficiencies to ensure that children learn and achieve skills of adaptive living. (Mitchell, 2010, p. 26)

Despite offering distinct directives, criticism has emerged that the organizational paradigm is too "absolutist" and doesn't tackle the complexity around the construction of disability (Mitchell, 2010).

The rights paradigm has been steadily gaining ground within an educational context. The CRPD strongly states that all education should be inclusive regardless of severity of impairment (United Nations, 2006). Exceptionality categories, such as autism, now have correlated legislated accommodations and pedagogical strategies. Despite earlier, failed court challenges for inclusive

education (e.g., Eaton vs. Brant County, 1997), greater numbers of parents are successfully pursuing human rights claims for better access to programs and services as well as student placements (Williams & Macmillan, 2005). Finite changes to wording of Ontario ministry documents outlining accommodations, procedures, and parental and student entitlements continue to occur. However, when pressed, all education commitments delivered through Individual Education Plans (IEPs) and Identification, Placement, and Review Committee (IPRC) decisions continue to be superseded by the Canadian Charter of Rights[4] . Unfortunately, as discussed earlier, rights and legal challenges are only possible through the navigation of dizzying bureaucratic procedures, which ultimately dissuades many claimants from pursuing (Engel & Munger, 2003).

Despite positive outcomes addressed by the move from the medical to rights models of disability in the field of education, there is a still a lack of acknowledgement of how socio-demographic characteristics and experiences inter-relate with the identification and support given to students identified with exceptionalities. This is another key example of where a theoretical framework encompassing students' experience of citizenship and belonging could reveal important relationships and situations in which student exclusion is exacerbated.

Case Study of the TDSB[5]

The TDSB is the largest school board in Canada and the fifth largest in North America. Located in Toronto, Ontario, it boasts a student population of more than a quarter of a million students ranging from Kindergarten to Grade 12. Situated in the heart of Toronto, arguably one

[4] See, for example, the December 19, 2011, MOE memorandum (Finlay, 2011) which states that all students, despite formal identification, are entitled to service and supports.

[5] Charts and tables in this chapter were previously published in *Special education: Structural overview and student demographics* (Report No. 10/11-03), by R. S. Brown & G. Parekh, 2010, Toronto: TDSB; and *The intersection of disability, achievement, and equity* (Report No. 12/13-12), by R. S. Brown & G. Parekh, 2013, Toronto: TDSB. Reprinted with permission.

of the most diverse and multicultural cities in the world, the TDSB has a unique vantage point from which to study and address issues of equity. In addition to a sizeable teaching and administrative staff, the TDSB is also home to a substantive research department. The TDSB research department not only accesses student and program information directly from the Ontario Ministry of Education, but also collects an abundance of data through its own developed student census.

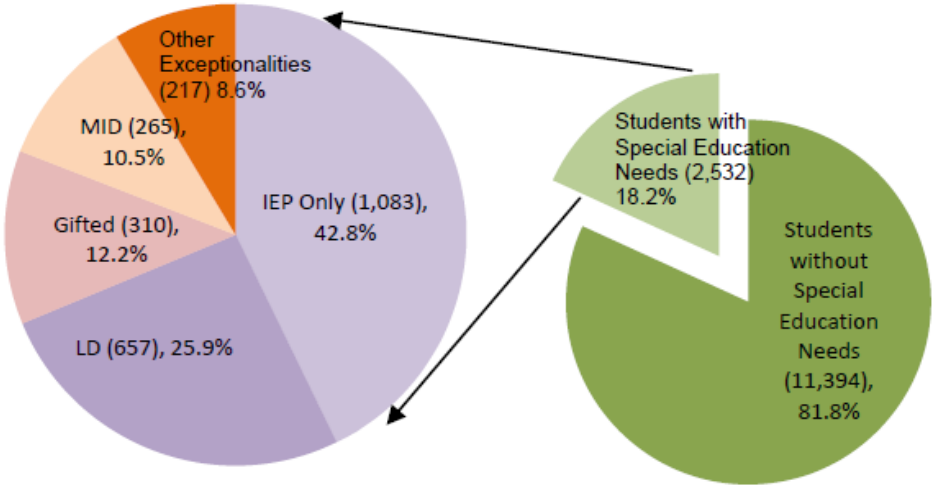
The TDSB's student census, rolled out every five years, collects data on all students from Junior Kindergarten through Grade 12. It is a confidential survey, but not anonymous. Although more discussion on the census can be found in the methodology section, it is important to note that it is currently Canada's largest youth survey and that the TDSB is the only board in Ontario that links program, service, and achievement data to student demographics, including poverty, race, sexuality, gender, and exceptionality. In 2010 and 2013, I co-authored two TDSB special education reports with Robert S. Brown that investigated the demographics of students identified as requiring special education support (Brown & Parekh, 2010, 2013). In brief, this chapter provides a demographic overview of the special education population demographics in the TDSB.

The first chart below (Figure 5.1) provides a breakdown of the Grade 9 cohort across students' special education status. The Grade 9 cohort refers to a group of students who were in Grade 9 at the time they wrote the 2006 student census; this cohort of students was then tracked from Grade 9 to their post-secondary destinations. Although only a subsection of the TDSB's overall population, the Grade 9 cohort includes an analysis of 16,365 students. As seen below, 18.2% of the Grade 9 cohort population, reflecting Grade 7 status,[6] was identified as requiring

[6] Note that although students in the Grade 9 cohort were in Grade 9 at the time they wrote the 2006 Student Census, the determination of special education status was pulled from their Grade 7 records, as these were more complete

special education support. Of this 18.2%, close to half (42.8%) of students identified as having Special Education Needs (SEN) had only an IEP and no formal identification. The second largest group was students who had been formally identified as having a learning disability (25.9%). Students formally identified as gifted made up 12.2% of the population, closely matched by students formally identified as having a mild intellectual disability (10.5%). All other formally identified exceptionalities, including autism, behaviour disorder, physical disability, speech and language impairment, and visual and auditory impairments were included within the group of "Other," which made up 8.6% of the population identified as SEN.

Figure 5.1. Percentage Breakdown of Students with Special Education Needs in the Grade 9 Cohort, 2006–2011 (Status as of Grade 7, in 2004)



Note. LD = learning disability; MID = mild intellectual disability; Other Exceptionalities = Students formally identified with an exceptionality not listed in this table; IEP only = students who have not been formally identified with an exceptionality but have been placed on an Individual Education Plan.

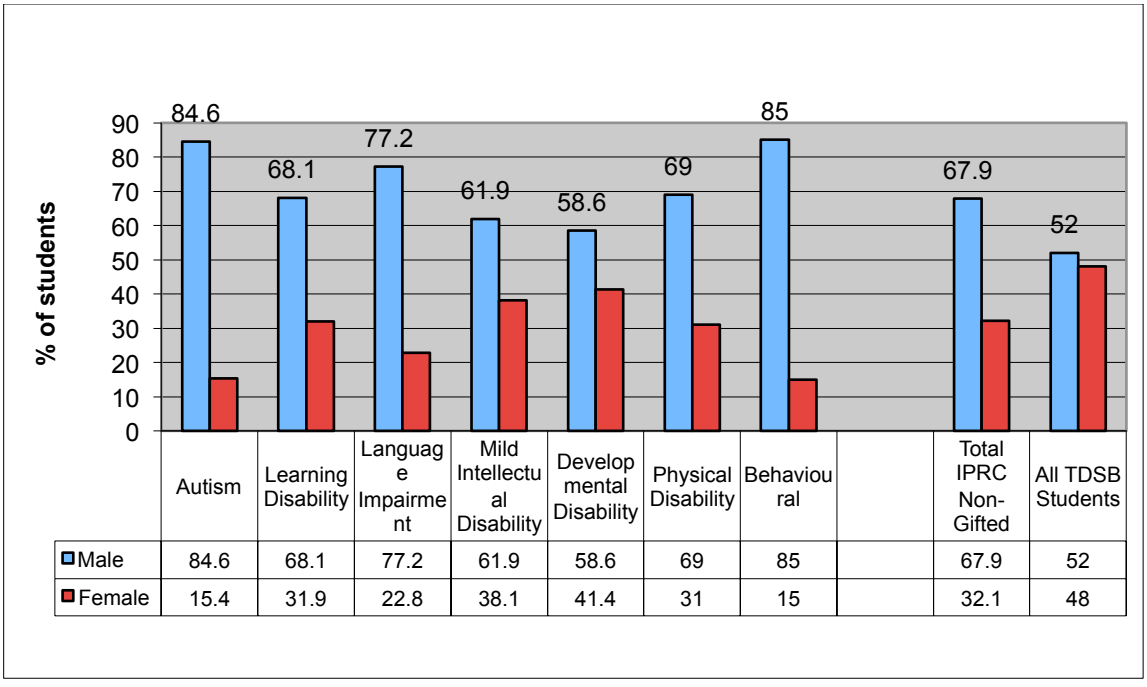
(see *Special education fact sheet no. 4*, available on the TDSB website: http://www.tdsb.on.ca/Portals/0/Community/Community%20Advisory%20committees/ICAC/ad%20hoc%20work/Gr9CohortFactSheet4SpecialEducation.pdf).

Although the most prominent model of disability employed in special education is the medical model, with the assumption that perceived impairment is organically or biologically based (Mitchell, 2010), there is evidence to suggest that systemic bias may be contributing to the over-representation of certain groups. Below explores the relationship between student demographic characteristics such as gender, race, parental presence, parental education, and neighbourhood income in the construction of the special education population.

Gender

To begin, male students largely dominated special education. As demonstrated in Figure 5.2, male students far outnumbered female students across all special education categories. Categories such as autism and behaviour disorder demonstrated the greatest over-representation of male students.

Figure 5.2. Special Education Exceptionalities by Gender, 2010



	Autism	Learning Disability	Language Impairment	Mild Intellectual Disability	Developmental Disability	Physical Disability	Behavioural		Total IPRC Non-Gifted	All TDSB Students
Male	84.6	68.1	77.2	61.9	58.6	69	85		67.9	52
Female	15.4	31.9	22.8	38.1	41.4	31	15		32.1	48

Race

Toronto is an epicenter of multicultural and ethnic diversity; therefore, the ethno-racial dynamics are far more complex than in many areas in the United States. The TDSB analysis released in 2010 was the first time this type of study had been conducted in Canada. Interestingly, results in the TDSB mirror those from the US in many ways. Both countries appear to have an over-representation of self-identified Black students in special education; however, as seen in Table 5.1, there is also an over-representation of White students in the TDSB. Self-identified East Asian and South Asian students were largely under-represented across most special education categories. Incidence of disproportionate racial representation across special education categories has been highly politicized. Numerous articles and books have been dedicated to uncovering trends and developing theoretical analyses of disproportionate representation throughout public education systems across the United States (Artiles, Kozleski, Trent, Osher, & Ortiz, 2010; De Valenzuela et al., 2006; Oswald et al., 2002; Skiba et al., 2006).

What is important to note within the TDSB is that although both self-identified Black and White students were over-represented in special education, they were stratified across special education categories and exceptionalities. For example, students who self-identified as Black were over-represented in the special education categories of behavioural, mild intellectual disability, developmental disability, and language impairment. Students who self-identified as White were over-represented within the special education categories of autism, learning disability, physical disability, and behavioural. Aside from the category of behaviour, where both self-identified White and Black students were over-represented, the over-representation of self-identified White students and self-identified Black students was generally found within different exceptionality categories. Literature across the field of education questions the connotations

associated with various special education categories and claims that categories that suggest intellectual deficiencies (e.g., mild intellectual disability, language impairment, developmental disability) are more likely to be assigned to marginalized ethno-racial identities. Conversely, categories based on more medicalized or clinical diagnoses, suggesting higher intelligence and reduced parental blame, are more likely to be assigned to dominant ethno-racial identities (e.g., autism, learning disability, speech impairment) (De Valenzuela et. al, 2006; Reid & Knight, 2006).

Table 5.1. Key Non-Gifted Exceptionality Distribution by Race, 2009–10

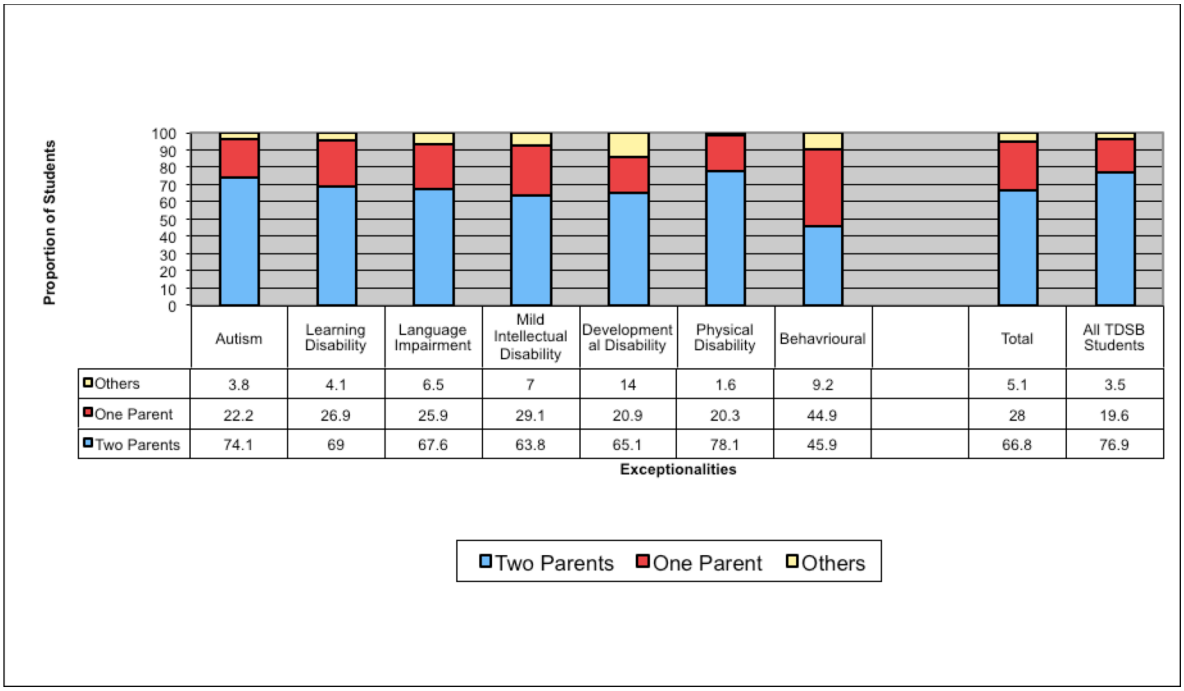
Ethno-racial categories	Autism	LD	Lang Impair	MID	Dev. Dis.	Phys. Dis.	Behav.	Total with SEN	Total in Grades 7–10
Aboriginal	0.6%	1%	0%	0.4%	0%	0%	1.4%	0.8%	0.3%
Black	12.7%	17.9%	24.1%	33.3%	29.5%	11.1%	35.5%	22.1%	13.5%
E Asian	15.3%	6.7%	17%	4.3%	2.3%	7.9%	2.7%	6.6%	17.6%
Latin	0%	2.7%	2.7%	2.8%	4.5%	1.6%	1%	2.6%	2%
Mid East	2.5%	2.7%	7.1%	8.7%	4.5%	7.9%	1.4%	4%	4.8%
Mixed	5.1%	7.4%	4.5%	6.5%	4.5%	4.8%	13.5%	7.4%	5.7%
S Asian	8.3%	8.4%	11.6%	18.7%	22.7%	23.8%	1.7%	10.7%	20.1%
SE Asian	5.1%	2.8%	9.8%	2%	2.3%	1.6%	1.4%	2.8%	3.9%
White	49.7%	50%	23.2%	23%	29.5%	41.3%	40.5%	42.7%	31.9%

Note. LD = learning disability; Lang Impair = language impairment; MID = mild intellectual disability; Dev. Dis. = developmental disability; Behav. = behaviour disorder; SEN = special education needs.

Exceptionality by parental presence

As seen in Figure 5.3, parental presence also demonstrated a strong relationship with special education categories and identifications. Parental presence can also be linked to class and economic security. Therefore, it is interesting to note that the categories within which there was an over-representation of students with access to only one parent were also the more subjective categories in terms of identification and referral (particularly behavioural and mild intellectual disabilities).

Figure 5.3. Parental Presence across Special Education Categories, 2009–10



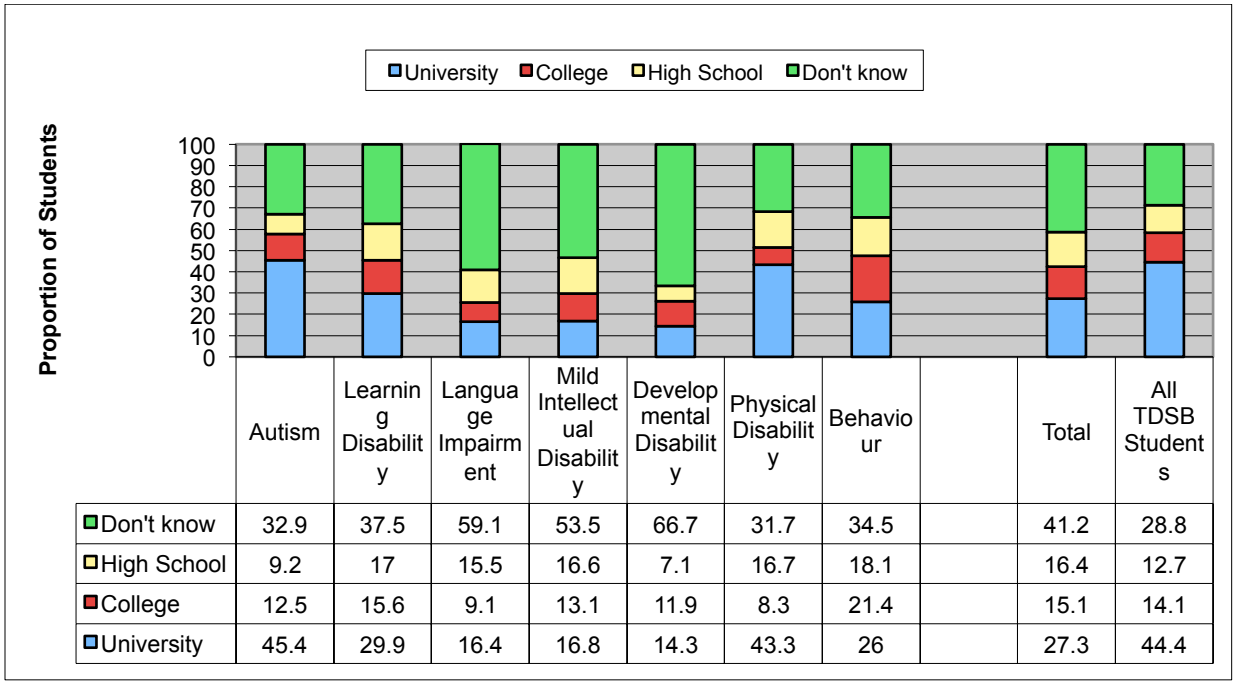
	Autism	Learning Disability	Language Impairment	Mild Intellectual Disability	Developmental Disability	Physical Disability	Behavrioural		Total	All TDSB Students
Others	3.8	4.1	6.5	7	14	1.6	9.2		5.1	3.5
One Parent	22.2	26.9	25.9	29.1	20.9	20.3	44.9		28	19.6
Two Parents	74.1	69	67.6	63.8	65.1	78.1	45.9		66.8	76.9

Exceptionality by parental education

Parent education is another key aspect contributing to students' experience of class and socio-economic status (Blanden, Gregg, & Macmillan, 2011). Again, as seen in Figure 5.4, interesting trends emerged. The categories with the lowest proportion of students whose parents

have university education were language impairment, mild intellectual disability, developmental disability, and behavioural disorder—all categories associated with student conduct and constructions of intelligence.

Figure 5.4. Parental Education across Special Education Categories, 2009–10



	Autism	Learning Disability	Language Impairment	Mild Intellectual Disability	Developmental Disability	Physical Disability	Behaviour		Total	All TDSB Students
Don't know	32.9	37.5	59.1	53.5	66.7	31.7	34.5		41.2	28.8
High School	9.2	17	15.5	16.6	7.1	16.7	18.1		16.4	12.7
College	12.5	15.6	9.1	13.1	11.9	8.3	21.4		15.1	14.1
University	45.4	29.9	16.4	16.8	14.3	43.3	26		27.3	44.4

Neighbourhood income

Similar to the disproportionality of ethno-racial status across special education categories, income trends demonstrated significant stratification. By employing students' postal code, the TDSB linked students to their neighbourhood income. After neighbourhood incomes were tabulated, collective incomes were distributed across 10 income deciles consisting of roughly 10% of the student population. Exploring the correlation between income and special education identification exposed interesting trends. Table 5.2 demonstrates clear trajectories of income within special education categories. For example, there was a prevalence of students coming

from higher-income households within categories such as autism and learning disability as compared to students identified as having a mild intellectual disability or behavioural disorder.

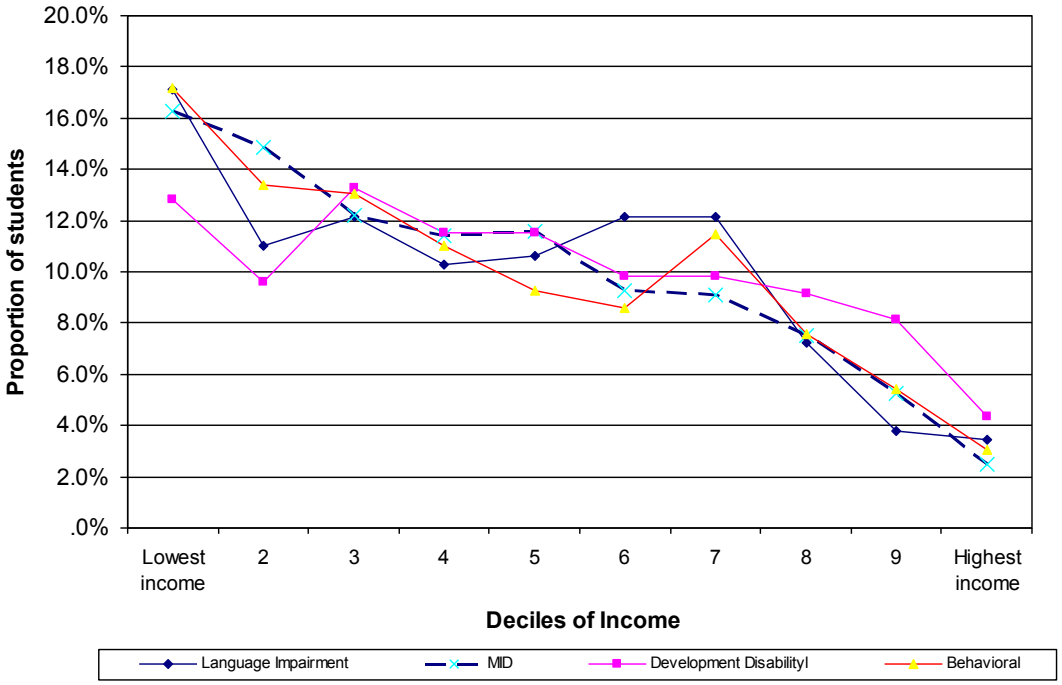
Table 5.2. Key Exceptionalities (excluding Gifted) across Income Deciles, 2009–10

Deciles of Income	Autism	Deaf	LD	Lang Impair	MID	Dev. Dis.	Phys. Dis.	Beh. Dis
Lowest Income	9.5%	7.6%	9.7%	17.1%	16.3%	12.8%	11.7%	17.1%
2	7.7%	13.5%	8.9%	11.0%	14.9%	9.6%	8.1%	13.4%
3	9.2%	14.5%	8.3%	12.2%	12.2%	13.3%	7.4%	13.1%
4	9.8%	7.6%	9.3%	10.3%	11.4%	11.5%	12.0%	11.0%
5	9.4%	12.7%	10.7%	10.6%	11.6%	11.5%	12.0%	9.3%
6	9.8%	9.5%	10.1%	12.2%	9.3%	9.8%	11.7%	8.6%
7	12.6%	9.8%	10.6%	12.2%	9.1%	9.8%	9.6%	11.5%
8	10.5%	6.9%	10.2%	7.2%	7.5%	9.1%	8.4%	7.6%
9	11.5%	9.8%	11.7%	3.8%	5.3%	8.1%	11.0%	5.4%
Highest Income	10.0%	8.0%	10.4%	3.4%	2.5%	4.4%	8.1%	3.1%

Note. LD = learning disability; Lang Impair = language impairment; MID = mild intellectual disability; Dev. Dis. = developmental disability; Phys. Dis. = physical disability; Beh. Dis. = behaviour disorder.

As demonstrated in Figure 5.5, four distinct categories had an almost linear negative correlation with income, demonstrating an over-representation of low-income students and under-representation of higher-income students. These categories were behavioural disorder, mild intellectual disability, language impairment, and developmental disability.

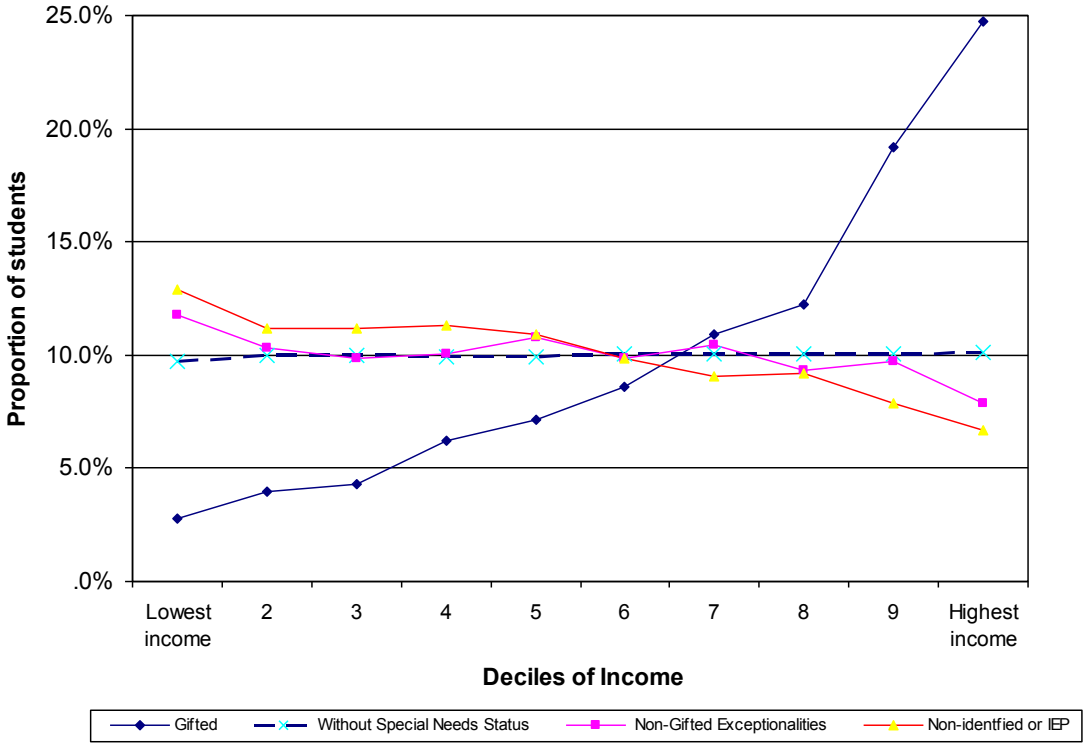
Figure 5.5. Selected Exceptionalities across Family Income, 2009–10



Note. MID = mild intellectual disability; Behavioral = behaviour disorder.

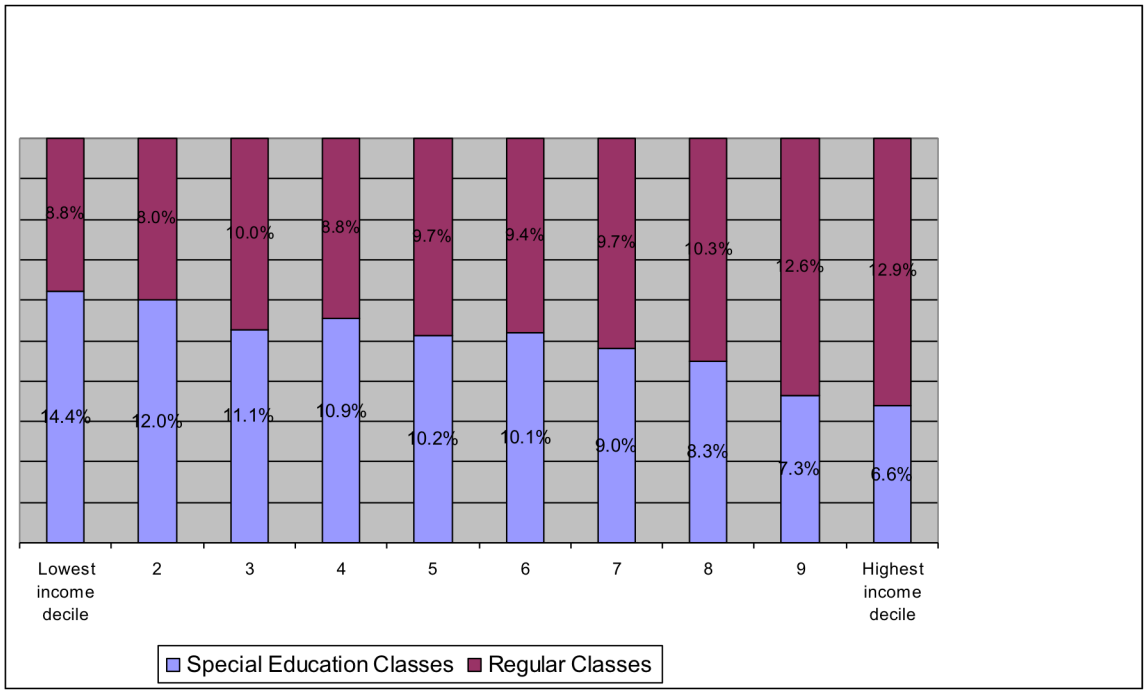
A converse trend regarding income and exceptionality categories, such as autism and learning disability, also exists, demonstrating an over-representation, albeit minimal, of higher-income students. However, the correlation between gifted and income, as seen in Figure 5.6, was perhaps the most pronounced of all the exceptionality categories. Over half (56%) of all students identified as gifted came from the three highest income deciles in Toronto (Brown & Parekh, 2010). The disparity between students who had not been identified as having SEN, students who had been identified as having SEN, students with only an IEP, and students identified as gifted is presented below.

Figure 5.6. Students Identified with Exceptionalities (including Gifted) and IEP across Family Income, 2009–10



Income also presented a key relationship with special education placement. Figure 5.7 demonstrates the correlation between income and placement within congregated or regular classroom settings.

Figure 5.7. Exceptionalities (excluding Gifted) across Congregated and Regular Class Placements, 2009–10



Students from lower-income households were more likely to be taught within congregated special education classes than were students from higher income households.

Conclusion

The data explored throughout this chapter demonstrates the myriad social relations between identity characteristics and the identification and placement of students in special education programming. Identity characteristics linked to historical and current socio-demographic challenges and marginalization demonstrated an over-representation within special education. While chapter 7 explores secondary pathways and links systemic barriers to academic achievement for students in special education, the results demonstrated in this chapter support discussions by Reid and Knight (2006) and Giroux (2012, 2013) around creating and

perpetuating the marginalization of perceived disposable populations. As seen in the literature and the historical case study of the Victoria Industrial School, groups already facing considerable disenfranchisement and discrimination continue to be systematically steered away from valued education opportunities. While the option to label, problematize, and remove students from the classroom continues to exist, identities attached to cultural and social connotations that defy or challenge historically biased institutional norms will continue to face systemic exclusion.

Chapter 6: The Scale of Belonging: Descriptive and Regression Analysis of the Relationship of Student Belonging across Demographic, Academic, and Programmatic Variables

Developing the Dependent Variable: A Scale of Belonging and Citizenship

Using the concepts of citizenship and belonging forwarded by scholars such as Somers (2008), Yuval-Davis (2006), and Arnold (2004), I developed a scale of belonging to assess students' experience of citizenship, value, and security within their schools. Using the TDSB's Grade 9 cohort data and 2006 student census responses from Form A, I selected all questions that were constructed with a 5-point scale: question numbers 17, 18, 19, 20, 22, 23, 24, 25, 26, and 31. Questions were recoded to ensure co-linearity and directionality of responses. There were three scales included in the analysis: Scale 1—"All the time," "Often," "Sometimes," "Rarely," "Never"; Scale 2—"All the time," "Most of the time," "Sometimes," "Rarely," "Unsure" ("Unsure" was recoded as 3); and Scale 3—"Excellent," "Good," "Average," "Weak," "Not sure" ("Not sure" was recoded as 3).

Using SPSS statistical software, all 5-point scaled questions from Form A were entered into a factor analysis forcing two components with a co-efficient value set to include results above 0.3. The emerging scale most closely related to the questions of citizenship, value, and security contained 23 questions from Form A.

Included questions were:

20 (a) How do you feel about your school? I enjoy school.

20 (b) How do you feel about your school? My school is a friendly and welcoming place.

20 (c) How do you feel about your school? My school building is an attractive and great place to learn.

20 (d) How do you feel about your school? I get along well with other students in my school.

20 (e) How do you feel about your school? I feel accepted by students in my school.

20 (f) How do you feel about your school? I feel accepted by adults in my school.

20 (g) How do you feel about your school? Extra help is available at this school when I need it.

22 (a) Do you feel safe in the classroom?

22 (b) Do you feel safe in other parts of the school building (e.g., cafeteria, washroom, hallways)?

22 (c) Do you feel safe outside on school property (e.g., schoolyard, playing field, school parking lot)?

23 (a) In school, have you ever experienced the following: Threats to hurt you?

23 (b) In school, have you ever experienced the following: Physical bullying by an individual?

23 (c) In school, have you ever experienced the following: Physical bullying by a group or a gang?

23 (d) In school, have you ever experienced the following: Insults or name calling?

23 (e) In school, have you ever experienced the following: Theft or destruction of your personal property?

23 (f) In school, have you ever experienced the following: Being excluded or shut out from a group?

24 How often do you feel the school rules have been fairly applied to you?

26 (a) How often do you feel comfortable: Answering questions in class?

26 (b) How often do you feel comfortable: Speaking up in class to give your opinion?

26 (c) How often do you feel comfortable: Participating in class activities and discussions?

31 (f) How do you rate yourself in each of the following areas? Social skills (e.g., getting along with others).

The 23-point scale identified through a factor analysis was run through a Cronbach's Alpha analysis to test the strength of the scale. The Cronbach's Alpha score returned as 0.881, demonstrating considerable strength to the scale's cohesiveness. Alpha scores for questions 22 (e) (0.881), 24 (0.883), and 31 (f) (0.880) were removed from the scale as they had values close to or above the Alpha score of 0.881 and were not strengthening the scale. The now-20-point scale had an Alpha score of 0.883.

Contractualization of citizenship to normative constructions of participation can be highly problematic for people with disabilities. To ensure that there was no conflation between the experience of citizenship and belonging with participation, two questions were removed: 20 (a, d). Unrelated questions were removed: 20 (c). Questions regarding safety outside of school and off school property were removed due to the high potential of external factors influencing results: 22 (d, e). Questions related to more remote incidences of violence were also removed as they substantially reduced the overall *n* factor of the analysis: 23 (b, c, e).

Therefore, the questions compiled to form the final scale used for analysis of citizenship and belonging included the following: 20 (b, e, f); 22 (a, b, c); 23 (a, d, f); and 26 (a, b, c). A Cronbach's Alpha test was run on the remaining 12-point scale, resulting in an Alpha score of 0.837. This was a slightly lower Alpha; however, it more closely mirrors the literature and reduces conflation between belonging and the ways students earn belonging and citizenship

through academic and social performance.

Descriptive Analysis of the Scale of Belonging

The first investigation included a regression analysis to uncover the relationship of belonging and exclusion to students' economic and demographic identity factors, achievement variables, structural variables, and self-reported outcomes of student-assessed sense of confidence and competencies. The model contained a broad range of student and school-level variables on aspects of citizenship (i.e., inclusion, safety, shared power, and sense of acceptance) and was structured to highlight the interaction between various organizational and social structures. Student demographic variables included gender, race, sexuality, income, special education identification/exceptionality status, and generational status. Achievement variables included EQAO scores and absenteeism. Structural variables included the Learning Opportunities Index (a school-level measure of the extent of external challenge students are experiencing) and program of study. The outcome variable was a composite scale capturing students' sense of intrinsic value and capabilities. Note that each variable is described in detail below.

Data source

The first quantitative analysis investigated the relationship of student belonging with student demographic, achievement, structural, and outcome variables employed the TDSB's Grade 9 cohort of fall 2006 data set. This subset of TDSB students took part in the 2006 student census during their Grade 9 year. As described above, the citizenship scale will be constructed from the 2006 census Form A, resulting in an N factor of 7,292 students. The Grade 9 cohort data set follows this set of students from the 2003–04 school year, when students were in Grade 6, until their post-secondary status as of October 31, 2011. The Grade 9 cohort data is ideal in

correlating structural change to student experiences as it tracks program and designation changes encountered by students over their tenure within the public education system.

Strategies for analysis

The data were analyzed using three strategies. Initially, a descriptive analysis was conducted. The descriptive analysis was followed by three regression analyses: (1) in which belonging and citizenship was the dependent variable, (2) in which post-secondary access was the dependent variable; and (3) in which the scale of students' self-assessed competencies was the dependent variable.

Independent variables

The independent variables for this study were categorized into four thematic groups: (1) identity-based characteristics, (2) achievement characteristics, (3) structural characteristics, and (4) outcome characteristics.

1. *Identity-based characteristics*. The following variables were employed in this study as Identity-based characteristics:

- Gender: Students responded as to whether they identified as male or female.
- Race: Students self-identified within one of the following categories: Asian—East (e.g., China, Japan, Korea), Asian—South (e.g., India, Pakistan, Sri Lanka), Asian—South East (e.g., Malaysia, Philippines, Vietnam), Black—Africa (e.g., Ghana, Kenya, Somalia), Black—Canada, Black—Caribbean Region (e.g., Jamaica, Trinidad and Tobago), Latin American (e.g., Argentina, Chile, Costa Rica), Indian-Caribbean (i.e., Guyana with origins in India), Middle Eastern (e.g., Egypt, Iran, Israel, Palestine), mixed background, White—Canada, White—Europe (e.g., England, Greece, Italy, Portugal, Serbia), Aboriginal, other(s). Only the four largest groups—

White, South Asian, East Asian, and Black—were employed as individual variables within this study. Students identifying within the remaining racial categories were included under "Other."

- Sexuality: Students self-identified within one of the following categories: heterosexual (straight), lesbian, gay, bisexual, transgender, transsexual, queer, two-spirited, questioning, not sure.
- Parental Education: Students were asked to select the highest level of education for each parent or caregiver. Choices included high school, college, university, and "I don't know."
- Family Structure: Students were asked to identify the adults they live with most of the time. Choices included father only, mother and step-father, foster parents, group home adults, mother only, half of the time with each of my parents, two parents, father and step-mother, on my own, friends, adult relatives or guardians, other (with the option to include).
- Special Education Needs: This variable was constructed from the TDSB Student Information System. Students were identified as having a special education need (SEN) by the special education department and were categorized according to formal identifications and whether they had been assigned an IEP. Only the most frequent identifications were included as individual independent variables. These included students identified as gifted, as having a learning disability, as having a mild intellectual disability, as having an IEP without a formal identification, and as "Other." The variable "Other" includes students identified as having autism, behavioural disorders, and physical disabilities.

- Income: To determine student income, the fall 2006 postal codes of students were correlated to 2001 Statistics Canada data on average household income.
- Generational Status: As part of the 2006 student census survey, students were asked to provide information on the location of their birth, the location(s) of the birth of their parent(s), and the racial background with which they self-identified. Student responses were then organized into categories of first, second, or third generational status. Location of birth options for both students and parents were Albania, China, Afghanistan, Guyana, Bangladesh, Hong Kong, Canada, India, Iran, Jamaica, Pakistan, Philippines, Romania, Russia, Somalia, South Korea, Sri Lanka, Yugoslavia, Ukraine, United States, Vietnam, other (with the option to include).

2. *Achievement characteristics*. The following variable was employed as a measure of student academic achievement:

- Grade 6 EQAO: The Education Quality and Accountability Office administers assessments of students' academic achievement in reading and math at Grades 3, 6, and 9. Students' scores are placed within four levels of achievement, level 3 being the provincial average. This study employs students' Grade 6 EQAO scores as one measure of academic achievement. Grade 6 EQAO scores have demonstrated significant predictive correlations to future academic achievement trajectories, including students' pathways through secondary school and post-secondary access (Brown & Parekh, 2013).

3. *Structural characteristics*. The following variables were incorporated into the study as measures of the relationship of structural factors with the experience of belonging and citizenship.

- Program of Study (POS): The independent variable of POS is determined by the TDSB as the academic level within which students take most of their Grade 9–10 courses. There are four factors within the POS variable: academic, applied, locally developed, and "no program of study." Academic courses are intended to be the most academically rigorous. Applied courses offer a reduced curriculum and are often considered to lead towards the college pathway, whereas locally developed courses are structured to prepare students with life skills and workplace knowledge.
- Suspensions: This measure is the mean average number of suspensions imposed on students.
- Learning Opportunity Index (LOI): The LOI reflects levels of external challenge surrounding neighbourhood schools. Factors included in this index are median income, families whose before-tax income falls below the Low Income Measure, families who are currently using social assistance, adults with minimal education, adults with post-secondary (university) degrees, and families headed by a lone parent. Each school across the TDSB is ranked according to this index, lowest ranking indicating greatest challenge. (TDSB, 2011)

4. *Outcome measures*. This study is based upon the premise that citizenship and belonging are necessary to acquire and actualize rights. In the context of school, one critical component is to better understand *what* the experience of belonging enables for students and *why* is it important. Academic achievement and post-secondary access have demonstrated to be gatekeepers in several factors influencing long-term benefits, including health, economic security, and employment (Raphael, 2004; Statistics Canada, 2008). Due to the adoption of meritocratic and neoliberal policies

currently guiding Ontario's public education system, the relationship between achievement and market participation continues to be stratified along lines of established privilege (Berger, Motte, & Parkin, 2009), suppressing the political and social participation of certain groups. Therefore, prioritizing the relationship between the experience of citizenship and belonging in schools to achievement seemed inappropriate. What made more sense was to connect the experience of citizenship and belonging in school to confidence in one's own competency in social, political, and curricular-related skills. This scale of self-rated confidence would be a proxy indicator of preparedness for active social and political engagement once students leave school.

- Self-Rated Confidence Scale. For the construction of this scale, I ran a 3-component factor analysis of all 5-point Likert scale questions within Form A of the 2006 student census. One component mirrored similar outcome measures regarding students' own perception of competence in areas of leadership, social skills, and some curricular areas. It also included questions from the belonging scale around experiencing value in the classroom. Selecting only questions from the component that addressed students' confidence in competencies, a Cronbach's Alpha analysis was run (Alpha = 0.811). Deleting confidence in math skills raised the alpha score to 0. 814. This scale reflects the extent to which students express confidence in their own competencies, which could increase the likelihood of future social and political participation.

Descriptive analysis

In addition to employing the scale of belonging in its entirety for the analyses, the scale covered three distinct relational spheres. To better understand the experience of student

belonging and potential differences between student groups among their peers, in their classrooms, and within their schools, the scale of belonging and citizenship was reduced to three components, each addressing a specific area (i.e., school climate, classroom, and peer dynamics). To determine each component, a second factor analysis was run on the scale. The first component that emerged could best be described as measuring students' perception of belonging within the school climate and included questions around safety and acceptance (Alpha = 0.826). Questions included the following:

20 (b) How do you feel about your school? My school is a friendly and welcoming place.

20 (e) How do you feel about your school? I feel accepted by students in my school.

20 (f) How do you feel about your school? I feel accepted by adults in my school.

22 (a) Do you feel safe in the classroom?

22 (b) Do you feel safe in other parts of the school building (e.g., cafeteria, washroom, hallways)?

22 (c) Do you feel safe outside on school property (e.g., schoolyard, playing field, school parking lot)?

The second component could best be described as students' perception of belonging within the context of a classroom and whether they felt their participation was valued by others (Alpha = 0.896). Questions included the following:

26 (a) How often do you feel comfortable: Answering questions in class?

26 (b) How often do you feel comfortable: Speaking up in class to give your opinion?

26 (c) How often do you feel comfortable: Participating in class activities and discussions?

The last component could best be related to students' experience of belonging among their peers (Alpha = 0.781). Questions included the following:

23 (a) In school, have you ever experienced the following: Threats to hurt you?

23 (d) In school, have you ever experienced the following: Insults or name calling?

23 (f) In school, have you ever experienced the following: Being excluded or shut out from a group?

Deciphering students' experience of belonging and exclusion

The experience of belonging was constructed in two different ways:

1. The dichotomous scale in which students' experiences were sorted into two categories of belonging and exclusion was developed by truncating the means of students' responses and then combining responses reported as 1, 2, and 3 as indicating experiences of exclusion and combining students' responses 4 and 5 as indicating experiences of belonging.
2. The tri-factor model was developed by using the means of students' responses and collapsing responses into three constructed categories: positive, mixed, and negative. The tri-factor analysis was only used for analyses of peer, school, and classroom experiences. Positive experiences were the combination of student responses reported as 4 and 5 on the 5-point Likert scale of belonging and citizenship; mixed experiences were student responses reported as 3; and negative experiences were the combination of student responses reported as 1 and 2.

Note: Table 6.1 shows Pearson chi-square significance results for the full scale of belonging across special education categories. Chi-square significance tests were also run for the full scale of belonging across racial, generational status, parental education, and sexuality categories. All

were significant and, in addition, demonstrated significance within the regression analysis. However, due to the large population sizes included in these analyses, when looking at more detailed subgroups, testing for significance loses its interpretative value. Therefore, when exploring results for various aspects of the scale (e.g., peers, school, classroom experiences) significance tests were not run.

Table 6.1. Chi-Square Results

Chi-Square Tests	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	39.903[a]	5	0
Likelihood Ratio	39.405	5	0
Linear-by-Linear Association	23.356	1	0
N of Valid Cases	4867		

[a] 0 cells (.0%) have expected count less than 5. The minimum expected count is 16.71.

Results

Disability

A cross tabulation of the scale of belonging and the special education needs variable was conducted. Results in Table 6.2 and Figure 6.1 show that there were notable differences between the experiences of belonging and exclusion across special education categories. Students identified with a learning disability, mild intellectual disability, and other exceptionalities, as well as students who had an IEP, experienced notably greater exclusion than the total student population, particularly when compared to students who were identified as gifted. Results demonstrated that the experience of belonging was statistically significant across every special

education needs sub-category (Pearson chi-square = 0.000).[7]

Table 6.2. Crosstab—Special Education Needs across Belonging Scale

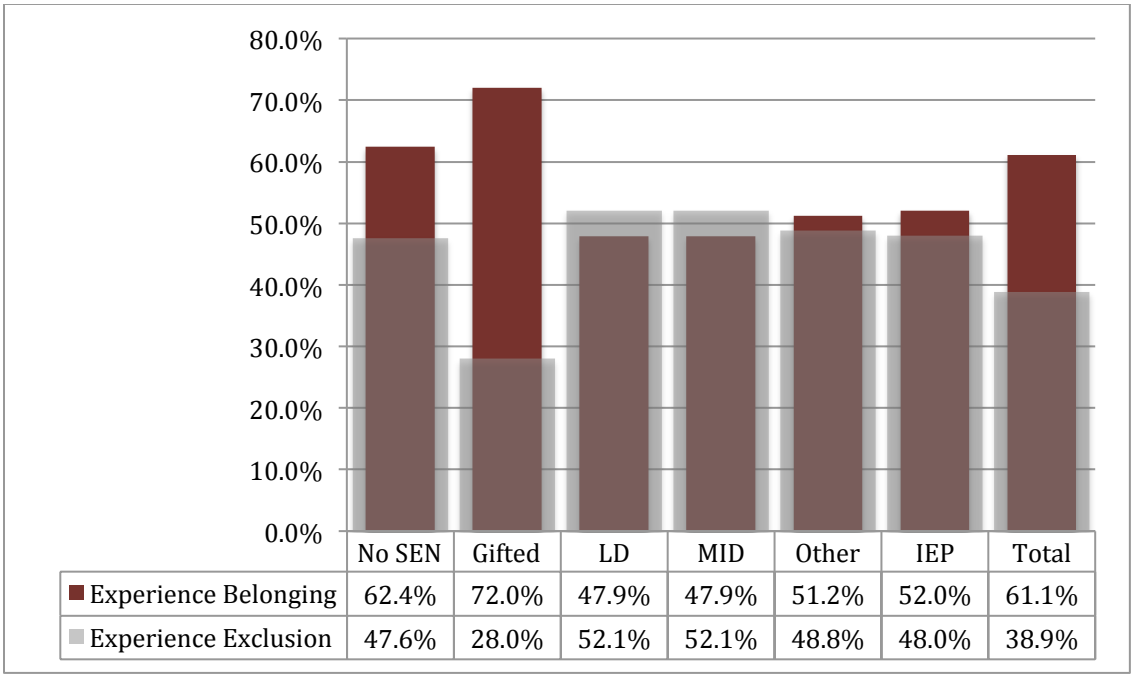
Exceptionality Category	Across/Within	Experience Belonging	Experience Exclusion	Total
.00 No SEN	Count	2580	1554	4134
	% across Belonging Scale	62.4%	37.6%	100.0%
	% within Belonging Scale	86.7%	82.2%	84.9%
1.00 Gifted	Count	90	35	125
	% across Belonging Scale	72.0%	28.0%	100.0%
	% within Belonging Scale	3.0%	1.9%	2.6%
2.00 LD	Count	91	99	190
	% across Belonging Scale	47.9%	52.1%	100.0%
	% within Belonging Scale	3.1%	5.2%	3.9%
3.00 MID	Count	23	25	48
	% across Belonging Scale	47.9%	52.1%	100.0%
	% within Belonging Scale	0.8%	1.3%	1.0%
4.00 Other	Count	22	21	43
	% across Belonging Scale	51.2%	48.8%	100.0%
	% within Belonging Scale	0.7%	1.1%	0.9%
5.00 IEP	Count	170	157	327
	% across Belonging Scale	52.0%	48.0%	100.0%
	% within Belonging Scale	5.7%	8.3%	6.7%
Total	Count	2976	1891	4867
	% across Belonging Scale	61.1%	38.9%	100.0%
	% within Belonging Scale	100.0%	100.0%	100.00%

[7] Please note that there may be incidences where columns and rows do not add up to exactly 100% but fall between 99.9% and 100.1%. These incremental differences are due to rounding errors associated with establishing the proportionate means for each variable and value.

Note. No SEN = no identification of special education needs; LD = learning disability; MID = mild intellectual disability; Other = formal identification of an exceptionality not listed in this table; IEP = Individual Education Plan only (no formal identification of SEN).

A visual representation of results can be found below.

Figure 6.1. The Experience of Belonging and Exclusion across Special Education Categories, 2006 Census



	No SEN	Gifted	LD	MID	Other	IEP	Total
Experience Belonging	62.4%	72.0%	47.9%	47.9%	51.2%	52.0%	61.1%
Experience Exclusion	47.6%	28.0%	52.1%	52.1%	48.8%	48.0%	38.9%

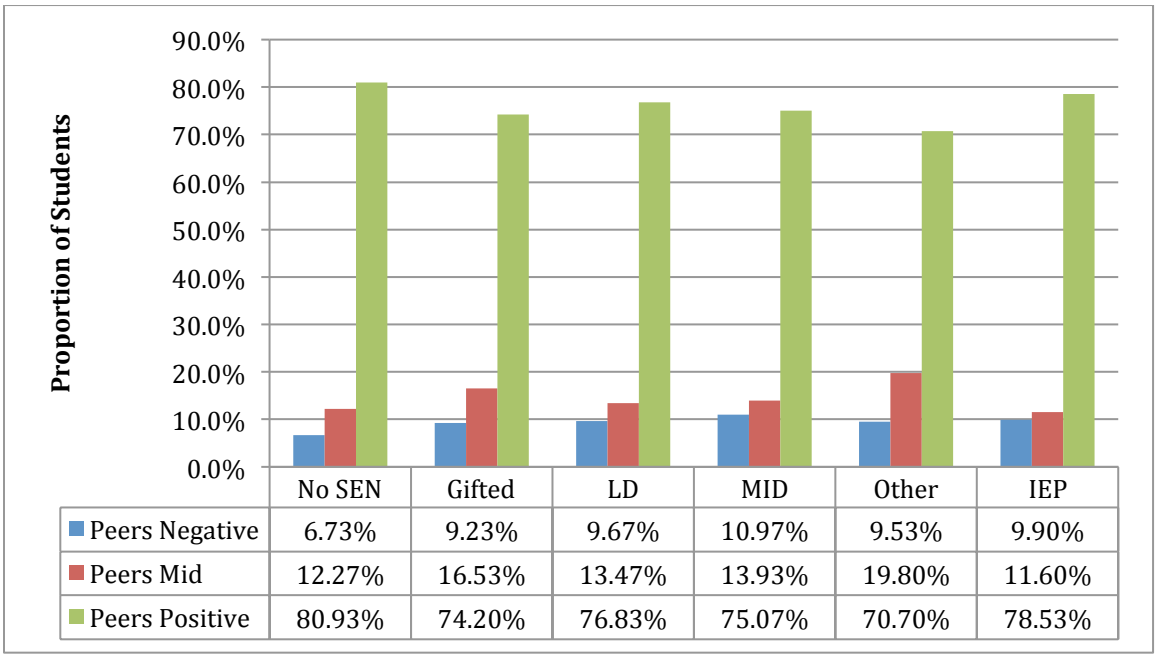
Note. No SEN = no identification of special education needs; LD = learning disability; MID = mild intellectual disability; Other = formal identification of an exceptionality not listed in this table; IEP = Individual Education Plan only (no formal identification of SEN).

After the scale of belonging was broken down into thematic sub-components, a cross tabulation was conducted across special education needs categories. The results were as follows:

Peer relationships.

Experience among peers primarily refers to students' sense of safety and belonging among their peers. This includes students' experience of being threatened, insulted, and excluded. Results are demonstrated in Figure 6.2.

Figure 6.2. Peer Experience—Positive, Mixed, and Negative—across Special Education Categories



	No SEN	Gifted	LD	MID	Other	IEP
Peers Negative	6.73%	9.23%	9.67%	10.97%	9.53%	9.90%
Peers Mid	12.27%	16.53%	13.47%	13.93%	19.80%	11.60%
Peers Positive	80.93%	74.20%	76.83%	75.07%	70.70%	78.53%

Note. No SEN = no identification of special education needs; LD = learning disability; MID = mild intellectual disability; Other = formal identification of an exceptionality not listed in this table; IEP = Individual Education Plan only (no formal identification of SEN).

- *Experience of belonging among peers*. Among peers, the results across SEN categories were most equitable. As seen in Figure 6.2, students without any SEN identification experienced the greatest sense of belonging (80.93%) among their peers as compared to students who had been identified with an SEN that falls in the category of "Other" (70.7%). Students identified as gifted (74.3%), as having a learning disability (76.83%), a mild intellectual disability (75.07%), and only an IEP (78.53%) all had similar but reduced experiences of belonging among their peers.
- *Mixed experiences of belonging and exclusion among peers*. Students identified as "Other" (19.80%) and gifted (16.53%) resulted in the highest results of mixed outcomes.

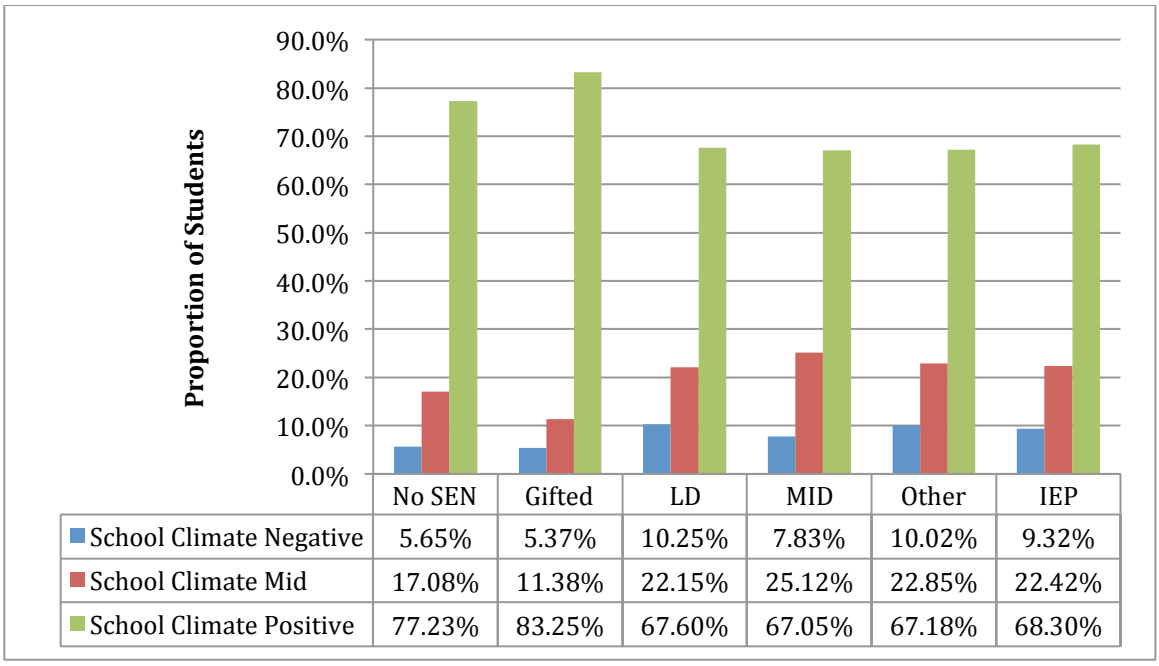
Students identified as having a learning disability (13.47%) and students identified with a mild intellectual disability (13.93%) resulted in reduced but similar levels of mixed results. Students without any SEN identification (12.27%) and students who only had an IEP (11.6%) resulted in the lowest mixed experiences of belonging and exclusion among their peers.

- *Experience of exclusion among peers*. Students identified with a mild intellectual disability (10.97%) experienced the greatest sense of exclusion among their peers; however, rates of exclusion for students with an identification of an exceptionality (formal or informal) were similar. Students identified as gifted (9.23%), as having a learning disability (9.67%), as "Other" (9.53%), and as having an IEP only (9.9%) all demonstrated greater experiences of exclusion than students with no SEN identification (6.73%).

School climate.

School climate refers to students' experiences in their school and includes measures of safety and acceptance. Students whose responses demonstrated a positive experience in this measure can be interpreted as having a positive experience of belonging and citizenship. Students whose responses demonstrated a negative experience were interpreted as experiencing exclusion within their school. Figure 6.3 demonstrates the differences in belonging and citizenship for students identified with special education needs.

Figure 6. 3: Experience of Positive, Mixed, and Negative School Climate across Special Education Categories



	No SEN	Gifted	LD	MID	Other	IEP
School Climate Negative	5.65%	5.37%	10.25%	7.83%	10.02%	9.32%
School Climate Mid	17.08%	11.38%	22.15%	25.12%	22.85%	22.42%
School Climate Positive	77.23%	83.25%	67.60%	67.05%	67.18%	68.30%

Note. No SEN = no identification of special education needs; LD = learning disability; MID = mild intellectual disability; Other = formal identification of an exceptionality not listed in this table; IEP = Individual Education Plan only (no formal identification of SEN).

- *Experience of belonging in school*. The first column represents the experiences of students who have not been identified with special education needs. As shown above in Figure 6.3, 77.23% of students who have not been identified with special education needs demonstrated a positive experience of belonging within their schools. For students identified as gifted, the experience of belonging increased to 83.25%. Although the majority of students across all SEN categories reported positive experiences of safety and acceptance at school, students identified with a learning disability (67.6%), students identified with a mild intellectual disability (67.05%), students identified with other exceptionalities (67.18%), and students who use an IEP with no formal identification

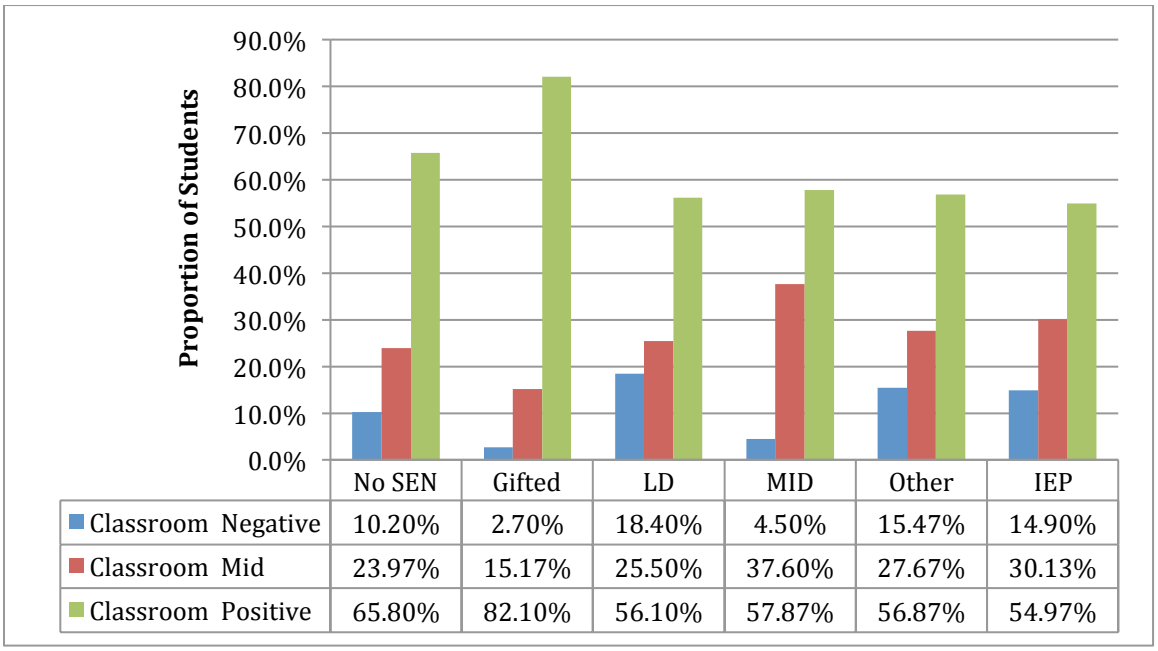
(68.30%) reported far fewer experiences of belonging.

- *Mixed experience of belonging and exclusion in school*. In relation to school climate, students identified with a mild intellectual disability (25.12%) demonstrated the greatest mixed experience of belonging and exclusion. Students identified with a learning disability (22.15%), other exceptionalities (22.85%), and IEP only (22.2%) demonstrated similar levels of mixed experiences. Students identified without SEN demonstrated a mixed experience of belonging and exclusion of 17.08%, whereas students identified as gifted demonstrated the least mixed experiences (11.38%).
- *Experience of exclusion in school*. In the school climate, students identified with a learning disability experienced the most exclusion (10.25%), followed closely by students identified with other exceptionalities (10.02%), and students who had an IEP only (9.32%). Students identified with a mild intellectual disability experienced a rate of exclusion at 7.83%, slightly higher than students who had not been identified with an SEN (5.65%). Continuing the trend, students identified as gifted experienced the least exclusion at school (5.37%).

Participation valued in the classroom.

This measure indicated the extent to which students experienced a sense of belonging in the classroom. Results are demonstrated in Figure 6.4.

Figure 6. 4: Experience of Positive, Mixed, and Negative Classroom Climate across Special Education Categories



	No SEN	Gifted	LD	MID	Other	IEP
Classroom Negative	10.20%	2.70%	18.40%	4.50%	15.47%	14.90%
Classroom Mid	23.97%	15.17%	25.50%	37.60%	27.67%	30.13%
Classroom Positive	65.80%	82.10%	56.10%	57.87%	56.87%	54.97%

Note. No SEN = no identification of special education needs; LD = learning disability; MID = mild intellectual disability; Other = formal identification of an exceptionality not listed in this table; IEP = Individual Education Plan only (no formal identification of SEN).

- *Experience of belonging in the classroom*. Comparatively across all SEN categories, students identified as gifted demonstrated the greatest sense of belonging in the classroom, with a positive response rate of 82.10%. Of students without an SEN identification, 65.80% felt a sense of belonging in the classroom. Students identified with a learning disability (56.10%), a mild intellectual disability (57.87%), other exceptionalities (56.87%), and students who only had an IEP (54.97%) resulted in reduced experiences of belonging in the classroom.
- *Mixed experience of belonging and exclusion in the classroom*. There was a wide range between student groups regarding mixed experiences of value within the classroom. Of

students identified with a mild intellectual disability, 37.6% reported mixed experiences of belonging and exclusion in the classroom, which dramatically contrasts with the mixed experience of students identified as gifted (15.17%). The remaining categories fall within a 7% difference from one another in terms of mixed experiences of belonging and exclusion in the classroom. Of students without SEN, 23.97% reported mixed experiences of belonging and exclusion in the classroom, as compared to 25.5 % of students identified with a learning disability. Of students identified with other exceptionalities, 27.67% reported mixed experiences of belonging and exclusion in the classroom, similar to 30.13% of students who only use an IEP without a formal identification.

- *Experience of exclusion in the classroom*. Results indicated that 18.40% of students identified with a learning disability felt excluded. Of students identified with other exceptionalities, 15.47% felt excluded in the classroom, while 14.90% of students who use an IEP without a formal identification felt excluded. Only 4.5% of students identified with a mild intellectual disability and 2.7% of students identified as gifted experienced exclusion in the classroom.

Further Exploration of the Belonging Variable across Student Demographic Characteristics

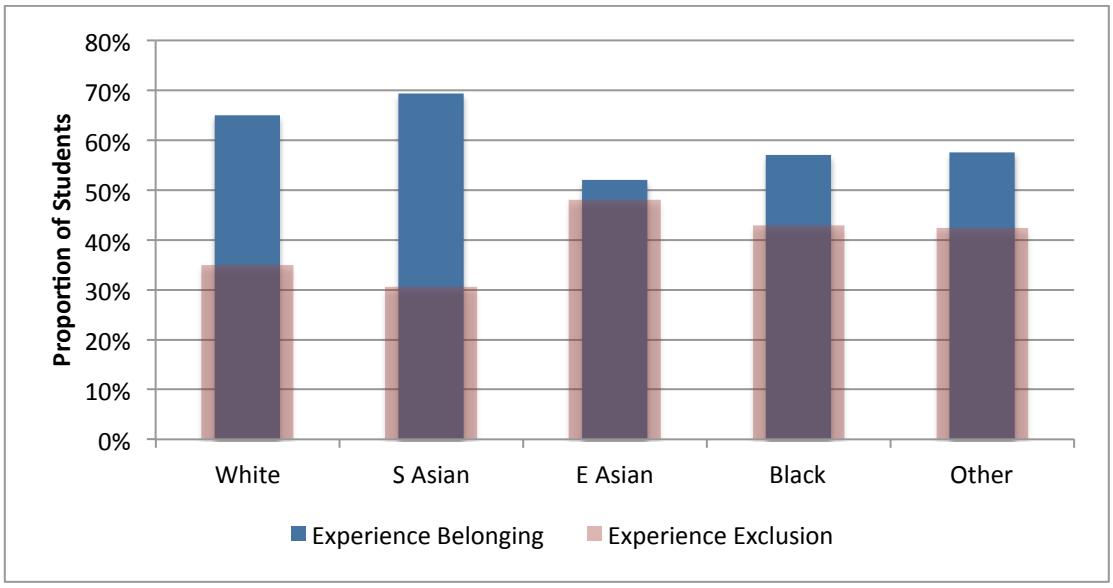
To explore further whether the trend observed above was consistent across other factors, a similar analysis was conducted for the following variables: race, class[8], generational status, and sexual orientation.

[8] Parental education (university or no university education) was used as a proxy variable for class for three reasons: (1) the literature supports this conjecture, (2) the more accurate variable for class (i.e., parental occupation) was largely incomplete and therefore could not be used in the regression analysis, and (3) Toronto has an unusually large

Race

Figure 6.5 demonstrates that across all self-identified racial groups, students identifying as South Asian experienced the highest degree of belonging, while students identifying as East Asian experienced the highest degree of exclusion.

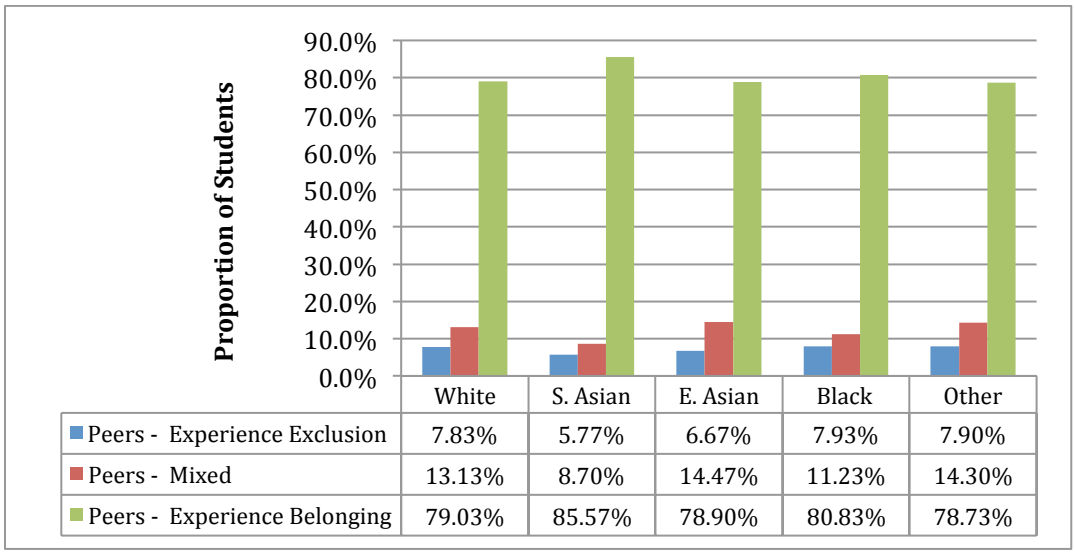
Figure 6.5. Experience of Belonging across Self-Identified Ethno-Racial Groups



- *Experiences among peers.* In terms of a sense of belonging among peers, students' experiences across ethno-racial groups were very similar. The chart below (Figure 6.6) demonstrates that there were subtle differences across groups in how students experienced a sense of belonging and exclusion among their peers.

highly educated and highly skilled but underemployed immigrant population, which conflates the traditionally observed correlations between class and academic outcomes.

Figure 6.6. Peer Experience—Positive, Mixed, and Negative—across Racial Categories

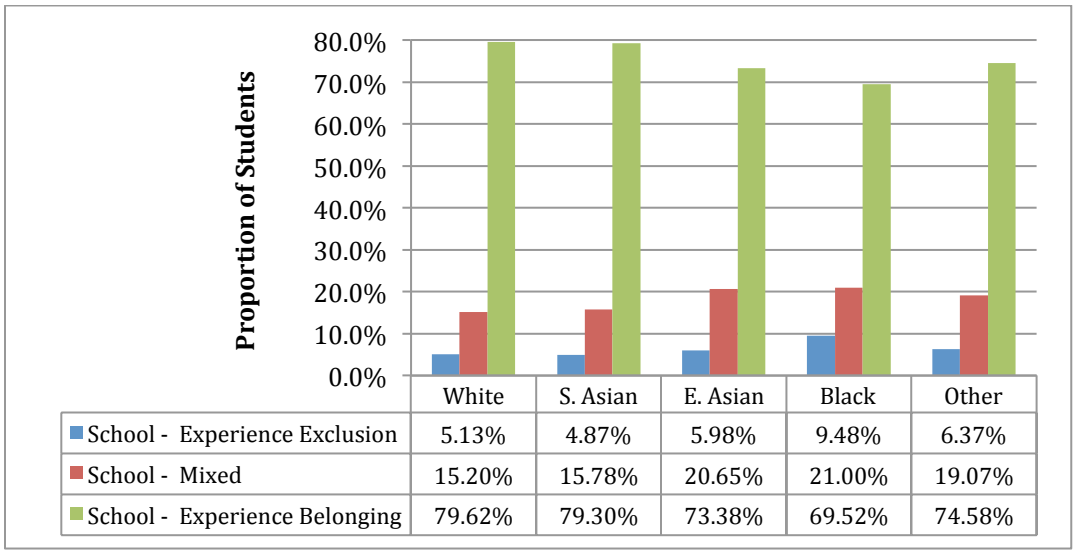


	White	S. Asian	E. Asian	Black	Other
Peers - Experience Exclusion	7.83%	5.77%	6.67%	7.93%	7.90%
Peers - Mixed	13.13%	8.70%	14.47%	11.23%	14.30%
Peers - Experience Belonging	79.03%	85.57%	78.90%	80.83%	78.73%

Students who self- identified as South Asian experienced a slightly higher sense of belonging with their peers, where 85.57% reported rarely or never experiencing a sense of exclusion. In terms of experiences of exclusion, outcomes for students who self-identified as White, Black, and Other fell within 0.1% of one another.

- *Experiences in school.* The disparity between ethno-racial groups grew when variables looked at school climate. Figure 6.7 demonstrates results.

Figure 6.7. School Experience—Positive, Mixed, and Negative—across Racial Categories

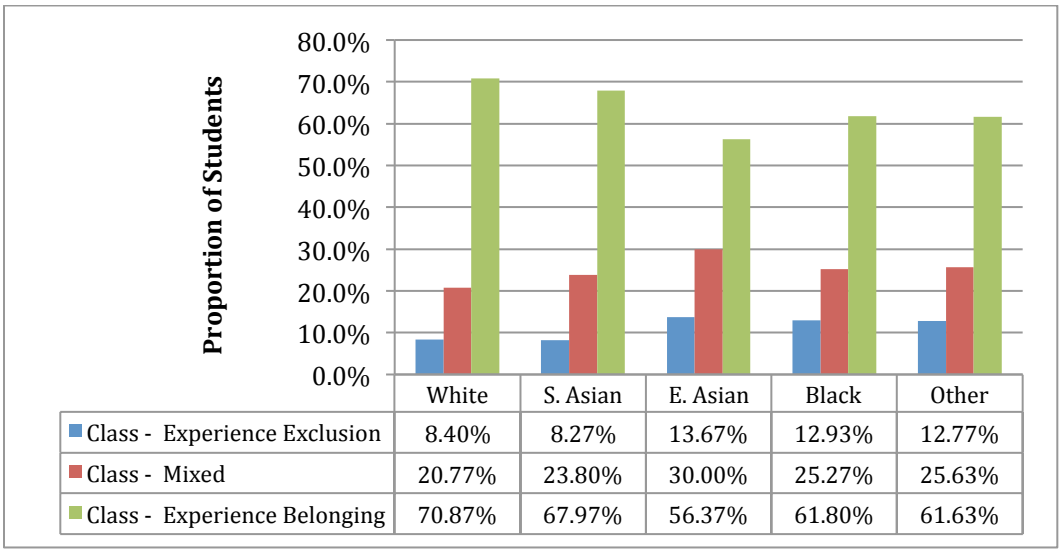


	White	S. Asian	E. Asian	Black	Other
School - Experience Exclusion	5.13%	4.87%	5.98%	9.48%	6.37%
School - Mixed	15.20%	15.78%	20.65%	21.00%	19.07%
School - Experience Belonging	79.62%	79.30%	73.38%	69.52%	74.58%

There was little difference between the experiences of belonging for students who self-identified as White and those who identified as South Asian. This proportion dropped to 69.52% for students who self-identified as Black. Students who self-identified as Black also reported experiencing the greatest degree of exclusion at school, at 9.48%, close to doubling that of other ethno-racial groups.

- *Experiences in the classroom.* In terms of the experience of belonging in the classroom, the disparity between racial groups reached close to 15%. As seen in Figure 6.8, students who self-identified as East Asian felt the most excluded from participating in class. Only 56.37% of students self-identified as East Asian felt comfortable contributing in their classrooms. Furthermore, 13.67% of students who self-identified as East Asian felt excluded in their classrooms.

Figure 6.8: Class Experience—Positive, Mixed, and Negative—across Racial Categories



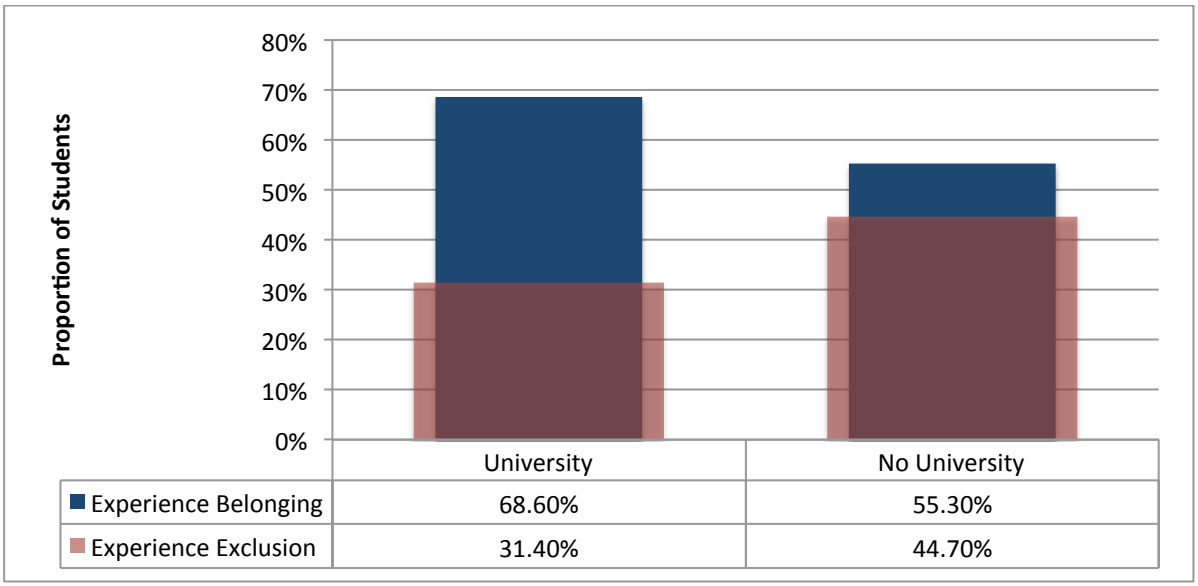
	White	S. Asian	E. Asian	Black	Other
Class - Experience Exclusion	8.40%	8.27%	13.67%	12.93%	12.77%
Class - Mixed	20.77%	23.80%	30.00%	25.27%	25.63%
Class - Experience Belonging	70.87%	67.97%	56.37%	61.80%	61.63%

Students who self-identified as Black or Other had similar outcomes, whereas students who self-identified as White experienced the greatest sense of belonging in the classroom (70.87%). Students who self-identified as South Asian had similar outcomes to students who self-identified as White. However, students who self-identified as South Asian experienced the least negative experiences in the classroom, where only 8.27% reported a sense of exclusion.

Class

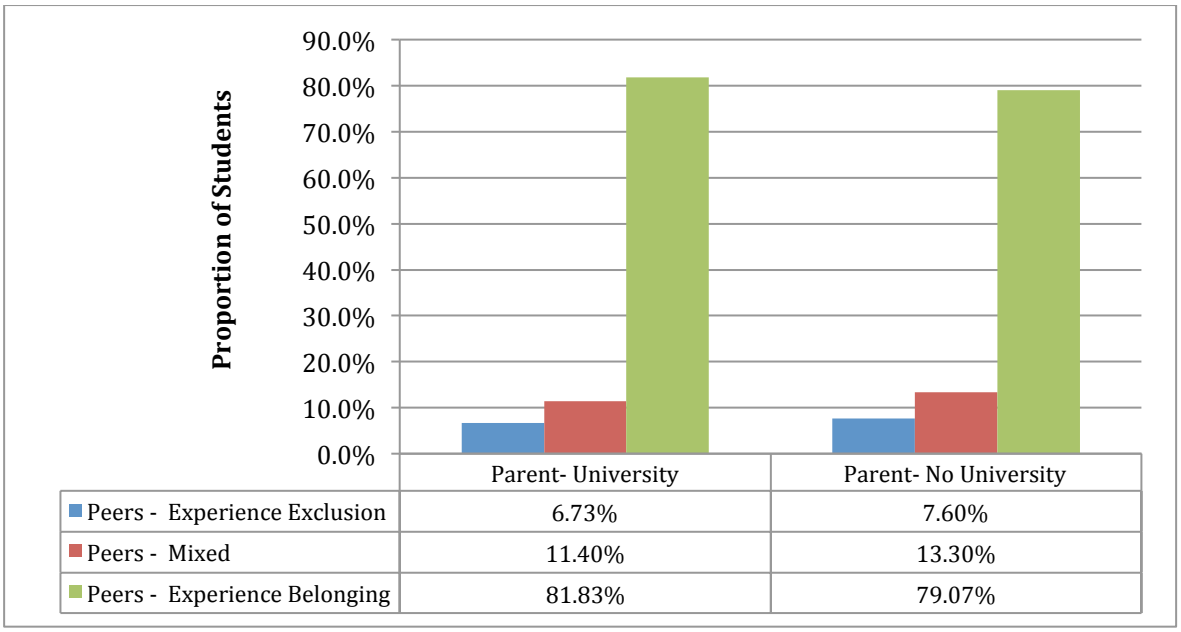
Parent education was used as a proxy for class, as discussed in footnote 1. Students were included into two separate groups: (1) students whose parents had attended university and (2) students whose parents had not attended university. Overall, as demonstrated in Figure 6.9, students whose parents had gone to university experienced a far greater sense of belonging and decreased sense of exclusion as compared to students whose parents had not gone to university.

Figure 6.9. The Experience of Belonging and Exclusion across Parental Education Categories



- *Experiences among peers*. When exploring the sense of belonging and exclusion among peers, there was little difference between either group. As seen in Figure 6.10, each group's positive, mixed, and negative outcomes fell within 2% of one another.

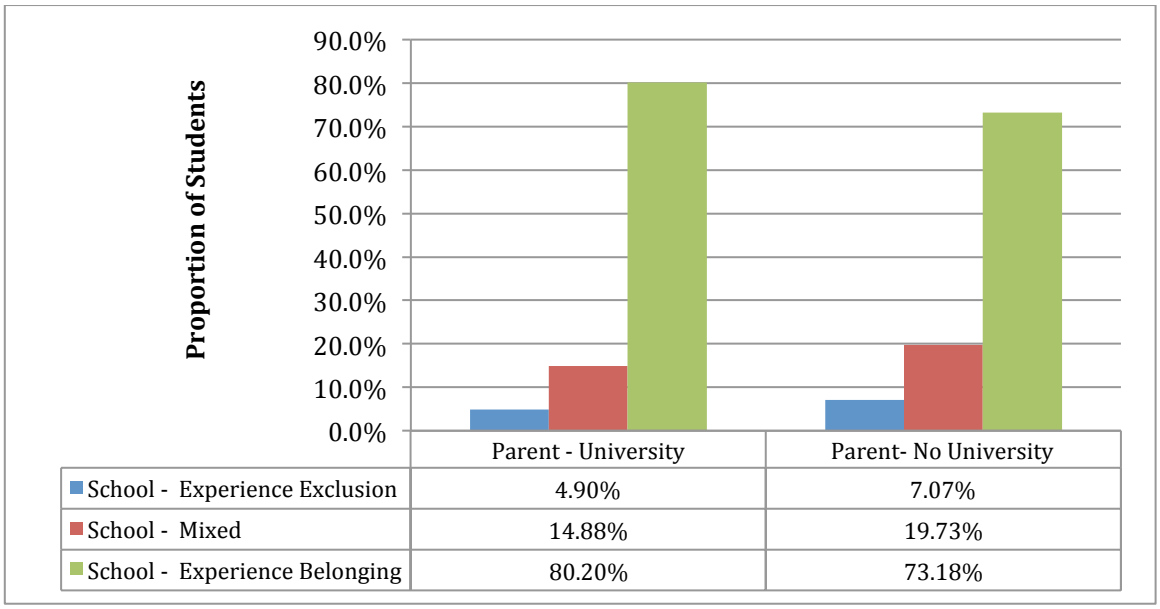
Figure 6.10. Peer Experience—Positive, Mixed, and Negative—across Parental Education Categories



	Parent- University	Parent- No University
Peers - Experience Exclusion	6.73%	7.60%
Peers - Mixed	11.40%	13.30%
Peers - Experience Belonging	81.83%	79.07%

- *Experiences in school.* Similar to both race and disability, the disparity between groups became more pronounced when students responded to questions concerning belonging and exlcusion in school (Figure 6.11). Across groups, there was over a 7% difference in the experience of belonging in school. Of students whose parents had gone to university, 80.2% reported experiencing belonging in school as compared to 73.18% of students whose parents did not go to university. There was roughly a 5% difference between groups reporting mixed experiences and close to a 4% difference between groups reporting experiences of exclusion in school.

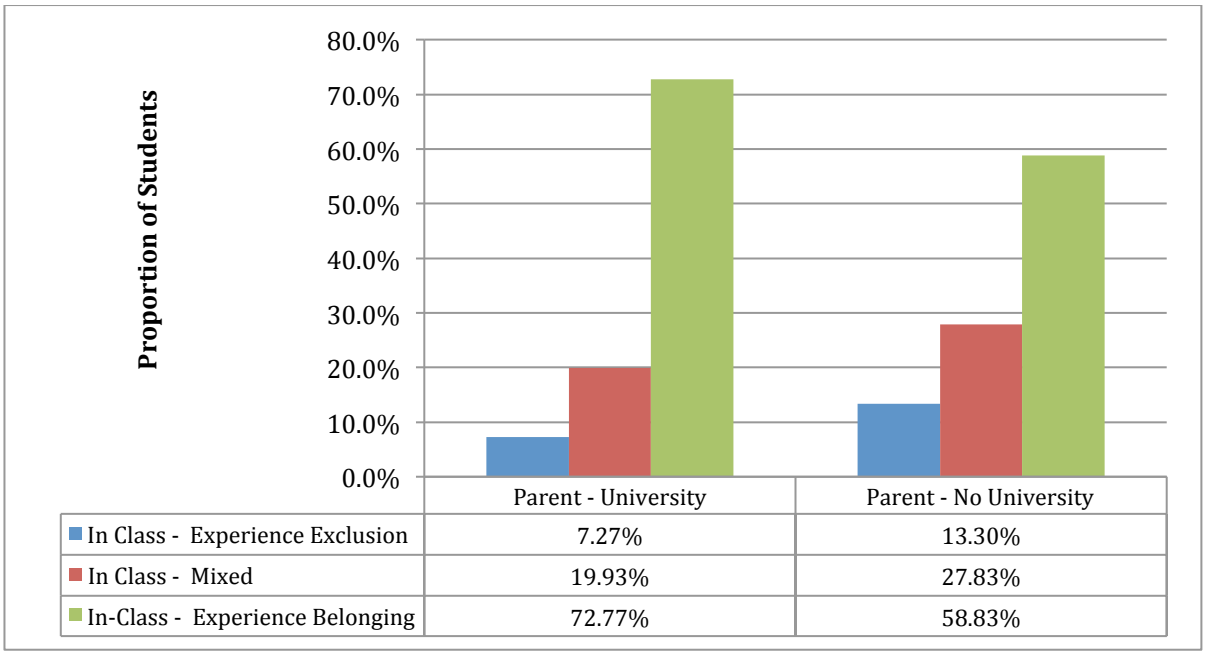
Figure 6.11. School Experience—Positive, Mixed, and Negative—across Parental Education Categories



	Parent - University	Parent- No University
School - Experience Exclusion	4.90%	7.07%
School - Mixed	14.88%	19.73%
School - Experience Belonging	80.20%	73.18%

- *Experiences in the classroom.* Similarly to other variable analyses, classroom outcomes demonstrated the greatest disparity of difference between groups (Figure 6.12). Close to 14% more of the students whose parents had gone to university reported experiencing a sense of belonging in the classroom than the students whose parents had not gone to university. Differences between groups for mixed experiences was 7.9%. The rate of exclusion close to doubled for students whose parents had not gone to university.

Figure 6.12. Classroom Experience—Positive, Mixed, and Negative—across Parental Education Categories



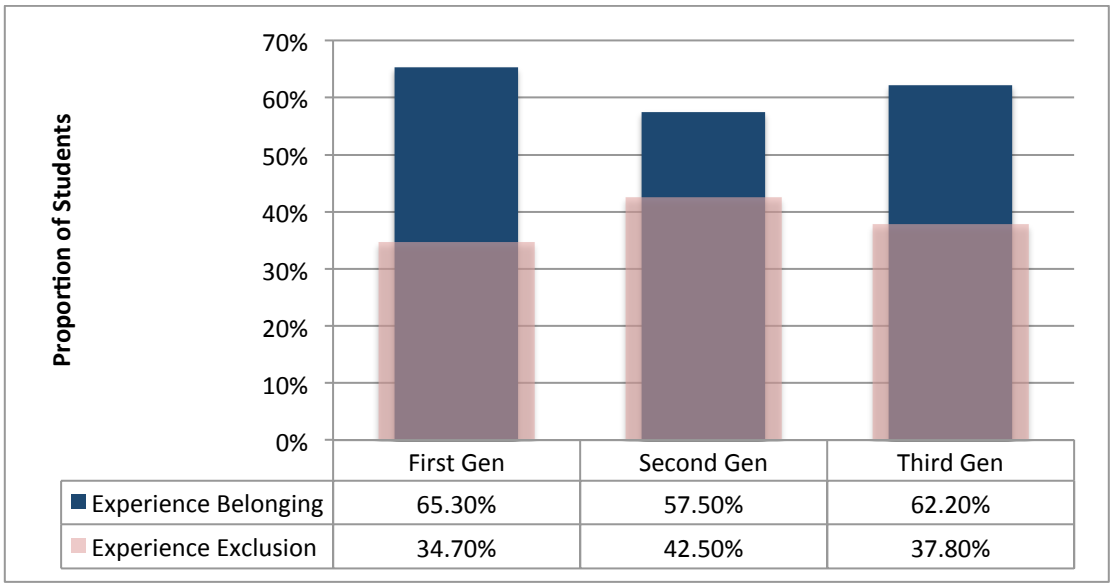
	Parent - University	Parent - No University
In Class - Experience Exclusion	7.27%	13.30%
In Class - Mixed	19.93%	27.83%
In-Class - Experience Belonging	72.77%	58.83%

Generational status

Generational status is determined based upon parents' region of birth. If students' parents were both born outside of Canada, students were classified as first generation. If students reported having one parent born outside of Canada and one parent born inside Canada, students were classified as second generation. If students' parents were both born inside Canada, students were classified as third generation.

Although the experience of belonging and exclusion was roughly similar for students identifying as first and third generation, second generation students experienced a slight increase in the experience of exclusion comparative to other generational categories (Figure 6.13).

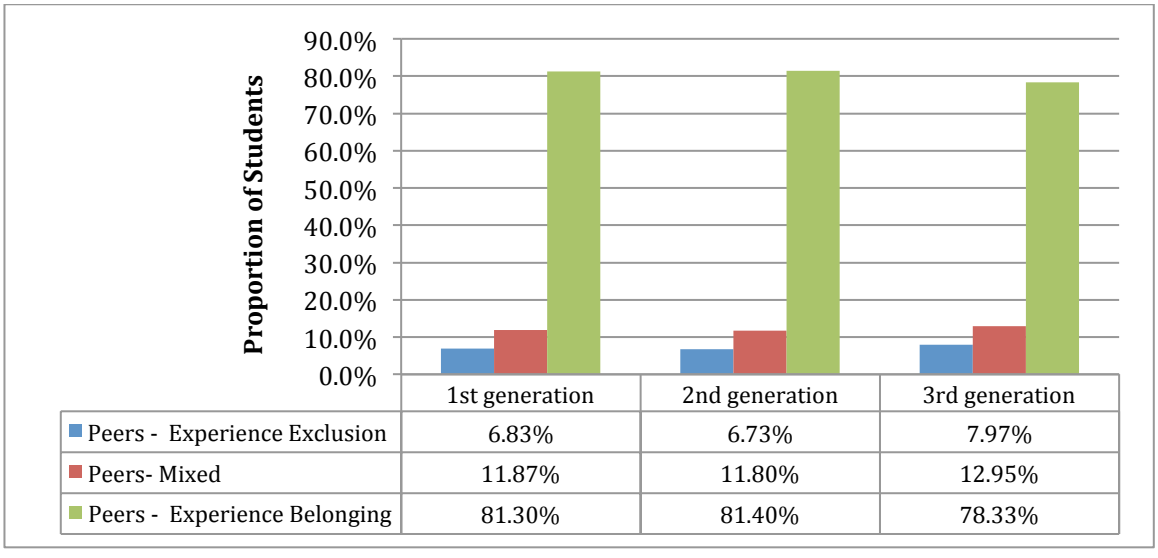
Figure 6.13. The Experience of Belonging and Exclusion across Generational Status



Note. First Gen = first generation status; Second Gen = second generation status; Third Gen = third generation status.

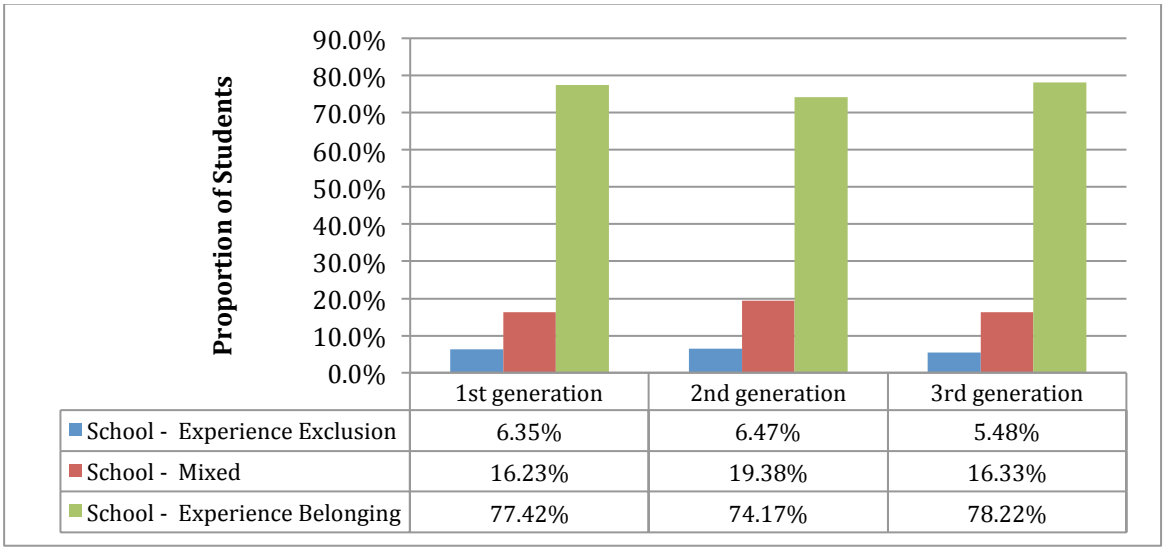
- *Experience among peers*. There was very little difference between generational status categories in terms of experiencing belonging and/or exclusion (Figure 6.14).

Figure 6.14: Peer Experience—Positive, Mixed, and Negative—across Generational Status



- *Experiences in school*. In terms of students' experiences of belonging and exclusion in school, first- and third-generation students shared very similar results. However, students identified as second generation reported experiencing slightly more mixed experiences and experiences of exclusion (Figure 6.15).

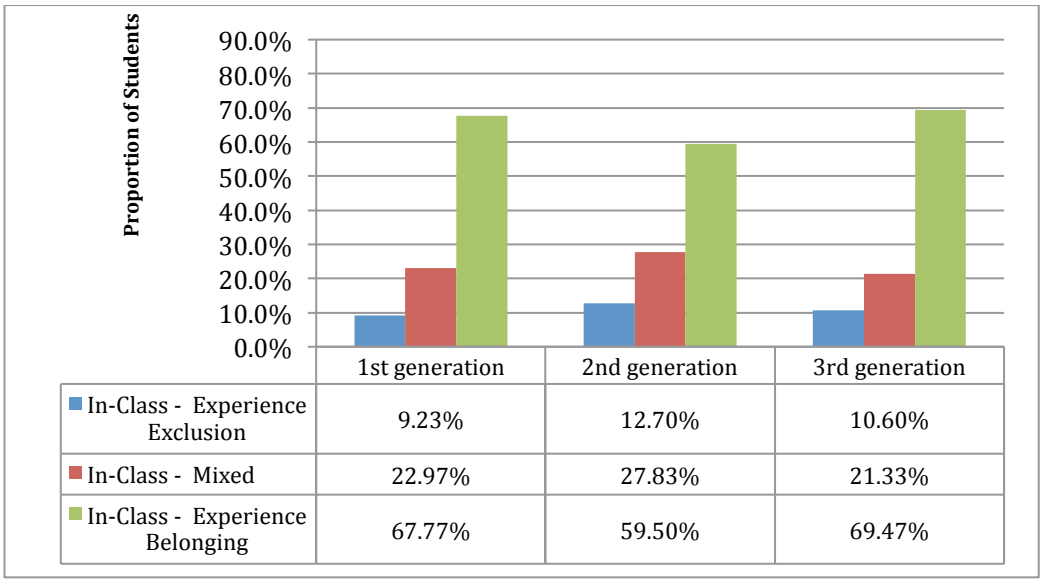
Figure 6.15. School Experience—Positive, Mixed, and Negative—across Generational Status



	1st generation	2nd generation	3rd generation
School - Experience Exclusion	6.35%	6.47%	5.48%
School - Mixed	16.23%	19.38%	16.33%
School - Experience Belonging	77.42%	74.17%	78.22%

- *Experiences within the classroom.* Similarly as with in-school experiences, first- and third-generation students shared largely mirrored results (Figure 6.16). However, second-generation students reported a notable increase in mixed experiences and experiences of exclusion.

Figure 6.16. Classroom Experience—Positive, Mixed, and Negative—across Generational Status

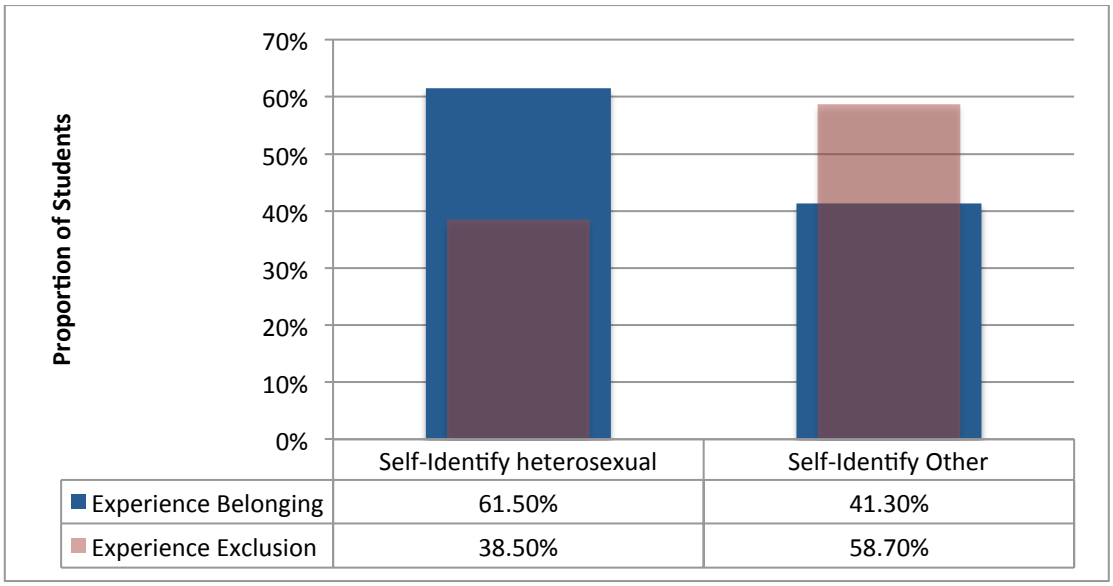


	1st generation	2nd generation	3rd generation
In-Class - Experience Exclusion	9.23%	12.70%	10.60%
In-Class - Mixed	22.97%	27.83%	21.33%
In-Class - Experience Belonging	67.77%	59.50%	69.47%

Sexuality

The data presents dramatic differences in the experience of belonging and exclusion for students who self identified as either heterosexual or "other than heterosexual." The group identified as "other than heterosexual" included students who had self-identified as lesbian, gay, bisexual, transgender, transsexual, queer, two-spirited, or questioning, or who were "not sure." Students who self-identified as other than heterosexual reported experiencing a close to 20% increase of incidences of exclusion than students who self-identified as heterosexual (Figure 6.17).

Figure 6.17. The Experience of Belonging and Exclusion across Sexual Orientation Categories

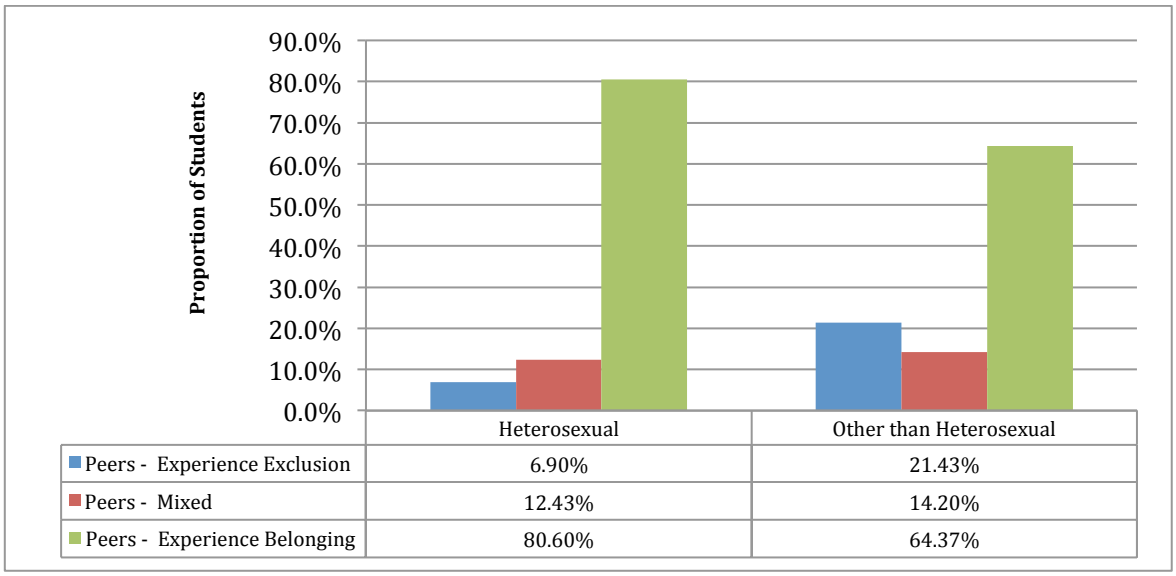


An interesting outcome from the analysis of the crosstabulations was that across disability, race, class, and generational status, the experience of belonging was reported as being more equitable among peers, less equitable at the school level, and most disproportionate at the classroom level. However, this trend was entirely reversed when it came to students who did not self-identify as heterosexual.

- *Experiences among peers*. The experience of exclusion is most apparent among peers for students who self-identified as other than heterosexual. Experiences of exclusion for students who self-identified as other than heterosexual was over three times that of students who identified as heterosexual: 21.43% of students who did not self-identify as heterosexual as compared to 6.9% of students who self-identified as heterosexual experienced exclusion among their peers (Figure 6.18). There was also a slight increase

in mixed experiences for students who self-identified as other than heterosexual and a notable drop in experiences of belonging.

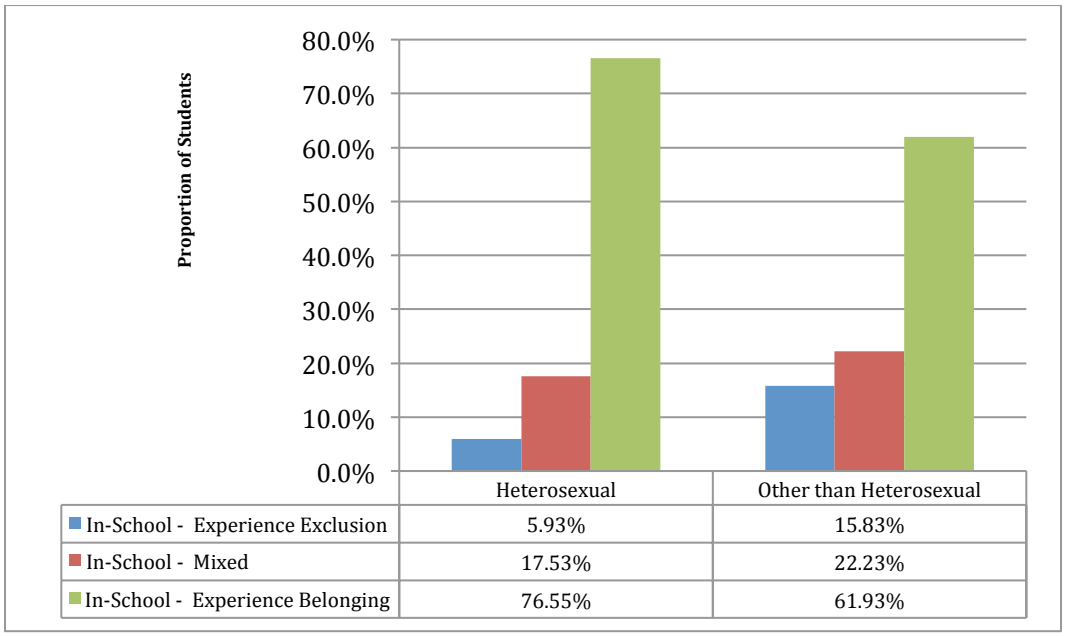
Figure 6.18. Peer Experience—Positive, Mixed, and Negative—across Self-Identified Sexual Orientation Categories



	Heterosexual	Other than Heterosexual
Peers - Experience Exclusion	6.90%	21.43%
Peers - Mixed	12.43%	14.20%
Peers - Experience Belonging	80.60%	64.37%

- *Experiences in school.* Students who did not self-identify as heterosexual reported experiencing exclusion in school at a rate close to three times that of students who did self-identify as heterosexual: 15.83% of students who did not self-identify as heterosexual as compared to 5.93% of students who self-identified as heterosexual experienced exclusion in school (Figure 6.19). Almost a quarter (22.23%) of students who self-identifed as other than heterosexual reported mixed experiences.

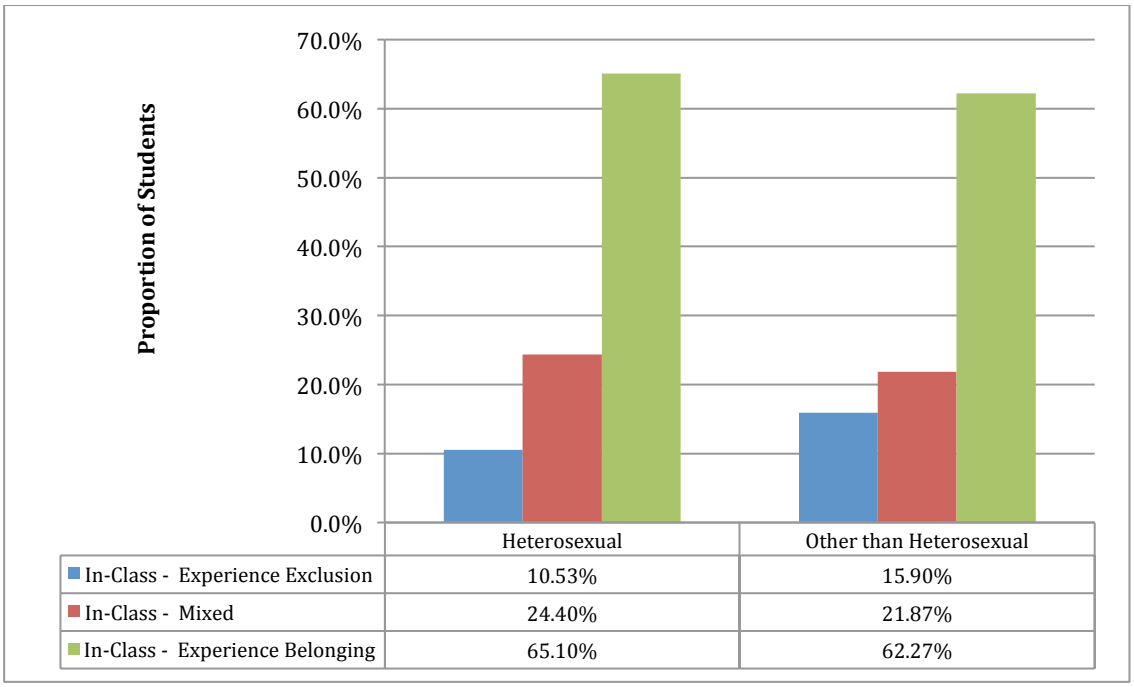
Figure 6.19. School Experience—Positive, Mixed, and Negative—across Self-Identified Sexual Orientation Categories



	Heterosexual	Other than Heterosexual
In-School - Experience Exclusion	5.93%	15.83%
In-School - Mixed	17.53%	22.23%
In-School - Experience Belonging	76.55%	61.93%

- *Experiences in the classroom*. Although there remained a small discrepancy between the experience of exclusion and belonging for students who did and did not self-identify as heterosexual, the classroom appears to be the place in which reported experiences were most similar between both groups (Figure 6.20).

Figure 6.20. Classroom Experience—Positive, Mixed, and Negative—across Self-Identified Sexual Orientation Categories



	Heterosexual	Other than Heterosexual
In-Class - Experience Exclusion	10.53%	15.90%
In-Class - Mixed	24.40%	21.87%
In-Class - Experience Belonging	65.10%	62.27%

Regression Analyses of the Scale of Belonging, Post-Secondary Access, and Students' Self-Assessed Confidence and Competencies Scale

The following analyses include logistic regressions. Three four-step models were created to present and analyze the data. The first model positioned the belonging and citizenship scale as the dependent variable. The first step included all identity-based characteristics. The second step added the achievement variable. Structural characteristics were included in the third step, and the model was finalized with the inclusion of the outcome variable. The second model repeated the first model stepwise; however, in place of the scale of belonging, post-secondary access was positioned as the dependent variable and the scale of belonging as an independent variable. It was critical, from a system perspective committed to successful academic achievement, to

include an analysis of post-secondary access as a dependent variable. However, as discussed throughout the first five chapters, academic achievement is complicated by the presence or deprivation of privilege. Academic achievement is narrowly defined and does not often acknowledge diverse engagement; therefore, it was also critical to include an outcome measure that captures students' perception of their own competencies relevant to their future social, political, and economic engagement. Therefore, the third model positioned the students' self-assessed scale of confidence and competencies as the dependent variable.[9]

Student-identity characteristics

A logistic regression analysis[10] was conducted to determine the impact of individual student characteristics on the likelihood that students experience citizenship and belonging within their schools. The first step or method of analysis included 19 independent variables. These variables were gender, sexual orientation, parent level of education, family structure, race (White), race (South Asian), race (East Asian), race (Black), race (other), no SEN, gifted, learning disability, mild intellectual disability, other SEN, IEP only, income, first-generation status, second-generation status, and third-generation status.

The first method of analysis demonstrated significance (19, N=4636) = 225.39, $p<.0001$. The model demonstrated strength with a Hosmer Lemershow significance value of .352 and was able to accurately classify 63.3% of cases. Of the 19 values included in the method 1 analysis, eight were statistically significant and one was approaching significance. The variable that appeared to have the greatest impact on the experience of citizenship and belonging was sexual orientation, as students who identified as other than heterosexual were 2.71 times as likely to feel

[9] Logistic regression results Please note that Pallant's (2007) guide to SPSS helped structure the writing of this results section re: regression.

[10] Please note that a hierarchical linear model regression analysis was initially attempted, but the variable of belonging did not demonstrate much effect. Differences in the experience of belonging appear to be dependent upon the dynamics involved within a particularly school as opposed to between schools.

excluded than students who identified as heterosexual. In terms of SEN, students who were identified as having a learning disability were 1.7 times as likely to feel excluded, and students who have not been formally identified but have an IEP were 1.57 times as likely to feel excluded, as students who have not been identified with having a SEN. However, students identified as gifted were much more likely to feel valued in school at an Exp(B) rate of 0.658. Students identified as having a mild intellectual disability were 1.759 times as likely to feel excluded than students who had not been identified with any SEN, although the variable was only approaching significance (p. = 0.056). In terms of race, students who identified as East Asian were 1.91 times to feel excluded than students who self-identified as White. Students who self-identified as Other in the racial category were 1.289 times as likely to feel excluded than students who self-identified as White. Second- and third-generation immigrant students were also 1.181 and 1.243 times respectively more likely to feel excluded than first-generation students.

Table 6.3. Step 1—Regression Analysis of Student Identity Characteristics

Identity Characteristics	B	S.E.	Wald	df	Sig.	Exp(B)
Gender	0.008	0.062	0.017	1	0.895	1.008
Sexual Orientation*	0.997	0.232	18.384	1	0	2.71
Parental Education*	0.534	0.068	62.591	1	0	1.706
Family Structure*	0.197	0.079	6.304	1	0.012	1.218
(REF) Race _White			73.667	4	0	
Race_South Asian	-0.158	0.117	1.816	1	0.178	0.854
Race_East Asian*	0.647	0.111	33.747	1	0	1.91
Race_Black	0.114	0.129	0.787	1	0.375	1.121
Race_Other*	0.254	0.108	5.484	1	0.019	1.289
(REF) SEN_No SEN			30.833	5	0	
SEN_Gifted*	-0.419	0.214	3.831	1	0.05	0.658
SEN_Learning Disability*	0.531	0.158	11.26	1	0.001	1.7
SEN_MID**	0.565	0.299	3.559	1	0.059	1.759
SEN_Other	0.225	0.325	0.481	1	0.488	1.253
SEN_IEP only	0.453	0.123	13.53	1	0	1.574
Income	-0.042	0.074	0.324	1	0.569	0.958
(REF) Generation _first			5.932	2	0.052	
Second Generation*	0.166	0.08	4.351	1	0.037	1.181
Third Generation*	0.217	0.106	4.219	1	0.04	1.243
Constant	-1.165	0.111	110.963	1	0	0.312

Note. B = regression coefficient, S.E = Standard Error, Wald = value of statistic, df = degrees of freedom, Sig. = significance, Exp(B) = odds ratio, (REF) = reference category.
* p>0.05.
** p>0.059.

Inclusion of achievement variables: EQAO scores and absenteeism

The second method of analysis included 21 independent variables. These variables included the initial variables from method 1—gender, sexual orientation, parents' level of education, family strucutre, race (White), race (South Asian), race (East Asian), race (Black), race (other), no SEN, gifted, learning disability, mild intellectual disability, other SEN, IEP only, income, first-generation status, second-generation status, and third-generation status—as well as Grade 6 EQAO scores and student absenteeism.

The second method of analysis demonstrated significance (21, N=4636) = 53.505, $p<.0001$. The model demonstrated strength with a Hosmer-Lemeshow significance value of .625 and was able to accurately classify 63.8% of cases. Of the 21 variables included in the second method of analysis, nine were statistically significant and one was approaching significance. Both Grade 6 EQAO and absenteeism variables demonstrated significance. Students who scored higher on the Grade 6 EQAO were significantly more likely to experience a sense of citizenship and belonging in school. Likewise, students who have higher rates of absenteeism were 1.299 times more likely to experience a sense of exclusion. Interestingly, with the introduction of achievement variables, all SEN categories became non-significant while other previously significant variables maintained their significance.

Table 6.4. Step 2—Regression Analysis—Introduction of Achievement Variables

Identity and Achievement Characteristics	B	S.E.	Wald	df	Sig.	Exp(B)
Gender	-0.03	0.063	0.229	1	0.632	0.97
Sexual Orientation*	0.985	0.233	17.796	1	0	2.677
Parental Education*	0.458	0.069	44.504	1	0	1.58
Family Structure*	0.174	0.079	4.835	1	0.028	1.19
(REF) Race White			82.255	4	0	
Race_South Asian	-0.129	0.118	1.198	1	0.274	0.879
Race_East Asian*	0.715	0.113	40.353	1	0	2.045
Race_Black	0.057	0.13	0.192	1	0.661	1.058
Race_Other*	0.235	0.109	4.627	1	0.031	1.265
(REF) SEN_No SEN			6.22	5	0.285	
SEN_Gifted	-0.264	0.217	1.491	1	0.222	0.768
SEN_Learning Disability	0.236	0.165	2.048	1	0.152	1.266
SEN_MID	0.063	0.309	0.042	1	0.838	1.065
SEN_Other	-0.088	0.333	0.07	1	0.792	0.916
SEN_IEP only	0.221	0.128	2.973	1	0.085	1.248
Income	-0.083	0.075	1.221	1	0.269	0.92
(REF) Generation_first			10.731	2	0.005	
Second Generation*	0.245	0.081	9.116	1	0.003	1.278
Third Generation*	0.269	0.107	6.276	1	0.012	1.309
Grade 6 EQAO*	-0.244	0.036	44.853	1	0	0.784
Absenteeism*	0.261	0.11	5.61	1	0.018	1.299
Constant	-0.509	0.149	11.659	1	0.001	0.601

Note. B = regression coefficient, S.E = Standard Error, Wald = value of statistic, df = degrees of freedom, Sig. = significance, Exp(B) = odds ratio, (REF) = reference category.
* $p>0.05$.

Inclusion of structural variables: POS and the LOI

The third method of analysis included 27 independent variables. These variables included the initial variables from method 1—gender, sexual orientation, parents' level of education, family strucutre, race (White), race (South Asian), race (East Asian), race (Black), race (other), no SEN, gifted, learning disability, mild intellectual disability, other SEN, IEP only, income, first-generation status, second-generation status, and third-generation status—and those from method 2 (EQAO scores and student absenteeism) as well as POS (academic), POS (applied), POS (locally developed), POS (no POS), cumulative suspensions, and the LOI.

The third method of analysis demonstrated significance (27, N=4636) = 26.941, $p<.0001$. The model demonstrated strength with a Hosmer-Lemeshow significance value of .649 and was able to accurately classify 63.9% of cases. Of the 27 variables included in the third method of analysis, nine were statistically significant and one was approaching significance. With the inclusion of the structural variables, all SEN categories became non-significant and all racial categories other than students who self-identified as East Asian became non-significant. Student absenteeism also became non-signficant. Family structure lost significance but remained close to significance. Of the newly introduced structural variables, the applied POS was significant with students being 1.22 times as likely to feel excluded than students who were in the academic POS. Also, the LOI was significant. Students attending schools ranking lower on the LOI were 1.7 times as likely to experience exclusion than students attending schools in more privileged communities.

Table 6.5. Step 3—Regression Analysis—Introduction of Structural Variables

Identity, Achievement and Structural Characteristics	B	S.E.	Wald	df	Sig.	Exp(B)
Gender	-0.061	0.064	0.907	1	0.341	0.941
Sexual Orientation*	0.983	0.234	17.62	1	0	2.674
Parental Education*	0.374	0.071	27.929	1	0	1.453
Family Structure**	0.153	0.08	3.657	1	0.056	1.165
(REF) Race_White			94.456	4	0	
Race_South Asian	-0.175	0.119	2.16	1	0.142	0.839
Race_East Asian*	0.75	0.113	43.83	1	0	2.117
Race_Black	-0.048	0.132	0.134	1	0.714	0.953
Race_Other	0.181	0.11	2.688	1	0.101	1.198
(REF) SEN_No SEN			3.723	5	0.59	
SEN_Gifted	-0.246	0.217	1.287	1	0.257	0.782
SEN_Learning Disability	0.138	0.169	0.666	1	0.414	1.148
SEN_MID	-0.103	0.328	0.099	1	0.753	0.902
SEN_Other	-0.202	0.337	0.358	1	0.55	0.817
SEN_IEP only	0.143	0.133	1.166	1	0.28	1.154
Income	-0.155	0.077	4.041	1	0.044	0.856
(REF) Generation_first			9.336	2	0.009	
Second Generation*	0.226	0.082	7.609	1	0.006	1.253
Third Generation*	0.261	0.108	5.844	1	0.016	1.298
Grade 6 EQAO	-0.192	0.039	24.115	1	0	0.825
Absenteeism	0.146	0.115	1.621	1	0.203	1.158
(REF) Program of Study_Academic			5.47	3	0.14	
Program of Study_Applied*	0.199	0.098	4.106	1	0.043	1.22
Program of Study_Essentials	0.305	0.226	1.818	1	0.178	1.357

Program of Study_Undefined*	0.647	0.599	1.168	1	0.28	1.911
Suspensions	0.019	0.021	0.866	1	0.352	1.02
Learning Opportunity Index*	0.555	0.138	16.227	1	0	1.742
Constant	-0.793	0.161	24.358	1	0	0.453

Note. B = regression coefficient, S.E = Standard Error, Wald = value of statistic, df = degrees of freedom, Sig. = significance, Exp(B) = odds ratio, (REF) = reference category.
* $p>0.05$.

Inclusion of the self-assessed scale of confidence and competencies

As noted earlier, it was imperative that a measure be included that was not based on established performance evaluations. This scale was intended to become a measure that assessed students' own self-assessed level of confidence in their own competencies related to future social, political, and economic engagement. Differing from traditional methods of education research (namely, academic acheivement and post-secondary access), this scale reveals students' own sense of how well they relate to others, their readiness to take on leadership roles and to solve problems, and the level of confidence they have in basic competencies such as reading, writing, and technology.

This fourth method of analysis included 28 independent variables. These variables included the initial variables from previous methods as well as the newly incorporated confidence scale.

Development of the Confidence Scale

The following group of questions were selected as they best represented an outcome measure that would enable students greater opportunities for the actualization of citizenship. Although the quantitative analyses included in this thesis were based in an education system, they also speak to larger constructs such as citizenship and experiences of structural violence and

oppression. Therefore, it was important to implement not simply education-based outcomes, but also outcomes that would be more indicative of characteristics likely to enable future social and political participation.

Selecting from Form A of the 2011 TDSB student census, question 31 was evaluated through a factor analysis and Cronbach's Alpha analysis.

31 How do you rate yourself in the following areas? (Likert scale: excellent, good, not sure, average, weak)

- Oral communication
- Reading
- Writing
- Math
- Technology
- Social Skills
- Problem Solving
- Leadership

Results from the factor analysis identified the scale, however the Cronbach's Alpha eliminated Math as one of the variables. All above indicators remained as part of the scale with the exception of Math.

The first step was to run the scale of students' self-assessed confidence and competencies across the population of students identified with SEN.

Table 6.6. Chi-Square Results for Confidence and Competence Scale

Chi-Square Tests	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	115.102[a]	5	0
Likelihood Ratio	111.979	5	0
Linear-by-Linear Association	76.342	1	0
N of Valid Cases	4787		

[a] 0 cells (.0%) have expected count less than 5. The minimum expected count is 15.04.

Table 6.7. Crosstab—Special Education Needs across Confidence and Competence Scale

Exceptionality	Across/Within	High Confidence/Value	Low Confidence/Value	Total
.00 No SEN	Count	2708	1367	4075
	% across Confidence/ Intrinsic Value Scale	66.5%	33.5%	100.0%
	% within Confidence/ Intrinsic Value Scale	88.1%	79.8%	85.1%
1.00 Gifted	Count	97	24	121
	% across Confidence/ Intrinsic Value Scale	80.2%	19.8%	100.0%
	% within Confidence/ Intrinsic Value Scale	3.2%	1.4%	2.5%
2.00 LD	Count	79	105	184
	% across Confidence/ Intrinsic Value Scale	42.9%	57.1%	100.0%
	% within Confidence/ Intrinsic Value Scale	2.6%	6.1%	3.8%

3.00 MID	Count	20	28	48
	% across Confidence/ Intrinsic Value Scale	41.7%	58.3%	100.0%
	% within Confidence/ Intrinsic Value Scale	0.7%	1.6%	1.0%
4.00 Other	Count	19	23	42
	% across Confidence/ Intrinsic Value Scale	45.2%	54.8%	100.0%
	% within Confidence/ Intrinsic Value Scale	0.6%	1.3%	0.9%
5.00 IEP	Count	150	167	317
	% across Confidence/ Intrinsic Value Scale	47.3%	52.7%	100.0%
	% within Confidence/ Intrinsic Value Scale	4.9%	9.7%	6.6%
Total	Count	3073	1714	4787
	% across Confidence/ Intrinsic Value Scale	64.2%	35.8%	100.0%
	% within Confidence/ Intrinsic Value Scale	100.0%	100.0%	100.0%

Note. No SEN = no identification of special education needs; LD = learning disability; MID = mild intellectual disability; Other = formal identification of an exceptionality not listed in this table; IEP = Individual Education Plan only (no formal identification of SEN).

Students' Self-Assessed Confidence and Competence Scale and Special Education

There were tremendous differences in students' self-reported confidence and sense of value across special education categories. Although 66.5% of students who had not been identified as having an SEN reported experiencing a sense of confidence, 80.2% of students

identified as gifted reported experiencing a sense of confidence. This result dropped dramatically to below 50% of students identified as having a learning disability, mild intellectual disability, other exceptionality, and only an IEP.

The low-confidence scale was then included into the original regression analysis model as a fourth method of analysis. The fourth method of analysis demonstrated significance (28, N=4636) = 282.339, p<.0001. The model demonstrated strength with a Hosmer-Lemeshow significance value of .093 and was able to accurately classify 67.5% of cases. Of the 28 variables included in the method 1 analysis, eight were statistically significant. Of all four methods of analysis, the confidence scale proved to have the strongest relationship with the scale of belonging and citizenship. Students who did not feel confident in their own skills of leadership, problem solving, social skills and identified curricular areas were 3.106 times more likely to experience exclusion in school. With the inclusion of the confidence scale, all SEN categories remained non-significant as well as all racial categories other than students who self-identified as East Asian. Student absenteeism and all levels of POS also became non-signficant.

Table 6.8. Step 4—Regression Analysis—Introduction of Self-Assessed Confidence and Competence Scale

Identity, Achievement, Structural, & Confidence Characteristics	B	S.E.	Wald	df	Sig.	Exp(B)
Gender	-0.047	0.066	0.507	1	0.476	0.954
Sexual Orientation*	0.98	0.239	16.738	1	0	2.664
Parental Education*	0.283	0.073	14.937	1	0	1.327
Family Structure	0.144	0.083	3.027	1	0.082	1.154
(REF) Race_White			49.185	4	0	
Race_South Asian	-0.158	0.123	1.659	1	0.198	0.854
Race_East Asian*	0.541	0.118	21.185	1	0	1.718
Race_Black	-0.074	0.137	0.291	1	0.589	0.929
Race_Other	0.12	0.114	1.1	1	0.294	1.127
(REF) SEN_No SEN			1.545	5	0.908	
SEN_Gifted	-0.173	0.222	0.608	1	0.436	0.841
SEN_Learning Disability	0.021	0.175	0.015	1	0.903	1.022
SEN_MID	-0.133	0.343	0.151	1	0.698	0.875
SEN_Other	-0.262	0.348	0.568	1	0.451	0.77
SEN_IEP only	0.047	0.137	0.12	1	0.729	1.049
Income	-0.146	0.08	3.318	1	0.069	0.865
(REF) Generation_first			9.203	2	0.01	
Second Generation*	0.237	0.084	7.88	1	0.005	1.268
Third Generation*	0.256	0.111	5.268	1	0.022	1.291
Grade 6 EQAO*	-0.118	0.041	8.352	1	0.004	0.889
Absenteeism	0.192	0.119	2.597	1	0.107	1.211
(REF) Program of Study_Academic			1.397	3	0.706	

Program of Study_Applied	0.065	0.102	0.408	1	0.523	1.067
Program of Study_Essentials	0.24	0.235	1.039	1	0.308	1.271
Program of Study_Undefined	0.37	0.634	0.341	1	0.559	1.448
Suspensions	0.021	0.022	0.968	1	0.325	1.021
Learning Opportunity Index*	0.564	0.142	15.673	1	0	1.758
Confidence/Intrinsic Value Scale*	1.133	0.068	277.261	1	0	3.106
Constant	-1.296	0.17	58.367	1	0	0.274

Note. B = regression coefficient, S.E = Standard Error, Wald = value of statistic, df = degrees of freedom, Sig. = significance, Exp(B) = odds ratio, (REF) = reference category.
* p>0.05.

Regression Analysis of Post-Secondary Pathways

The issue of post-secondary access in relation to both the belonging and confidence indices was considered. To explore whether there is a relationship between (a) the experience of belonging and confidence and (b) post-secondary access, a secondary regression analysis was conducted situating post-secondary access as the dependent variable and belonging and confidence as independent variables.

Table 6.9. Hosmer-Lemeshow Test for Post-Secondary Pathways

Step	Chi-square	df	Sig.
1	10.757	8	0.216

Table 6.10. Full Regression Analysis—Post-Secondary Pathways

Variables	B	S.E.	Wald	df	Sig.	Exp(B)
Gender	0.258	0.076	11.548	1	0.001	1.295
Sexual Orientation	0.11	0.276	0.159	1	0.69	1.117
Parental Education*	0.523	0.082	40.211	1	0	1.687
Family Structure*	0.256	0.097	6.938	1	0.008	1.292
(REF) Race_White			83.235	4	0	
Race_South Asian*	-0.736	0.138	28.431	1	0	0.479
Race_East Asian*	-0.913	0.14	42.353	1	0	0.401
Race_Black	0.209	0.161	1.676	1	0.195	1.232
Race_Other	-0.158	0.13	1.469	1	0.226	0.854
(REF) SEN_No SEN			16.996	5	0.005	
SEN_Gifted	0.309	0.23	1.795	1	0.18	1.362
SEN_Learning Disability*	0.714	0.277	6.665	1	0.01	2.043
SEN_MID	-0.399	0.64	0.39	1	0.532	0.671
SEN_Other	-0.401	0.569	0.497	1	0.481	0.669
SEN_IEP only*	0.531	0.186	8.177	1	0.004	1.701
Income	-0.013	0.094	0.02	1	0.887	0.987
(REF) Generation_first			32.354	2	0	
Second Generation	-0.028	0.1	0.075	1	0.784	0.973
Third Generation*	0.632	0.127	24.733	1	0	1.881
Grade 6 EQAO*	-0.482	0.048	102.116	1	0	0.617
Absenteeism*	0.835	0.159	27.503	1	0	2.305
(REF) Program of Study_Academic			166.21	3	0	
Program of Study_Applied*	1.77	0.137	166.21	1	0	5.87
Program of Study_Essentials	19.758	3356.693	0	1	0.995	3.81E+08
Program of	21.02	9503.67	0	1	0.998	1.35E+09

Study_Undefined						
Suspensions*	1.072	0.16	44.701	1	0	2.921
Learning Opportunity Index*	0.384	0.051	56.501	1	0	1.468
Confidence/Intrinsic Value Scale*	0.275	0.084	10.661	1	0.001	1.316
Belonging*	0.221	0.081	7.421	1	0.006	1.247
Constant	-0.493	0.191	6.669	1	0.01	0.611

Note. B = regression coefficient, S.E = Standard Error, Wald = value of statistic, df = degrees of freedom, Sig. = significance, Exp(B) = odds ratio, (REF) = reference category.
* $p>0.05$.

The following student characteristics correlated with barriers to post-secondary education: being female, having parents who did not have a university education, having access to only one parent, identifying as South Asian or East Asian or third generation, being identified as having a learning disability or having only an IEP, poor academic achievement, absenteeism and being suspended, living in an under-resourced neighbourhood, having low-confidence, and feeling a sense of exclusion in school.

Finally, the question of whether students' self-assessed confidence and competence scale has a relationship with all other variables was explored in the following regression analysis.

Table 6.11. Hosmer-Lemeshow Test for Competence and Confidence Scale

Step	Chi-square	df	Sig.
1	8.653	8	0.372

Table 6.12. Full Regression Analysis—Students' Self-Assessed Confidence and Competence Scale

Variables	B	S.E.	Wald	df	Sig.	Exp(B)
Gender	-0.07	0.069	1.025	1	0.311	0.933
Sexual Orientation	-0.023	0.254	0.008	1	0.929	0.978
Parental Education*	0.351	0.077	20.907	1	0	1.42
Family Structure	0.028	0.086	0.104	1	0.747	1.028
(REF) Race_White			87.539	4	0	
Race_South Asian	-0.028	0.129	0.046	1	0.83	0.973
Race_East Asian*	0.879	0.122	51.664	1	0	2.408
Race_Black	0.095	0.141	0.448	1	0.504	1.099
Race_Other*	0.269	0.118	5.139	1	0.023	1.308
(REF) SEN_No SEN			12.968	5	0.024	
SEN_Gifted	-0.335	0.248	1.819	1	0.177	0.715
SEN_Learning Disability*	0.447	0.18	6.133	1	0.013	1.563
SEN_MID	0.103	0.349	0.087	1	0.767	1.109
SEN_Other	0.239	0.357	0.449	1	0.503	1.27
SEN_IEP only*	0.352	0.139	6.393	1	0.011	1.421
Income	-0.04	0.082	0.239	1	0.625	0.961
(REF) Generation_first			0.193	2	0.908	
Second Generation	-0.035	0.087	0.157	1	0.691	0.966
Third Generation	-0.001	0.116	0	1	0.995	0.999
Grade 6 EQAO*	-0.282	0.042	44.603	1	0	0.754
Absenteeism	-0.217	0.125	2.986	1	0.084	0.805
(REF) Program of Study_Academic			18.529	3	0	
Program of Study_Applied*	0.428	0.106	16.343	1	0	1.534
Program of Study_Essentials	0.165	0.239	0.474	1	0.491	1.179

Program of Study_Undefined	1.039	0.654	2.521	1	0.112	2.825
Suspensions	-0.012	0.022	0.32	1	0.572	0.988
Learning Opportunity Index	-0.085	0.15	0.319	1	0.572	0.919
PSE Access*	0.264	0.083	10.182	1	0.001	1.302
Belonging*	1.125	0.068	272.675	1	0	3.08
Constant	-0.917	0.176	27.064	1	0	0.4

Note. B = regression coefficient, S.E = Standard Error, Wald = value of statistic, df = degrees of freedom, Sig. = significance, Exp(B) = odds ratio, (REF) = reference category.
* p>0.05.

Similarly to the regression analysis on belonging, many of the same variables resulted in signficance when correlated to the confidence/competence scale. Additional significant variables for the confidence/competence scale were post-secondary eduction (PSE) access, self-identified ethno-racial status of "Other," being identified with a learning disability, having only an IEP, and being enrolled in the applied POS. Generational status and low-resourced neighbourhoods were not signficant variables here.

Conclusion

Although many outcomes revealed deep social inequities in relation to experience of belonging in school, three critical findings emerged from the descriptive and regression analysis. The first finding was that students identified with SENs experienced a far greater sense of exclusion in school as compared both to the total student population and to students identified as gifted. The second important finding to emerge was that students identified with SENs tend to experience the greatest sense of exclusion in the classroom as compared to among peers or within the school at large. Aside from students who self-identified as other than heterosexual, most other groups who have experienced historical marginalization experienced the greatest

sense of exclusion in the classroom. The third finding, and arguably the most important to emerge from my doctoral research, is the quantitative evidence supporting the social construction of special education labels and designations.

The outcomes from the regression analysis are complex, particularly due to the multi-level model employed. When only identity characteristics were included in the model (step 1), four special education categories were significant. However, when academic and structural characteristics were included into the model (steps 2 and 3), all special education labels and designations lost their significance. The process of special education characteristics losing their significance suggests that the initial significance apparent in the first step of the regression analysis was later explained by the achievement and structural factors introduced in the second and third steps. These findings lend support to the notion that perceptions of disability are constructed based on external factors and, once constructed, are then assigned to students. The argument that disability labels are socially constructed is widely supported and disseminated in Disability Studies and Critical Disability Studies. However, I believe this to be the first quantitative study to address and support these important theoretical concepts. If this knowledge were to be shared within educational settings, there is great potential for more purposive service and support to students without assigning disability labels or segregation based on evidenced, constructed differences.

Chapter 7: Structured Secondary Pathways and Disproportionality across the TDSB[11]

The scale of belonging has been demonstrated to be a powerful indicator to identify ongoing and embedded forms of exclusion and discrimination. In light of these findings, it was imperative to delve deeper into the key structural issues that affect the experience of belonging. This chapter explores a number of structural mechanisms often employed as approaches to student organization and examines students' pathways across secondary school. Differences across student and school demographic characteristics in relation to POS (academic streaming/tracking), school-wide structures, and in-school programs are explored.

Analysis

This final large-scale analysis explores descriptive statistics including student achievement, students' socio-economic and demographic characteristics, as well as their experience of belonging and exclusion across widely implemented secondary school organizational mechanisms. To begin, this analysis had three distinct foci:

1. The first focus investigated whether or not students were congregated across POS (academic, applied, Essentials, and undefined POS)—academic being the most rigorous—by a particular economic or demographic characteristic.
2. The second focus of this analysis included an investigation into selected school-wide structures (specialty arts schools, alternative schools, special education schools, and schools that offer limited academics).
3. The third focus of this analysis includes an investigation into selected in-school

[11] The majority of this chapter has been published in *Structured pathways: An exploration of programs of study, school-wide, and in-school programs across secondary schools in the Toronto District School Board* (Report No. 13/14-03), by G. Parekh, 2013, Toronto: TDSB. Permission was given to the TDSB to publish as a report and post on their external website.

programs: congregated gifted and special education programming, the International Baccalaureate (IB) program, French Immersion, Advanced Placement (AP) opportunities, the elite athlete program, the Specialist High Skills Major (SHSM) program, and the Ontario Youth Apprenticeship Program (OYAP).

In addition to a thorough investigation of students' achievement, as well as their economic and demographic representations across school structures, an exploration into students' experience of belonging and exclusion was examined. Student economic, demographic, and outcome variables included gender, race, language, sexuality, income, special education identification status, exceptionality status, generational status, parental presence, parental education, parental occupation, parents living in or outside of Canada, family income, the LOI, suspensions, achievement, absenteeism, and belonging.

Data Source

This final quantitative analysis on school structures and their correlation to students' socio- demographic characteristics, as well as their experience of belonging, employed data from the TDSB's 2011 student census as well as from its Student Information System.

- Analysis of student transitions from Grade 8 to Grade 9 drew from a smaller cohort of students selected in Grade 10 (2011–12) and followed back to Grade 8 (2009–10) (n=15,827).
- Analyses of Grade 12 (year 4) students correlating graduation and post-secondary confirmation employed data only for students in Grade 12 for the first time (n=15,975). However, when correlating to responses from the 2011 student census, depending on the question, the number of completed responses can vary.
- For all other analyses within the first quantitative study, all students in the secondary

panel (2011–12) were included, which resulted in an N of 90,838 students.

Purpose and Introduction to the Analysis

Having established the strength of the scale of belonging and the complexity of factors involved in the experience of belonging and exclusion (e.g., cultural factors, ethno-racial factors, sexuality, class, generational status) in chapter 7, a follow-up analysis was conducted to explore how the various student characteristics and divergent identities were organized and controlled within a public education system. Drawing correlations between student characteristics and program pathways constructed an important depiction of equity within the TDSB and has the potential to draw attention to structural factors in relation to student organization of privilege and marginalization. Ensuring equitable access to post-secondary opportunities is a key priority for educators and policy makers. Clues as to how and why students may be encountering barriers to post-secondary education (PSE) access could be revealed by closely examining their secondary school pathways. Although this chapter is exploring correlation and not causality, significant relationships between how schools operate and how student populations are organized could offer insight into targeted and effective program action.

This study of secondary school pathways, program participation, and outcomes presents a vital analysis of school structures and the ways in which students negotiate the secondary school panel. This chapter is divided into three distinct sections. The first section explores Grade 9–10 programs of study, including an analysis of program pathways, student demographics, achievement, and a sense of belonging. The second section looks at school-wide structures (i.e., program decisions that affect entire school populations such as specialty arts schools, special education schools, schools with limited academic opportunities, and alternative schools). The foci of the third section are selected in-school programs (i.e., programs that affect a portion of

the school population such as gifted and special education programming, AP programming, IB programming, French Immersion, Elite Athlete programming, SHSM programming, and OYAP)[12].

In addition to exploring student trajectories from Grade 8 to post-secondary confirmations, one purpose of this chapter is to provide a comparative analysis of proportionate representation of selected student demographic variables. In cases where there are notable over- or under-representations of specific demographic characteristics within a program or pathway, further investigation is necessary to uncover factors of causality. Illuminating what drives program pathways reveals rich opportunities for innovative and creative policy interventions towards more equitable outcomes.

Programs of Study

The exploration of students' secondary school pathways is a highly political issue. Historically, the relationship between social privilege, perceived ability, and greater academic opportunity has been well documented. Critics advocating education reform have identified structured academic pathways afforded to certain social and cultural groups as key to the replication of social privilege and marginalization. According to the MOE, streaming does not officially exist (Brown & Sinay, 2008). In fact, organizational strategies such as programs of choice and mixed-level academic courses are considered functions of a de-streamed system. However, research conducted at the TDSB reveals that students are often set along structured academic pathways beginning before Grade 8 and ultimately shaping post-secondary access.

Overview of programs of study

Within the TDSB, secondary school students can enroll in classes within various programs of study (Brown, 2008). Across the secondary school panel, the TDSB offers seven

[12] For further detail on TDSB programming, see Sinay (2010).

possible course levels in which students can participate. For students in Grades 9–10, they can enroll in courses at the academic, applied, and locally developed/Essentials levels of study, academic-level courses being the most academically rigorous. Similarly, for Grades 11–12, students can enroll in courses at the levels of university preparedness, mixed, college preparedness, and workplace preparedness, with university preparedness courses being the most academically challenging (Brown, 2008).

The proportion of students taking the majority of their courses in each POS breaks down as follows[13]:

Table 7.1. Proportion of Students across Grades 9–10 Program of Study, 2011–12

Program of Study	Academic	Applied	Essentials	Undefined
Total	65.7%	25.4%	4.1%	4.8%

Academic courses explore essential concepts within specified disciplines at the Grade 9 and 10 levels. They promote abstract and critical thinking as well as encourage students to learn and apply theory to facilitate future learning. For students in Grades 11–12 looking for post-secondary access to university, the TDSB offers university preparation courses. These courses are designed to ensure that students are adequately prepared for entrance into university. University preparation courses promote independent learning while developing students' research skills.

[13] POS descriptions were retrieved from the TDSB document *Choices 2014-2015* (p. 39).

Applied POS courses focus primarily on practical, real-life applications of course material and theory and are offered in Grades 9–10. Applied programs offer students an opportunity to engage with course material. For students in Grades 11–12 hoping to be eligible for college, the TDSB offers college preparation courses. In consultation with colleges, these courses have been developed to ensure that students are adequately prepared for entrance into college.

To be considered enrolled in the Essentials POS (as defined in this analysis), students must be taking a majority of locally developed courses in Grades 9–10. The locally developed compulsory credit courses have been geared towards students who demonstrate significant barriers to learning within other programs of study. These courses are designed to cover core areas with additional support. For students hoping to enter the workforce directly after high school, the TDSB offers workplace preparation courses in Grades 11–12. Workplace preparation courses are geared towards preparing students to transfer directly into the workforce or into other vocational/apprenticeship programs.

Students also have the opportunity to take Grade 11–12 mixed courses or university/college preparation courses which offer programming that prepares students to meet the requirements for certain university and college degrees or programs as well as specific occupational fields. Theory and application are promoted in these courses.

Students identified as taking an "undefined" POS or "no program of study" are generally students taking non-credit courses, students who have recently arrived in Canada, or students who had entered the TDSB after Grade 10. This group largely included students with special education needs taking non-credit courses and students who arrived in the TDSB in Grade 11 or 12.

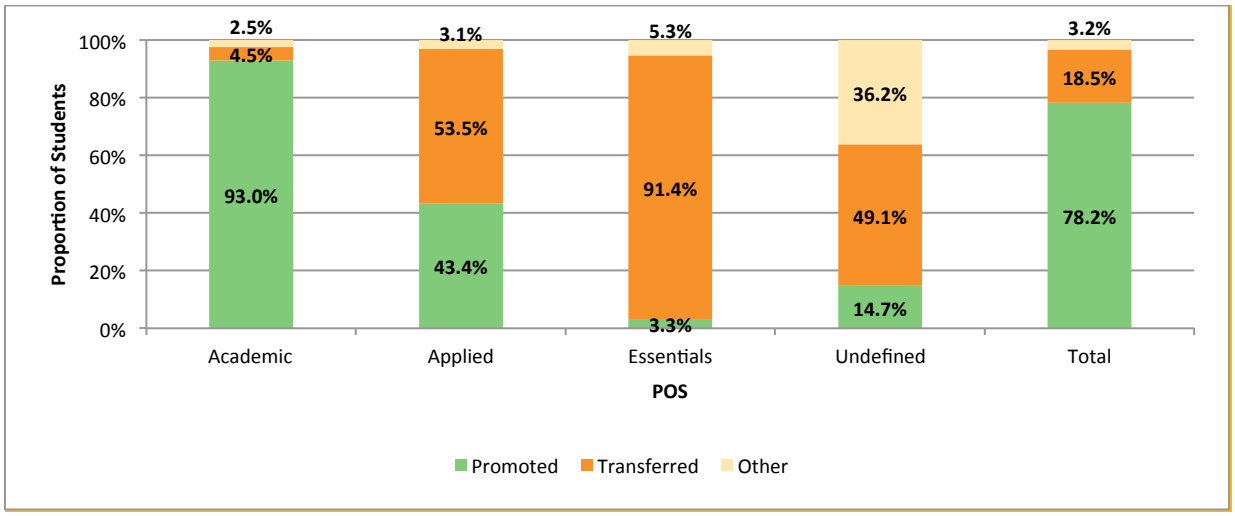
Pathways across Grade 9–10 programs of study

Transitions to secondary.

Although students may be set along an academic trajectory long before they enter secondary school, the point of origin for this analysis begins with students' transitions from intermediate to secondary school. Transitioning from Grade 8 to Grade 9 is a pivotal event in a student's program pathway. If students are successful in their Grade 8 studies, passing all components of the curriculum, they are promoted to Grade 9. Due to policies restricting schools from retaining students within their grade for a second year, unsuccessful Grade 8 students (i.e., students who did not pass all the curriculum requirements in Grade 8) will also be transferred to Grade 9.

There is a strong relationship between students' successful and unsuccessful transition to Grade 9 and the majority of courses taken within the Grades 9–10 POS (Figure 7.1). In September 2010, 78.4% of students in Grade 8 were successfully promoted to Grade 9 while 18.6% were transferred. For students in the academic POS, 93% were promoted and 4.5% were transferred. The proportion of students promoted to Grade 9 dropped dramatically for both the applied (43.4%) and Essentials (3.3%) POS. Conversely, the proportion of students who were transferred rose to 53.5% of students in the applied and 91.4% of students in the Essentials POS.

Figure 7.1. Rates of Promotion and Transference across POS (Grade 8–10 Students Only), 2010



The analysis on transitions from Grade 8 to Grade 9 and the established relationship between academic achievement and POS in Grades 9 and 10 challenges the embedded discourse of student choice around academic pathways. Student achievement in the elementary or intermediate school panels closely relates to POS in Grades 9–10. The philosophy behind offering courses at varying levels of academic challenge is that each student will be enrolled in a POS in which they will be successful. As previously seen, encountering success in Grade 8 sets students on a pathway to more rigorous academic programming, in the academic POS. Conversely, the failure to successfully transition from Grade 8 to Grade 9 sets students on a pathway to less rigorous and basic programming, in the applied and Essentials POS.

Program of study.

However, the rhetoric of choice persists for student pathways despite the evidence that, once set, many students do not deviate from their established academic trajectories. While some students do diverge from their initial pathway, most do not. The proportion of students remaining in their projected academic pathway is largely intact (Tables 7.2 & 7.3). For example, of students

who took the majority of their courses in the academic POS for Grades 9–10, 77.8% went on to take the majority of their courses at the university preparedness level for Grade 12. Of students who took university preparedness–level courses in Grade 12, 90.2% had taken the majority of their courses in the academic POS in Grades 9–10.

There is a similar connection between the applied POS in Grades 9–10 and the college preparedness–level courses in Grade 12. Of students in the applied POS, over half (52.5%) pursued college preparedness courses in Grade 12 and almost three quarters (74.9%) of students taking the majority of their courses at the college preparedness level in Grade 12 took the majority of their Grade 9–10 courses in the applied POS.

Whereas 59.6% of students the Essentials POS in Grades 9–10 took the majority of their courses at the workplace level in Grade 12, just under half (48.4%) of students taking the majority of their courses at the workplace level had taken the majority of their Grade 9–10 courses in the Essentials POS. Interestingly, a large proportion of students (43.4%) who ended up taking the majority of their courses at the workplace level in Grade 12 had taken the majority of their Grade 9–10 courses in the applied POS.

Table 7.2. Proportion of Grade 12 (Year 4 Only) Students' Grades 11 and 12 Level of Courses across POS, 2011–12

Grade 9-10 POS	University	Mixed	College	Workplace	Undefined
Academic	77.8%	17.2%	4.5%	0.2%	0.3%
Applied	12.5%	23%	52.5%	7.1%	4.9%
Essentials	2.9%	6.7%	16.5%	59.6%	14.3%
Undefined	50.8%	14.3%	11.7%	3.9%	19.3%
All Grade 12 students	58.5%	18.1%	16.6%	3.9%	2.9%

Table 7.3. Proportion of Students in Grade 12 (Year 4 Only) Who Were Enrolled in Academic, Applied, or Essentials POS, 2011–12

Grade 9-10 POS	University	Mixed	College	Workplace	No POS
Academic	90.2%	64.5%	18.2%	2.8%	7.3%
Applied	5.1%	30.1%	74.9%	43.4%	41%
Essentials	0.2%	1.2%	3.1%	48.4%	15.7%
Undefined	4.6%	4.2%	3.8%	5.4%	36%
Total	100%	100%	100%	100%	100%

Graduation.

An analysis of graduation rates reveals similar trends supporting the existence and effects of established secondary pathways. Graduation rates dropped across programs of study while rates of students returning to and dropping out of the TDSB rose (Table 7.4). For example, 81.6% of students taking the majority of their Grade 9–10 courses in the academic POS graduated on time. This proportion dropped to less than half (39.3%) of students taking the majority of their Grade 9–10 courses in the applied POS and, even further, to less than a quarter (20.3%) of students taking the majority of their Grade 9–10 courses in the Essentials POS.

In contrast to falling graduation rates, rates of returning students and students dropping out of the TDSB rose. While only 13.2% of students in the academic POS returned to the TDSB, 40.9% of students in the applied POS and 51.7% of students in the Essentials POS returned for a fifth year. While only 2.9% of students in the academic POS dropped out of the TDSB prior to graduation, this proportion rose to 14.8% for students in the applied POS and 23.1% of students in the Essentials POS.

Table 7.4. Proportion of Students Graduating On Time across POS (Year 4 Only), 2011–12

Grade 9-10 POS	Graduated	Returned	Transferred	Dropped Out
Academic	81.6%	13.2%	2.2%	2.9%
Applied	39.2%	40.9%	5.2%	14.8%
Essentials	20.3%	51.7%	4.9%	23.1%
Undefined	41.7%	33%	11.5%	13.8%
Total	67.5%	22%	3.5%	7%

Post-secondary access.

Having established strong evidence of established secondary pathways beginning with students' transitions from Grade 8 to Grade 9 and across Grades 9–10 programs of study and Grade 12 course levels, the question then becomes one of equity for post-secondary access. There are two points of consideration in the discussion of equity regarding post-secondary access:

1. Do post-secondary outcomes mirror high school POS expectations?
2. Do students leave secondary school with equitable access to a variety of post-secondary education opportunities?

The trajectory of post-high school pathways is well documented (e.g., Brown & Sinay, 2008; Kirby, 2009). For example, students who take the majority of their courses at the university preparation level in Grade 12 can assume that, upon graduation, they will be eligible to pursue post-secondary education at a university. Similarly, students who successfully complete the majority of classes at the college preparation level in Grade 12 should be eligible, upon graduation, to pursue post-secondary education at a college. Likewise, students in Grade 12 who enroll in the workplace POS can assume that they will be given the opportunity to learn skills essential to moving successfully from secondary school to the workplace.

The analysis conducted at the TDSB revealed that the outcomes of established academic pathways both prevent students from equitable access to post-secondary opportunities and fail to reflect the goals embedded in secondary programs of study. The data below look at students who are in their fourth year of secondary school (i.e., first year in Grade 12) and PSE confirmations for the year following graduation (Figure 7.2).[14] Overall, 39.5% of students confirm an offer of admission to a university in Ontario, while 6.4% confirm an offer to an Ontario college. Although 11.4% of students applied to PSE but did not confirm, this does not mean that they were not accepted into a PSE institution. A portion of this group includes students who applied through the Ontario University Application Centre (OUAC) but confirmed PSE offers outside of Ontario, for which OUAC has no records. Finally, 42.7% of students did not apply to PSE at all.

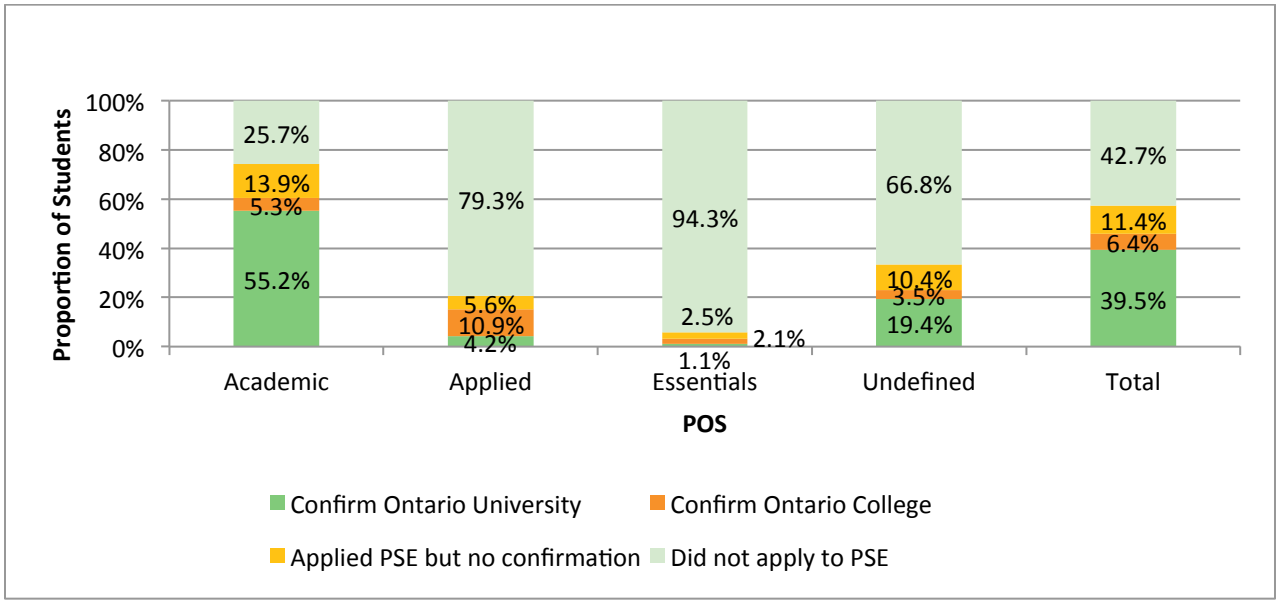
The data below are parsed out in two ways. The upper table breaks down the proportion of first-time Grade 12 students in each POS across PSE outcomes. The lower table breaks down the proportion of first-time Grade 12 students in each PSE outcome category across programs of study.

For students in the academic POS, 55.2% confirmed an offer of admission to a university in Ontario while 5.3% accept a confirmation to an Ontario college. Although 13.9% of students in the academic POS applied to a PSE institution with no confirmation, 24% of students did not apply to any PSE opportunities. Of students who did confirm an offer of admission to an Ontario university, 94.8% had taken the majority of their courses in the academic POS. Likewise, over half (55.6%) of students confirming an offer of admission to an Ontario college had taken the majority of their courses in the academic POS. Interestingly, a higher proportion of college-

[14] It is important to note that there is a proportion of students who do not apply to PSE their first year after graduation, but will apply the following year (Brown, 2009).

bound students had taken the majority of their courses in the academic POS as opposed to the applied POS (40.5%).

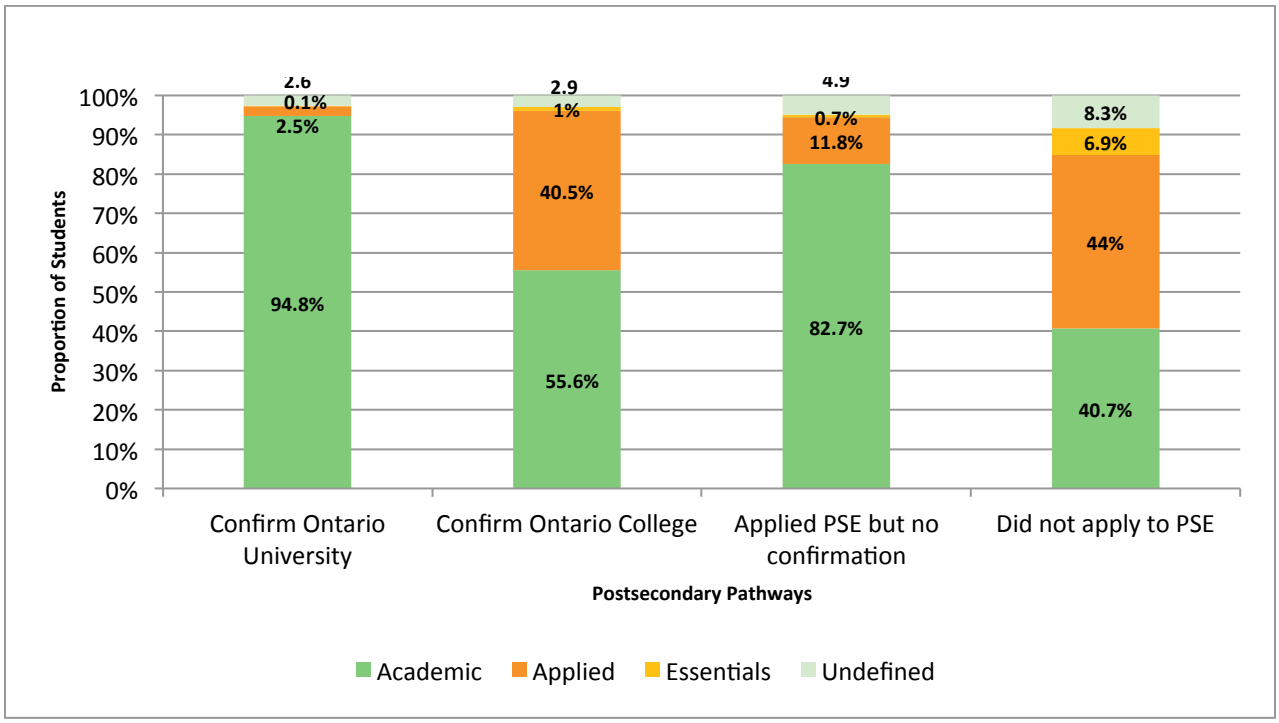
Figure 7.2. Ontario PSE Confirmations across POS, 2011–12



Of students who took the majority of their courses in the applied POS, 4.2% confirmed an offer of admission to an Ontario university, 10.9% confirmed an offer to an Ontario college, and 5.6% applied to a PSE institution without confirmation of an offer (Figure 7.3). Although the applied POS is often a precursor to the college preparedness POS for Grades 11–12, a surprising 79.3% of students did not apply for PSE at all. For the Essentials program, only 5.7% of students applied to any PSE institution (1.1% confirming an offer to an Ontario university), while 94.3% did not apply.

To complement this analysis, data were explored looking at proportions of students who had confirmed their post-secondary destinations and correlated their outcomes back to their Grade 9–10 POS. See Figure 7.3 for further detail.

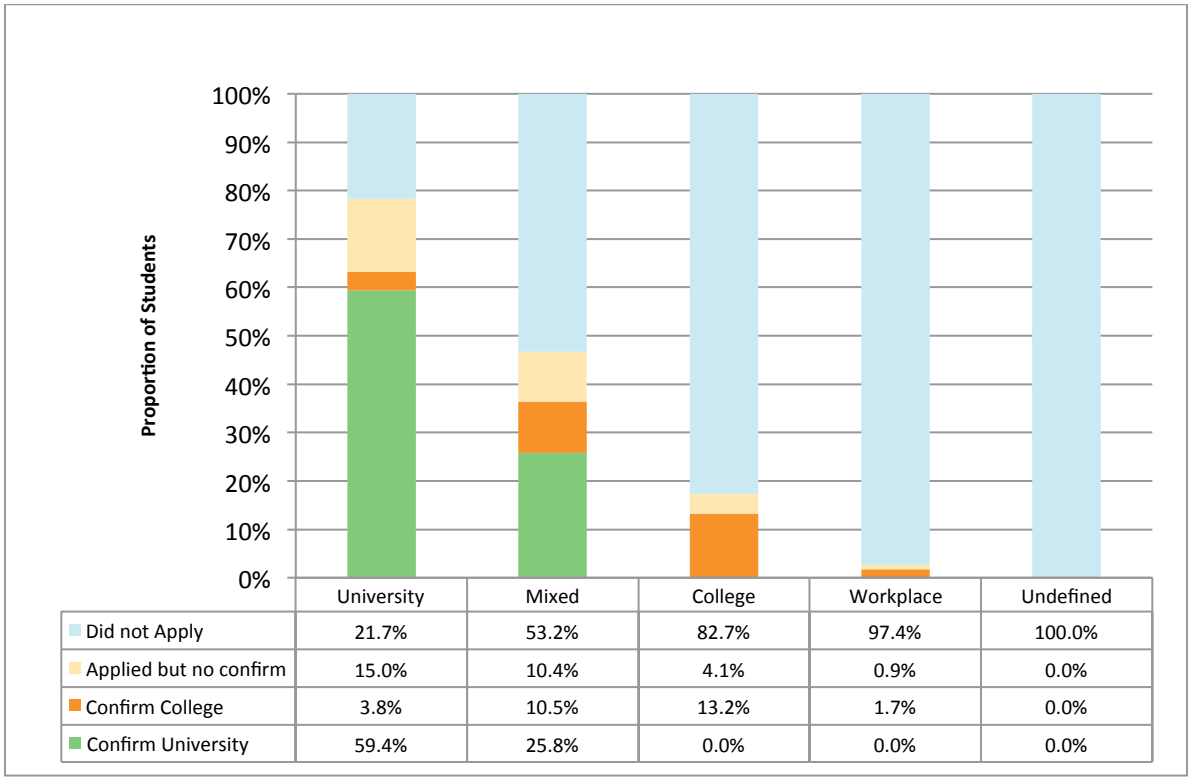
Figure 7.3. Proportion of Students Confirming PSE across POS, 2011–12



A similar analysis looks at the majority of courses taken by students in their first year of Grade 12 and PSE confirmations. Similar patterns emerge when compared to PSE access and POS for students in Grades 9–10 (Figure 7.4). Over half of students (59.4%) taking the majority of their Grade 12 courses at the university preparedness level confirmed an offer of admission to a university in Ontario. Only 3.8% of students taking university preparedness–level courses in Grade 12 confirmed an offer of acceptance to an Ontario college. Results revealed that 15% of students taking Grade 12 courses at the university preparedness level had applied and had either confirmed an offer of acceptance to a PSE institution outside of Ontario or were unsuccessful in their application. Only 21.7% of students taking university preparedness–level courses in Grade 12 did not apply to any PSE institution during their Grade 12 (year 4) year.

Based on expectations of college preparedness courses (that they are a PSE pathway to college), it is surprising that only 13.2% of these students confirmed an offer of acceptance to an Ontario college and a staggering 82.7% did not apply to any PSE institution at all during their Grade 12 (year 4) year. For students who have taken their Grade 12 courses at the workplace level, 1.7% confirmed an offer to an Ontario college and 0.9% had applied with no confirmation. However, 97.4% of students taking workplace-level courses in Grade 12 did not apply to any PSE institution.

Figure 7.4. Ontario PSE Confirmations across Grade 12 Level of Study (Year 4 Only), 2011–12

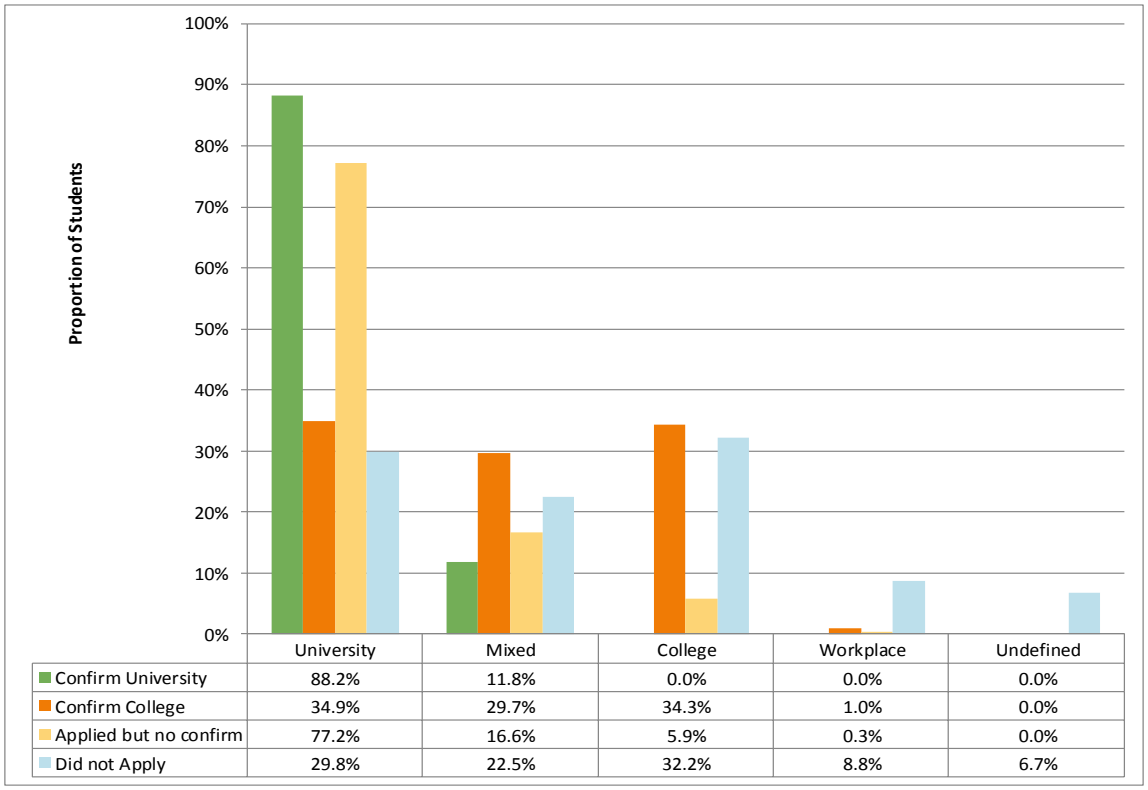


	University	Mixed	College	Workplace	Undefined
Did not Apply	21.7%	53.2%	82.7%	97.4%	100.0%
Applied but no confirm	15.0%	10.4%	4.1%	0.9%	0.0%
Confirm College	3.8%	10.5%	13.2%	1.7%	0.0%
Confirm University	59.4%	25.8%	0.0%	0.0%	0.0%

The relationship between Grade 12 POS and PSE confirmations strongly suggests that established academic trajectories prevent equitable access to PSE opportunities. Aside from students who took the majority of their Grade 12 courses at either the university preparation or mixed levels, less than a fifth of students went on to confirm an offer of admission to any PSE institution.

Exploring the data by category of confirmation, the relationship between Grade 12 courses and PSE access is reinforced (Figure 7.5). Of students who have confirmed an offer to an Ontario university, 88.2% took the majority of their Grade 12 courses at the university preparedness level while the remaining students (11.8%) took the majority of their Grade 12 courses at the mixed level. For students who confirmed an offer to an Ontario college, only 34.3% had taken the majority of their Grade 12 courses at the college preparedness level while the largest proportion of students (64.6%) had taken the majority of their Grade 12 courses at the university preparedness or mixed level. Of students who had applied without confirmation, the majority (77.2%) had taken courses at the university preparedness level, followed by the mixed (16.6%), the college preparedness (5.9%), and the workplace levels (0.3%).

Figure 7.5. Ontario PSE Confirmations across Grade 12 Level of Study (Year 4 Only), 2011–12



	University	Mixed	College	Workplace	Undefined
Confirm University	88.2%	11.8%	0.0%	0.0%	0.0%
Confirm College	34.9%	29.7%	34.3%	1.0%	0.0%
Applied but no confirm	77.2%	16.6%	5.9%	0.3%	0.0%
Did not Apply	29.8%	22.5%	32.2%	8.8%	6.7%

This initial analysis determined the existence of established academic pathways from the transition process in Grade 8, to the Grade 9–10 programs of study, to the academic level of study in Grade 12, to PSE confirmations. Not only are PSE opportunities largely reserved for students taking the academic POS and university preparedness–level courses in Grade 12, but the constructed college pathway is only successfully completed by 13.2% of students in Grade 12 (year 4). Over half of students (53.2%) taking mixed-level courses, and the vast majority of college- (82.7%) and workplace- (97.4%) bound students do not apply to PSE institutions within the Grade 12 year.

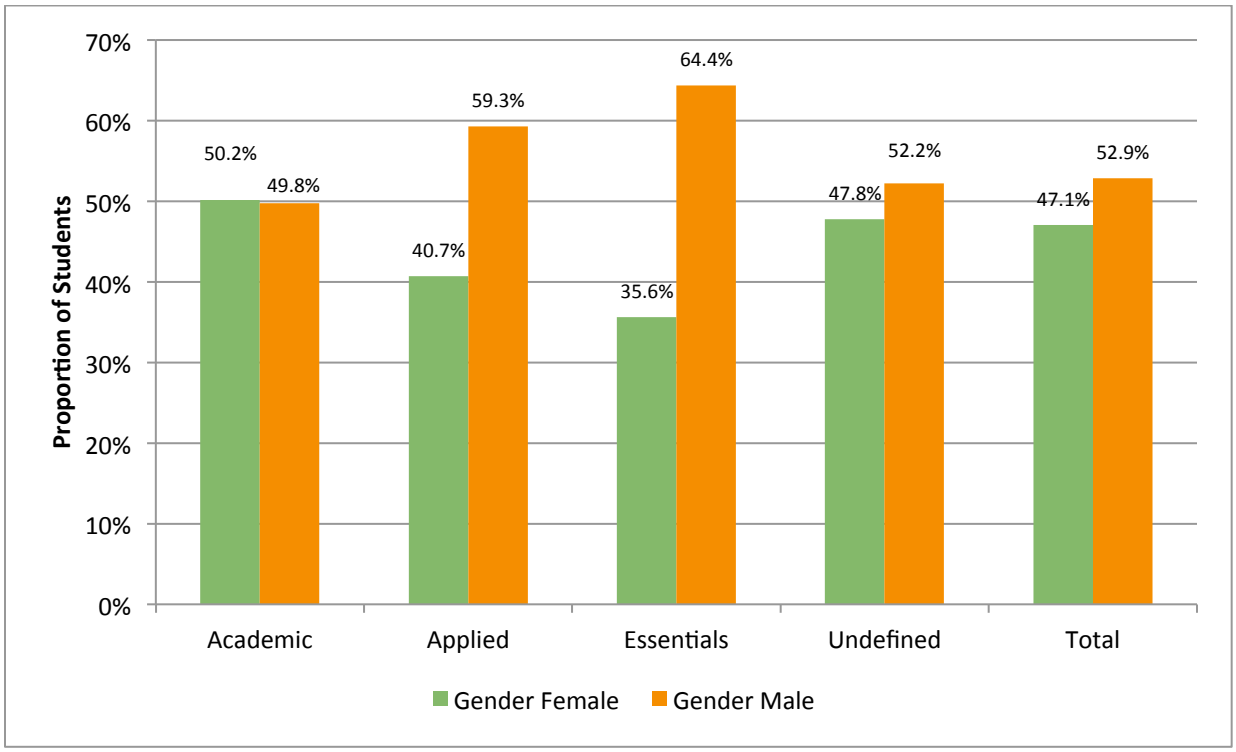
The next point of analysis uncovers whether there are certain student demographic characteristics that are disproportionately disadvantaged by this sorting mechanism. The following section details the representation of students across POS by gender, race, sexuality, disability or SEN, generational status, parental education, parental occupation, income, parental presence, parents living inside and outside of Canada, the LOI, achievement, and students' sense of belonging and exclusion.

Student demographic variables across Grade 9–10 programs of study

Gender.

There are substantive differences in gender divisions across programs of study (Figure 7.6). There is roughly a 5% difference between the total number of female and male students in the secondary panel, with female students representing 47.1% and male students representing 52.9% of the population. However, gender proportions are almost equal within the academic POS, demonstrating a slight over-representation of female students. There are notable disparities in gender representation in both the applied and Essentials programs of study, with a substantial over-representation of male students. The gender proportions for students with an undefined POS mirror the gender proportions of the total population.

Figure 7.6. Gender Proportions across POS, 2011–12



Race.

There are notable differences in self-identified racial representation across programs of study (Figure 7.7 & Table 7.5). For example, the overall self-identified Black population was 12.6%; however, self-identified Black students represented 29.3% of students taking the Essentials POS. Self-identified Black students were also over-represented in the applied POS (22.7%) and under-represented in the academic POS. Aside from a slight under-representation in the applied POS (23.8%), students who self-identified as White were generally equitably represented across the academic (29.9%) and Essentials (26.5%) POS.

Both self-identified East Asian (17.9%) and South Asian (21%) students were over-represented in the academic POS, however, self-identified East Asian students were notably

under-represented in both the applied (10.5%) and Essentials (5.1%) POS. Self-identified South Asian students were also under-represented in the applied (16.9%) and Essentials (15.9%) POS.

The number of self-identified Aboriginal students in the secondary panel was quite small in comparison to other groups (0.3%). Even with the proviso of smaller proportions and numbers, Aboriginal students were notably under-represented in the academic POS (0.1%), more than doubly represented in the applied POS (0.7%), and had quadrupled representation in the Essentials POS (1.2%).

For students who did not have a defined POS, patterns were unclear. There was notable over-representation of students self-identified as Black, East Asian, Latin American, Middle Eastern, and Southeast Asian and under-representation of students self-identified as Mixed, South Asian, and White within the undefined category of POS.

Figure 7.7. Proportion of Students by Self-Identified Race across POS, 2011–12

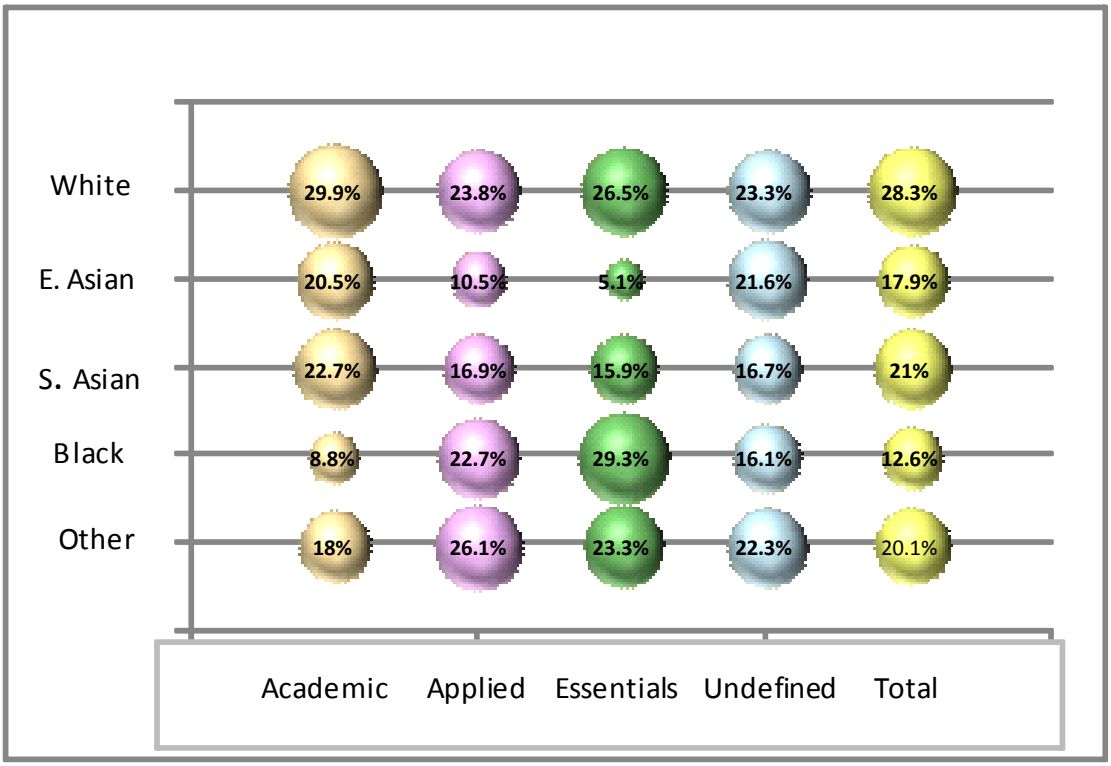


Table 7.5. Self-Identified Race across POS, 2011–12

Grade 9-10 POS	Aboriginal	Black	East Asian	Latin American	Middle Eastern	Mixed	South Asian	Southeast Asian	White
Academic	0.1%	8.8%	20.5%	1.7%	4.9%	6.6%	22.7%	4.7%	29.9%
Applied	0.7%	22.7%	10.5%	3.8%	7.9%	7.9%	16.9%	5.8%	23.8%
Essentials	1.2%	29.3%	5.1%	3.5%	7.6%	7%	15.9%	4%	26.5%
Undefined	0.4%	16.1%	21.6%	2.9%	8.1%	5.5%	16.7%	5.4%	23.3%
Total	0.3%	12.6%	17.9%	2.2%	5.8%	6.9%	21%	4.9%	28.3%

Student first language.

In an analysis of student language, students whose first language was Bengali, Hindi, Korean, Romanian, Russian, or Serbian were most likely to enroll in the academic POS over the applied or Essentials programs of study (Table 7.6). Students who spoke Dari, Pashto, or Spanish were somewhat less likely to take courses in the academic POS and more likely to take courses in the applied POS. Language groups over-represented (5%<) in the Essentials POS were Dari, English, Pashto, Portuguese, Spanish, and Turkish.

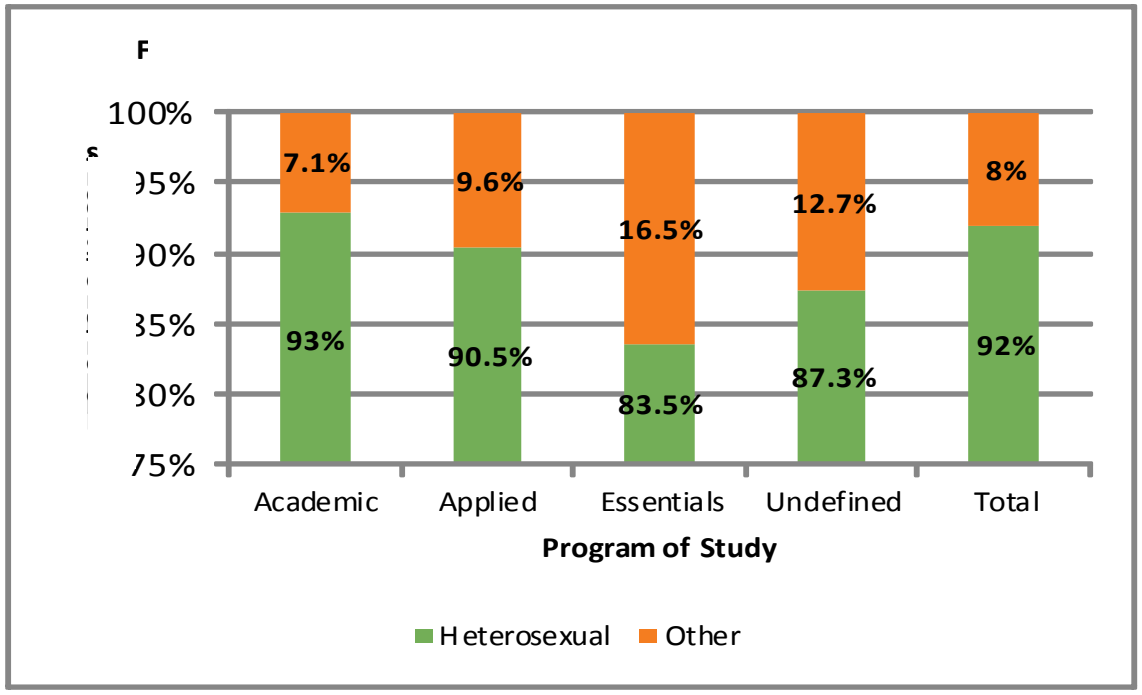
Table 7.6. Student Language across POS, 2011–12

Student First Language	Academic	Applied	Essentials	Undefined
Albanian	75.2%	18.5%	2.1%	4.2%
Arabic	60.8%	28.3%	4.8%	6.0%
Bengali	83.6%	10.9%	1.4%	4.1%
Chinese	79.1%	14.9%	1.1%	4.9%
Dari	40.2%	46.9%	9.1%	3.9%
English	60.6%	30.4%	5.2%	3.8%
French	70.5%	16.9%	4.0%	8.6%
Greek	71.2%	22.2%	3.0%	3.6%
Gujarati	76.3%	18.0%	2.6%	3.0%
Hindi	80.7%	14.1%	1.4%	3.8%
Korean	85.8%	9.4%	0.8%	4.0%
Pashto	48.7%	40.8%	7.1%	3.3%
Persian	60.8%	27.8%	4.7%	6.6%
Portuguese	51.5%	35.8%	7.3%	5.3%
Punjabi	72.7%	22.6%	2.3%	2.4%
Romanian	80.9%	12.8%	3.0%	3.3%
Russian	80.8%	14.5%	0.9%	3.8%
Serbian	87.5%	9.9%	0.7%	1.9%
Somali	65.6%	24.7%	3.5%	6.2%
Spanish	47.3%	39.4%	6.0%	7.2%
Tagalog	54.6%	37.1%	2.7%	5.7%
Tamil	79.4%	15.3%	2.5%	2.7%
Turkish	54.7%	34.8%	5.9%	4.7%
Urdu	71.9%	20.4%	3.4%	4.3%
Vietnamese	75.2%	19.0%	2.3%	3.5%
Total TDSB	65.7%	25.4%	4.1%	4.8%

Sexuality.

Sexuality is a more recently explored demographic characteristic in terms of its relationship to POS. The results demonstrated that 93% of students enrolled in the academic POS self-identified as heterosexual, while 7.1% self-identified as gay, lesbian, bisexual, or not sure/questioning (Figure 7.8). The proportion of students self-identifying as heterosexual dropped in both the applied (90.5%) and Essentials (83.5%) programs of study. Students with an undefined POS self-identified as heterosexual at a rate of 87.3%. One confounding factor within this analysis is the response option of "not sure/questioning" as it is believed that many students may select this response interpreted as "not sure of the question" as opposed to an identification of sexuality (Brown & Sinay, 2008). Therefore, caution must be heeded in interpreting for students who answered "not sure/questioning" in response to the question on sexuality.

Figure 7.8. Sexuality Categories across POS, 2011–12[15]

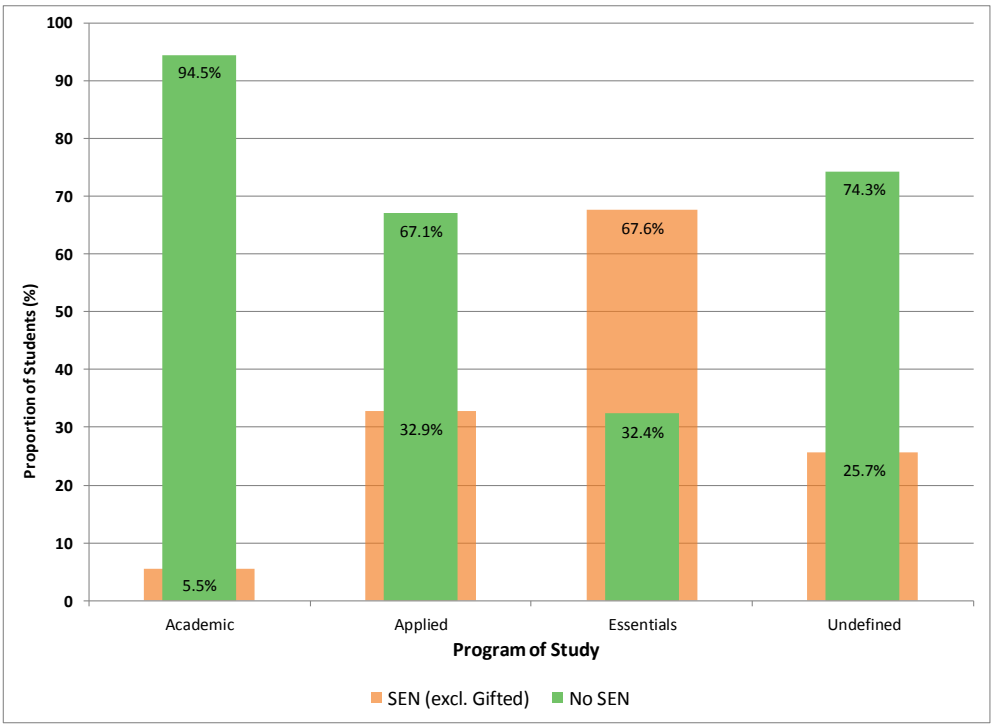


[15] Graph begins at 75% in order to better demonstrate differences across groups.

Students with special education needs (excluding gifted).

Students with SEN are students who have been identified either informally or formally as students requiring additional support to their learning. Students with SEN can include students who have been formally identified through IPRCs or who have been identified by educators as requiring extra support and placed on an IEP without a formal identification of exceptionality. Below is the breakdown of students identified as having SEN (excluding the identification of giftedness). As seen in Figure 7.9, the overall proportion of students identified with SEN across the TDSB secondary panel is 15.9%; however, this proportion varies across POS. In the academic POS, the proportion of students identified as having an SEN is 5.5%. This proportion rose to 32.9% (double the average) for students taking the majority of their Grade 9–10 courses in the applied POS. For students taking the majority of their Grade 9–10 courses in the Essentials POS, the proportion of students with SEN is over four times (67.6%) the TDSB average.

Figure 7.9. SEN (excluding Gifted) across POS, 2011–12



Students with special education needs are stratified across all programs of study. Students who have not gone through a formal identification process (e.g., IPRC), but who do have an IEP make up 31.4% of all students with SEN. The four largest categories of students who have SEN are students who have only an IEP, students who have been formally identified with a learning disability, students formally identified with giftedness, and students who have been identified as having a mild intellectual disability. There are eight other categories of exceptionalities identified below, which cumulatively make up 11.5% of students with SEN.

Of students with SEN in the academic POS, students who had only an IEP (i.e., no formal identification) made up 29.1% (Table 7.7). Students identified as having a learning disability represented 21.8%, students with giftedness represented 44.4%, and a small proportion of students with a mild intellectual disability (0.3%) made up the majority of students with SEN in the academic POS. Aside from students identified as gifted (0.1%), the proportion of students identified as having a learning disability (40.4%), a mild intellectual disability (5.5%), and only an IEP (40.4%) rose in the applied POS. Of students enrolled in the Essentials POS, 39.6% were students identified as having a mild intellectual disability, over a quarter (25.9%) were identified as having a learning disability, and 17.5% were students who had only an IEP. There were no students identified as gifted enrolled in the Essentials POS. Identifications of autism (12.8%), development disability (37.1%), and physical disability (5.8%) were also greatly over-represented.

Table 7.7. Proportionate Representation of Key Exceptionalities across POS, 2011–12

Grade 9-10 POS	IEP Only	Autism	Deaf	LD	Lang. Impair.	Gifted	Mild Int Disability	Dev. Disability	Blind and Low Vision	Physical Disability	Behaviour	Multip Except
Academic	29.1%	1.8%	0.5%	21.8%	0.3%	44.4%	0.3%	0%	0.2%	0.6%	0.8%	0.1%
Applied	40.4%	1.8%	0.6%	45.9%	1%	0.1%	5.5%	0%	0.1%	0.5%	3.9%	0.1%
Essentials	17.5%	5.2%	0.4%	25.9%	1.1%	0%	39.6%	3%	0.1%	2%	5%	0.2%
Undefined	12.8%	12.8%	1.3%	8%	0.4%	1.4%	17.5%	37.1%	0.3%	5.8%	2.5%	0.2%
Total	31.4%	3%	0.6%	32.2%	0.8%	15.4%	9.5%	2.9%	0.1%	1.1%	2.9%	0.1%

Note. IEP only = Individual Education Plan only (no formal identification of SEN); LD = learning disability; Lang. Impair. = language impairment; Mild Int Disability = mild intellectual disability; Dev. Disability = developmental disability; Behaviour = behaviour disorder.

Family factors across Grade 9–10 programs of study

Family factors play a role in shaping students' academic pathways and have demonstrated important relationships to achievement and PSE outcomes (Suarez-Orozco, Pimental & Martin, 2009). This section explores family factors and their relationship to students' participation in school-wide structures.

Generational status.

Generational status is determined based on the student responses from the 2011 student census. Generational status for the 2011–12 dataset is slightly different than for the 2006–07 Grade 9 cohort. For the 2011–12 dataset, "first generation" means that either the student or both their parents were born outside of Canada, "second generation" means one parent was born outside of Canada and one inside of Canada, and "third generation" means a student's parents were both born inside Canada. There were some changes across POS for generational status; however, the variance was minimal (Table 7.8). Interestingly, proportions of students in both the first and third generation categories were almost identical whereas second-generation students

were slightly more likely to be taking courses in the academic POS and slightly less likely to be taking applied or Essentials courses or to have an undefined POS.

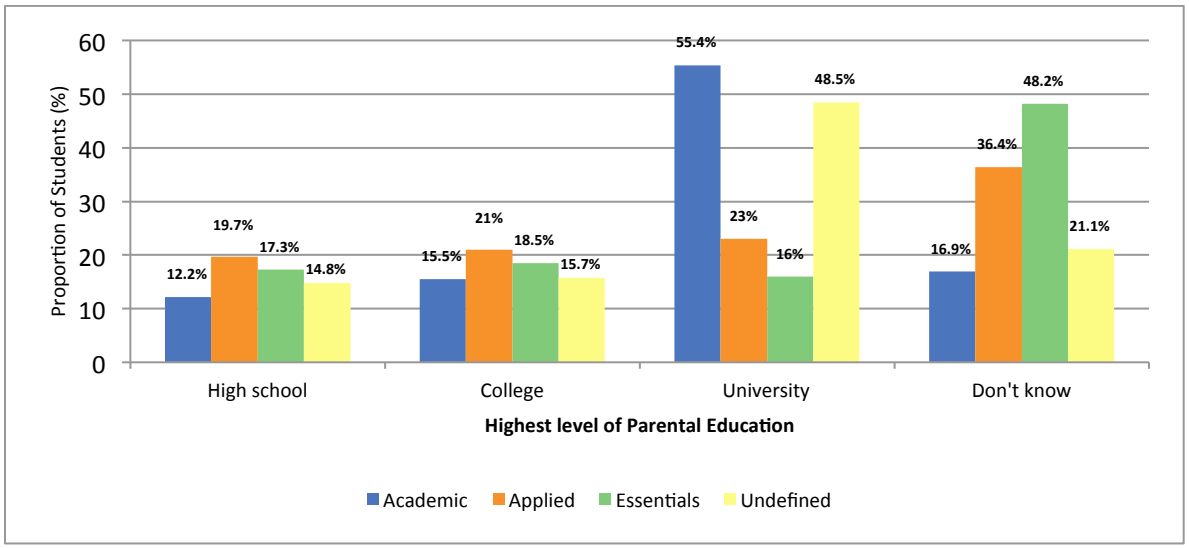
Table 7.8. Proportionate Representation of Students' Generational Status across Grade 9–10 Program of Study, 2011–12

Grade 9-10 POS	3rd Generation	2nd Generation	1st Generation
Academic	71.8%	77%	72.1%
Applied	22.1%	18.9%	21.8%
Essentials	4.1%	2%	3.1%
Undefined	2%	2%	3%
Total	100%	100%	100%

Parent education.

Despite discussions on whether parents' own experience of education influences that of their children or whether the privileged access associated with higher education is reproduced within public education, the relationship between the two variables is clear (Figure 7.10). Over half of students enrolled in the academic POS (55.4%) had parents who had themselves attended university. Comparatively, less than a quarter (23%) of students in the applied POS and only 16% of students in the Essentials POS had parents who had attended university. Close to half (48.2%) of students in the Essentials POS indicated that they did not know their parents' educational status, compared to 16.9% of students in the academic POS.

Figure 7.10. Parental Education across POS, 2011–12



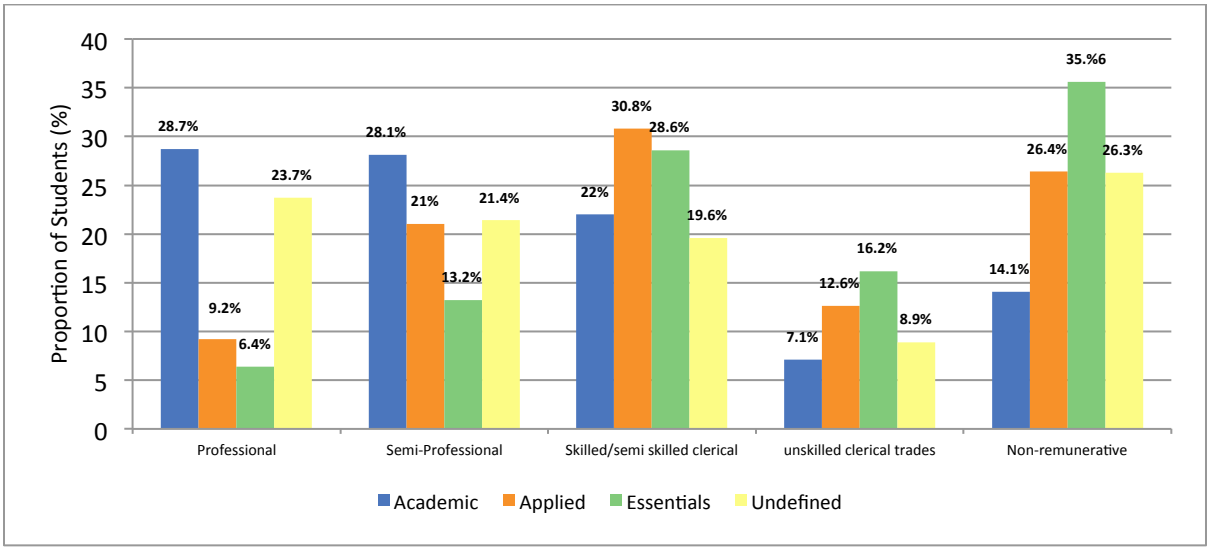
Parent occupation.

Similarly, with parental occupation, notable differences are clear across programs of study (Figure 7.11). There is a great deal of literature that documents trends in social reproduction as a result of academic programming at the secondary panel (Curtis et al., 1992); Clanfield et al., 2014). Of students in the academic POS, 28.7% had parents who were employed in professional positions. This proportion dropped notably for both the applied (9.2%) and Essentials (6.4%) programs of study. Of students whose parents are currently in non-remunerative positions (17.2% of students in the secondary panel), only 14.1% were represented in the academic POS compared to 26.4% in the applied and 35.6% in the Essentials programs of study.

Proportionate representation of parental occupation categories varied widely across POS. Noting that the category of unskilled clerical/trades is only 8.3% of the total student population, this category is almost doubly represented in the Essentials POS. Likewise, students whose parents were, at the time of the survey, in non-remunerative positions (17.2%) are more than

doubly represented in the Essentials POS, whereas only a quarter (6.4%) of students whose parents held professional positions were in the Essentials POS. Students whose parents held skilled or semi-skilled clerical or trades positions were over-represented in the applied POS, constituting 30.8% of students. Students whose parents held professional or semi-professional positions were over-represented in the academic POS.

Figure 7.11. Parental Occupation across POS, 2011–12



Family income.

The analysis of family income presented clear trends across Grade 9–10 programs of study (Table 7.9 & Figure 7.12). Students who were enrolled in the academic POS were more likely to come from higher-income households than students in both the applied and Essentials POS. Conversely, students in the Essentials POS were much more likely to be from lower-income households, as were students with an undefined POS. The proportion of students in the lowest-income decile in the secondary panel was 9.4%; however, only 7.2% of students in the lowest-income decile were in the academic POS, compared to 13.2% in the applied POS and

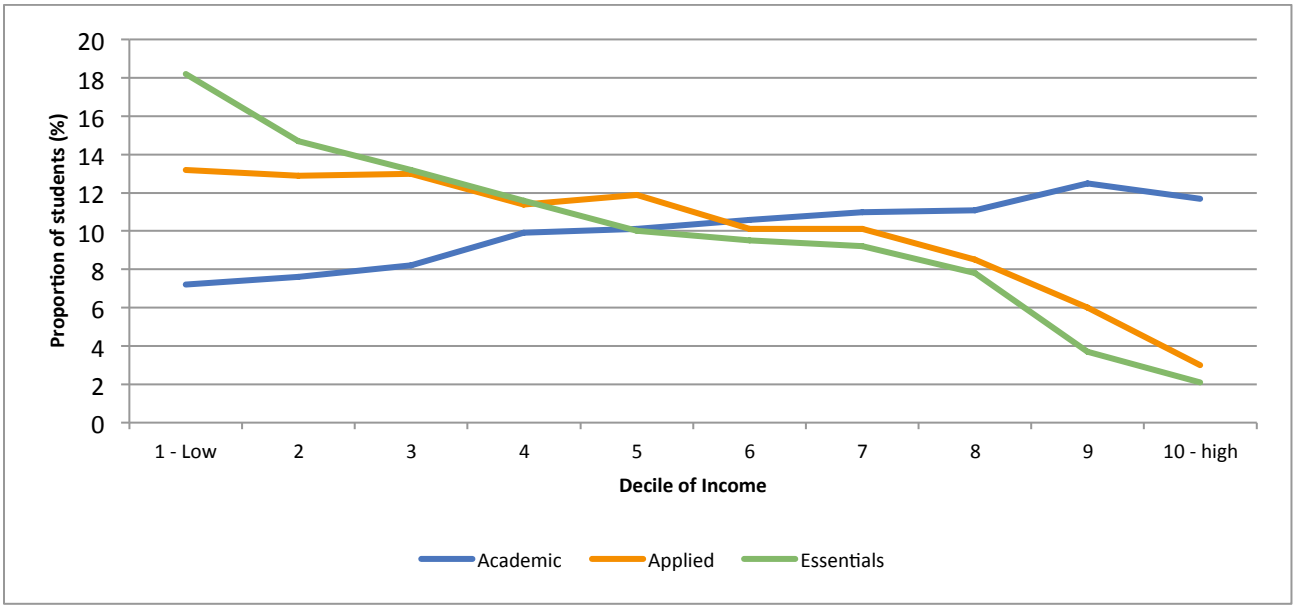
18.2% in the Essentials POS. Students from the highest-income decile represented 11.7% of students in the academic POS, 3% of students in the applied POS, and 2.1% of the Essentials POS.

Table 7.9. Family Income Deciles across POS, 2011–12

Grade 9-10 POS	1 - Lowest income	2	3	4	5	6	7	8	9	10 - highest income
Academic	7.2%	7.6%	8.2%	9.9%	10.1%	10.6%	11%	11.1%	12.5%	11.7%
Applied	13.2%	12.9%	13%	11.4%	11.9%	10.1%	10.1%	8.5%	6%	3%
Essentials	18.2%	14.7%	13.2%	11.6%	10%	9.5%	9.2%	7.8%	3.7%	2.1%
Undefined	11.4%	12.3%	11.4%	11.2%	9.7%	10.6%	9.7%	8%	9.5%	6.3%
Total	9.4%	9.5%	9.8%	10.4%	10.6%	10.5%	10.6%	10.1%	10.3%	8.8%

At each income decile point, differences in income are observed. However, overall trends revealed notable disparities in income representation across programs of study. As seen in the chart below, trends within the academic POS revealed an almost linear positive correlation with income. Conversely, income in the Essentials POS had an almost linear negative correlation with income.

Figure 7.12. Income Trends across POS, 2011–12



Parental presence.

In terms of family structure, parental presence also had a close relationship with POS (Table 7.10). Of students in the academic POS, 80.7% lived with both parents (this included shared custody). This proportion dropped for students within the applied and Essentials programs of study to 63.7% and 59.2% respectively. Conversely, the proportion of students living with their mother only, father only, or in alternative situations is lowest in the academic POS. These proportions almost doubled or more than doubled in the applied and Essentials programs of study. For example, 14.6% of students in the academic POS lived with only their mother, while that proportion was close to double in the applied (25.6%) and Essentials (27.8%) programs of study.

Table 7.10. Parental Presence across POS, 2011–12

Grade 9-10 POS	Two parents	Mother only	Father only	Others
Academic	80.7%	14.6%	1.7%	2.9%
Applied	63.7%	25.6%	3.6%	7%
Essentials	59.2%	27.8%	4.3%	8.8%
Undefined	63.7%	19.3%	3.1%	13.9%
Total	75.9%	17.5%	2.3%	4.3%

Parents living in Canada.

Not all students live with their parents nor do all parents live in the country. As seen in Table 7.11, the majority of secondary students have both parents who live inside of Canada (87%). However, it is interesting to note that there is a relationship between a student's Grade 9–10 POS and whether their parents live in the country. Students in the academic POS had the highest proportion of both parents living in Canada (89.8%), while students in the Essentials POS had a notably lower proportion (76.7%). The category of students who have an undefined POS sometimes includes students who have recently arrived to the TDSB; it is interesting to note that only 65.7% of this group had both parents living in Canada.

Since this is a newly explored variable, the column figures were also included. Students whose parents were both in Canada were most likely enrolled in the academic POS (75.2%) and much less likely enrolled in the applied (20.1%) or Essentials (2.7%) programs of study. It appears that when students had one parent living outside of Canada, their likelihood of being enrolled in the academic POS dropped to 60%, and their likelihood of being enrolled in the applied or Essentials POS rose to 30% and 4.8% respectively. If students had both parents living outside of Canada, their rate of enrolment in the academic POS fell to less than half (48.9%) and

their likelihood of enrolment in the applied or Essentials POS increased to 30.3% and 7.5% respectively.

Table 7.11. Parents Living Inside and Outside of Canada across POS, 2011–12

Grade 9-10 POS	One Parent Outside	Both Parents Outside	No Parents outside Canada	Total
Academic	8.1%	2.1%	89.8%	100%
Applied	13.7%	4.5%	81.8%	100%
Essentials	15.4%	7.9%	76.7%	100%
Undefined	18.8%	15.5%	65.7%	100%
Total	9.8%	3.2%	87%	100%

Grade 9-10 POS	One Parent Outside	Both Parents Outside	No Parents outside Canada
Academic	60%	48.9%	75.2%
Applied	30%	30.3%	20.1%
Essentials	4.8%	7.5%	2.7%
Undefined	5.2%	13.3%	2.1%
Total	100%	100%	100%

Learning Opportunity Index.

The LOI is a critical scale in measuring external challenge facing students within the TDSB. It is a composite scale that includes median income, percentage of families whose income is below the Low Income Measure (before tax), percentage of families receiving social assistance, adults with low education, adults with university degrees, and lone-parent families. Each of these indicators is measured for each student at the neighbourhood level. Cumulatively, a score is collected upon which each school is ranked according to level of need. At the

secondary level, 109 TDSB schools were included in the LOI analysis. Each school was ranked based on each student's neighbourhood level of need. A rank of 1 represents the lowest level of external challenge, while 109 represents the highest level of external challenge. The analysis below explores the mean LOI score for students across each POS. The minimum mean LOI across the secondary panel is 0.001, which represents the least level of external challenge. The maximum mean LOI across the secondary panel is 0.956, which represents the highest level of external challenge. The mean LOI across the secondary panel is 0.45.

Along the trajectory of secondary pathways presented at the beginning of this report, the mean LOI score varied dramatically. For example, the LOI score for students who had been promoted from Grade 8 to Grade 9 was substantially higher, at 0.386, than for students who had been transferred at 0.541 (Table 7.12).

Table 7.12. Mean LOI across Grade 8–9 Promotion and Transference, 2011–12

Promotion or Transference	Minimum	Maximum	Mean LOI
Promoted	0.001	0.956	0.386
Transferred	0.001	0.956	0.541
Average across Secondary	0.001	0.956	0.45

Similar trends of stratification are observed across programs of study. Table 7.13 demonstrates the variance of the mean LOI score across programs of study. The mean LOI for the academic POS was 0.379; it rose to 0.571 for the applied and 0.698 for the Essentials POS. The rise in the mean LOI score across programs of study demonstrates that the rise in external challenges of the school correlates highly with students in the applied and Essentials programs of

study as compared to the academic—another example of the congregation of students along lines of external challenge.

Table 7.13. Mean LOI across POS, 2011–12

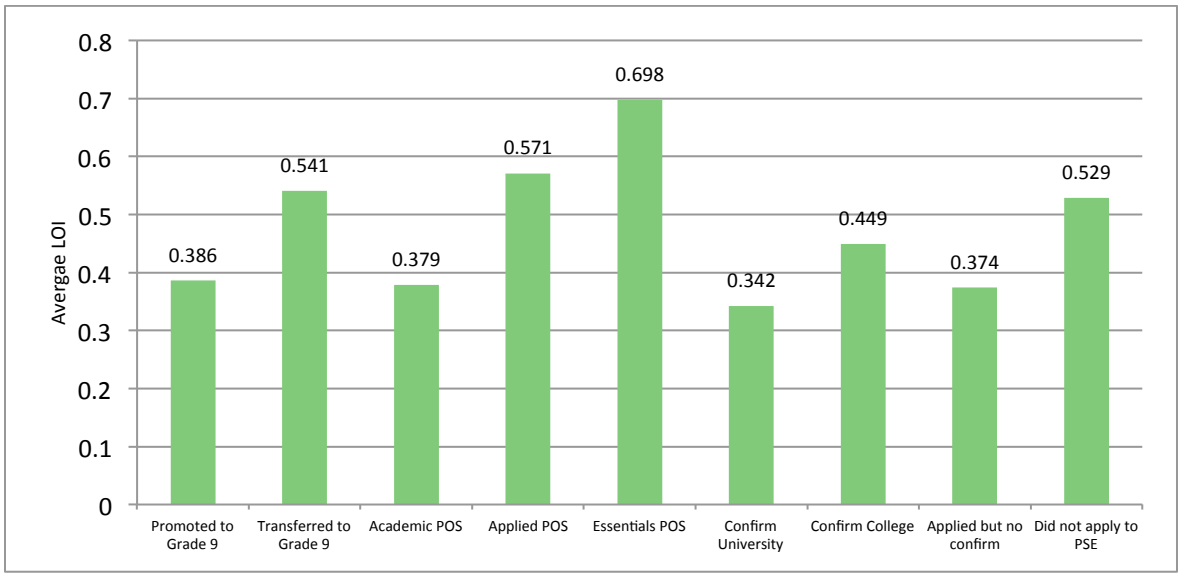
Grade 9-10 POS	Minimum	Maximum	Mean LOI
Academic	0.001	0.956	0.379
Applied	0.001	0.956	0.571
Essentials	0.001	0.956	0.698
Undefined	0.001	0.956	0.57
Average across Secondary	0.001	0.956	0.45

Table 7.14 and Figure 7.13 look at the variation of the mean LOI scores across post-secondary confirmations. Again, similar trends emerge. Students with the least access to university or other post-secondary opportunities (i.e., students who did not apply) had a substantially higher mean LOI score (0.529) than students who confirmed an offer of admission to university (0.342).

Table 7.14. Mean LOI across PSE Indicators, 2011–12

Post-secondary Confirmations	Minimum	Maximum	Mean LOI
Confirm University	0.001	0.956	0.342
Confirm College	0.001	0.956	0.449
Applied but no confirm	0.001	0.956	0.374
Did not apply	0.001	0.956	0.529
Average across Secondary	0.001	0.956	0.45

Figure 7.13. The LOI across POS and PSE Indicators, 2011–12



Achievement across Grade 9–10 programs of study

Ontario Secondary School Literacy Test.

For the analysis on POS, achievement variables were of significant importance. A measure of academic success employed in the TDSB is a successful pass of the Ontario Secondary School Literacy Test (OSSLT). The OSSLT is considered a high-stakes test as it requires that a student pass in order to be eligible to graduate with a secondary school diploma. For students who continue to receive unsuccessful results for the OSSLT, an optional course is available as a proxy for the test and will also allow students to pursue a diploma. In the case of the OSSLT, 87.8% of students in the academic POS passed the first time they were eligible to write (Table 7.15). However, the pass rate for first-time-eligible (FTE) students dropped dramatically for students in the applied POS (37.4%) and even further for the Essentials POS, to a surprising 3.9%.

Table 7.15. OSSLT Pass Rate (FTE) across POS, 2011–12

Grade 9-10 POS	Successful	Unsuccessful/Absent/Deferred/Exempt
Academic	87.8%	12.1%
Applied	37.4%	62.6%
Essentials	3.9%	96%
Undefined	17.2%	82.8%
Total	73.1%	27%

Suspensions.

In terms of suspensions, only 3.6% of the secondary student population had been suspended (Table 7.16). However, rates of suspension changed across programs of study. Only 1.8% of students in the academic POS had ever been suspended from school, whereas this proportion rose for students in the applied (7.1%) and Essentials (11.5%) POS.

Table 7.16. Suspensions across POS, 2011–12

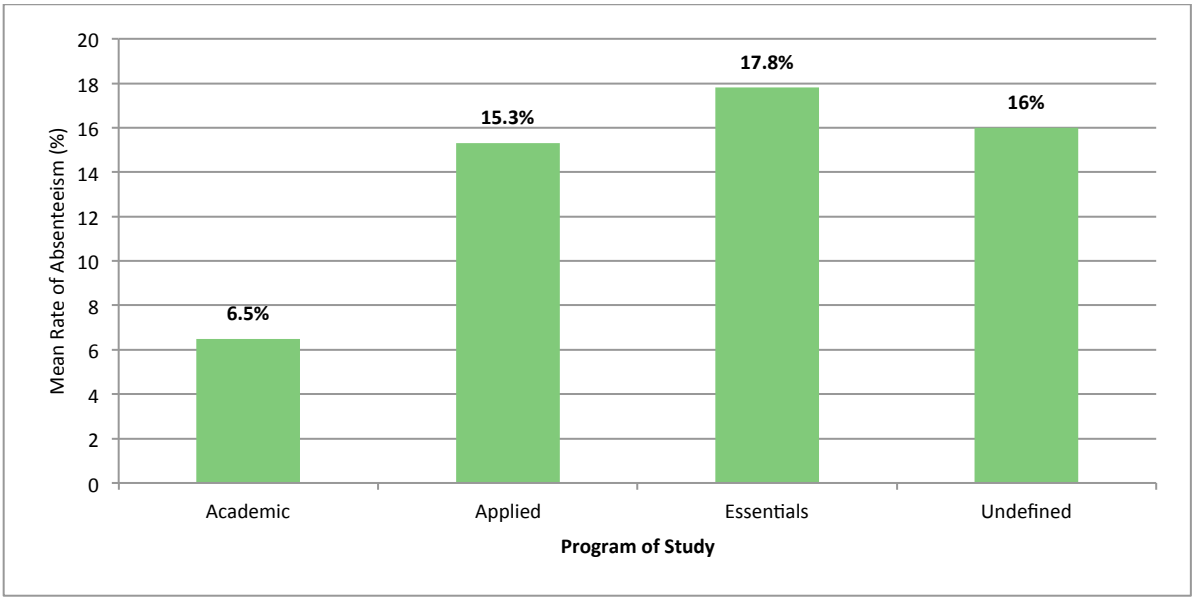
Grade 9-10 POS	No Suspension	Suspended
Academic	98.2%	1.8%
Applied	92.9%	7.1%
Essentials	88.5%	11.5%
Undefined	96.7%	3.3%
Total	96.4%	3.6%

Absenteeism.

The absenteeism rate is a calculation based on the mean number of days absent out of the number of days students were registered over the school year. The average Grade 9–12 absenteeism rate for 2011–12 was 9.5% (i.e., on average, secondary students are absent 9.5% of

registered days in the school year) (Figure 7.14). However, there was a very wide range across programs of study. The absenteeism rate for students in the academic POS was 6.5%; it rose to 15.3% for students in the applied POS and 17.8% for students in the Essentials POS.

Figure 7.14. Absenteeism across POS, 2011–12



School-Wide Structures

In the exploration of school structures and their relationship to student demographics, achievement, and students' sense of belonging, school-wide structures at the secondary level were investigated. School-wide structures are defined as programming decisions and strategies that affect the entire school population as opposed to a particular segment. Although not an exhaustive list, the school-wide structures explored in this report include specialty arts schools, alternative schools, special education schools, schools that offer limited academic courses, and schools that offer university preparedness courses. Through a detailed comparison, an exploration of school-wide structures revealed not only demographic trends in program

participation, but also a strong relationship between school-wide programming decisions, student achievement, and students' sense of belonging and citizenship within their school community.

Description of school-wide structures

Alternative schools.

There are currently 19 elementary and 22 secondary alternative schools in the TDSB (Sinay, 2010). According to the TDSB,

> TDSB alternative schools offer students and parents something different from mainstream schooling. Each alternative school, whether elementary or secondary, is unique, with a distinct identity and approach to curriculum delivery. They usually feature a small student population, a commitment to innovative and experimental programs, and volunteer commitment from parents/guardians and other community members. While the schools offer Ministry-approved courses, these courses are delivered in a learning environment that is flexible and meets the needs of individual students. Each alternative school is a school of choice and has its own distinct culture. (TDSB, 2013e)

For this analysis, each secondary school identified as alternative through School Planning was selected and merged with data from the Student Information System and the 2011 student census survey.

Specialized arts schools.

Specialized arts schools are known for their prestigious programming. Admission is based upon a competitive application and audition process. The current TDSB website dedicated to specialized arts programming states that "these programs are for students who wish to pursue visual arts and performing arts at a professional level. This program consists of intensive programs within select schools as well as specialized schools focused solely on the arts" (TDSB,

2013b, p. 22). Only two specialized arts schools were included in this analysis as they were the only two in which *all* students participated in the specialty arts curriculum as opposed to an in-school arts program.

Special education schools

Schools selected as special education schools were identified through School Planning. This analysis included all secondary schools identified as special education schools. Special education schools comprise students identified as having special education needs and are resourced as intensive support sites. At the time of analysis (2013), there were six secondary special education schools in the TDSB.

Schools with limited academic/university-preparedness opportunities.

Through the exploration into school structures and previous research findings (Parekh et al., 2011), it was revealed that there are secondary schools in the TDSB that do not offer an academic or university preparedness–level POS or offer too few of such courses to support students seeking eligibility for PSE at the university level. Schools selected for this analysis were included if they did not offer any English or mathematics courses at the university preparedness level. Initial observations revealed that every secondary special education school also fell within the category of limited academic schools. For this analysis, special education schools were removed from the limited academic school category, which left twelve schools as part of the analysis.

Total schools.

For each category of analysis, overall results from the secondary level in the TDSB were included as a baseline.

Overview of analyses.

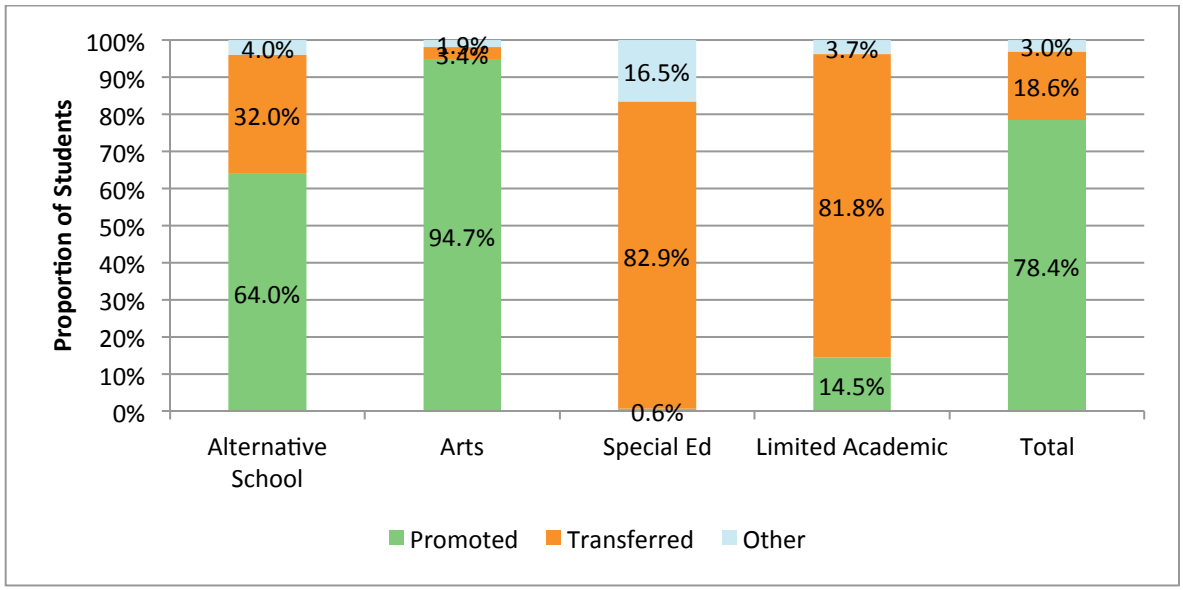
This section first explores school-wide structures through a lens of equity by investigating proportions of students promoted or transferred to each school type; students' POS, achievement, and post-secondary pathways; followed by an analysis of student demographics. The conclusion of this report looks at students' sense of belonging and exclusion within these school-wide structures.

Pathways across selected school-wide programs

Promotion and transference.

For the majority of students, the transition process from Grade 8 to Grade 9 is a successful one. Overall, 78.4% of students are successfully promoted from Grade 8 to Grade 9, while only 18.6% are transferred (Figure 7.15). However, theses proportions differ radically across school-wide structures. For students in specialty arts schools, 94.7% are successfully promoted from Grade 8 to Grade 9. This rate drops for students attending secondary alternative schools down to 64%, and further to 14.5% for students in limited academic schools. Only 0.6% of students attending special education schools were successfully promoted from Grade 8 to Grade 9. In regards to students' rates of transference, students attending special education schools had the highest, at 82.9%, followed closely by schools with limited academics, at 81.8%. Students attending alternative schools had a rate of transference of 32%, while students attending specialty arts schools were at 3.4%.

Figure 7.15. Proportion of Promotion and Transference across Selected School-Wide Structures (Grade 8–10 Students Only), 2011-12

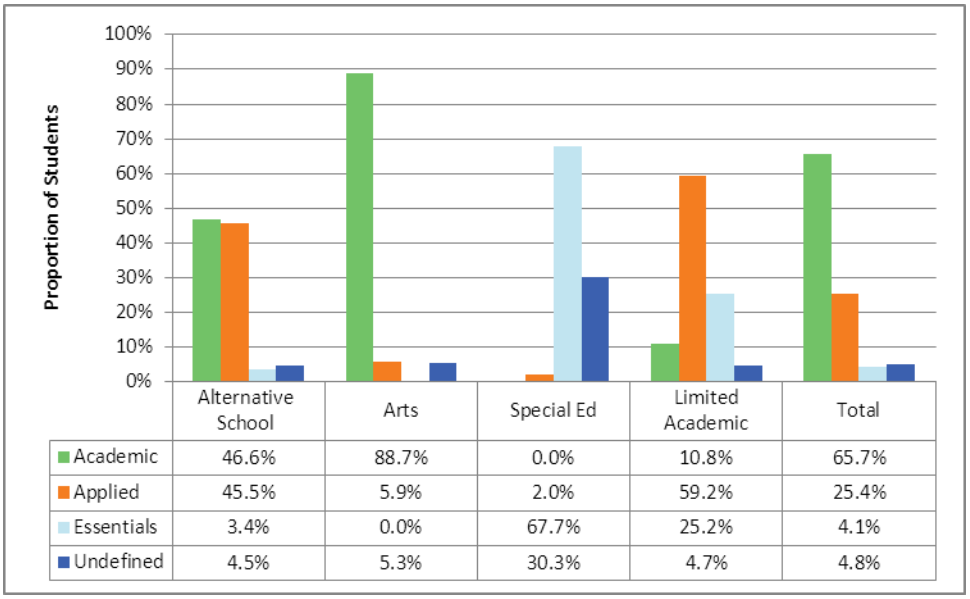


Program of study.

Across school-wide structures, there is a large variance of participation within levels of POS (Figure 7.16). Overall, 65.7% of students in Grades 9–10 take the majority of their courses in the academic POS, while 25.4% take the majority of their courses in the applied POS. Less than 10% of the student population take the majority of their courses in the Essentials POS (4.1%) or have an undefined POS (4.8%). The proportions of students in each POS vary across school-wide structures. As an example of this variance, proportions of students taking the academic POS ranged from 88.7% of students in specialty arts schools, to 46.6% of students in alternative schools, to 10.8% of students in limited academic schools, to 0% of students in special education schools. Conversely, the proportions of students in the Essentials POS rose notably from 0% of students in specialty arts schools, to 3.4% of students in alternative schools, to 25.2 % of students in limited academic schools, to 67.3% of students in special education

schools. Schools that had the highest proportion of students taking the majority of their courses in the applied POS were alternative schools (45.5%) and limited academic schools (59.2%).

Figure 7.16. POS across Selected School-Wide Structures, 2011–12



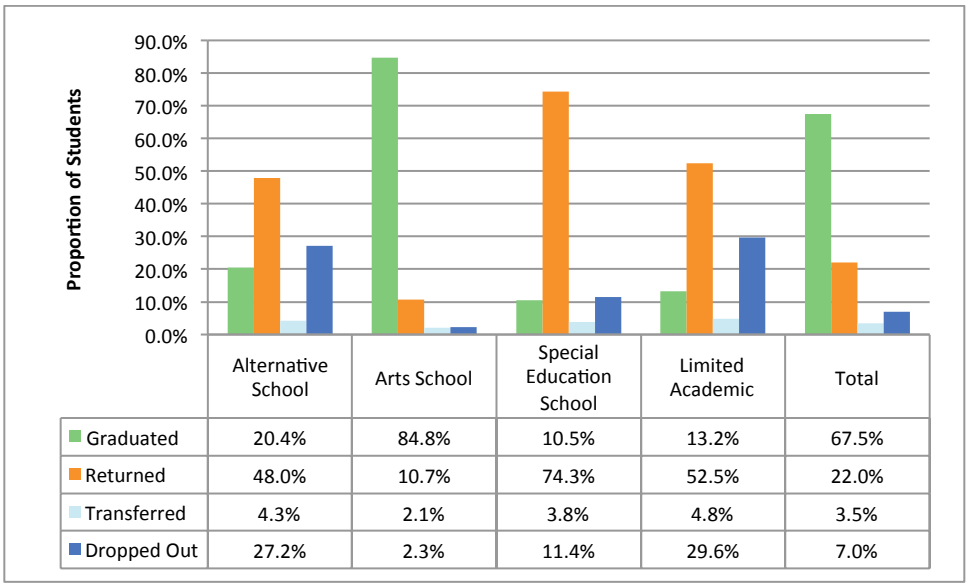
	Alternative School	Arts	Special Ed	Limited Academic	Total
Academic	46.6%	88.7%	0.0%	10.8%	65.7%
Applied	45.5%	5.9%	2.0%	59.2%	25.4%
Essentials	3.4%	0.0%	67.7%	25.2%	4.1%
Undefined	4.5%	5.3%	30.3%	4.7%	4.8%

Graduation.

Graduation is a key achievement variable in the exploration of academic pathways. Of students who were in Grade 12 for the first time in 2011, 67.5% graduated while 22% returned for a fifth year in the TDSB (Figure 7.17). Overall, 3.5% of Grade 12 students transferred outside the TDSB and 7% dropped out. Across school-wide structures, graduation rates varied dramatically. For students attending specialty arts schools, 84.8% graduated on time, 10.7% returned for a fifth year, 2.1% transferred out of the TDSB, and 2.3% dropped out. Graduation rates fell to 20.4% for students attending alternative schools, to 13.2% for students attending schools with limited academic opportunities, and to 10.5% for students attending special education schools. The rate of students dropping out prior to graduation rose to over a quarter for

students attending alternative schools (27.2%) and schools with limited academic opportunities (29.6%), but were notably lower for students attending special education schools (11.4%). The highest proportion of returning students was for special education schools, a rate that stood at 74.3%.

Figure 7.17. Graduation Rates across Selected School-Wide Structures, 2011–12



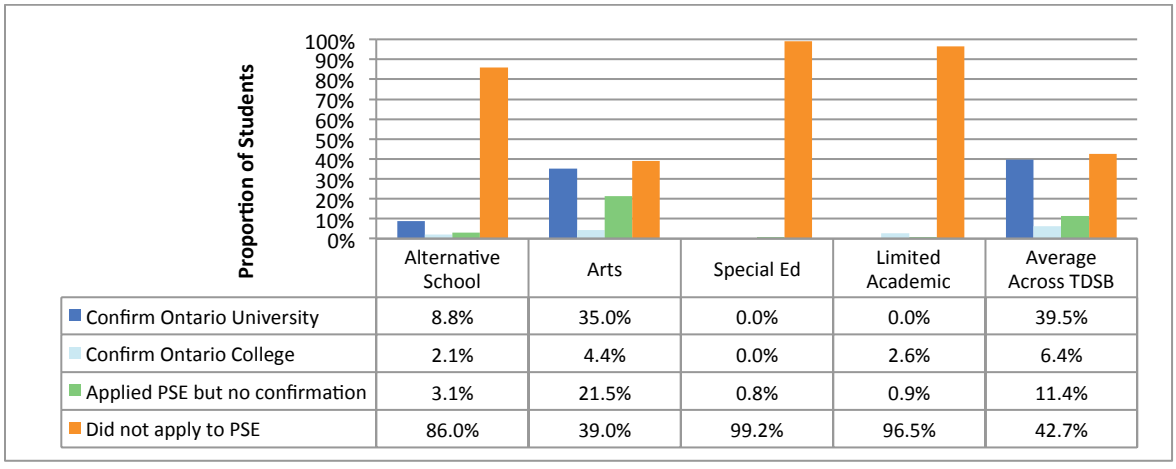
	Alternative School	Arts School	Special Education School	Limited Academic	Total
Graduated	20.4%	84.8%	10.5%	13.2%	67.5%
Returned	48.0%	10.7%	74.3%	52.5%	22.0%
Transferred	4.3%	2.1%	3.8%	4.8%	3.5%
Dropped Out	27.2%	2.3%	11.4%	29.6%	7.0%

Post-secondary confirmation.

As discussed in the section on programs of study, post-secondary access is the outcome of many embedded programmatic decisions and opportunities. Overall, 39.5% of students at the secondary level in the TDSB will confirm an offer of admission to an Ontario university while 6.4% will confirm an offer of admission to an Ontario college (Figure 7.18). Students who applied to a PSE institution but who either accepted an offer outside of Ontario or were not successful made up 11.4% of the secondary student population. However, 42.7% of secondary students did not apply to either college or university. Students attending specialty arts schools are

slightly less likely than the average to confirm an offer of admission to an Ontario university (35%) and much more likely to apply to a PSE institution without confirming an offer (21.5%). Only 39% of students attending specialty arts schools did not apply to any PSE institution. Aside from the specialty arts schools, the three remaining school-wide structures resulted in a far smaller proportion of students confirming offers of admission to an Ontario university or college or applying to any PSE institution. Only 8.8% of students in alternative schools confirmed an offer of admission to an Ontario university and 2.1% confirmed an offer of admission to an Ontario college. No students attending a special education school confirmed an offer of admission to an Ontario university or college. Although there were no confirmations of offers of admission to an Ontario university for students attending schools with limited academics, 2.6% did confirm an offer to an Ontario college. The proportions of students who did not apply to any PSE institution were 86% of students in alternative schools, 96.2% of students in schools with limited academics, and 99.2% of students in special education schools.

Figure 7.18. Proportion of PSE Confirmations across Selected School-Wide Structures, 2011–12



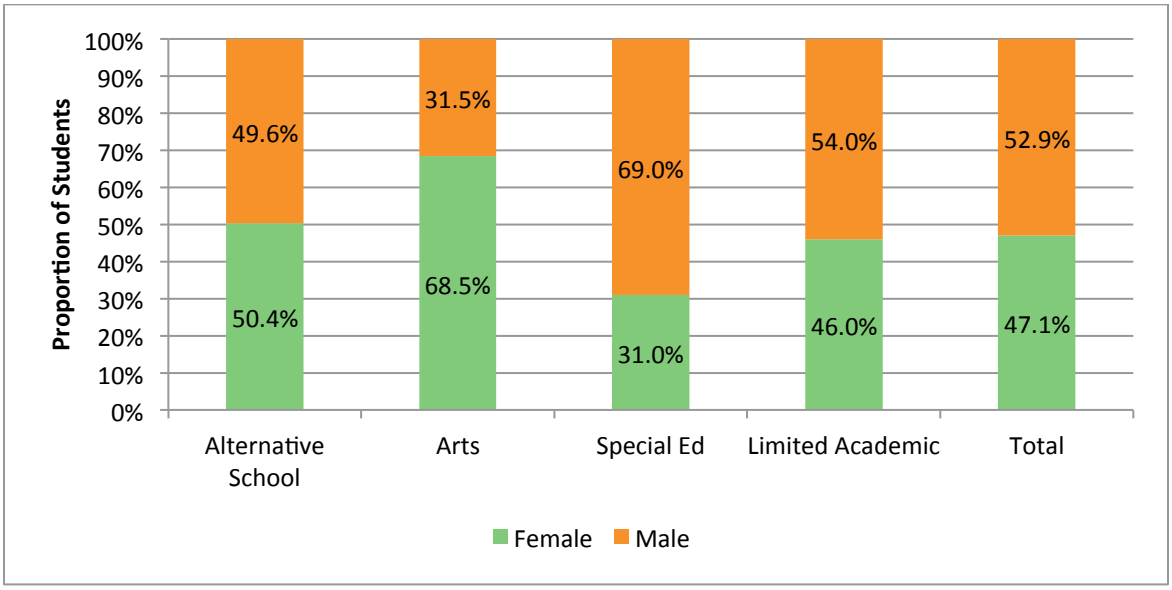
	Alternative School	Arts	Special Ed	Limited Academic	Average Across TDSB
Confirm Ontario University	8.8%	35.0%	0.0%	0.0%	39.5%
Confirm Ontario College	2.1%	4.4%	0.0%	2.6%	6.4%
Applied PSE but no confirmation	3.1%	21.5%	0.8%	0.9%	11.4%
Did not apply to PSE	86.0%	39.0%	99.2%	96.5%	42.7%

Student demographic variables across selected school-wide structures

Gender.

Gender proportions varied across school-wide structures. In the TDSB's secondary panel there is an uneven gender divide, with roughly 5% more male than female students, resulting in proportions of 47.1% female and 52.9% male (Figure 7.19). The gender proportion in schools with limited academics roughly mirrored the overall gender proportion across the TDSB's secondary panel. The proportion of female students was slightly higher in alternative schools (50.4%) bringing the proportions of the two genders to near equal. The proportion of female students was notably higher in specialty arts schools (68.5%) and substantially smaller in special education schools (31%).

Figure 7.19. Gender across Selected School-Wide Structures, 2011–12



Race.

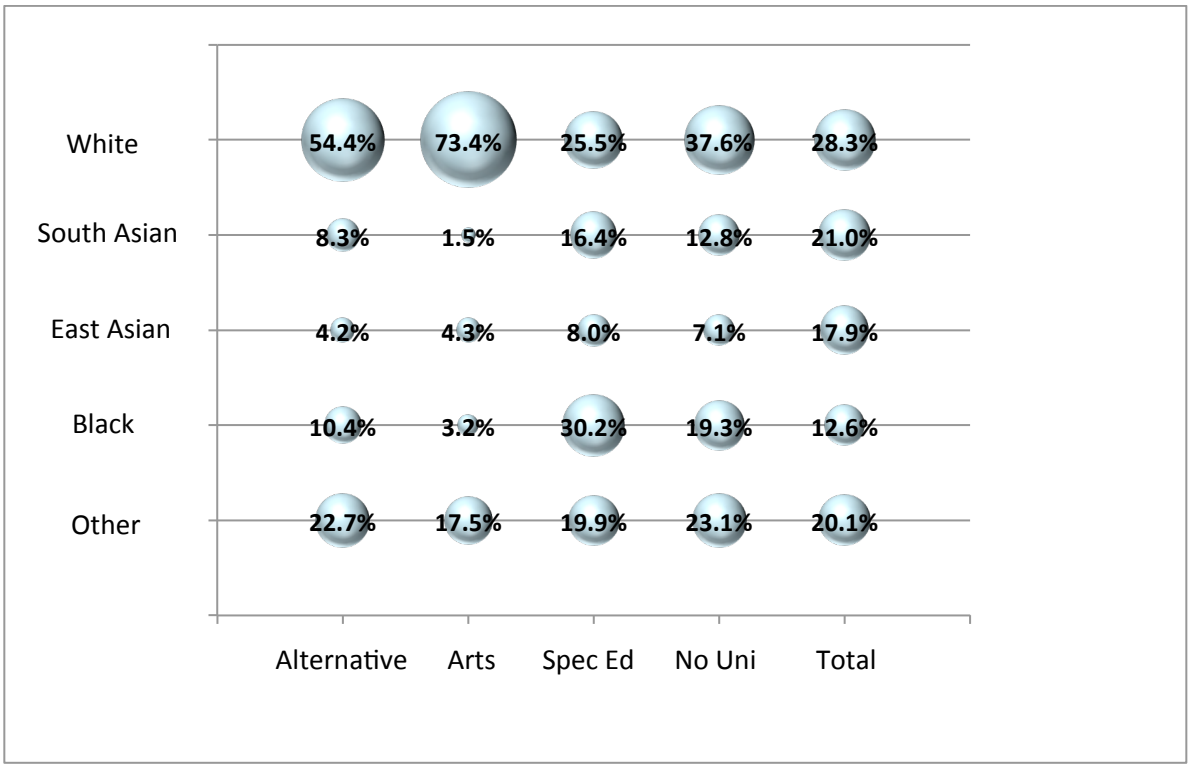
The four largest racial categories across the TDSB secondary panel are White (28.3%), South Asian (21%), East Asian (17.9%), and Black (12.6%) (Table 7.17 & Figure 7.20). Racial proportions varied across the school-wide structures included in the analysis. For example, the proportion of self-identified White students was close to triply represented in specialty arts schools (73.4%) and doubly represented in alternative schools (54.4%), as well as overrepresented in both specialty arts schools (46.5%) and schools with limited academic opportunities (37.6%). Self-identified South Asian students were under-represented across all school-wide structures, most notably within the specialty arts schools (1.5%) and alternative schools (8.3%). The second largest racial category represented within specialty arts schools was self-identified "mixed" students, at 12.6%. As a group, self-identified East Asian students were largely under-represented across alternative schools (4.2%), special education schools (8%), specialty arts schools (4.3%), and schools with limited academics (7.1%). Self-identified Black students were the largest racial category represented in special education schools (30.2%) and were over triply represented. Self-identified Black students were also over-represented in schools with limited academic opportunities (19.3%), but were under-represented in both alternative schools (10.4) and specialty arts schools (3.2%).

Table 7.17. Racial Categories across Selected School-Wide Structures, 2011–12

School-Wide Structures	Aboriginal	Black	East Asian	Latin American	Middle Eastern	Mixed	South Asian	South east Asian	White
Alternative School	1.2%	10.4%	4.2%	2.8%	3.2%	12.6%	8.3%	2.9%	54.4%
Arts	0.5%	3.2%	4.3%	2.3%	0.7%	12.6%	1.5%	1.4%	73.4%
Special Ed	1%	30.2%	8%	4.5%	6%	6.1%	16.4%	2.3%	25.5%
Limited Academic	2.3%	19.3%	7.1%	2.8%	6.1%	8.5%	12.8%	3.4%	37.6%
TDSB Average	0.3%	12.6%	17.9%	2.2%	5.8%	6.9%	21%	4.9%	28.3%

The bubble chart below (Figure 7.20) provides a visualization of the proportionate representation of racial categories across school-wide structures. The columns represent each school type within the analysis, while the rows represent the proportion of self-identified racial groups. The final column on the right represents racial proportion across the TDSB's secondary panel.

Figure 7.20. Racial Categories across Selected School-Wide Structures, 2011–12



Note. Spec Ed = full special education schools; No Uni = limited academic schools.

Student first language.

The student language most notably over-represented in specialty arts schools is English, making up close to three-quarters of the population (Table 7.18). Students who spoke English were the only key language group over-represented in alternative schools. English and Pashto were the only two languages to have a notable over-representation in schools with limited academics, whereas students who spoke English, Portuguese, Somali, Spanish, or Tamil were over-represented in special education schools.

Table 7.18. Student Language across Selected School-Wide Structures, 2011–12

First Language	Arts School	Alternative School	Limited Academic School	Special Education School	Total
Albanian	0.4%	0.4%	0.2%	0.5%	0.5%
Arabic	0.1%	1.2%	1.7%	0.9%	1.6%
Bengali	0.2%	0.8%	1.1%	0.6%	2.0%
Chinese	2.7%	2.7%	4.6%	5.3%	13.3%
Dari		0.7%	1.7%	0.7%	0.8%
English	79.0%	75.3%	65.4%	59.8%	44.3%
French	3.4%	1.0%	0.9%	0.5%	0.8%
Greek	0.8%	0.5%	0.7%	0.5%	0.8%
Gujarati	0.1%	0.5%	0.8%	1.4%	1.8%
Hindi		0.5%	0.2%	0.3%	0.7%
Korean	0.6%	0.4%	0.6%	0.4%	1.6%
Pashto		0.1%	0.7%	0.3%	0.4%
Persian	0.4%	1.1%	1.6%	2.1%	2.2%
Portuguese	0.7%	0.4%	0.5%	1.3%	0.6%
Punjabi	0.1%	0.3%	0.4%	1.1%	1.4%
Romanian	0.2%	0.2%	0.3%	0.2%	0.3%
Russian	1.4%	1.0%	0.2%	0.4%	1.4%
Serbian	1.0%	0.3%	0.1%	0.3%	0.7%
Somali	0.1%	0.7%	0.9%	2.9%	2.6%
Spanish	2.4%	2.4%	2.4%	3.6%	2.4%
Tagalog	0.5%	1.7%	2.3%	0.9%	2.2%
Tamil	0.2%	2.1%	3.4%	5.6%	5.2%
Turkish	0.2%	0.4%	0.6%	0.6%	0.6%
Urdu		1.4%	1.6%	3.5%	3.5%
Vietnamese	0.5%	0.5%	0.3%	1.1%	1.9%

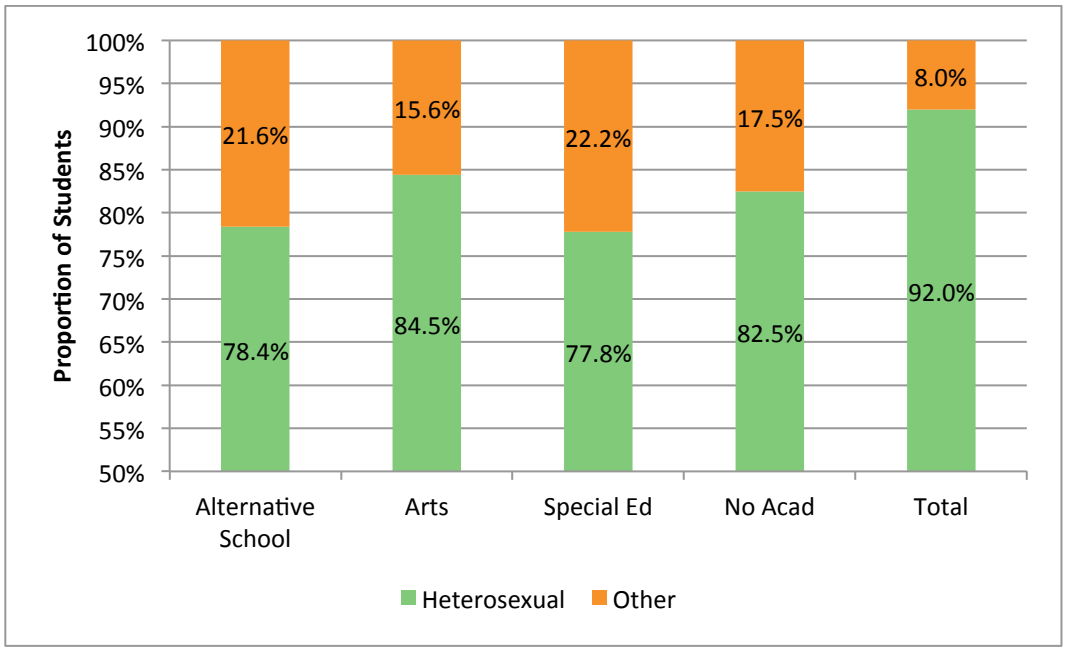
Sexuality.

From the results of the 2011 student census, students were given the opportunity to self-identify their sexual orientation Across the TDSB secondary panel, 92% of students identified as heterosexual (Table 7.19 & Figure 7.21). Interestingly, this proportion had a slight variation across each school-wide structure explored in this analysis: 78.4% of students in alternative schools and 84.5% of students in specialty arts schools self-identified as heterosexual, while 77.8% of students within special education schools and 82.5% of students within limited academic schools self-identified as heterosexual.

Table 7.19. Sexuality Categories across Selected School-Wide Structures, 2011–12

School-Wide Structures	Heterosexual	Gay/Lesbian	Bisexual	Other	Not sure/ Questioning
Alternative					
School	78.4%	3.2%	9.2%	3.6%	5.6%
Arts	84.5%	2.5%	4.5%	2.2%	6.4%
Special Ed	77.8%	1%	0.9%	1.2%	19.1%
Limited					
Academic	82.5%	2%	5.8%	1.6%	8.1%
Total	92%	0.7%	1.8%	1.1%	4.4%

Figure 7.21. Sexuality Categories across Selected School-Wide Structures, 2011–12

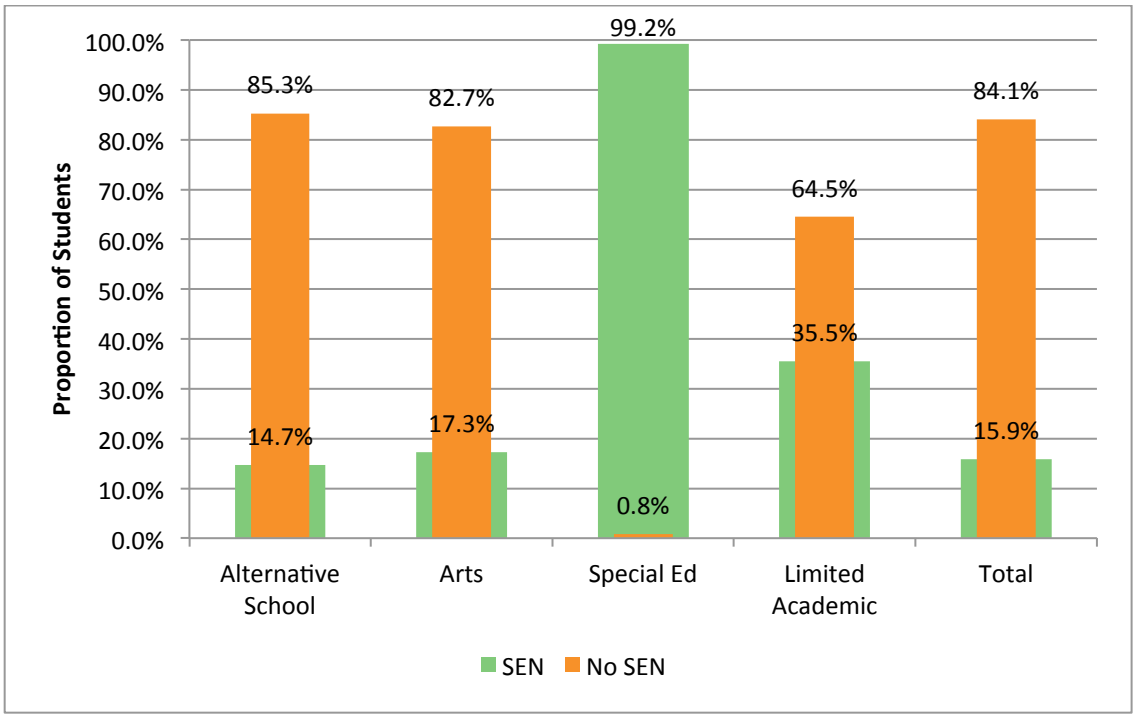


Note. Spec Ed = full special education schools; No Uni = limited academic schools.

Students with special education needs.

Students with special education needs include students who have been formally identified through an IPRC as well as students who have not been formally identified but who have an IEP. The following analysis looks at the proportion of students across school-wide structures who had been identified as having an SEN (excluding those identified as gifted). Across the TDSB's secondary panel, 15.1% of students had been identified with SEN; however, this proportion fluctuated across school-wide structures (Figure 7.22). Students attending specialty arts schools were slightly more likely to be identified with an SEN (17.3%); students attending alternative schools were slightly less likely to be identified with an SEN (14.7%); and students attending schools with limited academic opportunities were more than twice as likely (35.5%) to be identified with an SEN. Understandably, close to all students attending special education schools were identified with an SEN (99.2%).

Figure 7.22. Proportion of Students with SEN (excluding Gifted) across School-Wide Structures, 2011–12



The table below (Table 7.20) demonstrates the proportions of students identified either formally or informally with special education needs across both SEN categories and school-wide structures. The greatest proportions of students with SEN attending alternative schools were students who have only an IEP (42.9%) and students who have been identified as having a learning disability (36.9%). Although the proportion of students who have only an IEP is greater in specialty arts schools (37.1%) than across the entire secondary panel (31.4%), the proportion of students with a learning disability is smaller, at 30.7%. Just over a quarter of students with SEN (26.6%) attending specialty arts schools have been identified as gifted. The three largest proportions of SEN categories represented within limited academic schools were students who have only an IEP (33.6%), students identified with a learning disability (34.8%), and students

identified as having a mild intellectual disability (18.8%). The proportions of students who had both an IEP and a learning disability closely mirror the proportions across the TDSB's secondary panel; however, the proportion of students with mild intellectual disabilities was almost double that of the total (9.6%). For students attending special education schools, SEN categorical proportions varied from overall trends. There was a marked increase in students identified as having a developmental disability, a mild intellectual disability, autism, and a physical disability in special education schools. With special education schools, students identified with a developmental disability (16.7%) or a physical disability (5.9%) were represented at over five times the total proportion. Students with a mild intellectual disability (49.1%) and students with autism (10.8%) were 2 to 3 times over-represented in special education schools.

Table 7.20. SEN (including Gifted) across Selected School-Wide Structures, 2011–12

School-Wide Structures	IEP Only	Autism	Deaf and Hard of Hearing	Learn Dis	Lang. Impair	Gifted	MID	Dev Dis	Blind and Low Vision	Phys Dis	Multiple Exception	Beh
Alternative School	42.9%	1.1%	0.2%	36.9%	0.7%	10%	3.1%	0%	0%	0%	0.4%	4.7%
Arts	37.1%	0.6%	0.4%	30.7%	0.0%	26.6%	0.4%	3.1%	0.0%	1.0%	0.2%	0.8%
Special Ed	3.2%	10.8%	0.8%	7.5%	0.8%	0%	49.1%	16.7%	0.2%	5.9%	0.3%	4.7%
Limited Academic	33.6%	3.1%	0.2%	34.8%	0.9%	0.3%	18.8%	0.9%	0%	0.6%	0.2%	6.7%
Total	31.4%	3%	0.6%	32.2%	0.8%	15.4%	9.5%	2.9%	0.1%	1.1%	0.1%	2.9%

Note. IEP only = Individual Education Plan only (no formal identification of SEN); Learn Dis = learning disability; Lang. Impair = language impairment; MID = mild intellectual disability; Dev Dis = developmental disability; Phys Dis = physical disability; Multiple Exception = multiple exceptionalities; Beh = behaviour disorder.

Family factors across selected school-wide structures

Generational status.

The TDSB is unique in that close to three quarters (71.5%) of its secondary student population hold first-generation status (Table 7.21). However, across the selected school-wide structures, the proportion of first-generation students was greatly reduced. The proportion of first-generation students attending alternative schools was close to half (41.8%) of the total first-generation population (71.5%). The proportion of first-generation students remained notably reduced for students attending specialty arts schools, special education schools, and schools with limited academics. Conversely, the proportion of third-generation students was disproportionately over-represented within each of the school-wide structures presented in this analysis, most notably in specialty arts schools (50.2%), alternative schools (40.9%), and limited academic schools (36.2%) as compared to the total third-generation population, at 19.8%.

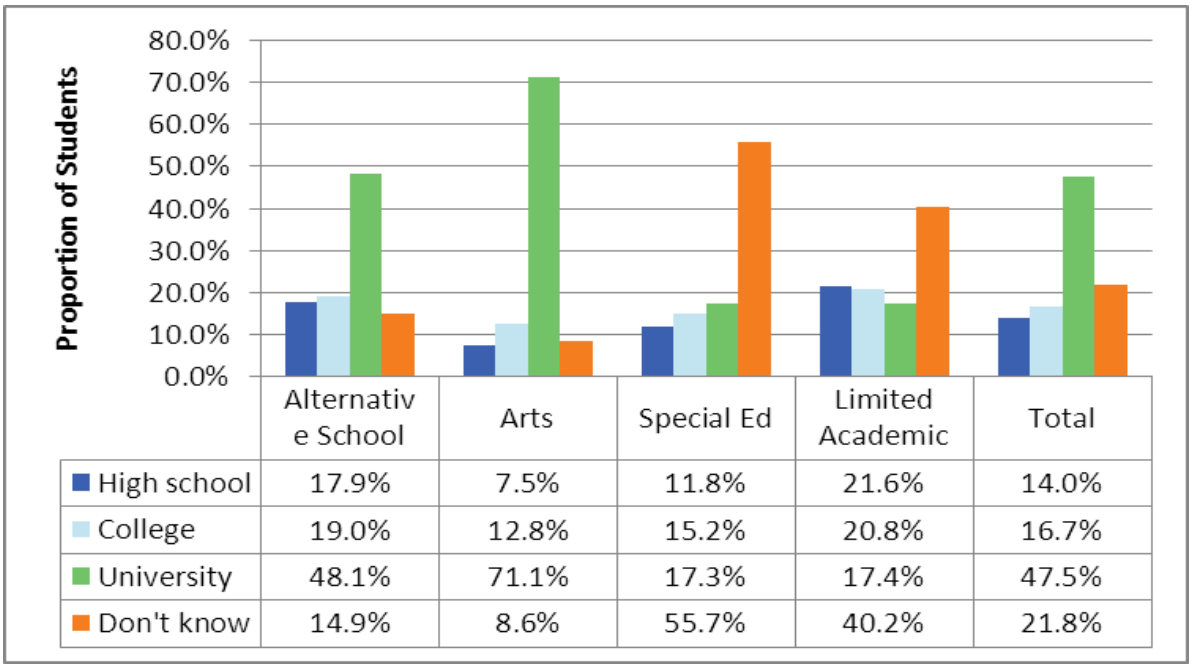
Table 7.21. Generational Status across Selected School-Wide Structures, 2011–12

School-Wide Structures	3rd Generation	2nd Generation	1st Generation
Alternative			
School	40.9%	17.3%	41.8%
Arts	50.2%	24.9%	24.9%
Special Ed	28.9%	5.7%	65.4%
Limited			
Academic	36.2%	7.6%	56.1%
Total	19.8%	8.7%	71.5%

Parent education.

As discussed earlier, parental education has been established as one of the most critical variables in relation to student success and academic outcomes. Here, the relationship between parental education and school-wide structures was explored (Figure 7.23). Across the TDSB's secondary panel, 14% of students had parents with a high school education, while 16.7% of students had parents with a college education as their highest level of education achieved. Although 21.8% of the student population noted that they did not know their parents' highest level of education, 47.5% recorded that their parents had achieved a university education. These proportions varied across school-wide structures. For example, 71.1% of students attending specialty arts schools had parents whose highest level of education was university. Though still slightly higher than the overall total, the proportion of students whose parents had achieved a university education dropped to 48.1% of students attending alternative schools. Although the proportions of students whose parents had a university education were substantially lower for both special education schools and schools with limited academics, it is important to note that these two school-wide structures also had a notable proportion of students who reported not knowing their parents' highest level of education—55.7% of students attending special education schools and 40.2% of students attending limited academic schools.

Figure 7.23. Parent Education across Selected School-Wide Structures, 2011–12



	Alternative School	Arts	Special Ed	Limited Academic	Total
High school	17.9%	7.5%	11.8%	21.6%	14.0%
College	19.0%	12.8%	15.2%	20.8%	16.7%
University	48.1%	71.1%	17.3%	17.4%	47.5%
Don't know	14.9%	8.6%	55.7%	40.2%	21.8%

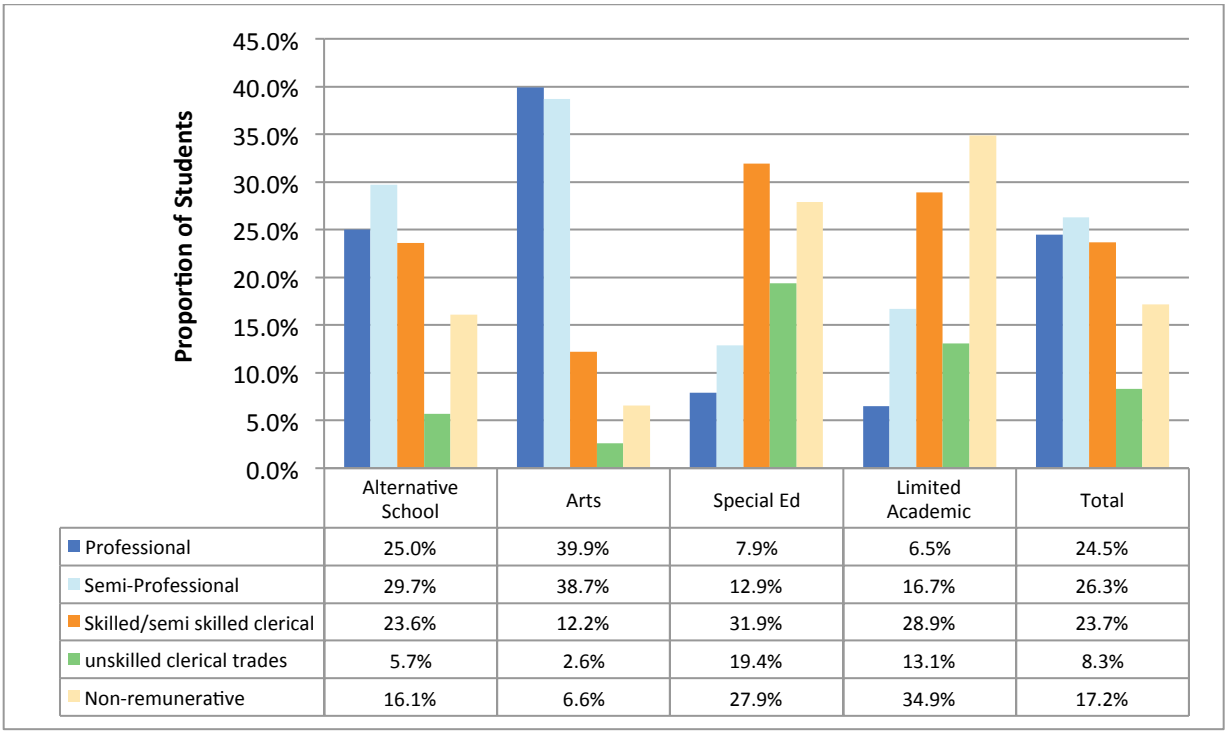
Note. Special Ed = special education.

Parent occupation.

Figure 7.24 demonstrates the relationship between parental occupation and school-wide structures. The data revealed interesting results. For example, while just under a quarter (24.5%) of the overall total of the TDSB's secondary panel were students whose parents were employed in professional positions, over a third of students (39.9%) in specialty arts schools had parents who were employed as professionals. Of all the school-wide structures, the specialty arts schools, which require admission based on a successful application and auditions, are considered to occupy a privileged space within public education (Gaztambide-Fernández, Saifer, & Desai, 2013). Based upon the literature, it should be no surprise that 78.6% of students in specialty arts schools have parents from higher social-class standings, while a smaller proportion of these students (6.6%) have parents in non-remunerative positions at the time of the survey. Schools

with limited academic opportunities had the smallest proportion of students whose parents were employed as professionals (6.5%) and the highest proportion (34.9%) of students whose parents were non-remunerative at the time of the survey.

Figure 7.24. Parent Occupation across Selected School-Wide Structures, 2011–12



	Alternative School	Arts	Special Ed	Limited Academic	Total
Professional	25.0%	39.9%	7.9%	6.5%	24.5%
Semi-Professional	29.7%	38.7%	12.9%	16.7%	26.3%
Skilled/semi skilled clerical	23.6%	12.2%	31.9%	28.9%	23.7%
unskilled clerical trades	5.7%	2.6%	19.4%	13.1%	8.3%
Non-remunerative	16.1%	6.6%	27.9%	34.9%	17.2%

Note. Special Ed = special education.

Income.

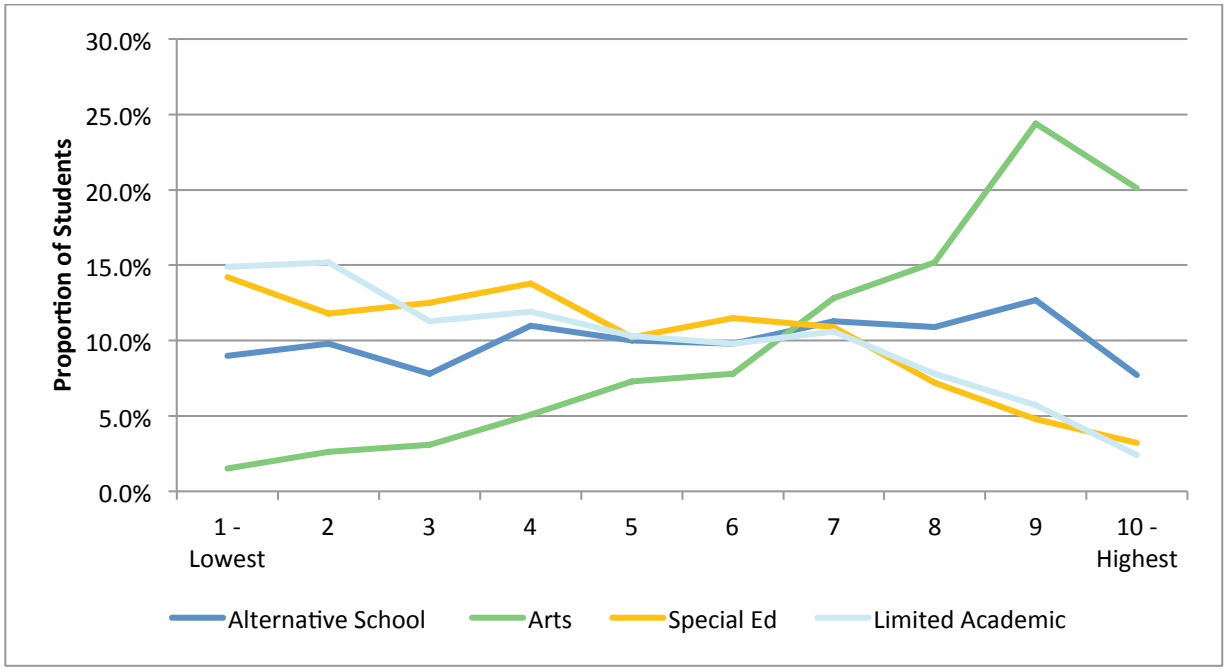
As with parental occupation, family income demonstrated similar trends (Table 7.22 & Figure 7.25). Students attending specialty arts schools were much more likely to come from higher-income households and much less likely to come from lower-income households than students attending special education schools or schools with limited academic opportunities.

Table 7.22: Deciles of Income across Selected School-Wide Structures, 2011–12

School-Wide Structures	1 - Low	2	3	4	5	6	7	8	9	10 - High
Alternative										
School	9%	9.8%	7.8%	11%	10%	9.8%	11.3%	10.9%	12.7%	7.7%
Arts	1.5%	2.6%	3.1%	5.1%	7.3%	7.8%	12.8%	15.2%	24.4%	20.1%
Special Ed	14.2%	11.8%	12.5%	13.8%	10.2%	11.5%	10.9%	7.2%	4.8%	3.2%
Limited										
Academic	14.9%	15.2%	11.3%	11.9%	10.3%	9.8%	10.6%	7.8%	5.7%	2.4%
Total	9.4%	9.5%	9.8%	10.4%	10.6%	10.5%	10.6%	10.1%	10.3%	8.8%

Note. Special Ed = special education.

Figure 7.25. Deciles of Income across Selected School-Wide Structures, 2011–12

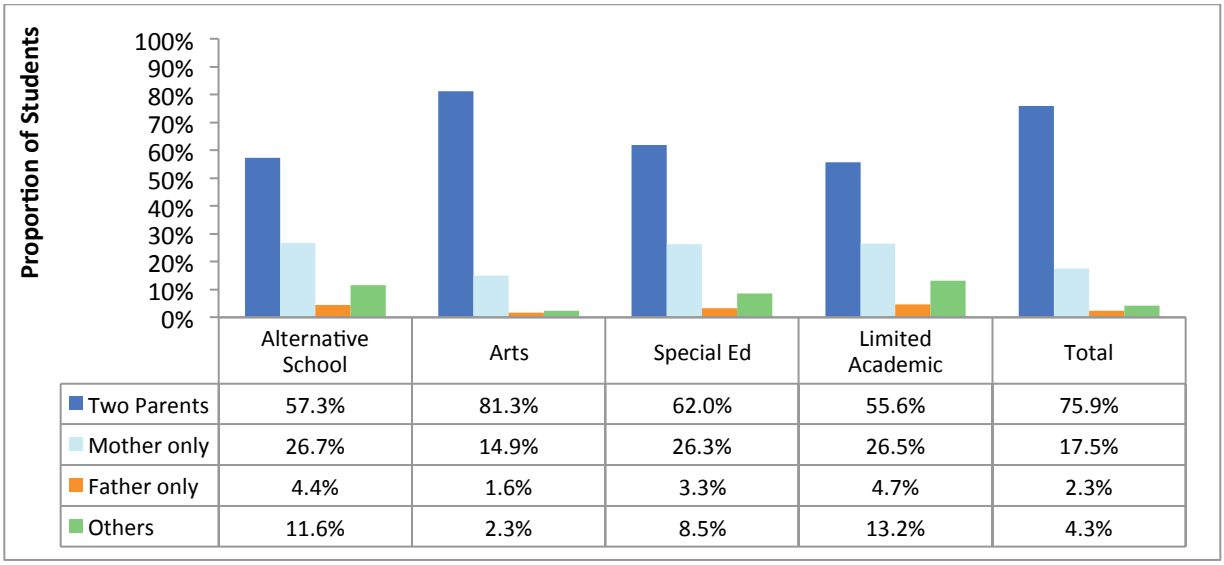


Note. Special Ed = special education.

Parental presence.

As with parental education, parental occupation, and family income, similar trends emerged for parental presence (Figure 7.26). Students attending specialty arts schools were more likely to live with two parents than students in any other school-wide structure (including the average for the TDSB secondary panel), whereas students attending limited academic schools were the least likely to live with both parents (20.3% less likely than the total average). However, aside from students attending specialty arts schools, over a quarter of students within each of the other school-wide structures lived with only their mother.

Figure 7.26. Parental Presence across Selected School-Wide Structures, 2011–12



	Alternative School	Arts	Special Ed	Limited Academic	Total
Two Parents	57.3%	81.3%	62.0%	55.6%	75.9%
Mother only	26.7%	14.9%	26.3%	26.5%	17.5%
Father only	4.4%	1.6%	3.3%	4.7%	2.3%
Others	11.6%	2.3%	8.5%	13.2%	4.3%

Note. Special Ed = special education.

Parents living outside of Canada.

As a new variable, the proportion of parents living inside and outside of Canada has revealed some interesting findings (Table 7.23). For example, students who attend special education schools are 2.4 times as likely to have both parents living outside of Canada as the

TDSB secondary average. Students attending specialty arts schools were the most likely to have both parents living in Canada (94.1%), followed by students attending alternative schools (90.8%).

Table 7.23. Parents Living Outside of Canada across Selected School-Wide Structures, 2011–12

School-Wide Structures	One parent	Both parents	No parents
Alternative			
School	7.4%	1.8%	90.8%
Arts	4.8%	1.1%	94.1%
Special Ed	14.6%	7.7%	77.6%
Limited			
Academic	11.3%	7.2%	81.6%
Total	9.8%	3.2%	87%

Note. Special Ed = special education.

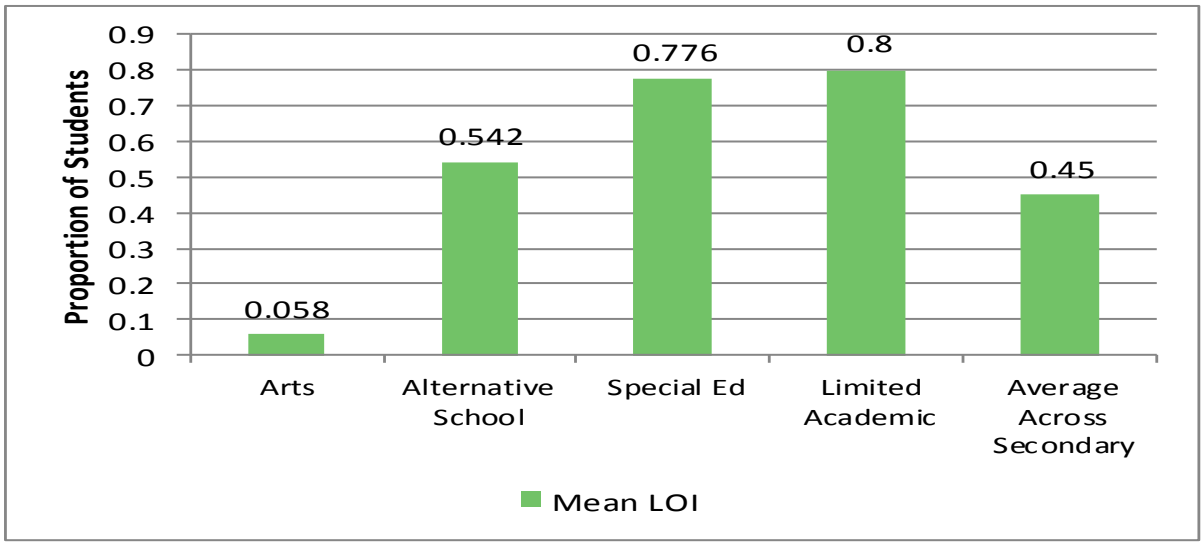
Learning Opportunity Index.

As discussed earlier, the LOI is a critical scale measuring external challenge at the neighborhood level based upon six socio-economic factors. Across the TDSB secondary panel, the range of external challenge begins at 0.001 to reaches to 0.956, while the mean is 0.45 (Figure 7.27). The closer the LOI score is to 1.0 the more extreme the external challenge.

Minimum and maximum LOI ranges as well as the mean LOI fluctuated across school-wide structures. For example, the LOI range for students in specialty arts schools was from 0.046 to 0.161 with a mean of 0.058, which indicates far less external challenge than those facing students who were attending schools with limited academic opportunities (range of 0.693 to

0.913, mean of 0.8). A mean LOI of 0.8 signifies a high level of external challenge. Although alternative schools demonstrate a wide range of LOI and a higher-than-average mean (0.542), special education schools closely mirror the LOI of schools with limited academic opportunities, with a high range (from 0.632 to 0.943) and a mean of 0.776.

Figure 7.27. Mean LOI across Selected School-wide Structures, 2011–12



Note. Special Ed = special education.

Achievement variables across selected school-wide structures

Achievement—conceived as promotion to Grade 9, POS, level of courses taken at the Grade 12 level, and PSE access—was discussed at the beginning of this chapter. Two more achievement variables were explored across school-wide structures: the OSSLT for first-time-eligible Grade 10 students and the rate of suspension.

OSSLT.

Results for the OSSLT are varied across school-wide structures (Table 7.24). For example, 94.4% of first-time-eligible students in specialty arts schools passed the OSSLT upon

their first attempt, compared to 53% of students in alternative schools and 12% of students in schools with limited academics. While only 2% of students in special education schools successfully passed the OSSLT, it is important to remember that 91.3% of students in special education schools were either deferred or exempt from writing.

Table 7.24. OSSLT Pass Rate (FTE) across Selected School-Wide Structures, 2011–12

School-Wide Structure	Successful	Unsuccessful/Absent/Deferred/Exempt
Alternative		
School	53%	47%
Arts	94.4%	5.6%
Special Ed	2%	98%
Limited		
Academic	12%	88%
Total	73.1%	27%

Note. Special Ed = special education.

Suspensions.

While the overall proportion of students being suspended across the TDSB's secondary panel is 3.6%, the rate of suspension among students attending specialty arts schools was less than half of the average at 1.5% (Table 7.25). Students attending alternative schools had a suspension rate equal to the TDSB secondary average, at 3.6%, while the rate of suspension was just over double (7.3%) for students attending schools with limited academic opportunities. Students attending special education schools had a suspension rate of 10.7%, which was close to three times the TDSB secondary average.

Table 7.25. Suspensions across Selected School-Wide Structures, 2011–12

School-Wide Structure	No Suspension	Suspended
Alternative School	96.4%	3.6%
Arts	98.5%	1.5%
Special Ed	89.3%	10.7%
Limited Academic	92.7%	7.3%
Total	96.4%	3.6%

Note. Special Ed = special education.

Selected In-School Programs

The TDSB offers many programming options for students at the secondary level. Many programs are intended to support students in their learning needs as well as provide students with highly valued, marketable skills and opportunities for greater PSE access. Earlier, the outcomes associated with POS as well as school-wide structures were explored. This section looks exclusively at programs offered within schools, particularly the relationships between selected programs, the role programs play within students' academic pathways, the representation of student demographic characteristics, and program connections to students' sense of belonging and exclusion. An analysis into the relationship of programs to LOI will also be explored. Although this is not an exhaustive list, it is intended to examine a wide range of TDSB programs. This analysis includes the following programs: congregated gifted and special education programming, the International Baccalaureate (IB) program, French Immersion, Advanced Placement (AP) opportunities, the elite athlete program, the Specialist High Skills Major (SHSM) program, and the Ontario Youth Apprenticeship Program (OYAP). To begin,

descriptive statistics are provided followed by two logistic regression analyses exploring the connection between programs and the likelihood of students confirming an offer to an Ontario university and experiencing a sense of belonging and citizenship within their school community.

Description of selected in-school programs

Special education/gifted programming.

Special education programming is available for students who have been identified either formally or informally as having special education needs. The following formal categories of exceptionality exist: learning disability, giftedness, mild intellectual disability, developmental disability, autism, behavioural disorder, deaf and hard of hearing, blind and low vision, language impairment, speech impairment, physical disability, and multiple exceptionalities (TDSB, Special Education, 2013).

Programs can be designed to target the needs of students that fall within these exceptionality categories and can be delivered in various ways. Students can receive in-class support through indirect or withdrawal service as well as support within a home school program (special education class for up to 50% of the day) or intensive support program (special education class for up to 100% of the day). For the purpose of this report, all students who have an IEP, specialized placement, and/or special education programming were incorporated as variables. For the analysis of congregated special education programs, both students who were taught within congregated programs identified as gifted as well as students identified with other exceptionalities (excluding gifted) were included as separate variables.

The International Baccalaureate program.

The IB program is internationally renowned for its academic rigour. It provides students with first-year university courses while they are still in high school, with recognized

accreditation in over 125 countries. Geared towards Grades 11 and 12, the IB diploma program is offered at six TDSB secondary schools. Students prepare for the highly competitive IB diploma program by enrolling in a preparatory program in Grade 9. Exams are sent to a central office and marked externally (TDSB, 2013d). The IB diploma is valued highly by post-secondary institutions around the world. For this analysis, students identified as participants in the IB program were students taking the IB preparatory program in Grade 9 and 10 as well as the diploma program for Grades 11–12.

French Immersion.

The French Immersion program offers students who do not speak French as their first language the opportunity to learn French through immersion at school. Both early immersion and middle immersion programs offer 100% of course material in French, outside of some specialized courses such as physical education. Secondary immersion requires students to obtain 10 credits in French in order to graduate with a Certificate of Bilingual Studies in French Immersion (TDSB, 2013c). In the TDSB, early immersion begins in Senior Kindergarten and is offered at 56 schools across the board (TDSB, 2013c). Middle immersion programs, which begin in grade 4, are offered at three locations while secondary Immersion programs are offered at 10 schools in the Greater Toronto Area. The TDSB also offers a Grade 7 continuation program, which allows students to take 50% of their academic courses in French. The TDSB offers this program within 22 schools (TDSB, 2013c). French Immersion programming, which provides students with a firm conversational and academic foundation in a second language, can be considered one of the most marketable programs offered within the TDSB, broadening future academic and economic opportunities for participating students (Curtis et al., 1992; Parekh et al.,

2011). Students included in this analysis for French Immersion were students who were enrolled in French Immersion programming at the secondary level.

Advanced Placement.

Similar to the IB program, AP courses offer students the opportunity to accrue university accreditation while still in high school. AP courses provide students with highly valued opportunities to advance their education and increase their access to PSE. Quoting from the AP website, "AP courses offer [college and university] admissions officers a consistent measure of course rigor across high schools, districts, states and countries—because all AP teachers, no matter where they're teaching, have to provide a curriculum that meets college standards." (College Board, 2014, para. 3) Students included in this analysis for AP were identified through the AP course codes at the secondary level.

Academic Program for Gifted Athletes (elite athletes program)

The APGA or elite athletes program provides flexible secondary timetabling and support for students who are competing in athletics at provincial, national, or international levels (Northview Heights Secondary School, 2013). Students must have a B average in order to be eligible for entrance into the program in addition to recognized competitive athletic standings (TDSB, 2013a). Only four schools in the TDSB host the elite athlete program. Students identified as participating in the program were included based on their course codes. Unfortunately, data from Northview Heights Secondary School were unavailable at the time of this study

Specialist High School Major program.

Specialist High Skills Major (SHSM) is a program approved by the Ontario MOE. Each program has five components which include six to 12 (generally Grade 11–12 level) required

credits within a particular post-secondary pathway. The program includes a co-op opportunity as well. The program makes use of the Ontario Skills Passport as well as "Reach Ahead" opportunities to document achievement and provide students with post-secondary experiences (TDSB, 2013f). Areas of specialization include art and culture; aviation and aerospace; business; construction; energy; environment; health and wellness; horticulture and landscaping; hospitality and tourism; information and communication technology; justice, community safety, and emergency services; manufacturing; non-profit; sports; and transportation. (TDSB, 2013f) Students included in this analysis for SHSM were identified through their course codes.

Ontario Youth Apprenticeship Program (OYAP).

OYAP provides students with the chance to pursue apprenticeship and workplace opportunities following high school. "The Ontario Youth Apprenticeship Program (OYAP) is a School to Work program that opens the door for students to explore and work in apprenticeship occupations starting in Grade 11 or Grade 12 through the Cooperative Education program. Students have an opportunity to become registered apprentices and work towards becoming certified journeypersons in a skilled trade while completing their secondary school diplomas" (OYAP, 2013). Students included in this analysis for OYAP were identified through their course codes.

Total schools.

For each category of analysis, overall results from the secondary level in the TDSB were included as a baseline.

Overview of analyses

There are many ways to evaluate the effectiveness of school programs and institutional organization. Commonly employed strategies for program evaluation include a comparative

analysis of program outcomes such as academic achievement and post-secondary access. Are certain programs leading to greater academic and PSE success? Although academic achievement is a critical factor leading to post-secondary opportunities, there are alternative program outcomes to consider. Students' sense of citizenship and belonging among their peers, within their schools and classrooms, has also been demonstrated to be directly related to academic outcomes, as has students' self-assessed confidence and competencies.

Comparative analysis of program outcomes raises questions of access. Who is participating in these programs and what is the relationship between program access and historically marginalized groups? What correlations can be determined between student demographics and access to highly valued or, conversely, more restrictive programming?

This analysis looks at specialized programming through the lens of academic pathways, student success, and post-secondary outcomes; however, it also explores the role of programs in their relationship to student belonging within their school community. First, selected programs will be deconstructed in terms of their connection to established academic pathways. Following the analysis on academic pathways, student demographic characteristics will be explored looking closely at who is accessing the programs offered throughout the TDSB. Finally, an analysis as to the relationship between specialized programs and students' sense of belonging within their school community will be explored.

Pathways across selected in-school programs

Promotion and transference.

Proportions of students being promoted or transferred from Grade 8 to Grade 9 varied across programs (Table 7.26). Proportions for promotion ranged from 98.2% of students in the gifted program, to 96.6% of students taking IB, 98.5% of students in French Immersion, 88.6%

of students taking AP courses, and 97.3% of students in the elite athlete program. This proportion dropped dramatically for students in congregated special education programs (2.3%).

Table 7.26. Promotion and Transference across Selected In-School Programs (Grade 8–10 Students Only), 2011–12

In-School Program	Promoted	Transferred	Other
Gifted	98.2%	0.3%	1.5%
IB	96.6%	0.7%	2.7%
French	98.5%	1%	0.5%
AP	88.6%	8.6%	2.9%
Elite Athlete	97.3%	0%	2.7%
Special Education	2.3%	81.5%	16.2%
Total across TDSB Secondary	78.2%	18.5%	3.2%

Program of study.

As noted earlier, students' POS is determined by the academic level in which students take the majority of their Grade 9–10 courses. The proportion of students taking the majority of their courses at the academic, applied, and Essentials levels varied widely across selected secondary programs (Table 7.27). Although the proportion of students in the academic POS across the TDSB was 65.7%, the proportion of students taking academic courses in Gifted, IB, French Immersion, AP, and Elite Athlete programs averaged over 95%. This proportion dropped notably for students in the SHSM (53.8%) and OYAP (40.4%) programs. Across the secondary panel, 25.4% of students took the majority of their courses in the applied POS. However, these proportions are far greater for students in the SHSM (53.8%) and OYAP (50%) programs.

Within congregated special education programs, the proportion of students in the academic POS fell to 2.5%, while 30.1% of students were in the applied POS and 41.1% were taking the majority of their courses in the Essentials POS. The greatest proportion of students who have an undefined POS was found in congregated special education programming.

Table 7.27. POS across Selected In-School Programs, 2011–12

In-School Program	Academic	Applied	Essentials	Undefined
Gifted	99.6%	0.2%	0%	0.2%
IB	99.2%	0.2%	0%	0.6%
French	97.9%	0.6%	0%	1.4%
AP	96%	1.4%	0.4%	2.2%
Elite Athlete	95%	2.9%	0.9%	1.2%
SHSM	53.8%	38.1%	5%	3.2%
OYAP	40.4%	50%	6.4%	3.1%
Special Education	2.5%	30.1%	41.1%	26.4%
Total across TDSB Secondary	65.7%	25.4%	4.1%	4.8%

Graduation.

The discussion of streaming often connects students' POS to graduation rates and post-secondary access. The table below explores graduation rates for students enrolled in specific secondary programs so as to offer possible links between program opportunities and academic success. Table 7.28 shows graduation outcomes of students who were in their first year of Grade 12 and were eligible for graduation in June 2012. The table below (Table 7.28) represents student status as of October 31, 2012. Of all eligible Grade 12 students across the TDSB, 67.5%

graduated after four years in high school while 22% came back for a fifth year. Overall, 3.5% transferred out of the TDSB and 7% dropped out. Proportions of students graduating on time (i.e., after four years), varied dramatically across secondary programs. For students in a gifted program, the IB program, or taking AP courses, the rate of graduation after four years is close to 30% higher than the average. Students in French Immersion and the elite athlete program also have a higher-than-average rate of graduation. Students in the OYAP and SHSM programs have a lower rate of graduation after four years and a much higher rate of students returning for a fifth year of high school. The rate of graduation after four years for students in congregated special education programs was about a third of the average, at 22.6%, while the proportion of students returning for a fifth year was close to triple the average (64.8%).

Table 7.28. Graduation Rates across Selected In-School Programs, 2011–12

In-School Program	Graduated	Returned	Transferred	Dropped Out
Gifted	96.6%	2.4%	0%	1%
IB	98.7%	0.7%	0%	0.7%
French	88.5%	8.6%	1.1%	1.9%
AP	94.5%	3.9%	0.3%	1.2%
Elite Athlete	77.9%	8.8%	4.4%	8.8%
SHSM	46.2%	46.2%	2.2%	5.4%
OYAP	62.5%	26.6%	3.6%	7.3%
Special Education	22.6%	64.8%	2.8%	9.9%
Total across TDSB Secondary	67.5%	22%	3.5%	7%

Post-secondary confirmation.

The program that had the highest proportion of students confirming an offer to an Ontario university the year after graduation was the IB program, at 83%, with the gifted program close behind at 79.8%, followed by the AP program (77.4%) and French Immersion (62.5%) (Table 7.29). Interestingly, despite the high proportion both enrolled in the academic POS and graduating on time, students enrolled in the Elite Athlete program were less likely to confirm an offer of admission to an Ontario university and only slightly more likely to apply with no confirmation. For students taking the OYAP, SHSM, or congregated special education programs, the rate of university confirmations the year following graduation was notably smaller than the average, while the rates of students not applying for PSE was substantially higher than the average. However, students enrolled in OYAP were almost three times as likely to confirm an offer of admission to an Ontario college.

Table 7.29. Post-Secondary Confirmations across Selected In-School Programs, 2011–12

In-School Program	Confirm Ontario University	Confirm Ontario College	Applied PSE but no confirmation	Did not apply to PSE
Gifted	79.8%	1.4%	12%	6.7%
IB	83%	0%	13.1%	3.9%
French	62.5%	2.4%	18.8%	16.4%
AP	77.4%	1.9%	14.2%	6.5%
Elite Athlete	30.9%	0%	13.2%	55.9%
SHSM	2.2%	2.2%	14.2%	81.3%
OYAP	4.7%	17%	7.1%	71.2%
Spec Education	1.6%	2.8%	1.8%	93.9%
Total across TDSB Secondary	39.5%	6.4%	11.4%	42.7%

Student demographic variables across selected in-school programs

Gender.

Although the proportion of female students in the TDSB secondary panel is lower than males, at 47.1%, there were programs in which female students were over-represented (Table 7.30). Female students were over-represented in French Immersion (61.3%) and the IB program (58.5%). More equitably distributed across gender lines were AP, where female students make up 50% of the population, the elite athlete program (46.2%), and OYAP (44.9%). The programs in which male students were greatly over-represented were congregated special education (69.6%), congregated gifted programs (63.8%), and the SHSM (62.5%).

Table 7.30: Gender across Selected In-School Programs, 2011–12

In-School Program	Female	Male
Gifted	36.2%	63.8%
IB	58.5%	41.5%
French	61.3%	38.7%
AP	50%	50%
Elite Athlete	46.2%	53.8%
SHSM	37.5%	62.5%
OYAP	44.9%	55.1%
Special Education	30.4%	69.6%
Total across TDSB Secondary	47.1%	52.9%

Interestingly, in three of the highest performing academic programs, female students are over-represented. Conversely, programs that have been linked to decreased rates of graduation

and post-secondary access have a higher proportion of male students (i.e., SHSM and congregated special education). However, male students are also greatly over-represented in congregated gifted programs (63.8%), which have been demonstrated to have one of the highest rates of graduation and post-secondary access.

Race.

The table below (Table 7.31) represents the proportions of self-identified racial groups across secondary programs. All things being equal, the proportions highlighted in orange at the bottom of the table should be reflected across all programs. However, notable variations were observed. The four largest self-identified racial groups are White, South Asian, East Asian, and Black. Students who self-identified as White were over-represented in congregated gifted programs, French Immersion, elite athlete programs, OYAP, and congregated special education programs and were under-represented in the IB, AP, and SHSM programs. Students who self-identified as South Asian were over-represented in the IB program and, slightly, in the SHSM, but notably under-represented in gifted, French Immersion, elite athlete, and special education programs and slightly under-represented in AP and OYAP. Students who self-identified as East Asian were over-represented in congregated gifted programs, AP, and the IB program. Self-identified East Asian students were notably under-represented in the French Immersion, elite athlete, SHSM, OYAP, and congregated special education programs. Students who self-identified as Black were over-represented in congregated special education, SHSM, and OYAP, were notably under-represented in gifted, IB, AP, and elite athlete programs, and were slightly under-represented in French Immersion. Although these groups represented the majority of

TDSB students, it is important to note other incidences of over- and under-representation for racial groups across programs.

Table 7.31. Self-Identified Race across Selected In-School Programs, 2011–12

In-School Program	Aboriginal	Black	East Asian	Latin American	Middle Eastern	Mixed	South Asian	Southeast Asian	White
Gifted	0.1%	3.2%	31.1%	0.9%	2%	6.8%	12%	2.4%	41.6%
IB	0%	5.9%	23%	0.5%	4.1%	4.3%	40.8%	4.8%	16.5%
French	0.1%	11.1%	8.4%	1.9%	3.8%	12.2%	4.9%	2.2%	55.4%
AP	0%	6%	37.3%	0.9%	2.6%	4.4%	17.9%	5.9%	25%
Elite Athlete	0%	7.4%	1.1%	0.4%	1.5%	12.6%	3%	1.1%	73%
SHSM	0.1%	21.3%	9.1%	4.8%	6.5%	10.3%	21.6%	5.3%	20.9%
OYAP	0.7%	16.7%	8.6%	2.7%	4.8%	7.7%	18%	5.2%	35.6%
Special Education	0.8%	24.4%	9%	3.4%	5.4%	7.4%	14.4%	3%	32.2%
Total across TDSB Secondary	0.3%	12.6%	17.9%	2.2%	5.8%	6.9%	21%	4.9%	28.3%

Student language.

In a general sense, language groups are stratified across in-school programs (Table 7.32). For example, students who spoke Chinese are over-represented in gifted, IB, and AP programs but under-represented in French Immersion, elite athlete, SHSM, OYAP and congregated special education programs. Similarly, students whose first language was English are over-represented in all programs with the exception of IB and AP.

Table 7.32. Student Language across Selected In-School Programs, 2011–12

Student First Language	Gifted	IB	French	AP	Elite Athlete	SHSM	OYAP	Spec Ed	Total
Albanian	0.0%	1.0%	0.2%	0.3%	0.3%	0.1%	0.2%	0.4%	0.5%
Arabic	0.7%	1.6%	1.4%	0.5%	0.9%	2.0%	1.1%	1.2%	1.6%
Bengali	1.3%	4.8%	0.3%	2.8%	0.0%	1.7%	0.9%	1.0%	2.0%
Chinese	24.6%	20.4%	4.6%	33.5%	0.9%	7.4%	6.6%	6.4%	13.3%
Dari	0.1%	0.3%	0.2%	0.1%	0.0%	0.4%	0.7%	0.6%	0.8%
English	49.4%	26.9%	67.3%	29.3%	83.2%	49.3%	59.0%	60.2%	44.3%
French	0.7%	1.0%	5.8%	0.7%	2.7%	0.4%	0.4%	0.6%	0.8%
Greek	0.2%	0.0%	1.9%	1.2%	0.3%	0.5%	0.8%	1.0%	0.8%
Gujarati	0.8%	3.4%	0.4%	3.3%	0.3%	2.0%	0.9%	1.1%	1.8%
Hindi	0.6%	2.9%	0.1%	1.1%	0.3%	0.5%	0.3%	0.3%	0.7%
Korean	2.2%	1.6%	0.9%	2.1%	0.0%	0.2%	1.0%	0.6%	1.6%
Pashto	0.0%	0.6%	0.0%	0.1%	0.0%	0.7%	0.4%	0.4%	0.4%
Persian	0.7%	0.9%	1.5%	0.9%	0.3%	2.3%	2.0%	1.9%	2.2%
Portuguese	0.2%	0.2%	0.3%	0.5%	0.6%	1.5%	1.1%	1.1%	0.6%
Punjabi	0.5%	2.5%	0.2%	1.4%	0.0%	1.4%	1.2%	0.9%	1.4%
Romanian	1.0%	0.8%	0.6%	0.3%	0.0%	0.2%	0.2%	0.2%	0.3%
Russian	1.9%	1.1%	1.8%	2.0%	1.5%	0.1%	1.8%	0.5%	1.4%
Serbian	1.7%	0.3%	2.2%	0.9%	3.0%	0.1%	0.2%	0.3%	0.7%
Somali	0.3%	1.5%	0.6%	2.2%	0.0%	2.8%	2.2%	2.7%	2.6%
Spanish	0.7%	0.6%	2.2%	1.0%	0.6%	4.8%	2.9%	3.3%	2.4%
Tagalog	0.2%	1.0%	0.7%	0.6%	0.6%	2.3%	1.9%	0.8%	2.2%
Tamil	4.4%	13.6%	0.6%	3.6%	0.0%	4.5%	3.8%	4.2%	5.2%
Turkish	0.2%	0.2%	0.2%	0.3%	0.6%	0.4%	0.4%	0.5%	0.6%
Urdu	1.2%	4.3%	0.2%	1.6%	0.0%	4.9%	2.7%	2.6%	3.5%

Vietnamese	1.2%	3.0%	0.6%	5.3%	0.3%	3.1%	1.6%	1.8%	1.9%

Self-identified sexuality.

Proportions of self-identified sexualities did not vary much across programs (Table 7.33). Roughly all programs had similar proportions of sexuality represented. The only notable variance was for students in the congregated special education program, a large proportion of whom responded that they were "not sure/questioning."

Table 7.33. Self-Identified Sexuality across Selected In-School Programs, 2011–12

In-School Program	Heterosexual	Gay/Lesbian	Bisexual	Other	Not sure/ Questioning
Gifted	91.1%	0.8%	1.8%	1.6%	4.7%
IB	93.8%	0.4%	1.2%	1%	3.6%
French	93.9%	0.3%	1.6%	1.1%	3.1%
AP	91.2%	0.8%	2%	2.3%	3.6%
Elite Athlete	93.4%	0.8%	0.8%	1.5%	3.5%
SHSM	90.9%	0.8%	1.7%	2.2%	4.3%
OYAP	91%	0.8%	3.2%	1.2%	3.7%
Special Education	82.6%	0.9%	1.5%	1%	13.9%
Total across TDSB Secondary	92%	0.7%	1.8%	1.1%	4.4%

Students with special education needs.

Students with special education needs, as noted earlier, are identified either formally or informally. Students with a formal SEN identification have gone through an IPRC and have been

formally identified with an exceptionality. Students who have not been identified with an exceptionality but who have an IEP are also included in the group of students with SEN. The first table below looks at the proportion of students with SEN (excluding gifted) across programs.

Although the rate of students with SEN (excluding gifted) is 15.9% across the TDSB's secondary panel, the proportion of students with SEN fluctuated across programs (Table 7.34). The proportion of students with SEN was notably less than the TDSB average within the gifted, IB, French Immersion, AP, and elite athlete programs. Conversely, the proportion of students with SEN was greater than the TDSB average for the SHSM, OYAP, and congregated special education programs.

Table 7.34. SEN (excluding Gifted) across Selected In-School Programs, 2011–12

In-School Program	No SEN	SEN
Gifted	100%	0%
IB	98.9%	1.1%
French	96.1%	3.9%
AP	97.7%	2.3%
Elite Athlete	94.1%	5.9%
SHSMP	77%	23%
OYAP	71.8%	28.2%
Special Education	0%	100%
Total across TDSB Secondary	84.1%	15.9%

The analysis below (Table 7.35) explores the proportion of exceptionalities across programs and includes students who have been identified as gifted. The proportions highlighted in orange at the bottom of the table represent proportions of exceptionalities or students with only an IEP across the TDSB's secondary panel. However, exploring proportions across programs revealed notable incidences of over- and under-representation. For example, the proportion of students with SEN identified as gifted was 15.4% across the TDSB; however, the proportion of students with SEN identified as gifted dramatically increases in programs such as French Immersion (38.5%), the elite athlete program (42.9%), the IB program (87.3%), AP (89.2%), and congregated gifted programs (100%). For students in congregated special education programs, there are much higher proportions of students with autism, mild intellectual disability, and developmental disability.

Table 7.35. SEN Identification across Selected In-School Programs, 2011–12

Special Education Needs	IEP Only	Autism	Deaf and Hard of Hearing	Learn Dis	Lang. Impair	Gifted	MID	Dev Dis	Blind and Low Vision	Phys Dis	Multiple Exception	Beh
Gifted	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%
IB	5.1%	1.3%	0.6%	5.7%	0%	87.3%	0%	0%	0%	0%	0%	0%
French	39.8%	1.2%	0%	19.3%	0%	38.5%	0%	0%	0%	0.6%	0%	0.6%
AP	5.4%	0.9%	0%	4.5%	0%	89.2%	0%	0%	0%	0%	0%	0%
Elite Athlete	11.4%	2.9%	0%	31.4%	0%	42.9%	0%	0%	0%	8.6%	0%	2.9%
SHSMP	35.6%	1.3%	0%	42.2%	1.8%	3.6%	13.3%	0%	0%	0%	0%	2.2%
OYAP	36.3%	1.7%	0.7%	40.8%	0.9%	2.2%	12%	0.2%	0%	1.4%	0.2%	3.8%
Spec Ed	2.7%	10.8%	1.6%	27.9%	1%	0%	31.2%	14.9%	0.1%	4.9%	0.1%	5.3%
Total across TDSB Secondary	31.4%	3%	0.6%	32.2%	0.8%	15.4%	9.5%	2.9%	0.1%	1.1%	0.1%	2.9%

Note. IEP only = Individual Education Plan only (no formal identification of SEN); Learn Dis = learning disability; Lang. Impair = language impairment; MID = mild intellectual disability; Dev Dis = developmental disability; Phys Dis = physical disability; Multiple Exception = multiple exceptionalities; Beh = behaviour disorder.

Family factors across selected in-school programs

This section explores family factors and their relationship to students' participation in school-wide structures.

Generational status.

The TDSB secondary school population comprises predominantly first-generation students (71.5%) (Table 7.36). However, the proportion of students falling into the categories of first, second or third generation varied across secondary school programs. Variations from the overall average were noted in the elite athlete program, where only 27% of students were first generation, as well as French Immersion, where only 43.6% were first generation. However, students taking the AP program (78.6%) as well as those in the IB program (84.3%) were more likely to be first generation. The programs with the greatest proportion of third-generation students were French Immersion (36.8%), elite athlete (53%), OYAP (28.2%), and congregated special education (31.9%), all of which were notably higher than the 19.8% average across the TDSB secondary panel.

Table 7.36. Generational Status across Selected In-School Programs, 2011–12

In-School Program	3rd Generation	2nd Generation	1st Generation
Gifted	25%	13%	62%
IB	9.9%	5.9%	84.3%
French	36.8%	19.7%	43.6%
AP	14.8%	6.5%	78.6%
Elite Athlete	53%	20%	27%
SHSMP	18.2%	8.4%	73.4%
OYAP	28.2%	10%	61.9%
Special Education	31.9%	7.6%	60.5%
Total across TDSB Secondary	19.8%	8.7%	71.5%

Parental education.

Although the average proportion of students who had parents with university education is 47.5% across the TDSB secondary panel, proportions fluctuated heavily across programs (Table 7.37). For example, for the top five programs with the highest academic outcomes, the proportions of students who had parents with university education were substantially higher. In the gifted program, 81.1% of students had parents with university education (33.6% higher than the average), while in French Immersion, 72.5% of students had parents with university education (25% higher than the average). Conversely, students enrolled in SHSM and OYAP, programs linked to lower academic outcomes, were less likely than the average to have parents with university education and more likely than the average to have parents with high school as their highest level of education.

Table 7.37. Parental Education across Selected In-School Programs, 2011–12

In-School Program	High school	College	University	Don't know
Gifted	4.1%	7.9%	81.1%	6.9%
IB	8.9%	13.6%	67.2%	10.3%
French	5.6%	13.4%	72.5%	8.5%
AP	10.2%	12.6%	66.2%	11.1%
Elite Athlete	8.4%	19.5%	63.7%	8.4%
SHSMP	20.9%	20.1%	31.7%	27.4%
OYAP	22.7%	22.2%	27.8%	27.3%
Special Education	13.3%	15.6%	21.6%	49.5%
Total across TDSB Secondary	14%	16.7%	47.5%	21.8%

Parental occupation.

In terms of parental occupation, divisions similar to those regarding parental education were observed. Again the top five performing programs in academic outcomes had a higher-than-average proportion of students whose parents were employed as professionals. The average proportion across the TDSB secondary panel is 24.5%; however, this proportion rose to 48.6% for students enrolled in congregated gifted programs, 43.7% in French Immersion, 38.4% in elite athlete programs, 38% in IB, and 31% in AP (Table 7.38). The proportion of students who had parents employed in professional positions dropped notably below the TDSB secondary panel average for students enrolled in SHSM (16.1%), OYAP (12.8%), and congregated special education (11.1%) programs. Conversely, these trends were reversed when looking at students whose parents were non-remunerative at the time of the survey.

Table 7.38. Parental Occupation across Selected In-School Programs, 2011–12

In-School Program	Professional	Semi-professional	Skilled/semi-skilled clerical	Unskilled clerical trades
Gifted	48.6%	30.7%	10.4%	3.3%
IB	38%	29.1%	18.3%	5.2%
French	43.7%	32.2%	14%	3.4%
AP	31%	30.4%	22.8%	4.3%
Elite Athlete	38.4%	34.2%	20.7%	3.4%
SHSMP	16.1%	23.4%	26.7%	9.4%
OYAP	12.8%	24.1%	31.9%	11.4%
Special Education	11.1%	16.3%	30%	15.3%
Total across TDSB Secondary	24.5%	26.3%	23.7%	8.3%

Income.

Certain programs have greater representation of students from higher- or lower-income households (Table 7.39). As an example, gifted, French Immersion, and elite athlete programs have a notable over-representation of students from higher-income deciles. In the gifted program, 54.7% of students came from the highest three income deciles, as did 55.1% of students in French Immersion and 53.1% of students in the elite athlete program. Conversely, in the SHSM program, only 17.6% of students came from the highest three income deciles, as did 24.8% of students in OYAP and 19% of students in congregated special education.

Table 7.39. Deciles of Income across Selected In-School Programs, 2011–12

Deciles of Income	1 - Low	2	3	4	5	6	7	8	9	10 - High
Gifted	1.8%	3%	3.9%	6.6%	8.5%	8.2%	13.2%	11.9%	18.9%	23.9%
IB	6.3%	9.7%	7.6%	8%	12.5%	12.1%	12.7%	13%	12.2%	5.9%
French	3.1%	4.4%	4.2%	5.1%	7.8%	8.9%	11.4%	13.1%	19.6%	22.4%
AP	5.7%	6.5%	9.2%	10.1%	11.9%	12.6%	9.8%	9.7%	12.2%	12.2%
Elite Athlete	0.9%	1.8%	3.3%	5.3%	5.3%	9.5%	20.8%	17.2%	19.3%	16.6%
SHSMP	12.2%	10.7%	10.8%	11.7%	17.2%	9.7%	10.1%	9.3%	5.9%	2.4%
OYAP	8.6%	10.8%	9.9%	11.2%	12%	11.5%	11.3%	10.9%	9%	4.9%
Special Education	14.1%	11.6%	11.2%	11.7%	10.8%	11%	10.6%	8.2%	6.4%	4.4%
Total across TDSB Secondary	9.4%	9.5%	9.8%	10.4%	10.6%	10.5%	10.6%	10.1%	10.3%	8.8%

Parental presence.

Although the TDSB average of students at the secondary level living with two parents was 75.9%, the proportion of these students was higher than average in the gifted, IB, French Immersion, AP, and elite athlete programs and lower than average in the SHSM, OYAP, and congregated special education programs (Table 7.40).

Table 7.40. Parental Presence across Selected In-School Programs, 2011–12

In-School Program	Two Parents	Mother only	Father only	Others
Gifted	89.4%	9%	1%	0.7%
IB	89%	9.1%	0.6%	1.2%
French	83.9%	13.7%	1.2%	1.2%
AP	82.5%	12.6%	1.7%	3.3%
Elite Athlete	84.8%	12.3%	1.5%	1.5%
SHSMP	68.8%	21.3%	2.8%	7.2%
OYAP	68.1%	23.4%	3.1%	5.4%
Special Education	64.2%	25.8%	3.5%	6.5%
Total across TDSB Secondary	75.9%	17.5%	2.3%	4.3%

Parents living outside of Canada.

As a new variable to the TDSB, an analysis of parents living outside of Canada resulted in interesting outcomes (Table 7.41). For example, 3.2% of students in the secondary panel had both parents living outside of Canada. The proportion of students whose parents lived outside of Canada was notably smaller for students enrolled in the gifted, IB, French Immersion, AP, elite athlete, and OYAP programs. However, in SHSM and congregated special education programs, the proportion of students with parents living outside of Canada was notably higher.

Table 7.41. Parents Living Outside of Canada across Selected In-School Programs, 2011–12

In-School Program	One parent	Both Parents	No Parents
Gifted	4.9%	0.4%	94.8%
IB	4.6%	0.7%	94.7%
French	3.7%	0.3%	95.9%
AP	7.1%	2%	90.9%
Elite Athlete	4.1%	0.4%	95.5%
SHSMP	9.8%	3.5%	86.7%
OYAP	9.8%	2.6%	87.7%
Special Education	11.4%	5.5%	83.1%
Total across TDSB Secondary	9.8%	3.2%	87%

Learning Opportunity Index.

As discussed in previous chapters, the LOI is a school-level scale based upon six socio-economic factors measuring external challenge at the neighborhood level. The range of external challenge across the TDSB secondary panel had a mean of 0.45 but ranged from 0.001 to 0.956. The closer the mean is to 1.0, the higher the degree of external challenge. The range between minimum and maximum LOI varies across programs and is highly indicative of the participating population (Table 7.42). For example, the LOI range for students enrolled in French Immersion was 0.001 to 0.682, with a mean of 0.135. This indicates that no students enrolled in French Immersion were in schools that experienced the highest levels of external challenge, which were experienced by one third of students within the board. The mean LOI signifies that students in French Immersion, on average, faced the lowest degree of external challenge across all programs. A close second in the representation of external challenge was within congregated

gifted programs. Similarly to French Immersion, the LOI range in these programs was skewed to minimal levels of external challenge and had a mean of 0.186. The elite athlete, AP, and OYAP programs were more closely representative of the average LOI, while students participating in the IB, SHSM, and congregated special education programs were, on average, more likely to attend schools demonstrating greater external challenge.

Table 7.42. Mean LOI across Selected In-School Programs, 2011–12

In-School Program	Minimum	Maximum	Mean LOI
Gifted	0.036	0.67	0.186
IB	0.22	0.798	0.544
French	0.001	0.682	0.135
AP	0.001	0.929	0.408
Elite Athlete	0.136	0.56	0.411
SHSMP	0.023	0.956	0.629
OYAP	0.001	0.956	0.507
Special Education	0.217	0.956	0.678
Total across TDSB Secondary	0.001	0.956	0.45

Achievement across selected in-school programs

OSSLT.

The average pass rate of the OSSLT for first-time-eligible (FTE) students across the TDSB secondary panel was 73.1% (Table 7.43). Although data for students in OYAP could not be collected, all programs except congregated special education programs demonstrated higher-than-average pass rates.

Table 7.43. OSSLT Pass Rate (FTE) across Selected In-School Programs, 2011–12

In-School Program	Successful	Unsuccessful	Absent	Deferred	Exempt
Gifted	99.1%	0%	0.6%	0.3%	0%
IB	98.2%	0.4%	1%	0.4%	0%
French	92.7%	4.7%	1.6%	1.1%	0%
AP	85%	5%	2.5%	7.5%	0%
Elite Athlete	94.3%	4.6%	1.1%	0%	0%
SHSMP	81.6%	16.3%	0%	2%	0%
OYAP	12.3%	37.9%	2.9%	25.4%	21.6%
Special Education	73.1%	17.1%	2%	7.1%	0.8%
Total across TDSB Secondary	99.1%	0%	0.6%	0.3%	0%

Suspensions.

The suspension rate across the TDSB's secondary school panel is 3.6%. The suspension rate across programs is substantially lower for students in the gifted (0.5%), IB (0.1%), AP (0.6%), and elite athlete (0.9%) programs (Table 7.44). Suspension rates were below but closer to the average for students in French Immersion (2.7%). Suspension rates were slightly higher than the average for students in the SHSM (4.1%) and OYAP (4.4%) programs, but notably higher for students in congregated special education programs (9.4%).

Table 7.44. Suspensions across Selected In-School Programs, 2011–12

In-School Program	No Suspension	Suspended
Gifted	99.5%	0.5%
IB	99.9%	0.1%
French	97.3%	2.7%
AP	99.4%	0.6%
Elite Athlete	99.1%	0.9%
SHSMP	95.9%	4.1%
OYAP	95.6%	4.4%
Special Education	90.6%	9.4%
Total across TDSB Secondary	96.4%	3.6%

Conclusion

Despite the Ontario MOE's claims that the process of streaming has been dismantled through the restructuring of course offerings (Brown & Sinay, 2008), these analyses have demonstrated clear and consistent trends pointing to established secondary pathways for students. Evidence from the data demonstrates that, as early as Grade 8, students are set on a trajectory of achievement traversing across programs of study, to Grade 12 course enrolment, to PSE access. Most concerning are the findings that demonstrated the disproportionality of marginalized groups identified by race, gender, ability, and class that appear to be congregated along limited academic trajectories.

The comparative analysis across school-wide structures suggests important conclusions regarding equity. There were strong relationships among school-wide structures, achievement, student demographics, and students' intrinsic sense of belonging. As seen from this analysis,

schools that offer more highly valued programming and enhanced PSE access, such as the specialty arts schools, had an over-representation of students whose demographic characteristics mirrored those of historically recognized privilege. Conversely, in schools with more limited academic opportunities, racialized students and students living in poverty were notably over-represented. The results of the LOI analysis demonstrated a stratification of external challenge closely correlated with student participation across school-wide structures.

Such stratified outcomes could be resulting from a culmination of educational policy and curriculum decisions, educator expectations, and significant societal pressure promoting competition in a time of tightening public resources. However, these outcomes highlight the role of school-wide structures in the process of congregating students along established lines of privilege, which could lead to the reproduction of marginalized groups in society. The analysis of school-wide structures revealed significant trends regarding race, ability, gender, and class. TDSB educators, policy writers, and partners have a tremendous opportunity to create innovative interventions to counter the continuation of disparate outcomes.

Not unlike school-wide programming decisions, in-school programming decisions revealed similar disparities. As seen throughout the deconstruction of achievement, pathways, student demographics, and students' sense of belonging, these programs function as a part of establishing secondary pathways. Academic outcomes and student demographics were strongly correlated to these selected in-school programs. As noted at the beginning of the chapter, each program carries differently weighted value in terms of academic rigour and marketable skills. Gifted and French Immersion programs are highly valued based on their challenging curriculum and transferrable skills. Likewise, AP courses and the IB diploma program position students as highly competitive when applying for post-secondary education at the most academically

rigorous institutions. The elite athlete program can only be accessed through demonstrated academic ability and gifted athleticism. However, apprenticeship and co-op programs such as the OYAP and SHSM, as well as congregated special education programs, are conceived as more academically limited and do not carry the same social value in outcome for students entering the competitive market of post-secondary education. Correlations between POS and PSE access support the observed stratification in programming outcomes.

What is striking about this comparative analysis is the continuation of the same demographic trends seen across POS and school-wide structures. Although IB and AP programs were demonstrated to be the most equitably distributed across demographics, access to gifted, French Immersion, and elite athlete programs continues to be reserved largely for a very specific, historically privileged demographic. Conversely, enrolment in OYAP, SHSM, and special education programs demonstrates pronounced incidences of disproportionate representation of historically marginalized populations.

The overall results regarding disproportionate representation across programmatic participation and organizational decisions offer insight into the disparity among programmatic opportunities. These analyses have demonstrated repeatedly that, despite growing awareness, an unwavering social hierarchy continues to exist within educational environments. The persistent dominance of historically privileged characteristics of White, able-bodied/minded, heterosexual, and economic privilege remains intact across every analysis conducted throughout this extensive quantitative study. Much in line with the literature, the regression analysis re-affirmed the exclusion experienced by sexual minority, ethno-racial minority (East Asian), and under-privileged (high LOI + single parent) students. Evidence from this thesis lends credence to the notion that identification or perception of ability and disability is intimately linked to race,

gender, and class contexts. As Gorman (2013) theorized, and what is evidenced through these studies, is that the incidence or perception of disability cannot be extracted from multi-layered contextual factors shaping the experience of oppression.

Chapter 8: Structural Analysis of Belonging and Exclusion[16]

Many indicators explored in the previous chapter focused on established secondary pathways, student demographic characteristics, levels of external challenge, and academic achievement across programs of study. The investigation into students' experience of belonging and exclusion draws from students' self-reported experiences in school captured in the TDSB's 2011 student census. For this exploration, a scale was created employing variables that addressed students' experiences of inclusion, acceptance, safety, and shared power in the classroom. The scale deliberately focused on passive experiences of the students and veered away from aspects of achievement or individual identity. Student responses were merged into a scale by their mean and truncated. Across the Grade 9–12 student population who filled out Form A of the 2011 student census, 41.9% of students experienced exclusion in school while 58.1% reported experiencing a sense of belonging. However, the experience of belonging and exclusion varied across programs of study (Table 8.1). Students in the academic POS were more likely to experience a sense of belonging (60.5%) than students in the applied POS (50.7%). Conversely, the rate of student-reported exclusion dropped from 49.3% of students in the applied POS to 39.5% of students in the academic POS.

[16] The majority of this chapter has been published in *Structured pathways* (Report No. 13/14-03), by G. Parekh, 2013, Toronto: TDSB. Formatted by A. Catalano.

Table 8.1. The Experience of Belonging and Exclusion across POS, 2011–12

Grade 9-10 POS	Experience Belonging	Experience Exclusion
Academic	60.5%	39.5%
Applied	50.7%	49.3%
Essentials	49.1%	50.9%
Undefined	62.3%	37.7%
TDSB total	58.1%	41.9%

The scale measuring students' experience of belonging and exclusion was also applied to the evaluation of school-wide structures, with interesting results (Table 8.2). In terms of experiencing a sense of belonging, students attending schools defined as specialty arts schools demonstrated the highest sense of belonging (72.4%) of students in all school-wide structures. Alternative schools were close behind; 71.8% of their student population experiencing a sense of belonging. In comparison, just over half of students attending special education schools (55.6%) and schools that offered limited academics (54.1%) reported experiencing the lowest sense of belonging and the highest sense of exclusion. What is particularly interesting about this analysis is that belonging does not appear to be necessarily tied to academic achievement. For instance, students attending secondary alternative schools often struggle with aspects of achievement; however, they reported very high levels of belonging. Alternative schools also adopt different pedagogical strategies, which, in light of these findings, should be explored more fully.

Table 8.2. Experience of Belonging and Exclusion across Selected School-Wide Structures, 2011–12

School-Wide Structures	Experience Belonging	Experience Exclusion
Alternative School	71.8%	28.2%
Arts	72.4%	27.6%
Special Ed	55.6%	44.4%
Limited Academic	54.1%	45.9%
Total across TDSB secondary	58.1%	41.9%

Note. Special Ed = special education.

The scale measuring students' experience of belonging and exclusion was also applied to the evaluation of in-school programs (Table 8.3). Students who experienced the greatest levels of belonging were students taking AP courses (65.7%). Conversely, students who experienced the greatest level of exclusion were students taking OYAP (51.2%). All other programs fell in between. Those with higher-than-average levels of belonging among students were the gifted, IB, French Immersion, AP, and elite athlete programs; those in which students' sense of belonging fell below the average were the SHSM, OYAP, and congregated special education programs.

Table 8.3. Experience of Belonging and Exclusion across Selected In-School Programs, 2011–12

In-School Programs	Experience Belonging	Experience Exclusion
Gifted	65.1%	34.9%
IB	60.3%	39.7%
French	61.5%	38.5%
AP	65.7%	34.3%
Elite Athlete	65.2%	34.8%
SHSMP	50.7%	49.3%
OYAP	48.8%	51.2%
Special Education	52.4%	47.6%
Total across TDSB Secondary	58.1%	41.9%

When run across transition processes between Grade 8 and Grade 9, the scale of belonging and exclusion demonstrated interesting results (Table 8.4). Students who were promoted from Grade 8 to Grade 9 reported a greater sense of belonging (57.6%) than students who were transferred (46.6%).

Table 8.4. Experience of Belonging and Exclusion across Promotion and Transference, 2011–12

Promotion and Transference	Experience Belonging	Experience Exclusion
Promoted	57.6%	42.4%
Transferred	46.6%	53.4%
Other	61.3%	38.7%
Total	55.9%	44.1%

Conclusion

Across both the regression analysis and the descriptive analysis of belonging, the trend remains consistent. Structures (i.e., programs of study, school-wide programs, and in-school programs) that are more socially valued tend to reflect positive experiences of belonging. Conversely, programs that are not as highly regarded or that do not lead to higher education opportunities are more likely to correlate with experiences of student exclusion.

Chapter 9: Discussion and Future Research[17]

Social Construction of Disability

With mounting evidence from the case files of the VIS and from within Disability Studies literature, one of the most important findings to emerge from my doctoral analysis was the quantifiable confirmation of the social construction of disability. The goal of the regression analysis had been to include a large number of identity-based, structural, achievement, and outcome variables into the regression model in order to determine which variables accounted for the greatest impact on students' experience of belonging and exclusion. The model was constructed in four stages. The first stage included only identity-based characteristics, the second stage included achievement variables, the third stage included structural factors, and the final stage included an outcome measure of students' perceived intrinsic value and competence.

Variables that result in statistical significance are considered to represent key relationships with the variable against which all others are being tested. In this case, the strength and significance of all variables were being evaluated against the experience of belonging and exclusion. The logic embedded within a regression model is that variables that remain significant have accounted for all other variable interactions within the model and have emerged as having the most impact on the experience of belonging and exclusion. However, what is groundbreaking within this regression analysis is not only which variables remained significant throughout the four steps of the model, but also which variables lost significance along the way. When a variable demonstrates significance and then loses significance with the introduction of new

[17] Minor aspects of this conclusion section have been published in *Structured pathways* (Report No. 13/14-03), by G. Parekh, 2013, Toronto: TDSB. Formatted by A. Catalano.

variables into the model, it means that what was initially significant about the interaction is now being explained by the effects of newly introduced variables.

The first step of the regression model included only students' identity characteristics, of which 11 resulted in significant outcomes at the end of step one. Self-identifying as "other than heterosexual," as having parents without university education, and as East Asian all demonstrated strong significance—and remained strong throughout the entirety of the model. Moreover, outcomes for students identified with a learning disability, a mild intellectual disability and who were only receiving support through an IEP (no formal identification) demonstrated significant results in terms of increased experiences of exclusion, while students identified as gifted experienced significant results for increased experience of belonging. (Refer to Appendix A for a visualization of regression results).

When achievement variables (i.e., Grade 6 EQAO scores and absenteeism) were included in the second step of the regression model, two variables lost significance: identification of learning disability and identification of mild intellectual disability. Further, when structural variables (i.e., POS and LOI) were introduced within the third step of the model, two variable lost significance: students identified as gifted and students who were supported only through an IEP. Including a measure of students' self-assessed confidence and competencies in the fourth step did not support the re-emergence of significance for any special education variables. The loss of significance of special education categories across the regression model demonstrates the social construction of the identity labels. The initial significance resulting for learning disability and mild intellectual disability disappeared with the introduction of achievement variables, while the initial significance of giftedness and IEP status disappeared with the introduction of structural variables, such as streaming and socio-economic status.

Within the research conducted in the field, I have uncovered numerous theoretical discussions on the social construction of disability labels (Reid & Knight, 2006); however, I have yet to come across a quantitative study that lends support to this important argument. Drawing from the results presented here, special education categories are not derived organically or biologically, but instead are a culmination of achievement and socio-economic status outcomes. This supports that the identification of impairment, or SEN, is embedded within the structure of the education system. Measurements evaluating academic achievement, student organizational decisions regarding programming and streaming, as well as students' access to socio-economic resources culminate to create a unique environment within which certain students are identified as impaired. Results lend support to the notion that certain forms of impairment identified within this study would not exist outside the structured environment within which they are currently identified. Regression results indicate that identified impairment in school is highly dependent upon the institution within which it exists, drawing marked differences between students' self-identification of sexuality, ethno-racial, and socio-economic status, whose constructions appear to be derived outside the education system.

Unpacking the Complexity of Belonging: Cultural, Structural, and Intrinsic Outcomes

As established in the literature, youth identity is a complex construction with a multitude of influences shaping the embodied existence. The literature discussing youth citizenship, the construction of social norms and achievement, and the role of public education describes key influences that are reflected in the data analysis on the experience of student belonging. How youth are constructed, who they are "supposed to be," and the values and characteristics they are expected to embody appear to be deeply connected to whether students feel as though they belong in school. As the literature discussed, economic power and wealth, as well as the

embodiment of dominant cultural characteristics, interact directly with the experience of belonging/exclusion. In both the regression analysis and descriptive analysis of belonging, students who embodied dominant cultural characteristics or institutionally constructed normative or privileged characteristics (e.g., giftedness) were much more likely to experience a sense of belonging. Students embodying characteristics of privilege were often congregated within highly socially valued programs, whereas students experiencing socio-demographic challenge were often congregated in programming with limited post-secondary opportunities.

These findings not only support the social reproduction effects of public education but also demonstrate the socio-emotional toll experienced in school by students who have been "othered." Although the special education categories lost significance in the regression model once academic and structural characteristics were introduced, it was interesting to note that the disparities in the experience of belonging and exclusion were at their highest within the classroom. This was true for almost all groups (e.g., race, generational status, SEN) explored except for students who self-identified as other than heterosexual, who experienced the greatest degree of exclusion among their peers. Although this conclusion reflects correlation and not causation, it would be prudent to explore how classroom dynamics, curriculum interaction, and differentiated instruction are enacted in the classroom to determine the cause for this consistent trend.

After the four-step model was completed, only eight variables remained significant. Each remaining significant variable cast a unique angle on the experience of exclusion. Variables span identity characteristics, achievement, neighbourhood resources, and perceptions of the self. Variables that remained largely unchanged across the regression model were as follows:

Sexuality status

Regardless of which variables were included in the model, students who self-identified as other than heterosexual were a group whose experience of exclusion remained strong and unwavering across the regression model. This finding very much reflects the literature on the heightened experiences of homophobic bullying and exclusion experienced by students who self-identify as other than heterosexual (Poteat & Rivers, 2010; Robson, 2013 Thurlow, 2001).

Ethno-racial status

Students who self-identified as East Asian demonstrated a consistent experience of exclusion across the regression model. This was a surprising finding due to the intuitive thinking that belonging in school would have a direct correlation with achievement. Historically in the TDSB, as a group, self-identified East Asian students have had the highest rates of academic success and post-secondary access. The finding that self-described East Asian students experienced significant levels of exclusion in comparison to other ethno-racial groups suggests that the experience of belonging is far more complex than achieving good grades (Robson, 2012).

Parental education

Regression results determined that students whose parents did not have the opportunity to go to university experienced significant exclusion in school. According to many scholars, public schools function as a system of cultural and social reproduction through which students' own navigation of the system will largely follow that of their parents (Bourdieu, 1973; Curtis et al., 1992; Karabel & Halsey, 1996; Lynch, 1990). The mounting societal and systemic expectations to pursue post-secondary education may be contributing to students' experience of institutional

exclusion, their expectations or family experiences not being reflected within the dynamic of the school.

Generational status

Using first-generation students as the reference group, both second- and third-generation students reported experiencing significant and largely consistent exclusion in school. Research discusses a high incidence of student engagement and academic expectations of first-generation students and their families, which wanes across subsequent generations. (Dustmann, Frattini, & Lanzara, 2011; Keller & Tillman, 2008; Witkow & Fuligni, 2011). Perhaps in comparison to the surge of aspirations and positive outlook associated with first-generation students, second- and third-generation students appear to be experiencing greater exclusion. An additional theory would be that students new to the country might experience reduced expectations of belonging, knowing the challenges of integrating within an unfamiliar space. However, Toronto, an epicentre of multiculturalism, may present surprising opportunities for engagement and community development for newcomers, which, ultimately, shape students' perceptions of belonging.

Achievement

Achievement demonstrated significant positive results, indicating that students who have higher academic achievement are also more likely to experience a sense of belonging. Despite the positive findings, the link between achievement and belonging was demonstrated to be the weakest of all the significant outcomes in the fourth step of the regression model. Considering that the primary goal of the institution of public education is to encourage and support student learning and achievement, students who are doing well academically are fulfilling the expectations set out for them. Literature also supports the finding that students who perform well

in school are often privileged and afforded more enriched opportunities (Pring & Walford, 1997).

Learning Opportunity Index

As noted earlier, the LOI represents the extent of challenge students face at the school level. As the third most powerful significant variable, the LOI has a clear relationship with students' experience of belonging. The higher the LOI score (representing greater external challenge in the neighbourhood of the school they are attending), the more likely students will experience a sense of exclusion. Due to the intricate ties among class, external resources, and academic achievement, it could be argued that this is another example of how public education serves to reify, as opposed to challenge, social and cultural reproduction (Bourdieu, 1973; Curtis et al., 1992; Blanden et al., 2011).

Confidence and competencies

The final and strongest significant variable is a scale on students' own sense of competence in critical skills and interactions (e.g., writing, reading, social skills, problem solving, leadership). The results indicated that students' low scores on the social and academic competencies scale were highly correlated to experiences of exclusion. Further research, particularly qualitative research, would be helpful in determining whether it is students with high confidence in themselves and their academic competencies who then experience a greater sense of belonging at school, or the established dynamic of belonging at school that influences students' sense of self.

The results revealed in the regression analysis provided a multi-faceted understanding of the various components involved in the dynamics and experiences of belonging. Cultural identity, sexual orientation, institutional experiences, access to socio-economic resources,

academic achievement, and students' sense of confidence in their own competencies are all pivotal factors in students' experience of belonging and exclusion.

Problematizing Inter-Relational Identities Affected by Systemic Exclusion: Race, Disability, Class, Sexuality, Gender, and Streaming

The institution of public education, not unlike other systems of redistribution, is intended to function as an equalizer of opportunity for students facing social disadvantage. As demonstrated throughout the previous chapters and analyses, the existence of established secondary pathways leading to varying levels of academic programs of study and post-secondary opportunities disproportionately disadvantages historically marginalized groups. Outcomes revealed that certain groups of students accessed PSE opportunities while others encountered barriers.

As seen throughout the analyses discussed in chapters 5, 6, 7, and 8, it is clear that certain groups of students are either privileged or disadvantaged, whether it be in their promotion or transference into secondary school, participation in Grades 9–10 programs of study, participation in rigorous and/or elite academic programming, enrolment in special education and vocational programming, graduation, suspension, or post-secondary access. Regardless of measure, students whose identities have experienced historical marginalization continue to experience exclusion from socially and academically valued educational opportunities. Not only does the evidence support their systematic exclusion, but students themselves report an increased sense of exclusion within their schools and classrooms.

Within Giroux's (2012, 2013) discourse of "disposable youth," he identifies the powerful factor of "othering" and the systematic assault on forms of identity that do not embody the dominant cultural identity. Giroux (2013) connects the experience and outcome of being

"othered" with the notion of disposability. Once youth are situated as disposable, the state and its institutions, governed largely by the dominant culture, retract their commitment to the social contract to support and guide them into adulthood. Reid and Knight (2006) discuss how "othered" identities are situated to be deserving of the exclusion they encounter and point out that the segregation of "othered" identities appears natural, and even benevolent. Neoliberal ideology implicitly adopts the biological determinism or hereditarianism argument that individuals are to be blamed for their own challenges and experiences of exclusion. Neoliberal ideology rejects responsibility for disposable identities and supports that it is the individual's responsibility to belong or "fit in" within a system as opposed to demanding that the system accommodate and support their inclusion. As greater public resources are stripped from educational systems, the ghettoization of disposable identities confirmed in this analysis will continue.

The Misidentification of Belonging in Education: De-Bunking the Relationship between Belonging and Academic Engagement

Belonging and engagement are often conflated. I would argue that one does not require the presence of the other, but that both can exist in complementary or contradictory ways. There has been extensive research into student social and academic engagement and its correlation to academic achievement (Fredricks, Blumenfeld, & Paris, 2004; Parsons & Taylor, 2011). A recent study presented at the national Metropolis conference in Vancouver (Brown, Parekh, & Anisef, 2011) established a relationship between immigrant student status and engagement. Results indicated that Canadian-born students were less likely to experience academic and social engagement than students from most immigrant groups represented within the TDSB except for Caribbean-born students. Both academic and social engagement were demonstrated to have a

positive correlation to PSE confirmations. However, studies on engagement do not capture the extent to which students feel included or excluded within their school, nor do they reveal the relationship between belonging or exclusion and academic achievement.

In the literature, academic engagement is often determined through student engagement with academic activities, achievement, and commitment to school (measured by absenteeism) (Willms, 2003; Wagner et al., 2003). Students who demonstrated greater academic achievement were often considered to be more engaged in school. Satisfying, and even exceeding, academic expectations was also thought to be a primary component, if not a guarantee, of a sense of institutional belonging. However, as seen in the regression analysis, academic achievement (Grade 6 EQAO) was one of the weaker significant variables, and absenteeism was not significant at all. In addition, students who self-identified as East Asian were one of the groups experiencing the greatest sense of exclusion, yet past research on ethno-racial status and academic achievement positions East Asian students as one of the highest performing groups (Yau, O'Reilly, Rosolen, & Archer, 2011). Regression results indicated that the experience of belonging was far more complex and nuanced than academic achievement and institutional attendance.

As discussed, there is further evidence that academic engagement—often identified as successful academic achievement and commitment (Willms, 2003; Wagner et al., 2003)—is not synonymous with students' experience of institutional belonging. For example, as seen in the regression analysis exploring PSE access, some of the at-risk characteristics to emerge overlap with characteristics correlated to exclusion, such as having parents who had not gone to university, identifying as East Asian, being from the third generation, low academic achievement, living in under-resourced neighbourhoods, and having low confidence. However,

many characteristics that correlated with not accessing PSE were not significant in the measure of belonging and exclusion. For example, gender, identifying as South Asian, having access to only one parent, being identified as having a learning disability or having only an IEP, absenteeism, and suspensions did not result in significance when correlated with the experience of belonging.

The results from the confidence/competence scale regression very closely mirrored the results of the belonging scale, explaining, in part, why the two are so powerful when correlated together. In the case of confidence/competence, generational status and neighbourhood resources were not significant, but the identification of learning disability or having an IEP, enrolment in the applied POS, and the ethno-racial status of "Other" were significant.

Both of these analyses demonstrated the complexity of the experience of belonging and exclusion. Although strongly connected to both post-secondary access and the self-evaluation of confidence and competencies, belonging was demonstrated to be less tied to institutional priorities and expectations (i.e., academic achievement, PSE, suspensions, absenteeism, POS) and more closely tied to the embodiment of historically privileged or marginalized identity characteristics.

Why the Experience of Belonging Should Be an Institutional Priority

As mentioned in the results section, it was difficult to decide how best to measure *what* the experience of belonging grants individuals. In discussions with policy-focused individuals, the following question was raised: "So, I can see the complexity (first regression results) of the myriad factors impacting the experience of belonging; however, aside from the feeling of inclusion, why should I, as someone vested in public policy, care if students experience a sense of belonging? Why should public funds be allocated or institutional structures be modified to

accommodate this outcome?" In response to this question, although student well-being is an established institutional priority, it was key that post-secondary outcomes also be measured. As it turns out, the experience of belonging and exclusion had a very strong relationship with post-secondary access (i.e., the greater a student's experience of belonging, the more likely they are to pursue university education), which should certainly satisfy the "business case" for prioritizing greater opportunities for student belonging. However, I remain troubled by evaluating the experience of belonging and exclusion solely in terms of institutional priorities, particularly since the literature has strongly indicated a potential for systemic bias and discrimination affecting student outcomes. In addition, other more nuanced dynamics taking place within schools have not yet been adequately acknowledged in the literature. To address this gap, it was imperative that the experience of belonging and exclusion in school be linked not only to institutionally evaluated competencies, but also to students' level of confidence in their mastery of the critical skills necessary for future social, political, and economic participation. In the end, the most powerful interaction with the scale of belonging and exclusion was students' self-assessed scale of confidence and competencies. This indicated that there was a deep relationship between how students experience belonging in school and their confidence and competence in critical areas for social and political participation. The foundation of the critical literature in citizenship studies supported the view that social citizenship is a key factor in the actualization of rights. The results of these studies support the literature, which states that without social citizenship status, without the experience of belonging, individual rights can be trampled and denied (Somers, 2008; Arnold, 2004).

Model and Scale: An Asset for Measuring Disability Citizenship and Inequity?

One of the objectives of this research was to both expand the theorization around disability and citizenship, and create a practical scale of measurement and a theoretical model that could be implemented to investigate various forms of discrimination affecting diverse student groups. The development and theorization of a citizenship model pushes the boundaries of current disability models. Where the social model situates disability within the environment and the human rights model legislates inclusion, a citizenship model embraces the complexities of belonging that cannot be subtracted from, or muted in, the discussion of disability oppression. Issues of class, race, sexuality, and other forms of conceptual difference are inextricably linked to the forms of oppression segregating and stifling the lived experience or experiential citizenship of people with disabilities. In addition, a citizenship model of disability places power within the realm of the individual with the impairment. As opposed to only identifying barriers to accessibility or relying on legalistic interpretations of equity, the citizenship model of disability assigns power to the individual by centralizing their experience of belonging as key measure of equity.

The scale of belonging has successfully unveiled the complexities embedded within the experience of belonging and, in many cases, has accurately identified long-standing areas of systemic discrimination (e.g., the identification of students who self-identify as other than heterosexual, access to resources). It has also demonstrated significant correlations with programmatic participation, which calls on policy makers to re-evaluate the current structure and limitations embedded in the secondary public education system. Although the scale has only recently been introduced to the TDSB (Parekh, 2013), several requests for further analysis as well as usage of the scale have been initiated from various departments and external researchers.

Currently, it is being implemented within a highly sensitive investigation on the exclusion and achievement gap experienced by First Nations students.

Emerging Policy Recommendations

While the embedding of culturally relevant and responsive pedagogy into teachers' pedagogical approaches and assessment practices in and outside the classroom has often been discussed as a solution to reduce the over-representation of minority students in special education (Parekh, 2014), the research presented in this thesis would support more structural change. So long as programming opportunities are stratified across school systems, populations will face systematic segregation. Education systems are intended to function as redistributive mechanisms of greater social mobility; however, as discussed earlier, they are often structured to socially and culturally reproduce the marginalization of oppressed populations.

The extent to which historical bias can infiltrate schools, through teacher bias, curriculum development, and delivery which ignores diverse identities, educator, and administration expectations, is relentless. Until the option to stream students away from rigorous academic engagement (e.g., segregated special education classes, applied and college secondary pathways) is eliminated, the stratification of diverse identities across programmatic opportunities will continue. This is not to say that all students should be enrolled in university preparation courses with supports removed. However, it does challenge school systems, and society at large, to reflect on the value ascribed to alternative (e.g., vocational and trades) programs and the expectation of who belongs on each academic pathway.

Steps towards establishing greater inclusive education policies and practices enable greater opportunities for all students, particularly students with disabilities, to experience a sense of belonging in school. Pulled from international literature, recommendations and best practices

on how to best structure inclusion at an education system, school board, and classroom level are discussed below.

Steps to adopting an inclusive education model at the system level[18]

Despite the lack of board-specific research on procedural transitions, Porter (2008) has outlined transitory steps that are applicable to all boards seeking to adopt an inclusive education model. He wrote,

> Let me list a few of the critical steps needed to implement this approach:
>
> 1. We need to make a plan for transition and change and accept that this will take at least 3–5 years to do properly.
> 2. School staff must know how to make their schools and classrooms effective for diverse student populations, and so we need to invest in training for existing teachers and school leaders as well as for new teachers.
> 3. Understanding that teachers need support to accept and meet this challenge, we need to work with them and their associations to develop supports they need.
> 4. We need to start by creating positive models of success—classrooms, schools, and communities that do a good job and can share their success and strategies with neighbours.
> 5. We need to identify a cadre of leaders and innovators at all levels and assist them in building networks where they can produce and share knowledge unique to their communities.
> 6. We need to identify and share "best practices" from research and knowledge that is already available and can be enriched and enhanced by local experience.

[18] Sections titled "Steps to adopting an inclusive education model at the system level," "Values and praxis at the school level," and "Inclusion in the classroom" have been previously published in *A case for inclusive education* (Report No. 12/13-09) (pp. 4–7), by G. Parekh, 2013, Toronto: TDSB.

7. We need to understand that innovations and changes that will make a difference will require resources. That means money and people. (Porter & Stone, 1998 as cited in Porter, 2008, p. 64)

In personal communication with the author, and speaking specifically of the TDSB, Dr. Porter suggested that a cultural shift across the system is required. The current special education system has been long established and is the system with which most parents, teachers, professionals, and administrators are familiar. Dr. Porter suggested that with a board the size of the TDSB, setting up model schools of inclusion within each quadrant might be a vital step in moving the system forward. Using these schools as exemplars of an inclusive education model would help build confidence within the school community (G. Porter, personal communication, February 1, 2013).

Values and praxis at the school level

Sailor and Burrello (2013) discuss the importance of jurisdictions and school communities adhering to a core set of values that promote an inclusive environment for all students. To support these set values, specific practical directives are recommended:

1. All students' education should be accommodated within the general education setting. "The unified system is based upon five requirements: (1) all students attend their regularly assigned school; (2) all students have membership in their assigned classrooms in that school; (3) general education teachers and school-based leaders are responsible for all student learning; (4) all students are prepared within the district curriculum with appropriate adaptions and supports as needed; and (5) all staff are fully aware of teacher and student rights and capabilities, have the freedom to pursue what is important to them and their families, and have due process protections under

law" (Sailor & Burrello, 2013, p. 31).

2. All students should have access to all available resources and benefits.
3. All students should undertake training in citizenship and social development to better understand expectations not only as a student but also as a citizen of the world, highlighting post-school expectations.
4. "Schools should be democratically organized, data-driven, learning enhancement systems" (Sailor & Burrello, 2013, p. 31). "Five key elements are included here: (1) the school operates a team structure, including grade-level teams and a leadership team, that considers reliable and valid sources of data to determine instructional matches (i.e., services, supports, levels of intensity, etc.); (2) all staff (i.e., all school employees) participate in at least some way in the teaching and learning process; (3) the school employs a noncategorical lexicon (i.e., special education labels are not used in school discourse); (4) the school is guided by distributed leadership (i.e., teacher leaders assume some key leadership functions); and (5) each school has one or more learning enhancement teams that bring together the resident expertise of the school, its partnerships, and district personnel when needed to design conditions that increase student learning possibilities within and outside the school as appropriate to learning new functionings" (pp. 31–32).
5. Schools should be developing capacities and partnerships with parents, families, and local businesses within the school's community.
6. "Schools must have district support for undertaking transformative systems-change efforts" (Sailor & Burrello, 2013, p. 32).

Inclusion in the classroom

Strategies and approaches to inclusion in the classroom are also important in developing a high-quality, inclusive experience for students with SEN. Generally, strategies are not geared towards specific exceptionalities, but are instead designed to be implemented across exceptionality categories. Rix, Hall, Nind, Sheehy, and Wearmouth (2009) determined through their systematic literature review that cooperation among staff, commitment and accountability to the teaching of all students, differentiation of instruction, and recognizing "that social interaction is the means through which student knowledge is developed" (p. 17) are key to successful inclusion of students with SEN. In addition, the European Agency for Development in Special Needs Education (EADSNE) conducted two substantive international, evidence-based literature reviews. Areas of focus included evidence-based strategies to support inclusion of students with SEN in both the elementary and secondary levels (Meijer, 2001, pp. 31–32). Evidence-based strategies included:

At the *elementary* level:

- Cooperative teaching where special education teachers support general education teachers by providing instruction in the general education class.
- Peer tutoring in heterogeneous groups.
- Problem-solving as a team: teachers guide students through the processes involved in problem-solving.
- Promoting co-operation and shared responsibility by involving parents in the classroom, shared and co-operative teaching, peer tutoring, planning approached collaboratively by the teaching staff (Meijer, 2001).

At the *secondary* level:

- Peer tutoring within heterogeneous groups demonstrated to be effective as well as ensuring peers were working within the same curriculum although on potentially different aspects of the curriculum. Accommodations were addressed through collaboration between special education and general education teachers.
- Co-teaching was also found to greatly beneficial to students. Meijer (2004) cites Weigel, Murawski, and Swanson's (2001) meta-analysis which determined that the essential facets of co-teaching were that special education service providers should be working with general education teachers in both practice and planning. The interventions happen in a shared space (the inclusive classroom) and classrooms are made up of heterogeneous students.
- Learning strategies and approaches to instruction were also critical to facilitating inclusive education.
- Combined designs were classrooms that implemented a number of these strategies and also involved shifting structural elements of the school to support an inclusive environment. One such structural element was shifting class schedules to longer periods (50 minutes to 85 minutes). Longer class periods allowed for greater blocks of time to accommodate learning differences but also facilitated planning for teachers.

Note: In both the elementary- and secondary-level strategies, curriculum-based measurement (CBM) with computer technology was noted as a tool to monitor student progress. Studies reviewing CBM were outdated and so were not included above; however, they did support the use of technology in providing more accurate assessment opportunities (Meijer, 2004).

Global strategies for inclusion

In addition to system, board, and classroom strategies, discussed below are further practices that have demonstrated to support greater inclusion of students with SEN into mainstream education.[19]

Removing systems of categorization.

Many jurisdictions around the world are moving away from employing psychometric testing and categorizing students by ability/disability. For example, Sweden does not categorize students nor use psychometric testing; Scotland categorizes students who need additional support into a single category; and Denmark and England distinguish only those students who have profound disabilities (Mitchell, 2010).

In Ontario, the MOE supports that every student deemed exceptional has the right to an IPRC. However, in a December 2011 memorandum, the MOE clarified its position by stating that access to special education services is not contingent upon SEN identification (Finlay, 2011). That is, any student who is perceived as potentially benefitting from special education services is entitled to access them. "The determining factor for the provision of special education programs or services is not any specific diagnosed or undiagnosed medical condition, but rather the needs of individual students based on the individual assessment of strengths and needs" (Finlay, 2011, p. 2).

Current legislation requires that all school boards set up an Identification, Placement, and Review Committee (Ontario MOE, 2013, para. 3). The role of the IPRC is to "decide whether or not the student should be identified as exceptional; identify the areas of the student's exceptionality, according to the categories and definitions of exceptionalities provided by the

[19] The section "Global strategies for inclusion" was previously published in *A case for inclusive education* (Report No. 12/13-09) (pp. 8–14), by G. Parekh, 2013, Toronto: TDSB.

Ministry of Education; decide an appropriate placement for the student; and review the identification and placement at least once in each school year" (Ontario MOE, 2013, para. 4).

Although the MOE supports the continuation of the IPRC process, criticism of the process has been mounting. Calls for alternative approaches and shifts in resource allocation are being made. The 2008 report of the Auditor General of Ontario identified the IPRC process as being resource intensive and as having limited accountability.

> Identification, Placement, and Review Committees (IPRCs) make significant decisions regarding the education of students with special education needs, but do not adequately document the rationale for their decisions and the evidence they relied on. As a result, information that would be of use to IPRCs conducting annual reviews and to teachers in connection with the preparation of IEPs is not available. The lack of detailed information on the proceedings also limits the ability of boards to identify areas for systemic improvement in IPRC procedures. . . . The process for formally identifying students with special education needs—including IPRC meetings and professional assessments—is resource intensive. One school board we audited conducted fewer formal assessments to help offset the cost of additional special education teachers. The Ministry needs to compare the contribution to student outcomes made by the formal identification process to that made by additional direct services provided by special education teachers and identify the strategy that results in the greater benefits to students (Office of the Auditor General, 2008, ch. 3).

A similar review of identification processes in the United States received parallel critiques from the President's Commission on Excellence in Special Education (U.S. Department of Education, 2002). This document outlined the concerns regarding labeling children within a

potentially subjective or biased process of identification. The report strongly recommended against the use of resources to identify students and instead suggested funds be used to support student learning.

> The Commission could not identify firm practical or scientific reasons supporting the current classification of disabilities in IDEA [the Individuals with Disabilities Education Act]. . . . The Commission is concerned that federal implementing regulations waste valuable special education resources in determining which category a child fits into rather than providing the instructional interventions a child requires. . . . Thus, the overall Commission recommendation for assessment and identification is to simplify wherever possible and to orient any assessments towards the provision of services (U.S. Department of Education, 2002, pp. 21–22).

Scholars have identified the process of identification as a key barrier to implementing an inclusive model. They suggest that classifying students into categories maintains a separate system of education within which students will encounter lowered expectations and less favorable opportunities after their academic tenure. Sailor and Burrello (2013) contend that "the assessment and sorting of students with special needs into 13 separate categories of disability has resulted in a parallel system of responsibility and care for these students. This parallel system is serviced by a cadre of specialists each with their own culture, roles, and expectations for student outcomes and, unfortunately, poor postschool results" (p. 36).

In Mitchell's (2010) extensive international review of special education, he cites seven concerns with education processes that include the identification or classification of students perceived as having SEN: 1) they use an individual/deficit model in which academic failure is internal to the student; 2) there is significant heterogeneity within categories of exceptionalities;

3) many students who are identified with SEN do not appear to have disabilities; 4) research continues to show that deficit-based instruction does not adequately address student need; 5) due to the perception that impairments are often on a spectrum, individual judgment is required to determine when or if a student has an impairment/disability; 6) category boundaries are complicated by co-morbidity of multiple impairments; and 7) categories can prevent educators from approaching the student in a holistic way, further identifying the student by their impairment or disability (Farrell, 2010).

Inclusive boards across Canada rarely employ IPRC processes as currently configured. A number of boards have opted to forego psychometric testing (except for in rare instances); instead, they utilize a committee of in-school members and professionals to consult with and support teachers by focusing on student needs and setting goals for students' academic progress. Discussions prioritize unpacking strategies that teachers can incorporate into their instructional delivery to ensure that they are meeting the needs of the student in question (G. Porter, personal communication, February 1, 2013). "Teachers don't need clinical diagnosis; they need practical solutions and strategies" (G. Porter, personal communication, February 1, 2013).

Reducing congregated classrooms or ability grouping.

One of the key proponents of inclusive education is the reduction of segregated classes and the promotion of mixed-ability grouping both between and within classes. Houtveen and Van de Grift (2001) highlighted drawbacks of ability grouping by stating that placement in low-ability groups imposes low expectations on students; ability groupings often mirror social, ethnic, and class divisions; assignment to an ability group is often a permanent allocation; there is often less instruction delivered in lower-ability groupings than in mixed-ability groupings; and

segregated low-achieving students are further disadvantaged based on a lack of access to positive role models and social stimulation.

Furthermore, Shaddock, MacDonald, Hook, Giorcelli, and Arthur-Kelly (2009) explored the impact of individual instruction for struggling readers. Their research synthesis demonstrated that classroom effect on student learning far outweighed the effect of individual instruction (Shaddock et al, 2009). Pedagogically, this is important in terms of promoting inclusion. Classroom and social interactions are key to student learning (Rix et al., 2009). When classrooms are structured in a way that prevents the natural occurrence of social interactions between students or limits their participation, certain groups of students are disadvantaged.

From Mitchell's (2010) investigation into effects on student learning correlating to ability grouping and individual instruction, two critical results were uncovered:

- Research into ability grouping showed that, overall, it has little or no significant impact on student achievement, although high-achieving students appear to benefit more than low-achieving students, who suffer from disadvantages by being placed in low-ability groups (p. 155).
- Paradoxically, individual instruction has a low impact on student achievement, suggesting that the social context of the classroom is an important contributor to learning (p. 155).

Results from a previous systematic evidence review (Brown & Parekh, 2013) also highlight the importance of heterogeneous class structures on student outcomes. Three important findings resulted from the systematic review: (1) whether in an integrated or congregated classroom, students with a learning disability had similar results in academic success (Fore, Hagan-Burke, Boon, & Smith, 2008); (2) in one study, students without SEN who were educated

in integrated classrooms did not appear to experience any disadvantage or advantage from being taught alongside students with SEN (Ruijs, Van der Veen, & Peetsma, 2010); and (3) when ability/impairment was controlled, students with SEN who were taught in integrated settings were more likely to find employment and be economically independent following high school (Myklebust & Batevik, 2009).

Note: In the TDSB, 65% of all students in home school program (HSP) or intensive support program (ISP) classes were students identified with a learning disability, students identified as gifted, and students who have only an IEP. It could be argued that these three groups are, theoretically, among the easiest to integrate into general education.

Table 9.1. Student Special Education Identification across Special Education Placement

	ISP	HSP	Total # in HSP/ISP	Percentage of Total
Autism	1,217	159	1,376	8%
Deaf	146	11	157	1%
LD	1,795	2,275	4,070	24%
Language	122	32	154	1%
MID	1,780	316	2,096	12%
DD	1,090	7	1,097	6%
Blind	18	5	23	0%
Physical	384	11	395	2%
ME	6	3	9	0%
Speech	2	0	2	0%
Behav	628	72	700	4%
IEP	497	2,818	3,315	19%
Gifted	3,702		3,702	22%
			0	0%
Total	**11,387**	**5,709**	**17,096**	**100%**

Source: Internal database, TDSB, Research and Information Services, June 2012.

Moving from a direct service to an indirect service delivery model.

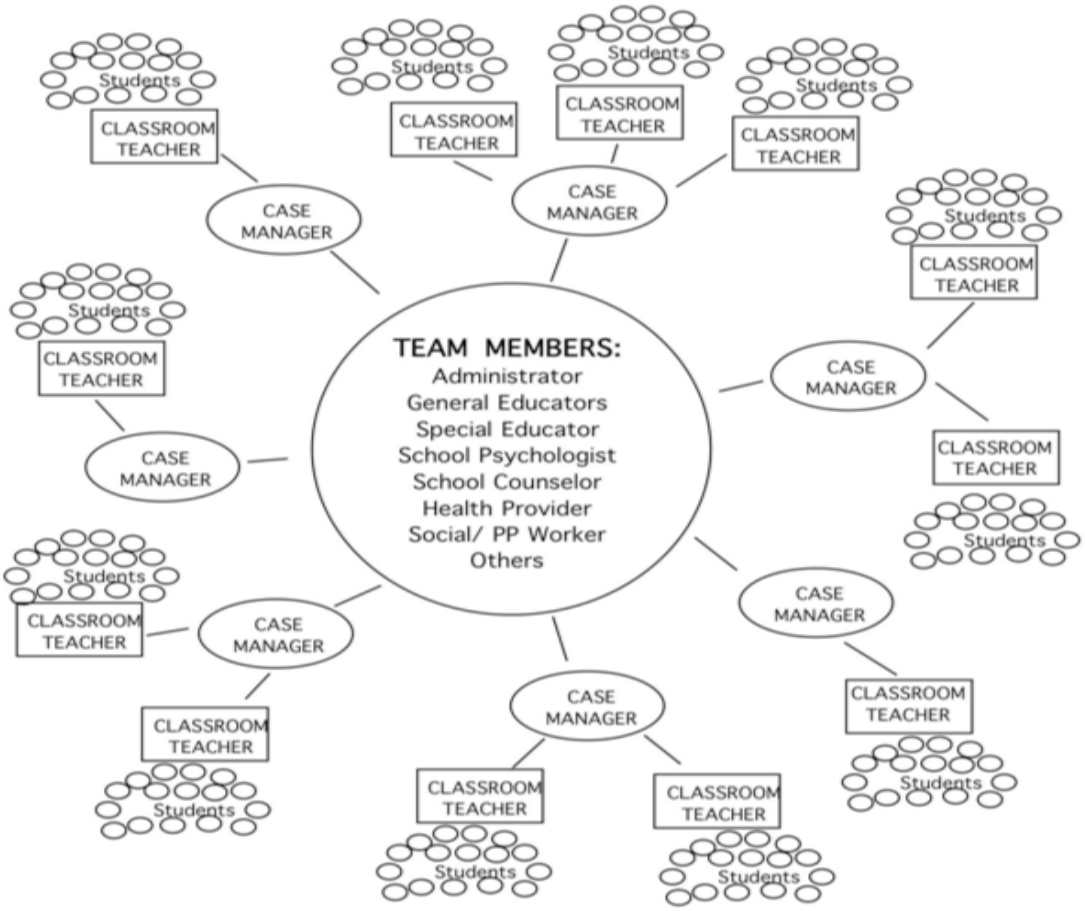
In a direct service model, the specialists or consultants work directly with the students identified as having SENs. In an indirect service model, the specialists or consultants work directly to support the teacher who has identified students in their classroom (Gravois, 2013).

Implementing an Instructional Consultation Team (ICT).

Developed over 25 years of research and consultation, the ICT is a highly structured, data-driven, accountable school-based team (Gravois, 2013). "The core of the system is ensuring all resources, including classroom teachers, principals, special educators, Title 1, ESL, and so on, are equally trained in and adhere to a common process of collaborative, data-based problem solving as the primary service delivery process. Once trained, these team members operate in a Case Manager role, partnering with teachers to facilitate interactions that are consistent, uniform, and accountable" (Gravois, 2013, p. 123). Figure 9.1 outlines the ICT model. Over 500 schools in the United States are currently employing the ICT model (Gravois, 2013).

Note: The implementation of this service delivery model does not reduce the role of professional or specialist services. The model supports the re-alignment of services, not the reduction of services.

Figure 9.1. Instructional Consultation Team Model



Source: Gravois, 2013, p. 124. Image retrieved from http://ru.ttacconnect.org/files/2010/09/Team-Meetings.png

According to Gravois (2013), successful ICT models follow the following procedures:

- The first step is to identify student needs and assess whether their teacher's approach to instruction is a good match to address student needs. This "instructional assessment" is completed by the ICT case manager and includes collaboration with the teacher.
- Plans are organized by short-term, measurable goals (roughly 4–6 weeks) and are closely connected to the curriculum. The teacher, in partnership with the assigned ICT case manager, establishes student goals.

- Strategies to support teachers in an inclusive classroom are prioritized, based on knowledge that instruction will need to reflect student need.
- The ICT serves as a rich resource for problem solving with teachers as well as providing opportunities for teachers to observe and learn from others' approach to instruction.
- "Additional resources are aligned with the plan established by the teacher in collaboration with the IC Team case manager and are guided by the goals established as part of the structured problem-solving process that has occurred" (p. 126).
- Monitoring is ongoing. Both the classroom teacher and case manager are required to monitor student success. Gravois (2013) recommends teachers and case managers review students' goals on a weekly basis. Once goals are met, resources are discontinued and a new series of goals is prepared. This stage is where flexibility in resource re-alignment is essential. Due to the frequent and regular monitoring of both teachers and case managers, resources that are no longer required by one student can be quickly re-allocated to another area of student need.
- "Beyond the progress of the student(s), schools must be supported to evaluate whether resource allocation is effectively producing the desired outcomes" (Gravois, 2013, p. 126).

School-based student services teams.

Similar in structure and purpose, some schools in Canada have adopted a school-based student services team model of service delivery. Here is an example from New Brunswick:

> The school-based Student Services Team should include a school administrator, resource teacher(s), classroom teacher(s), guidance counselor(s), and/or others that have responsibility in the school for the programs and services for students with

> exceptionalities. As with the district team, it is expected that this school-based team would meet on a regular basis (suggested once a week, but minimum twice a month) and would keep the principal informed (if he or she is not present at meetings) of discussions and actions in progress. When a Special Education Plan is developed, it will be the responsibility of one of the members of the school-based Student Services Team to direct the planning process, to involve the parents, to monitor the effectiveness of the programs that address the goals and outcomes of the plan, and to report on its effectiveness. The school-based Student Services Team is also important in helping schools to develop toward exemplary practice in inclusion and thus promote the planning, development, implementation, and monitoring of Special Education Plans for students that relate to all aspects of their school life (New Brunswick Department of Education, 2002, p. 8).

Future Research

Further research would include a significant qualitative component as well as an investigation as to whether targeted interventions addressing issues of belonging and structural organization of student populations impacts overall experience of social citizenship and sense of competence. A new direction for future research would be to re-visit the correlations explored here and add student voice. Further qualitative study, including interviews and focus groups with students, would provide depth to this broad quantitative analysis. Further study in this area has been approved for the upcoming year. Uncovering students' own perceptions of belonging and exclusion, in addition to this analysis, will be highly beneficial to both board and ministry policy makers in terms of implementing program action. In addition to exploring the erosion of student belonging over the years, my goal is to have the scale of belonging incorporated into future TDSB analyses as part of regular program evaluations and system reviews.

An approved post-doctoral proposal, to be held at the University of Toronto, included an evaluation of 50,546 students from Grade 7 to Grade 12 and explored the experience of student belonging and exclusion over time. Preliminary results indicated that students were much more likely to experience a sense of belonging in Grade 7, which then eroded over the students' tenure until Grade 12. In exploring the correlation between the experience of exclusion and the number of years spent in middle and secondary school, a close relationship was revealed. Between Grade 7 and Grade 12, the reported experience of exclusion rose by 27%. However, this trajectory varied wildly across identity-based groups, including racial, gender, and impairment-based identities. Drawing from the doctoral regression analysis results, there was also close relationship between students' sense of confidence and competencies in critical post–high school skills. Therefore it is imperative that boards prioritize program action to address the resulting erosion of student belonging.

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Appendix A: Visualization of Regression Results