Toronto District School Board

Research Report

SPECIAL EDUCATION: STRUCTURAL OVERVIEW AND STUDENT DEMOGRAPHICS

Robert S. Brown
Research Co-ordinator

Gillian Parekh
York University

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Special Education: Structural Overview and Student Demographics
Robert S. Brown and Gillian Parekh

Research and Information Services
Toronto District School Board
1 Civic Centre Court, Lower Level
Etobicoke, ON M9C 2B3

Tel.: 416-394-4929
Fax: 416-394-4946

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EXECUTIVE SUMMARY

This report is an update to the earlier Toronto District School Board (TDSB) reports looking at Special Needs data. In the 2009-10 school year, 44,063 of 259,958 (17%) of the total TDSB population were students with Special Needs. Half of the students with Special Needs had been formally identified as having one of 12 Exceptionalities as outlined by Ontario's Ministry of Education. Three quarters of the students identified as having an exceptionality fell into the category of Learning Disability, Giftedness, and Mild Intellectual Disability. The remaining half of the Special Needs population was students who had not been formally identified but had been placed on Individual Education Plans (IEPs).

The Special Needs population was further broken down as follows:

- 3,522 students (1.4% of all TDSB students) were in Identification, Placement and Review Committee **(IPRC) Gifted - Special Education Classes**; that is, students who had been formally identified as Gifted and were taking 50% or more of their time in congregated Special Education classes.
- 1,774 students (0.7%) were in **IPRC Gifted - Regular Classes**; that is, students who had been formally identified as Gifted and were taking the majority of their classes in the TDSB regular day classrooms.
- 10,165 students (3.9%) were in **IPRC non-Gifted - Special Education Classes**; that is, students who had been formally identified as having one of the 12 non-Gifted Exceptionalities and were spending 50% or more of their class time in congregated Special Education classes.
- 6,603 students (2.5%) were in **IPRC non-Gifted - Regular Classes**; that is, students who had been formally identified as having one of the 12 non-Gifted exceptionalities and were spending the majority of their class time within the TDSB regular day classrooms.
- 14,970 (5.8%) were **IEP- Non-identified** students; that is, students who had been placed on an IEP and were receiving Special Education programming but who had not been formally identified through the IPRC process.
- 7,029 students (2.7%) who had **IEPs** were receiving direct assistance in the classroom but who had not been formally identified through the IPRC process.

Changes Over Time: The number of students identified as having either Gifted or non-Gifted Special Needs increased by 6,216 between 2005-06 and 2009-10, even while overall enrolment declined by 14,094 students. The group of students who were placed on IEPs without formal IPRC identifications experienced the largest increase. The largest increase by formal exceptionality identification was for students identified as having Gifted, Learning Disability, Autism, or Behavioural exceptionalities.

Gender: Male students had a disproportionately high representation within both Gifted and non-Gifted Exceptionality categories, particularly within the Behavioural and Autism identification groups. Gender distributions have remained consistent over time and are supported within current literature.

Grade of New Students with Special Needs: Grade patterns were consistent for students who were identified as having Special Needs. The majority of new IEPs were created between Grades 1-4, while students were most likely to be formally identified through the IPRC process between Grades 3-6. Most students to undergo formal identification of a non-Gifted exceptionality had already been placed on an IEP possibly years before. Comparatively few students were placed on IEPs or given formal identifications of exceptionalities in Kindergarten or within the secondary panel. These patterns hold profound implications. First, despite the current emphasis on early intervention, formal identification tends to occur in middle or later elementary grades. Second, due to the limited time-frame within which IEP creation and IPRC processes are conducted, the high mobility of TDSB students (students entering and leaving the TDSB) could create inequitable access to Special Education programming for high needs students. Mobility within the TDSB has been declining and may account for some of the increase in the number of students identified as having Special Needs.

Student Achievement: Grade 6 EQAO Mathematics, Grade 9 credit accumulation, and Grade 10 Literacy (Ontario Secondary School Literacy Test [OSSLT]) results were examined over three years. Students identified as having Gifted exceptionalities showed higher achievement than students without Special Needs. All categories of students identified as having non-Gifted exceptionalities experienced lower achievement scores than students without Special Needs. Low achievement was especially apparent for students taught within congregated Special Education classes. Students identified as having non-Gifted exceptionalities who were taught in regular classes and supported through Special Education programming (with or without formal identification) demonstrated little variance in achievement outcomes. It appears that the

placement of a student on an IEP was a more important predictor for achievement than the student's formal identification through the IPRC process.

Congregated Special Education and Regular Classroom Settings: Students with exceptionalities were taught in either full-time congregated Special Education classes or within regular classes. Over three quarters of Grade 8 students with Gifted identifications were taught in congregated Gifted classes, declining to 58% in Grade 9, and to a minority in Grade 12. The pattern for students identified as having non-Gifted exceptionalities was entirely different. The vast majority of Grade 1-3 students identified as having a non-Gifted exceptionality were taught in congregated Special Education classes (83%-87%). This figure declined to 81% in Grade 8, and fell to 38% in Grade 9. The reasons for this initial configuration of congregated classes as well as the dramatic shift upon entry to secondary school are unclear, as are the long-term implications for the student.

Our examination of socio-economic variables for students identified as having non-Gifted exceptionalities showed a difference in neighbourhood income for students taught in congregated versus regular classroom settings. Students with non-Gifted identifications taught in congregated classroom settings were more likely to live in lower income neighbourhoods, whereas students with non-Gifted identifications taught within regular classroom settings were more likely to live in higher income neighbourhoods.

Exceptionalities: Half of students designated Special Needs had been formally identified through the IPRC process. Students with Learning Disability identifications made up the majority of students with non-Gifted exceptionalities. Students with formal identifications of a Learning Disability and students who had not been formally identified but who had been placed on IEPs shared very similar socio-economic and demographic characteristics. Students who experience the most significant socio-economic challenges were students identified as having a Behaviour exceptionality. Overall, students with Behaviour identifications were comparatively few. Over 2,300 students (10% of all IPRC identified students) were identified as having multiple exceptionalities. These students were much more likely to be male, born in Canada, speak English, and already been given an IPRC designation. One explanation for the high number of multiple exceptionalities may be the lack of precision within current exceptionality categories where educators may not feel as though student characteristics are being accurately reflected (for example, there is no direct exceptionality for students with ADHD). The Ontario Auditor-

General's Report also highlighted the clear lack of supporting documentation missing from IPRC processes and decisions.

IEP: The American Special Education process developed in the 1970's served as the template for the Ontario Special Education system adopted in 1980. Initially, the IEP was only to be created and implemented once the student had been formally identified through the IPRC process. However, in the current system, the vast majority of students with non-Gifted exceptionalities are placed on IEPs before they reach the IPRC process. Half of all Special Needs students (and more than half of students designated as non-Gifted Special Needs) only have IEPs.

Socio-economic Challenges were examined with three datasets: TDSB students from Fall 2008, Fall 2009, and Grade 7-10 students who had completed the detailed TDSB Student Census in Fall 2006.

Income: Postal codes of student residence were matched to the 2001 and 2006 Federal Censuses. The majority of students identified as Gifted were from the most affluent neighbourhoods of the city, while the lowest income neighbourhoods were significantly under-represented. There was a slight overall relationship of non-Gifted Special Needs to neighbourhood income; however, students identified with Language Impairment, Developmental Disability, Mild Intellectual Disability, or Behavioural exceptionalities were more likely to come from lower income neighbourhoods.

Race: Students who self-identified themselves as White and East Asian were over-represented amongst students identified as having a Gifted exceptionality. Mixed students (students who self-identified themselves as multi-racial) were approximately equal to their population, while all other key racial groups were under-represented. Self-identified White and Black students were over-represented amongst students identified as having non-Gifted exceptionalities. Within non-Gifted exceptionalities, Mixed students were approximately equal to their population, while students from other key racial groups were under-represented. These patterns were not a function of immigration or English as a Second Language (ESL) status, since they remained even after recent immigrants to Canada were removed.

Parental Status: Students living with two parents were more likely to receive a Gifted exceptionality while students living within other family arrangements were less likely to be identified as Gifted and more likely to be identified as having a non-Gifted exceptionality.

However, the majority of students designated non-Gifted Special Needs lived with two parents. The majority of students identified as Gifted had parents who had been to university whereas a little over a quarter of students identified as having non-Gifted Exceptionalities had parents with university education.

Post-secondary Pathways: Students identified as Gifted demonstrated a much higher degree of post-secondary access than students without Special Needs designations. The majority of students with non-Gifted Special Needs graduated from high school but did not confirm an offer of admission from an Ontario college or university. Students formally identified as having Learning Disabilities (the majority of students with non-Gifted exceptionalities) had approximately the same post-secondary access as students placed on IEPs. Students identified as having a Mild Intellectual Disability had lower post-secondary access. Comparatively few students with a Behaviour identification graduated and most therefore were not eligible to apply to post-secondary.

INTRODUCTION

Purpose

Discussions between the Toronto District School Board's (TDSB) Research, Planning, Special Education, and IT departments resulted in data extractions of available Special Needs information as of October 31, 2004. This resulted in a set of previous reports examining the structure of centrally available TDSB Special Needs information (Brown, 2008a and 2008b). This report is intended as an update of that previous baseline information.

Background

The current organization of Special Needs was based on amendments to the Education Act of 1980. Commonly referred to as Bill 82, throughout the 1970's amendments took place following consultations between the Ministry of Education and its stakeholders. These amendments largely reflected developments of the psychology surrounding special education at the time. As of September 1985, Bill 82 required every school board in Ontario to provide appropriate Special Education services for its pupils identified as "exceptional". Currently, there are two main categories of Special Needs: students identified as having exceptionalities and students placed on Individual Education Plans (IEPs) without undergoing a formal identification process.

1. Students Identified as Having Exceptionalities

Under the 1980 legislation, an "exceptional" child was defined by law under the education act. Although there were a broad range of exceptionalities, the Toronto Board Guide for Parents and Guardians from 1985 summed them up as: "The child may have difficulty in using language; a physical handicap, an emotional or Behavioural problem; intellectual or learning difficulties, or may be gifted" (Appendix A, p. 39). Legally, an exceptionality could only be decided through a decision made by an Identification, Placement, and Review Committee (IPRC).

Over the last number of decades, the IPRC process has changed somewhat to accommodate the evolving consensus regarding which exceptionalities should be recognized as Special Needs. "Autism" is the most recent addition to the Ministry's list of identifiable exceptionalities. Approximately half of all students designated as having Special Needs have been formally identified with at least one exceptionality.

2. Individual Education Plans

According to current Ministry requirements, principals are to ensure that an IEP is developed for each student who has been identified as having an exceptionality. School boards "also have the discretion to prepare an IEP for a student who is receiving a special education program and/or related services but who has not been formally identified as exceptional" (Ministry of Education, 2004, p. 4). About half the students designated as having Special Needs have not undergone the formal identification process but have an active IEP. It is also the responsibility of the principal to enter the student's IEP into the student's Ontario Student Record (OSR). This seemingly minor bureaucratic requirement has resulted in significant variations between the number of students reported by the Special Education department as non-identified and total figures reported by the schools.

IEP - Two Subgroups (Non-identified and Local IEP)

As noted above, half the students designated as having Special Needs and placed on an IEP do not have a formal identification of an exceptionality. This second group of students solely placed on IEPs consists of two subgroups.

2a) Non-identified

The Special Education department reports students without an exceptionality but receiving Special Education programming as "Non-identified". This defines students who are without a formal exceptionality but who are receiving Special Education programming.

2b) Local IEP

In addition to unidentified students who received direct special education programming according to their IEPs, there are also several thousand students reported as having an IEP but who are receiving direct assistance in the classroom as opposed to formal Special Education programming. For our purposes, we report these students as having a "local IEP".

> *One purpose of this report is to examine the differences and similarities of the "Non-identified" and "local IEP" students.*

Full-time or Part-time?

There are five settings categories in which Special Education programming can take place. Students who are in "fully self-contained" or "partially integrated" classrooms are considered to be full-time Special Education or in "Special Education classes" (also called congregated). Students in the other three categories (withdrawal assistance, resources assistance, and indirect services) are considered to be in "regular classes".

> *A second purpose of this report is to examine the similarities and differences of full-time and part-time students.*

SECTION A:
OVERVIEW OF SPECIAL NEEDS IN THE TDSB

1. Who Were the Students with Special Needs in the TDSB?

In the 2009-10 school year, 44,063 students out of 259,958 (**17% of the TDSB student population**) were students with Special Needs:

- 3,522 students (1.4%) were in **IPRC Gifted - Special Education Classes**; that is, they had been formally identified as Gifted and were taking 50% or more of their classes in Special Education (i.e., congregated).

- 1,774 students (0.7%) were in **IPRC Gifted - Regular Classes**; that is, they had been formally identified as Gifted and were taking the majority of their classes in the TDSB regular day classrooms.
- 10,165 students (3.9%) were in **IPRC non-Gifted - Special Education Classes**; that is, they had been formally identified as having one of the 12 non-Gifted exceptionalities and were taking 50% or more of their classes in Special Education (i.e., congregated).
- 6,603 students (2.5%) were in **IPRC non-Gifted - Regular Classes**; that is, they had been formally identified as having one of the 12 non-Gifted exceptionalities and were taking the majority of their classes in the TDSB regular day classrooms.
- 14,970 (5.8%) were **IEP- Non-identified** students; that is, students who had an IEP but had not been formally identified and received Special Education programming.
- 7,029 students (2.7%) had **IEPs** and were receiving direct assistance in the classroom rather than programming in Special Education.

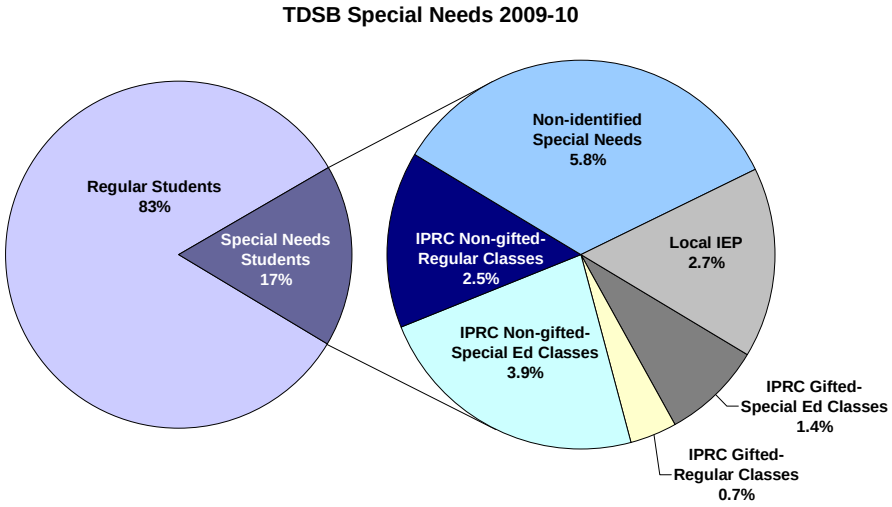
Table 1[1]: Special Needs in the TDSB 2009-10

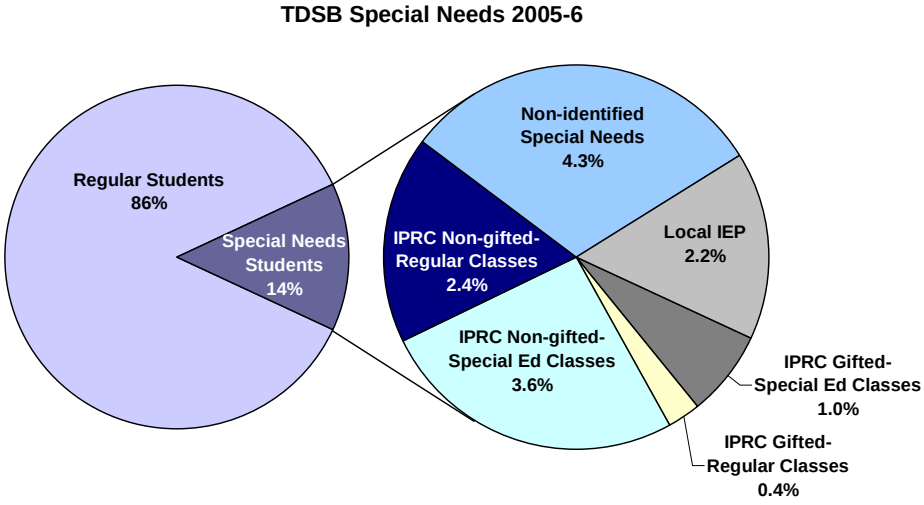
	Frequency	Percent
IPRC GIFTED: Special Education classes	3522	1.4
IPRC GIFTED: Regular classes	1,774	0.7
IPRC NON-GIFTED: Special Education classes	10,165	3.9
IPRC NON-GIFTED: Regular classes	6,603	2.5
IEP: Non-identified Special Needs (Special Education programming)	14,970	5.8
Local IEP: IEP but no Special Ed programming	7,029	2.7
Students Without Special Needs	215,895	83
Total	259,958	100

[1] Percentages in the Tables and Figures are rounded; therefore, some percentages may not total to 100 percent.

The number of Special Needs students increased by 6,216 between 2005-06 and 2009-10, even though enrolment declined by 14,094. All areas of Special Needs increased: Gifted students by 1,607 (3,689 to 5,296), students with non-Gifted identifications by 417 (16,351 to 16,768), and students solely placed on IEPs by 4,192 (17,807 to 21,999) (see Figure 1).

Figure 1: TDSB Special Needs 2009-10 compared to 2005-6





2. Most Frequent Exceptionalities

Students formally identified as having exceptionalities accounted for 50% of TDSB's Special Needs students; the other half accounted for students only placed on IEPs. The Ministry lists 12 Exceptionalities that can be allocated to formally identified students, although within the TDSB only nine of these categories had 100 or more identified students. Three exceptionalities - Learning Disability (LD), Giftedness (GIF), and Mild Intellectual Disability (MID) - accounted for 78% of all formally identified students while with the inclusion of the identifications Behavioural (BEH), Autism (AUT), and Developmental Disability (DD) in total accounted for 95% of formally identified students (see Table 2).

Table 2: Reported Exceptionality 2009-10 (October 31, 2009)

Special Needs		N	% of All Exceptionalities (2008-09)	% of All Special Needs (2009-10)
(a) Exceptionalities	Learning Disability	9054	41	20.5
	Giftedness	5296	24	12
	Mild Intellectual Disability	2939	13.3	6.7
	Behavioural	1236	5.6	2.8
	Autism	1376	6.2	3.1
	Developmental Disability	1065	4.8	2.4
	Physical Disability	451	2	1
	Language Impairment	270	1.2	0.6
	Deaf and Hard of Hearing	283	1.3	0.6
	OTHER	94	0.4	0.2
	(a) Total Exceptionalities	22064	100	50.1
(b) IEP Students (Non-identified and Local IEP)		21999		49.9
All Special Needs Students:		44063		100

As seen in Table 3, although there was an overall increase of 2,024 formally identified students between the years 2005-06 and 2009-10, changes across exceptionalities were varied. The largest increase was in the number of students identified as having a Gifted exceptionality (1,607), followed by LD (618), Autism (446), and Behavioural (216)[2] identifications. The number of students identified as having other exceptionalities decreased: MID (735), followed by Language Impairment (98), Deaf and Hard of Hearing (66), and DD (10) identifications.

Table 3: Changes in Exceptionalities between 2005-06 and 2009-10

	N (2005-06)	N (2009-10)	% of All Exceptionalities (2005-06)	% of All Exceptionalities (2008-09)	% Change	Change in Numbers
Learning Disability	8436	9054	42.1	41	-1.1	618
Giftedness	3689	5296	18.4	24	5.6	1607
Mild Intellectual Disability	3674	2939	18.3	13.3	-5	-735
Behavioural	1020	1236	5.1	5.6	0.5	216
Autism	930	1376	4.6	6.2	1.6	446
Developmental Disability	1075	1065	5.4	4.8	-0.6	-10
Physical Disability	375	451	1.9	2	0.1	76
Language Impairment	368	270	1.8	1.2	-0.6	-98
Deaf and Hard of Hearing	349	283	1.7	1.3	-0.4	-66
OTHER	124	94	0.6	0.4	-0.2	-30
Total Exceptionalities	200422064		100	100	2024	

[2] The dominant LD category had an increase in numbers while showing a decline in total proportion due to the very large increase in students identified as Gifted. There were more students identified as having a Learning Disability but they formed a slightly smaller part of the overall Exceptionality picture.

3. Gender

The TDSB population was 52% male and 48% female but students designated as having Special Needs were disproportionately male: 63% of all students designated as Special Needs, 67% of students formally identified as having exceptionalities, and 60% of those placed on IEPs were male. Within exceptionalities, there was a wide range of gender differences. One of the less frequent exceptionalities, Deaf and Hard of Hearing, had a lower proportion of male students (48%), but all others had a higher proportion. To exemplify the uneven gender distribution, students identified as having Autism were 84% male while those students identified as having a Behaviour disorder were 87% male. These gender patterns were fundamentally unchanged from 2005-06 (Brown, 2008a, p. 8).

Table 4: Gender Breakdown of Special Needs, 2009-10 (October 31, 2009)

Exceptionality		# Male	% Male
(a) Exceptionalities	Learning Disability	6095	67.3
	Giftedness	3206	60.5
	Mild Intellectual Disability	1819	61.9
	Behavioural	1070	86.6
	Autism	1159	84.2
	Developmental Disability	675	63.4
	Physical Disability	272	60.3
	Language Impairment	204	75.6
	Deaf and Hard of Hearing	137	48.4
	OTHER	55	58.5
	(a) Total Exceptionalities	14692	66.6
(b) IEP Students (Non-identified and local IEP)		13105	59.6
All Special Needs Students: (a) and (b)		27797	63.1

4. Grade of New IEPs and Exceptionalities, 2008-09

Out of the 44,063 Special Needs students in the TDSB as of October 31, 2009, 10,811 or a quarter had changed their Special Needs status from a year earlier over the 2008-09 school year. Thus, in the one year between October 31, 2008 and October 31, 2009, a) 7,188 students without an IEP were provided with an Individual Education Plan, while b) 948 students without

exceptionalities were provided with a Gifted exceptionality and c) 2,675 students without exceptionalities were formally identified with a non-Gifted exceptionality[3].

New IEPs

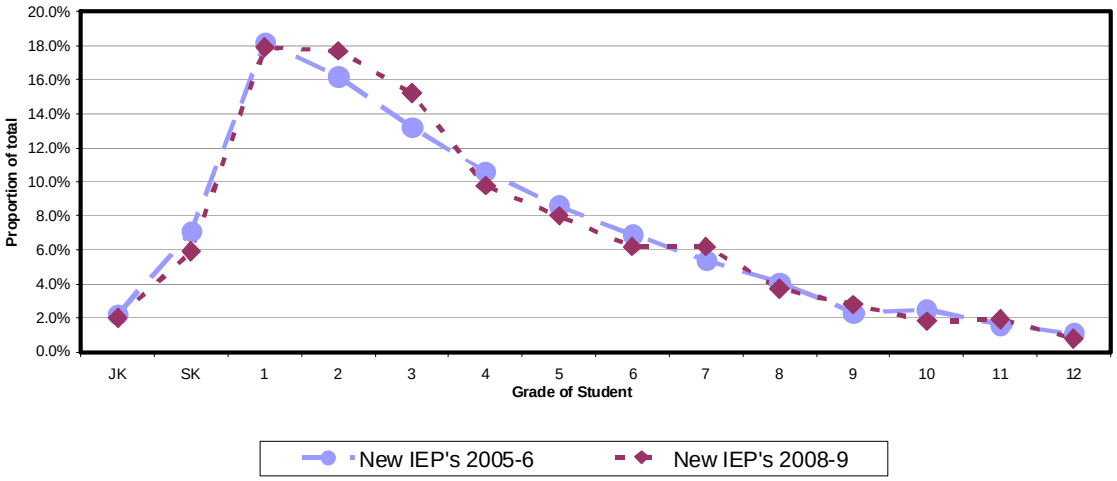
New IEPs refer to both students who were considered Non-identified (4,591 or 64%) and those students who had Local IEPs (2,597 or 36%). There were no noticeable differences in grade between new students designated Non-identified and those students placed on Local IEPs.

Figure 2 shows the distribution of newly assigned IEPs by grade. The vast majority of new IEPs in 2008-09 were assigned in Grades 1-4 (4,357 or 61% with the single most frequent number of new IEPs being given in Grade 1) followed by Grades 5-8 (1,734 or 24%). In contrast, 8% (570) of students with new IEPs were in JK or SK, while the secondary panel of Grades 9-12 was largely unrepresented in the population of new IEPs (527 or 7%).

[3] Note that with this process we missed students who were provided with a new Exceptionality or IEP after October 31 2008, but left the TDSB before October 31 2009.

As seen in Figure 2, the grade pattern of new IEPs in 2008-9 was nearly identical to the baseline of 2005-06.

Figure 2: Students with New IEPs:
By Grade, 2005-06 and 2008-09



Students with New Exceptionalities: non-Gifted and Gifted

Figures 3 and 4 demonstrate the grade pattern of the 2,675 students who received a new non-Gifted exceptionality and the 948 students who received a new Gifted exceptionality in the 2008-09 school year compared to the 2005-06 school year. In both years, most new exceptionalities occurred in the elementary panel. Even though a third of all TDSB students were in the secondary panel, only 2% of new Gifted identifications and 12% of new non-Gifted identifications came from the secondary panel. Half of new non-Gifted and over three quarters of new Gifted exceptionalities were identified between Grade 3 and 6 (half of Gifted identifications took place in Grade 3 alone). Figures 3 and 4 show how the grade patterns for new identifications in 2008-09 were almost identical to the earlier baseline of 2005-06.

**Figure 3: New IPRC'd Non-Gifted Exceptionalities:
By Grade 2005-06 and 2008-09**

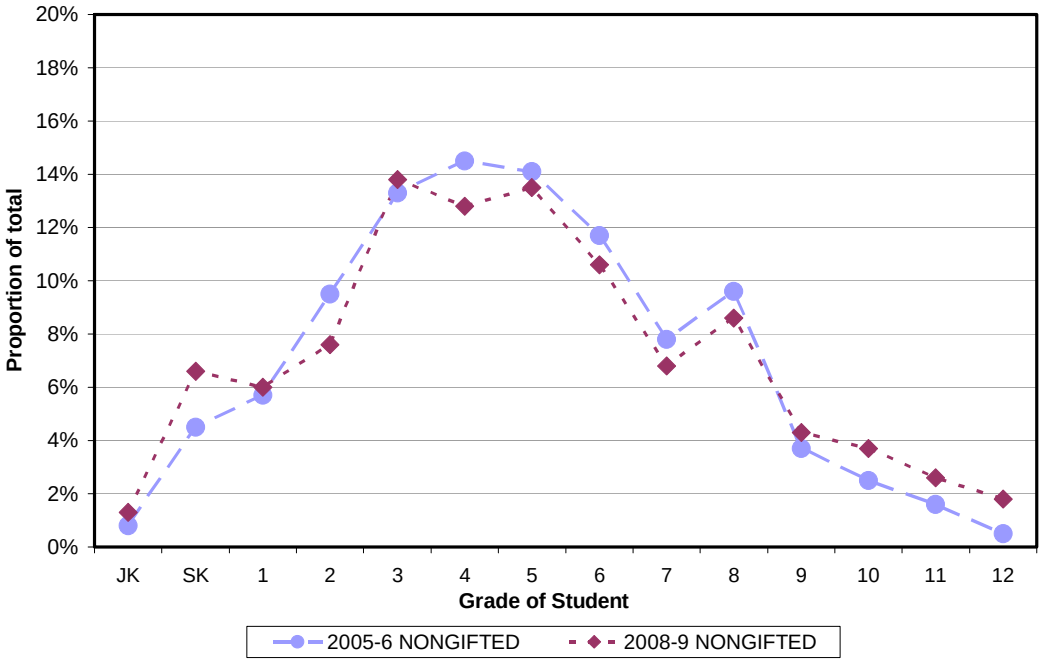
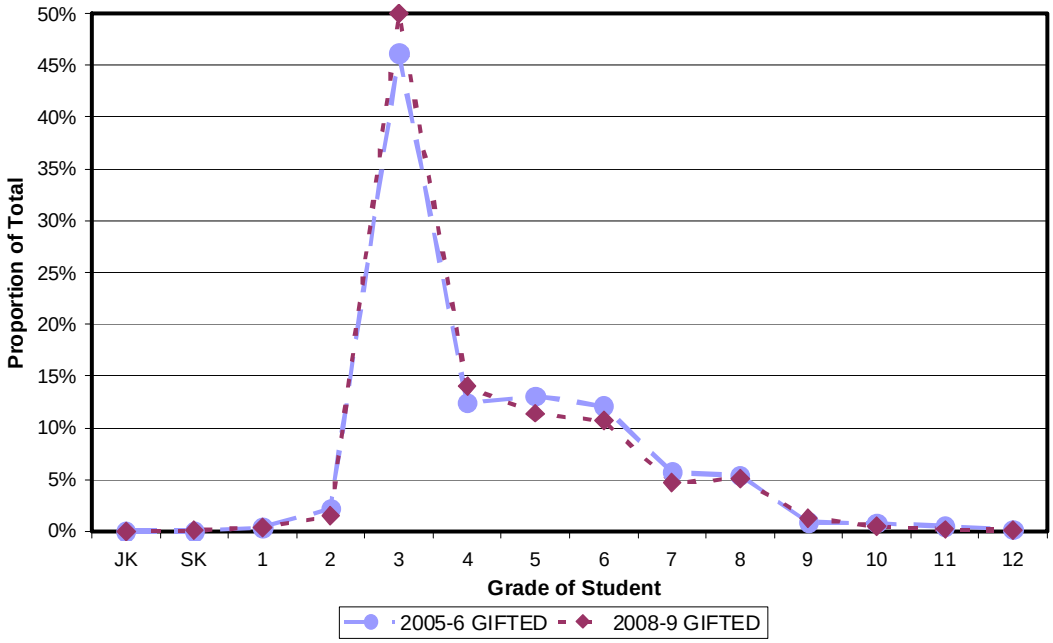


**Figure 4: New IPRC'd Gifted Exceptionalities:
By Grade 2005-06 and 2008-09**

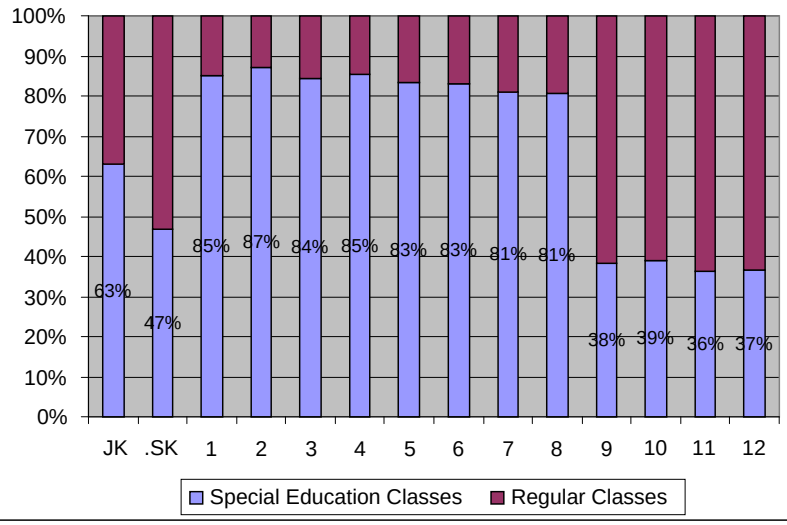


As with the 2005-06 study, we found that most students identified as having non-Gifted exceptionalities had already been recognized as students with Special Needs through the prior granting of IEP status. Before receiving a formal identification of a non-Gifted exceptionality in 2008-09, 71% of these students already had an active IEP[4]. Thus, the official IPRC designation was largely the process of assigning a more formal status to already-existing students designated Special Needs.

5. Non-Gifted and Gifted Exceptionalities: Special Education and Regular Classes

Students identified with exceptionalities were taught in full-time congregated Special Education classes (either fully self-contained or partially-integrated) or were taught in regular classes (where they received Indirect Service, Resource Assistance, or Withdrawal Assistance). Except for the small number of students in Kindergarten, the vast majority of students with non-Gifted exceptionalities remained in full-time congregated Special Education classes throughout their elementary years. Figure 5, demonstrates how the situation changed dramatically once students entered high school. Once in Grade 9, the proportion of students in congregated Special Education classes declined significantly from 81% in Grade 8 to 38% in Grade 9.

Figure 5: Non-Gifted Exceptionalities: Special Education and Regular Classes

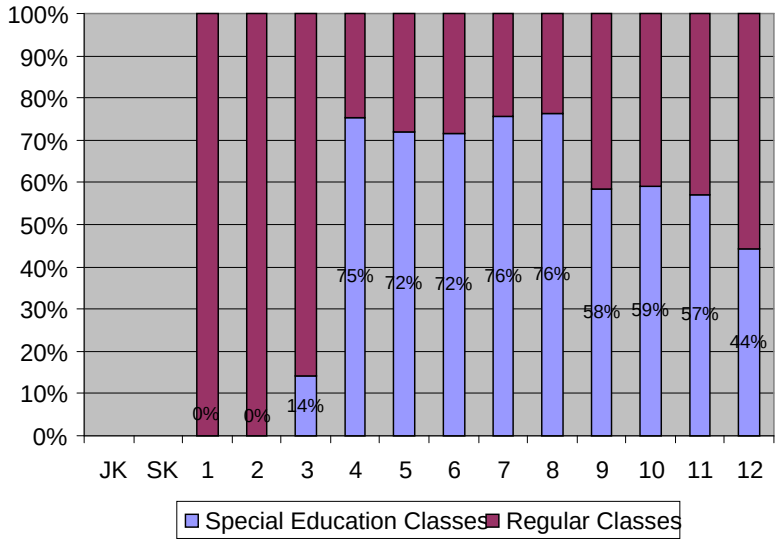


[4] Sixty-three percent (63%) were students who were Non-identified, that is, identified by the Special Education department as Special Needs but without an exceptionality, while 7% of these students had a local IEP without Special Education programming.

It was observed that a large number of students who made the transition from a congregated classroom setting in Grade 8 to a regular classroom setting in Grade 9 had been part of the Home School Program (HSP) during their elementary years. This program is unique to the TDSB and is not directly associated with reporting to the Ministry of Education. The program maintains that students spend at least 50% of the day within their HSP classroom and are integrated into mainstream classes for the remainder of the day.

Figure 6 demonstrates how the pattern for students identified as Gifted somewhat varies. For these students, full-time congregated Special Education classes generally started in Grade 4. From Grade 4 through Grade 8, about three quarters of the students identified as Gifted were being taught within congregated Special Education classes. The proportion declined from Grade 8 to Grade 9 but much less dramatically than with students who had non-Gifted exceptionalities: from 76% to 58%. Only at the conclusion of high school did the proportion of students being taught in congregated Gifted Special Education classes fall below half (44%).

Figure 6: Gifted:
Special Education and Regular Classes



6. Neighbourhood Income, 2009-10

Figure 7 shows the distribution of TDSB students according to deciles of neighbourhood income. All TDSB students as of October 31, 2009 were matched by postal code to the family income of the Dissemination Area included in the 2006 Student Census. Students were then organized into 10 groups from the 10% of lowest income to the 10% of highest income. Not surprisingly, the 83% of students without any Special Needs were evenly distributed across all deciles.

Regarding income, the incidence of giftedness demonstrated variance from the normative distribution. The majority of Gifted students (56%) came from the three highest income deciles and a quarter were from the very highest income decile. By comparison, only 11% of students identified as Gifted were from the three lowest income deciles and only 3% were from the lowest income decile. These differences are great enough to merit further study.

The neighbourhood income of students with IEPs and non-Gifted exceptionalities did not show any obvious pattern. Students from the lowest income decile were slightly more likely to be given a non-Gifted identification than students from the highest income decile. However, a more detailed examination of exceptionalities seen in Table 5 and Figure 8 shows that there were significant income differences between non-Gifted exceptionalities. Compared to other exceptionalities, students with Language Impairment, Developmental Disability, Mild Intellectual Disability, and Behavioural identifications were more likely to come from lower income neighbourhoods and less likely to come from higher income neighbourhoods (these income patterns were replicated with the 2008-09 information). Such vast income disparities as evidenced within these exceptionalities warrant further investigation.

Figure 7: Students in Gifted, Non-Gifted Exceptionalities, and IEP: By Family Income TDSB 2009-10

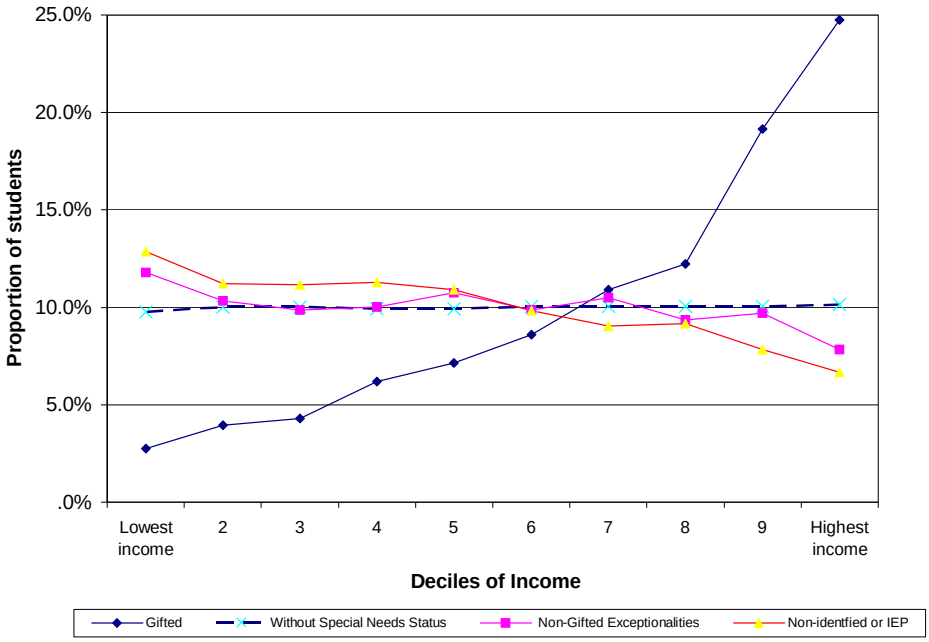
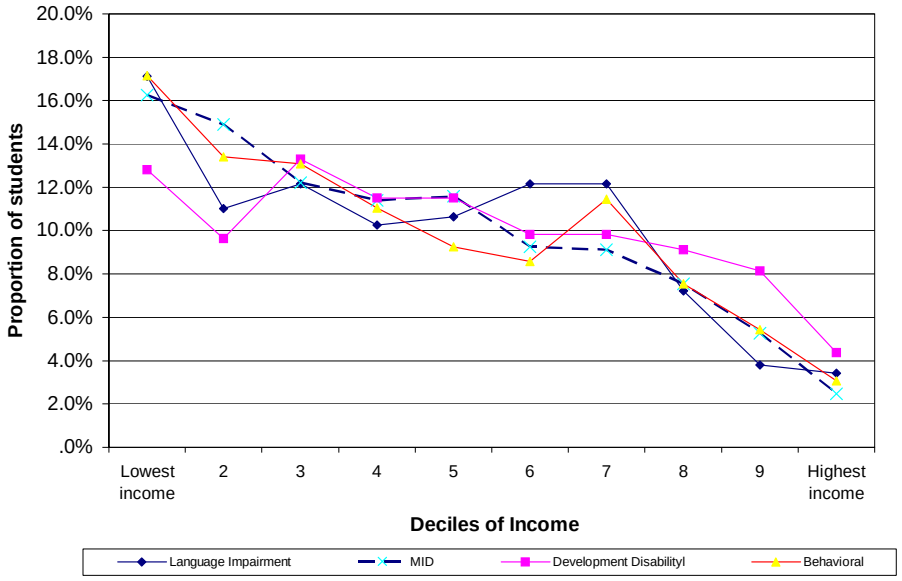


Table 5: Key Non-Gifted Exceptionalities and Income, 2009-10

	Autism	Deaf and Hard of Hearing	Learning Disability	Language Impairment	Mild Intellectual Disability	Developmental Disability	Physical Disability	Behavioural
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: Exceptionalities are included only when there are 100 or more students with these exceptionalities.

Figure 8: Selected Non-Gifted Exceptionalities and IEP:
By Family Income, TDSB 2009-10



7. Multiple Exceptionalities

Table 6 shows the number of students in the TDSB as of March 31, 2009 who had been identified with a second exceptionality or multiple exceptionalities in addition to the exceptionality 'officially' reported to the Ministry. There were 2,312 students identified as having multiple exceptionalities - 10% of all students with formal identifications (out of 22,397).

With the noticeable exception of Gifted, most of these multiple exceptionalities have the same frequency pattern as the exceptionalities reported to the Ministry. Learning Disability, Behavioural, Autism, Mild Intellectual Disability, and Developmental Disability identifications accounted for 78% of multiple exceptionalities.

Table 6: Multiple Exceptionalities as of March 31, 2009

Exceptionality	Frequency	Percent of all Exceptionalities	Percent of Multiple Exceptionalities
Learning Disability	644	2.9	27.9
Behavioural	373	1.7	16.1
Autism	308	1.4	13.3
Mild Intellectual Disability	265	1.2	11.5
Developmental Disability	216	1	9.4
Physical Disability	188	0.8	8.1
Giftedness	178	0.8	7.7
Language Impairment	49	0.2	2.1
Blind and Low Vision	46	0.2	2
Deaf and Hard of Hearing	38	0.2	1.6
Multiple Exceptionalities	3	0	0.1
Speech Impairment	2	0	0.1
Total of Multiple Exceptionalities	2310	10.3	100
Only One Exceptionality	20087	89.7	
Total of All Students with Exceptionalities	22397	100	

While Multiple Exceptionality (ME) exists as a formal designation according to the Ministry, only a handful of TDSB students were reported as having multiple exceptionalities. If students identified as having ME were being accurately reported to the Ministry this category would be the *fourth* largest overall coming in just below Learning Disability, Gifted, and Mild Intellectual Disability, but above Behavioural identifications.

One key question was whether these 2,310 cases of multiple exceptionalities are record glitches or if they validly showed students with concurrent exceptionalities. To explore this further we will need to follow the students with multiple exceptionalities as well as look at who is provided with a new multiple exceptionality identification and who maintains their current ME designation.

In the interim, the preliminary evidence supports that *many of these records were correct*. Students identified with multiple exceptionalities were much more likely than those with only one exceptionality identification be placed in congregated Special Education classes or to have had a history of a Special Needs designation in the past. Students identified as having multiple exceptionalities were also more likely to be male, to have been born in Canada, and to have English spoken at home.

Mobility and Placement

Out of all 258,862 students present in the TDSB as of March 31, 2009, 56% were present in the TDSB on October 31, 2004. Of those students identified as having one exceptionality, 86% were present on October 31, 2004 (17,328 out of 20,087). Of those students identified as having multiple (two or more) exceptionalities, 82% were present on October 31, 2004 (1,901 out of 2,310) only slightly less stability than those with one exceptionality. It is important to note that very few of these students with multiple exceptionalities were recent students to the TDSB. Therefore, it is less likely that the occurrence of ME designation was due to a conflict from new student records.

More importantly, students with multiple exceptionalities were *more likely to have been receiving Special Education programming in the past as compared to those with only one exceptionality.* That is, out of the current (as of March 31, 2009) students having been identified as having multiple exceptionalities, *the majority* (1,082 of 1,901 or 57%) had at least one exceptionality as of October 31, 2004, while 15% had an IEP. Slightly more than a quarter (525 or 28%) were 'regular' students without any prior Special Needs status.

In contrast, *less than half* of the students with one current exceptionality also had an exceptionality as of October 31, 2004 (7,218 of 17,328 or 42%) and 17% had an IEP. Close to half of the students with one exceptionality (7,133 of 17,328 or 41%) were 'regular' students without any past Special Needs status. It is clear that students with multiple exceptionalities were more likely to be given Special Needs status much earlier than those with only one

exceptionality. This suggests a greater level of observable need amongst those with a multiple exceptionality identification compared to those with an identification of only one exceptionality.

Demographics: All Students, Students with Multiple Exceptionalities, and Students with One Exceptionality

Geography: Students with multiple exceptionalities were no more or less likely to be in different TDSB quadrants than students with one exceptionality. In all four quadrants, the proportion of students with multiple exceptionalities designations was 10-11% of all students with exceptionalities. This means that there is no obvious geographical difference between students who had been given one exceptionality and those who had been identified as having more than one.

Country of Birth: Twenty-seven percent (27%) of TDSB students were born outside of Canada in more than 175 different countries. Students with one exceptionality were *less likely* to be born outside Canada (17%). Students with two or more exceptionalities were *even less likely* to be born outside Canada (10%).

Language: Fifty-three percent (53%) of students spoke a language other than English at home. For students with one exceptionality, this proportion *declined to 37%,* while *only 27% of students with two or more exceptionalities* spoke a language other than English at home.

Gender: The gender split in the TDSB had always been consistent with *52% male and 48% female*. For students with one exceptionality this division changed *to 65% male* and *35% female;* for students with two or more exceptionalities, *80% were male* and *20% female*.

In conclusion, students with multiple exceptionalities appeared to be students with more complete records as opposed to a record glitch; that is, they had been identified as Special Needs for longer periods of time. The fact that 80% of them were male and that they were much less likely to be born outside Canada, or to speak a non-English language at home than students with only one exceptionality, deserves further study.

SECTION B:
STUDENT NEEDS AND STUDENT ACHIEVEMENT

Figures 9, 10, and 11 demonstrate the relationship of Special Needs designations with achievement in three grades across three years. Indicators of achievement used were Grade 6 Mathematics EQAO tests results, Grade 9 credit accumulation, and the Grade 10 Ontario Secondary School Literacy Test (OSSLT) results. The baseline of 2005-06 was compared to the 2007-08 and 2008-09 results.

All three years of data showed similar patterns. Students with Gifted identifications had noticeably higher achievement levels than the TDSB average. There was little difference in results between students taught in Gifted Special Education classes and students identified as Gifted and taught in Regular classes. Students identified as having non-Gifted exceptionalities or students placed on IEPs had noticeably lower academic results compared to the TDSB average. Generally, students taught in congregated Special Education classes had the highest degree of at-risk status and the lowest achievement levels. Students identified as having non-Gifted exceptionalities and students with only IEPs (both Non-identified and local IEP without Special Education programming) had very similar achievement results. Judging from the achievement results, they were likely the same group.

Figure 9: EQAO Grade 6 Mathematics Results 2005-06, 2007-08, and 2008-09
Students at Level 3/4 (Method 1)

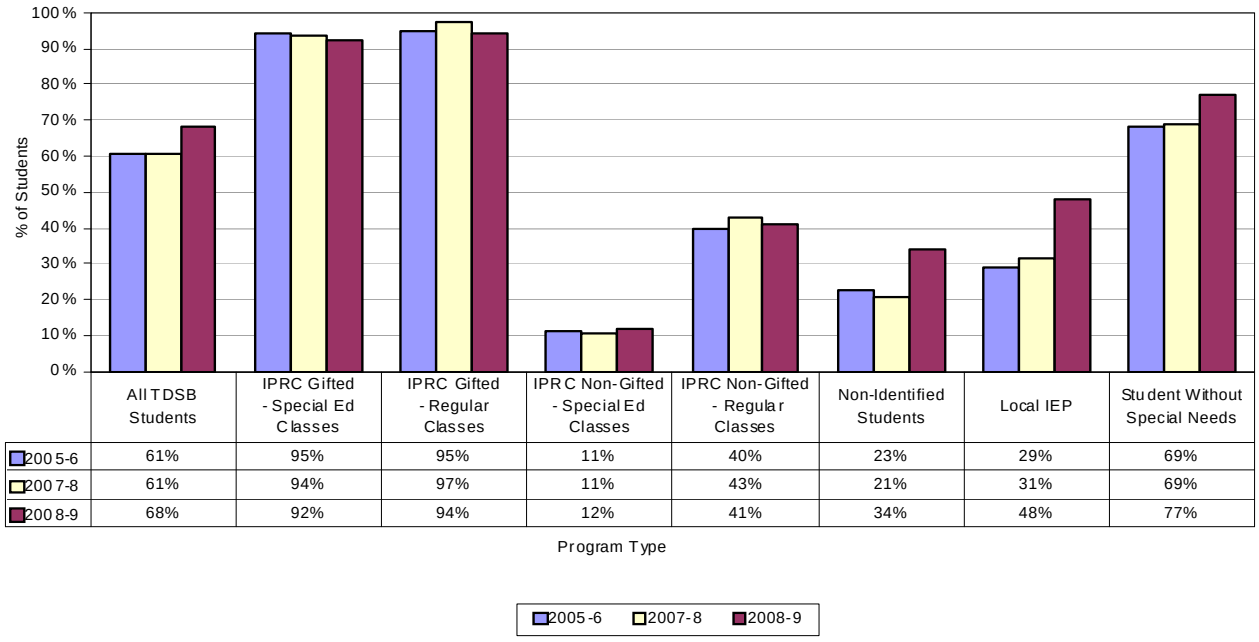
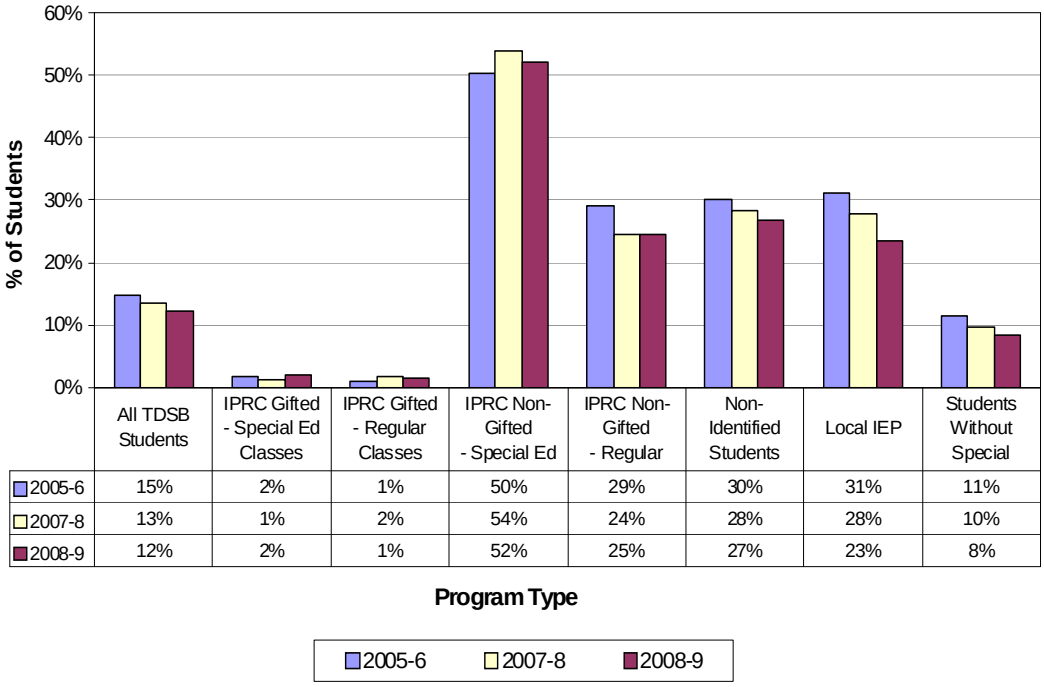
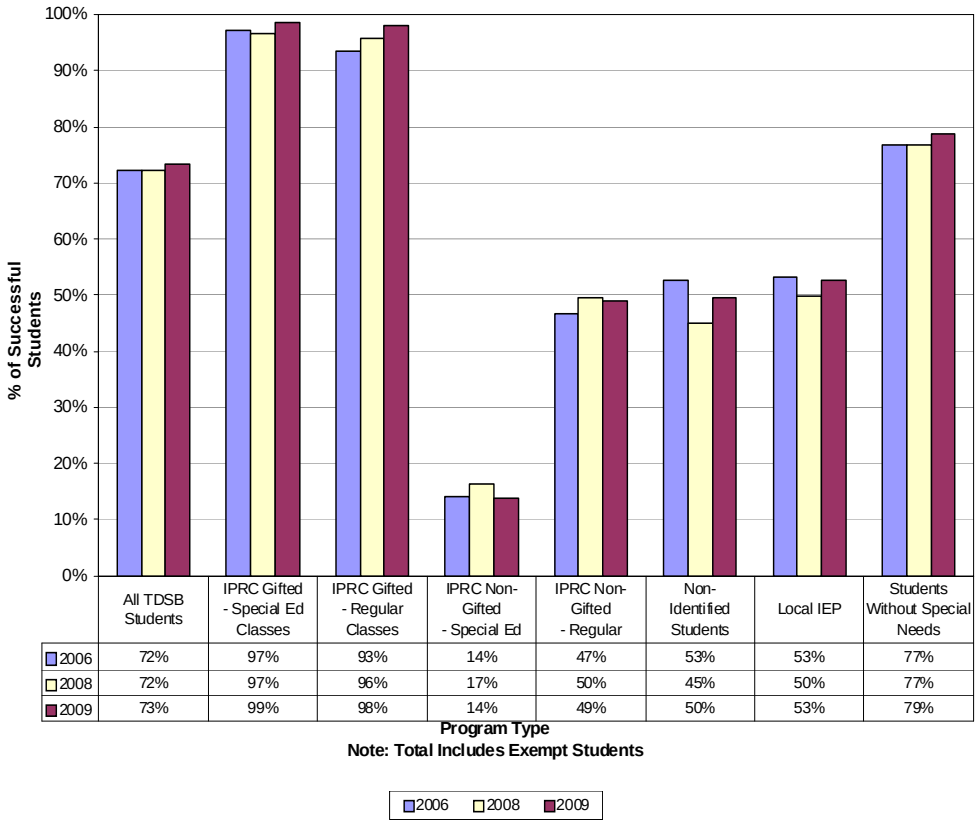


Figure 10: Grade 9 Cohort of 2005-06, 2007-08, and 2008-09: Proportion of Students with <7 Credits by Program



	All TDSB Students	IPRC Gifted - Special Ed Classes	IPRC Gifted - Regular Classes	IPRC Non-Gifted - Special Ed	IPRC Non-Gifted - Regular	Non-Identified Students	Local IEP	Students Without Special
2005-6	15%	2%	1%	50%	29%	30%	31%	11%
2007-8	13%	1%	2%	54%	24%	28%	28%	10%
2008-9	12%	2%	1%	52%	25%	27%	23%	8%

Figure 11: First Time Eligible Students 2006, 2008, and 2009: Proportion of Students Passing the OSSLT



	All TDSB Students	IPRC Gifted - Special Ed Classes	IPRC Gifted - Regular Classes	IPRC Non-Gifted - Special Ed	IPRC Non-Gifted - Regular	Non-Identified Students	Local IEP	Students Without Special Needs
2006	72%	97%	93%	14%	47%	53%	53%	77%
2008	72%	97%	96%	17%	50%	45%	50%	77%
2009	73%	99%	98%	14%	49%	50%	53%	79%

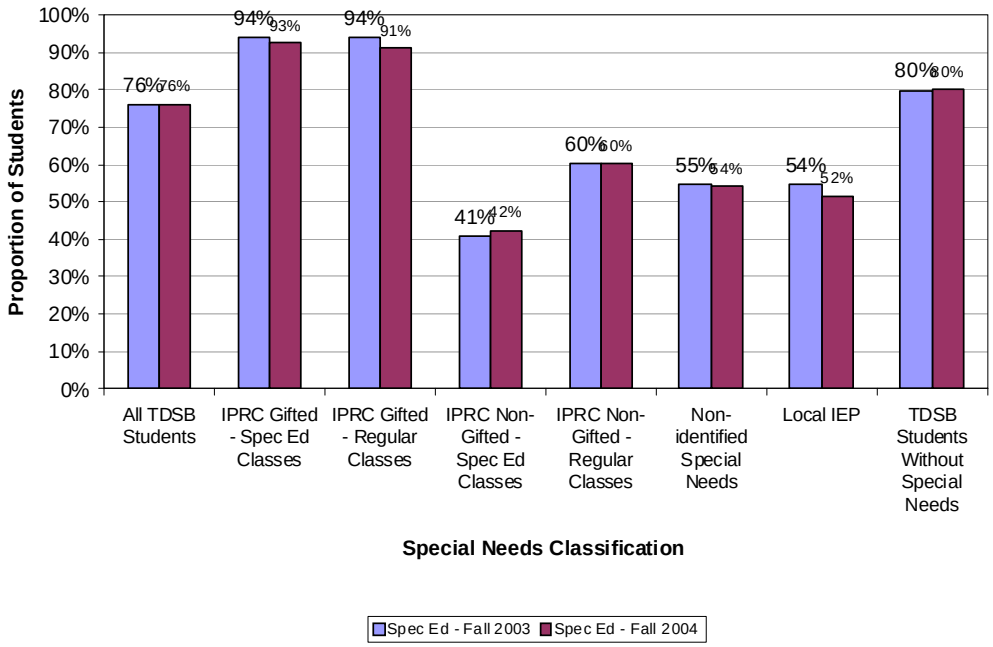
SECTION C:

COHORT ANALYSIS SPECIAL NEEDS IN GRADE 10 AND POST-SECONDARY PATHWAYS

A concurrent study (Brown, 2010) examined the post-secondary pathways of students in the Grade 9 cohort of Fall 2004. This study looked at the Grade 9 cohort of Fall 2003 and followed the students for five years. However, in this case, we looked at Special Needs status only at the beginning of Grade 10.

The purpose was to see if the patterns of Special Needs and post-secondary pathways were similar in the two cohorts[5]. The answer is yes and, generally, the achievement results are also similar to the multiple years of Grades 6, 9, and 10 achievement found in Part B.

Figure 12: Grade 9 Cohort of Fall 2003 and 2004:
Graduation Rates by Special Needs Status in Grade 10 (Fall 2004)



[5] Examination of Special Needs outcomes of the two cohorts could not be completely identical because with examination of Special Needs of the cohort of Fall 2003, students who left the TDSB before October 31, 2004 were eliminated resulting in part of the at-risk population missing from the Fall 2003 cohort. As a result, graduation and post-secondary confirmations of Special Needs students for this Fall 2003 cohort were slightly higher than they would have been if we had complete records going back to Fall 2003. For example, the graduation rate of the full Fall 2003 cohort is 74%, but when students with missing Special Needs records were excluded, the graduation rate rose to 76% as seen in Figure 12.

Graduation Rates

In Figure 12, 80% of students without Special Needs status had graduated by the end of five years of high school. The proportion of students identified as Gifted was much higher at 94%. Graduation rates for students in full-time non-Gifted Special Education classes were noticeably lower at 41%. The graduation rate of students identified as having a non-Gifted exceptionality and being taught in Regular classes was 60%. However, it was found in the Fall 2004 cohort study that by the end of secondary school, most students identified with non-Gifted exceptionalities had left full-time Special Education and moved into regular classrooms. Therefore, the most valid way to look at results was to combine all non-Gifted IPRC exceptionalities. When this happened, the combined graduation rate of students identified as having a non-Gifted exceptionality was 52% - very similar to the 55% graduation rate of students on an IEP. A similar relationship of combined identification of non-Gifted and students on IEPs was also found in the Fall 2004 cohort study (Brown, 2010).

Also, as can be seen in Figure 12, there were very limited differences between the graduation rates of Non-identified special needs groups (Non-identified and those with Local IEPs). Given the similarities of non-Gifted IPRC and IEP groups, it was difficult to determine the significance of separating the results of non-Gifted exceptionalities from those with only IEP status. As well, the graduation rate of all non-Gifted Special Needs students in the Fall 2003 cohort was almost identical to that of the Fall 2004 cohort.

Figure 13 demonstrates the outcomes of the four key exceptionalities, accounting for 95% of students formally identified as having an exceptionally. Figure 14 shows similar outcomes from the Fall 2004 cohort for comparison, and indeed the results were very similar for both cohorts. The majority of students identified as having a Learning Disability graduated, while only slightly under half of the students identified as having a Mild Intellectual Disability had graduated. Given that many students with Mild Intellectual Disability identifications returned to the TDSB for an additional school year, it is likely that the majority of these students will graduate eventually. However, with the 2003 cohort, as with the 2004 cohort, less than a third of the students identified as having a Behavioural disorder had graduated and almost half had dropped out. It appears from both cohorts that students with a Behavioural identification often did not complete their secondary school requirements.

Figure 13: Grade 9 Cohort of Fall 2003:
Five-year Outcomes by Exceptionality

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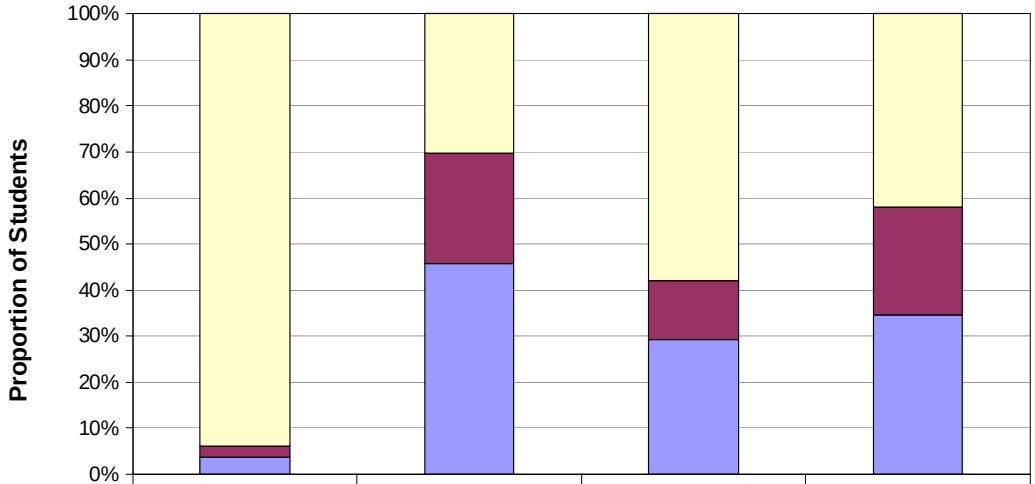
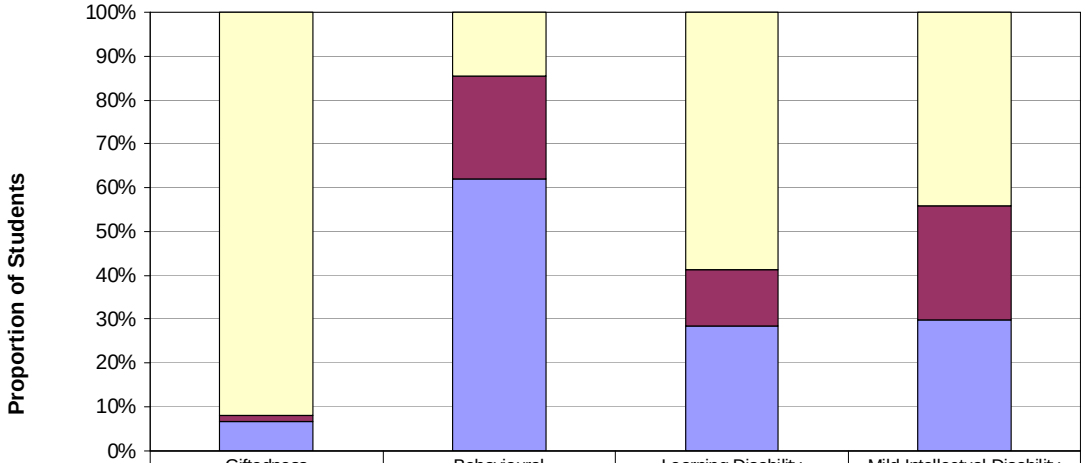


	Giftedness	Behavioural	Learning Disability	Mild Intellectual Disability
Graduate	94%	30%	58%	42%
In TDSB Fall of Next Year	3%	24%	13%	23%
Dropout	4%	46%	29%	35%

Exceptionality (Reported as of Fall 2004)

Dropout | In TDSB Fall of Next Year | Graduate

Figure 14: Grade 9 Cohorts of Fall 2004:
Five-year Outcomes by Exceptionality



	Giftedness	Behavioural	Learning Disability	Mild Intellectual Disability
Graduate	92%	15%	59%	44%
In TDSB Fall of Next Year	1%	23%	13%	26%
Dropout	7%	62%	28%	30%

Exceptionality (Reported as of Fall 2004)

Dropout | In TDSB Fall of Next Year | Graduate

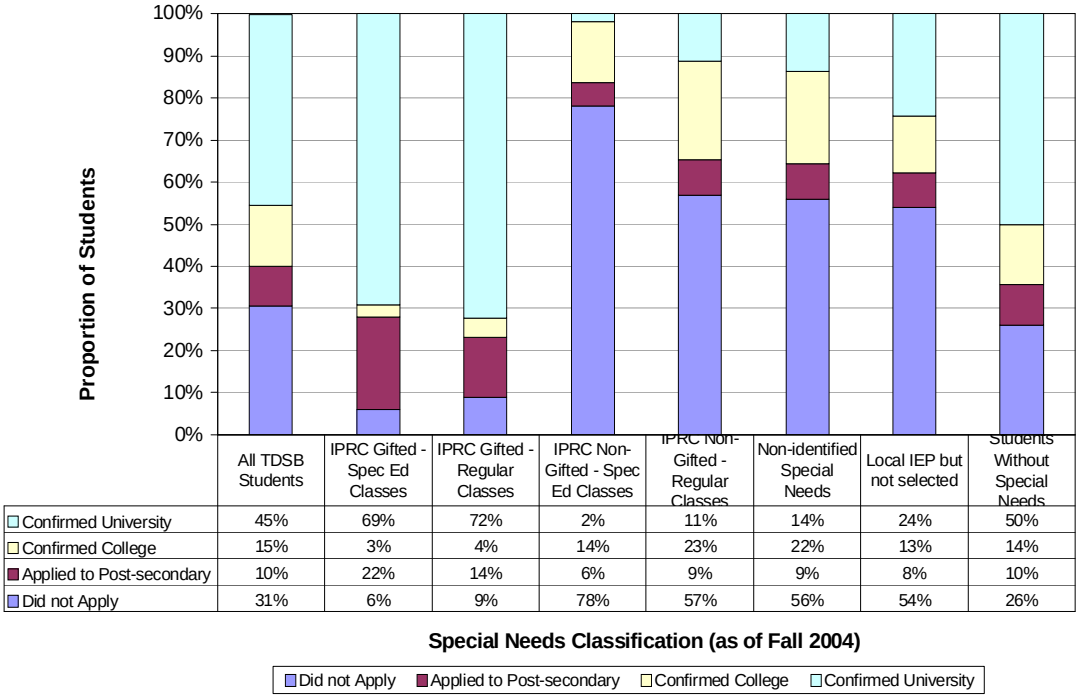
Post-secondary Access

Slightly under two thirds of students who start Grade 9 in the TDSB will confirm an offer of admission from an Ontario college or university within five years. Ultimately, the proportion of students entering post-secondary may rise to three quarters. The post-secondary pathways of Special Needs students are therefore of increasing importance.

Figures 15 and 16 demonstrate post-secondary access over two years (Grade 12 Years 1 and 2). According to prior Special Needs status for both the Fall 2003 and Fall 2004 cohorts, results were very similar. For students without Special Needs and for students identified as Gifted, the vast majority applied to post-secondary (around three quarters of students without Special Needs and 9 of 10 students identified as Gifted) and most got in (around two thirds of students without Special Needs and three quarters of Gifted students).

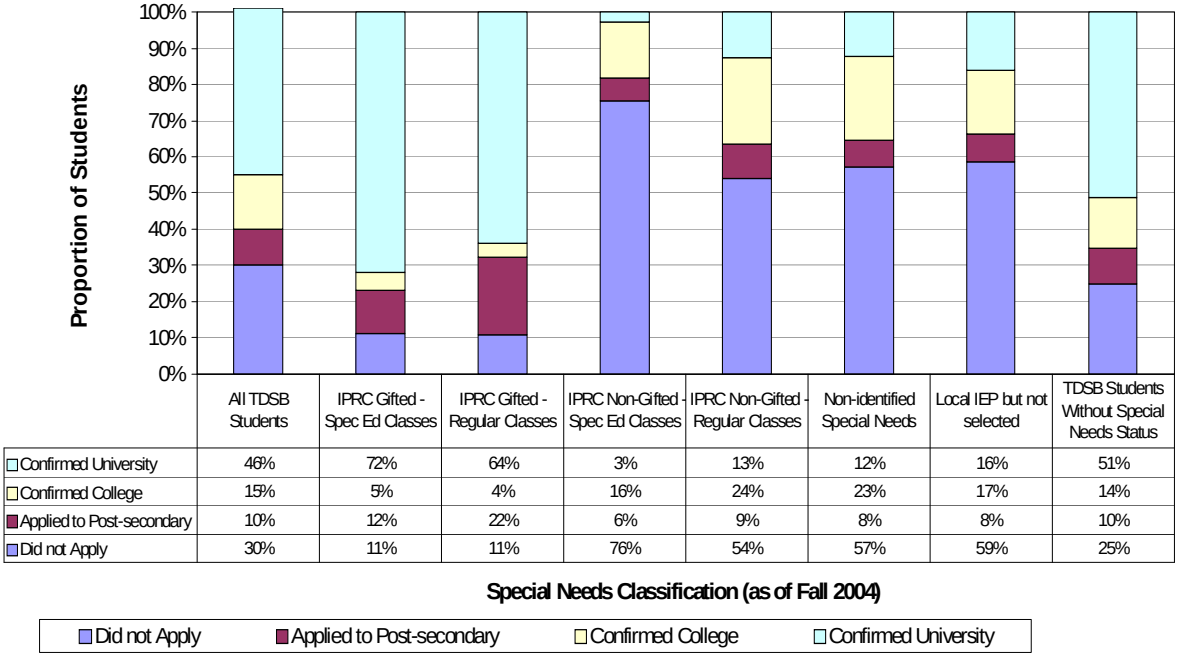
For most Special Needs students identified as non-Gifted in both the Fall 2003 and Fall 2004 cohorts, post-secondary access was not an option. Over three quarters of students having been taught in full-time Special Education classes, and over half of other students identified as Special Needs, did not apply to post-secondary at all. There was little difference in post-secondary pathways between students identified as having non-Gifted exceptionalities taught in Regular classes (the majority of non-Gifted exceptionalities in the secondary panel) and those students with only IEPs.

**Figure 15: Grade 9 Cohort of Fall 2003:
Post-secondary Confirmations by
Special Needs Status in Grade 10 (Fall 2004)**



	All TDSB Students	IPRC Gifted - Spec Ed Classes	IPRC Gifted - Regular Classes	IPRC Non-Gifted - Spec Ed Classes	IPRC Non-Gifted - Regular Classes	Non-identified Special Needs	Local IEP but not selected	Students Without Special Needs
Confirmed University	45%	69%	72%	2%	11%	14%	24%	50%
Confirmed College	15%	3%	4%	14%	23%	22%	13%	14%
Applied to Post-secondary	10%	22%	14%	6%	9%	9%	8%	10%
Did not Apply	31%	6%	9%	78%	57%	56%	54%	26%

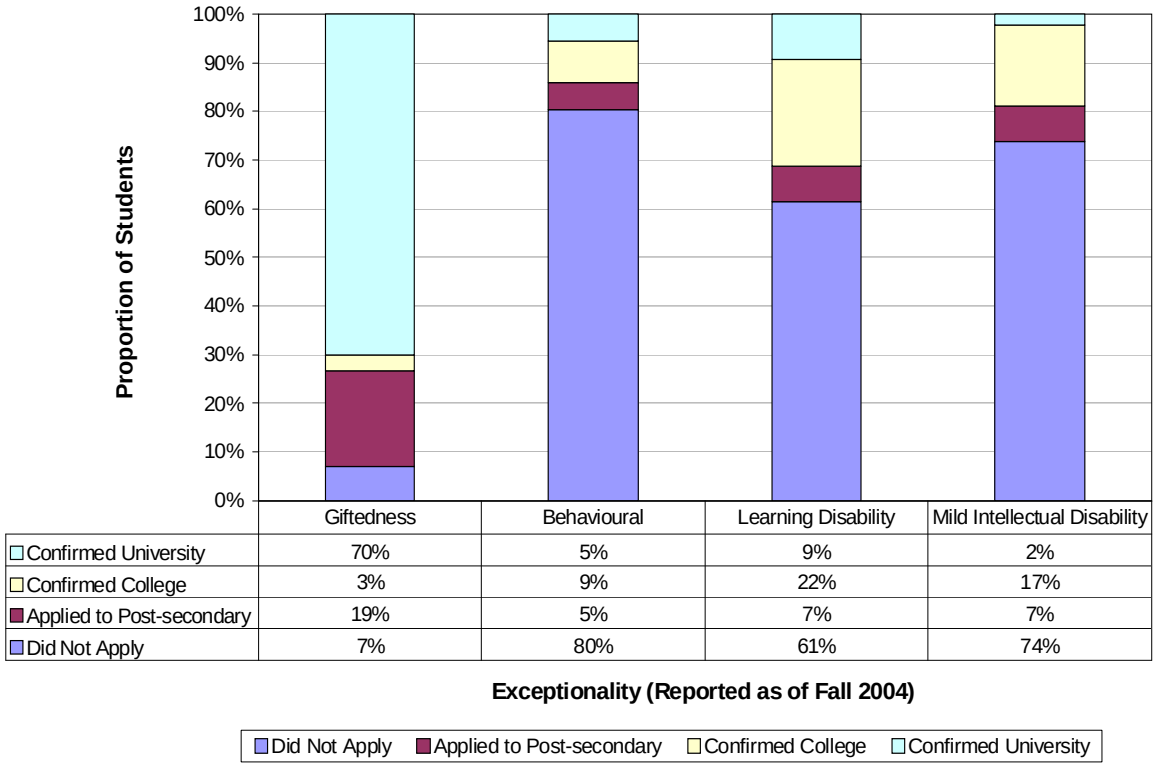
**Figure 16: Grade 9 Cohorts of Fall 2004:
Post-secondary Confirmations by
Special Needs Status in Grade 9**



	All TDSB Students	IPRC Gifted - Spec Ed Classes	IPRC Gifted - Regular Classes	IPRC Non-Gifted - Spec Ed Classes	IPRC Non-Gifted - Regular Classes	Non-identified Special Needs	Local IEP but not selected	TDSB Students Without Special Needs Status
Confirmed University	46%	72%	64%	3%	13%	12%	16%	51%
Confirmed College	15%	5%	4%	16%	24%	23%	17%	14%
Applied to Post-secondary	10%	12%	22%	6%	9%	8%	8%	10%
Did not Apply	30%	11%	11%	76%	54%	57%	59%	25%

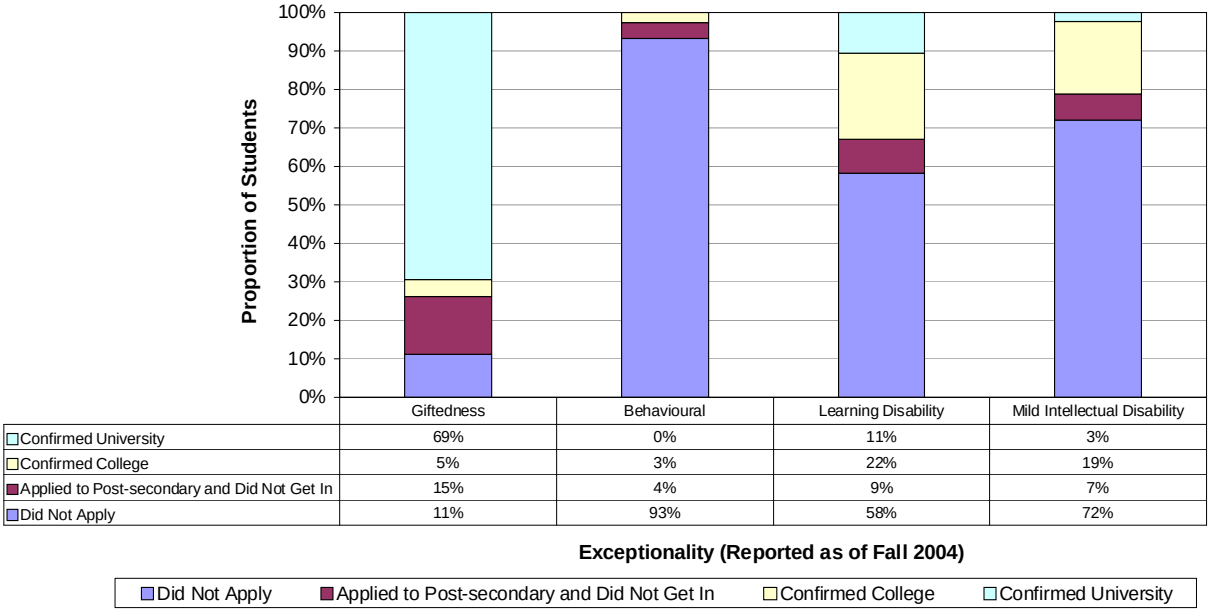
Figures 17 and 18 demonstrate post-secondary confirmation outcomes for the key exceptionalities (Giftedness, Behavioural, LD, and MID). Generally, the largest group, students identified as having a Learning Disability, had post-secondary outcomes similar to those of all students identified as non-Gifted Special Needs. In the Fall 2003 cohort, 31% of students identified as having a Learning Disability confirmed a post-secondary offer of admission, mostly from the Ontario college system. Students with a Mild Intellectual Disability identification had a pattern of somewhat lower post-secondary acceptance. For students identified as having a Behavioural exceptionality, post-secondary education was an unlikely prospect. A few students with Behavioural identifications had graduated within five years and therefore were not eligible to apply to post-secondary institutions.

Figure 17: Grade 9 Cohort of Fall 2003:
Post-secondary Confirmations by Exceptionality



	Giftedness	Behavioural	Learning Disability	Mild Intellectual Disability
Confirmed University	70%	5%	9%	2%
Confirmed College	3%	9%	22%	17%
Applied to Post-secondary	19%	5%	7%	7%
Did Not Apply	7%	80%	61%	74%

Figure 18: Grade 9 Cohorts of Fall 2004:
Post-secondary Confirmations by Exceptionality



	Giftedness	Behavioural	Learning Disability	Mild Intellectual Disability
Confirmed University	69%	0%	11%	3%
Confirmed College	5%	3%	22%	19%
Applied to Post-secondary and Did Not Get In	15%	4%	9%	7%
Did Not Apply	11%	93%	58%	72%

SECTION D:
THE 2006-07 TDSB STUDENT CENSUS AND SPECIAL NEEDS STATUS

In Fall 2006, TDSB students in Grades 7 to 12 completed the 2006 Student Census survey which included information on race and socio-economic variables. The following section looks at the students in Grades 7-10[6]. We examined students in Grade 7-10 since those are the grades where Special Needs status is most complete.

Because 'grade' is a fluid term in the secondary panel (there are students in "Grade 9" or "Grade 10" over several years) we define "Grade 7" and "Grade 8" as having a Grade 7 or 8 grade on October 31, 2006; "Grade 9" is defined as belonging to the TDSB Grade 9 cohort of 2006-07; while "Grade 10" is defined as first-time eligible for writing the Grade 10 Ontario Secondary School Literacy Test (OSSLT). There were 73,929 Grade 9-10 students in the TDSB, of whom 64,905 (88%) answered demographic questions on the 2006 Student Census survey and could be matched to existing TDSB data.

Gender

As seen in Table 7, male students in Grades 7-10 were more likely to have Special Needs than were female students, consistent with other research.

Table 7: Gender
Special Needs Status as of October 31 2006

		IPRC GIFTED	Without Special Needs Status	IPRC NON-GIFTED	IEP	Total	N
Gender	F	37.6%	50.7%	32.1%	41.7%	48.0%	35475
	M	62.4%	49.3%	67.9%	58.3%	52.0%	38454
Total		100.0%	100.0%	100.0%	100.0%	100.0%	73929

[6] Section A of this report showed challenges in new Special Needs status in the earlier primary grades as well as the secondary grades. Examination of annual versus cohort information found that many new students had entered the TDSB after Grade 9, in particular in Grade 11 and Grade 12, who would be less likely to gain Special Needs status (Brown, 2010).

Self-identified Race

Of the Grade 7-10 students who completed the 2006 Student Census survey, 32% self-identified themselves as White, 20% were South Asian, 18% were East Asian, 13% were Black, while the remaining students were Mixed (6%), Middle Eastern (5%), South-East Asian (4%), Latin (2%), and Aboriginal (1/3 of 1%).

In looking at students identified as Gifted, White students were significantly over-represented (52% compared to 32% of all Grade 7-10 students) as were East Asian (27% compared to 18% total). Mixed students were approximately equal to their population (6% compared to 6% total). In contrast, all other self-identified racial groups were significantly under-represented in overall students identified as Gifted. For example, South Asian students accounted for 9% of students identified as Gifted compared to 20% of the total. Black students accounted for only 3% of students identified as Gifted compared to 13% of the total.

In looking at students identified as having non-Gifted exceptionalities, a different pattern presents itself. The two groups most over-represented were self-identified White and Black students. White students accounted for 43% of students identified as having non-Gifted exceptionalities, higher than the 32% total of all Grade 7-10 students. Black students accounted for 22% of students identified as having non-Gifted exceptionalities compared to 13% of the total. Mixed students were approximately the same with 7% of students having non-Gifted exceptionalities compared to 6% of the total population. Other student groups were under-represented amongst students with non-Gifted exceptionalities. South Asian students accounted for 11% of non-Gifted exceptionalities but 20% of the total, while East Asian students accounted for 7% of non-Gifted exceptionalities but 18% of the total.

Table 8: Self-identified Race and Special Needs

		Special Needs Status October 31 2006				Total %	Number
		IPRC GIFTED	Without Special Needs Status	IPRC NONGIFTED	Non-identified Special Needs and or IEP		
Racial Groups	Unknown	0.2%	0.2%	0.3%	0.2%	0.2%	
	Aboriginal	0.0%	0.2%	0.8%	0.5%	0.3%	180
	Black	2.8%	11.6%	22.1%	28.2%	13.5%	8759
	East Asian	27.0%	19.2%	6.6%	8.8%	17.6%	11432
	Latin	0.3%	1.9%	2.6%	2.9%	2.0%	1279
	Middle Eastern	0.7%	4.9%	4.0%	5.5%	4.8%	3099
	Mixed	6.3%	5.5%	7.4%	5.6%	5.7%	3698
	South Asian	9.2%	21.7%	10.7%	15.7%	20.1%	13074
	SE Asian	1.9%	4.2%	2.8%	2.9%	3.9%	2544
	White	51.5%	30.6%	42.7%	29.6%	31.9%	20705
	Total	100.0%	100.0%	100.0%	100.0%	100.0%	6490

One possibility for the disproportional representation of some groups might be due to recent immigration. Special Needs status might not have been granted because the student may have only recently arrived in Canada with a limited proficiency in English. To test for this effect, in Table 9 all recent arrivals (those who arrived in Canada from 2002 through 2006) were excluded which reduced the total of Grade 7-10 students who answered the Race question in the 2006 Student Census survey by 10,184. However, as seen in Table 9, even with the elimination of recent arrivals, the overall race trends of Special Needs remained static.

Table 9: Special Needs Status October 31, 2006
Excluding All Students Arriving in Canada January 1, 2002 or Later

		Special Needs Status October 31 2006				Total	N
		IPRC GIFTED	Students without Special Needs	IPRC NONGIFTED	Non-identified Special Needs and or IEP		
Racial Groups	Unknown	0.2%	0.2%	0.3%	0.2%	0.2%	120
	Aboriginal	0.0%	0.3%	0.9%	0.6%	0.3%	177
	Black	2.7%	12.4%	22.2%	28.7%	14.4%	7882
	East Asian	26.5%	16.2%	6.3%	7.1%	14.8%	8102
	Latin	0.2%	1.7%	2.6%	2.8%	1.9%	1017
	Middle East	0.6%	3.8%	3.7%	5.2%	3.8%	2077
	Mixed	6.4%	6.5%	7.5%	6.0%	6.5%	3574
	South Asian	8.7%	20.1%	10.5%	15.0%	18.5%	10120
	SE Asian	2.0%	4.3%	2.8%	2.9%	4.0%	2168
	White	52.7%	34.6%	43.2%	31.5%	35.6%	19475
	Total	100.0%	100.0%	100.0%	100.0%	100.0%	54721

Generally, patterns of students on IEPs (Non-identified Special Education and local IEP without Special Education) were similar to those students identified with non-Gifted exceptionalities.

Parental Status

As seen in Table 10, students living with both parents were more likely to be identified as Gifted and less likely to be identified as having non-Gifted exceptionalities. By contrast, those living with one parent were less likely to be identified as Gifted and more likely to be identified as having non-Gifted Special Needs. Those in other living arrangements were less likely to be identified as Gifted but there was no distinct difference regarding the likelihood of being identified as a student with non-Gifted Special Needs.

Table 10: Parental Status

		Special Needs Status October 31 2006				Total	Number
		IPRC GIFTED	Without Special Needs	IPRC NONGIFTED	Non-identified Special Needs and or IEP		
Parental Status	Two Parents	87.0%	78.4%	66.8%	67.9%	76.9%	49191
	One Parent	11.8%	18.2%	28.0%	28.0%	19.6%	12516
	Others	1.3%	3.4%	5.1%	4.2%	3.5%	2254
	Total	100.0%	100.0%	100.0%	100.0%	100.0%	63961

Parental Education

Students whose parents had a university education were disproportionately more likely to be identified as Gifted. Parents who had a university education accounted for 44% of the TDSB's Grade 7-10 population overall; however, they accounted for 77% of students identified as Gifted. In contrast, students whose parents had less than a university education were less likely to be identified as Gifted.

The relationship of parental education to non-Gifted Special Needs status is more complex. Students whose parents had a university education were much less likely to be identified as having a non-Gifted exceptionality and less likely to have an IEP. Students whose parents had a university education accounted for 44% of the total population but only accounted for 27% of students with non-Gifted identifications and 28% of students on IEPs. Students whose parents had a high school or college education were somewhat more likely to be identified as having non-Gifted exceptionalities and be placed on IEPs. Students whose parents had a high school education accounted for 13% of the total and yet 16% of non-Gifted exceptionalities and 16% of students using IEPs. Students whose parents had a college education accounted for 14% of the total population, 15% of non-Gifted exceptionalities, and 15% of students placed on IEPs. Students who claimed they did not know their parents' education were slightly under-represented amongst those identified as having a non-Gifted exceptionality but greatly over-represented amongst students placed on IEPs. Students who claimed not to know parental education levels accounted for 29% of the total, (27% of non-Gifted exceptionalities and 41% of

students on IEPs). The reason for the IEP over-representation by those claiming they do not know their parents' education is unclear and deserves further study (see Table 11).

Table 11: Parental Education

		Special Needs Status October 31 2006				Total %	Total
		IPRC GIFTED	Without Special Needs Status	IPRC NONGIFTED	Non-identified Special Needs and or IEP		
Parental Education	High School	3.6%	12.4%	16.4%	15.9%	12.7%	8068
	College	8.2%	14.1%	15.1%	14.5%	14.1%	8940
	University	77.1%	46.5%	27.3%	28.4%	44.4%	28180
	Don't Know	11.1%	27.0%	41.2%	41.2%	28.8%	18276
Total		100.0%	100.0%	100.0%	100.0%	100.0%	63464

Income

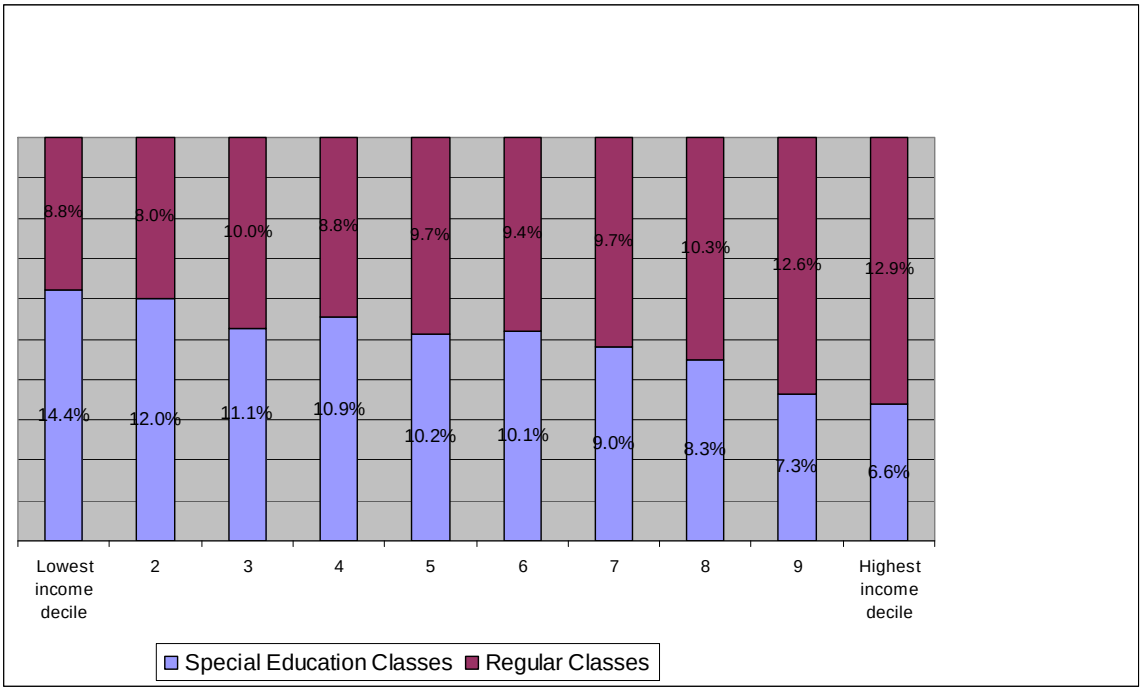
Table 12 shows the relationship of Special Needs to deciles of neighbourhood income. This was a similar methodology to Table 5 in Section A, except that Section A used self-identified income from the 2006 Federal Census and this table used comparable information from the 2001 Federal Census.

As with Table 5, there was a very strong relationship with the identification of Giftedness and income. Ten percent (10%) of students identified as Gifted were from the three lowest income deciles, while 58% of students with Gifted identifications were from the three highest income deciles. There was also a relationship for students who had been identified as non-Gifted and those placed on IEPs to income. However, the income connection for non-Gifted identifications was not as dramatic as the relationship with Gifted. Thirty-four percent (34%) of students identified with non-Gifted exceptionalities and 38% of students with IEPs came from the three lowest income deciles, while 27% of students identified as having non-Gifted exceptionalities and 22% of students placed on IEPs came from the three highest income deciles.

Table 12: Special Needs October 31, 2006 and Income

		Special Needs Status October 31 2006				Total	N
		IPRC GIFTED	Without Special Needs Status	IPRC NONGIFTED	Non-identified Special Needs and or IEP		
Deciles of Average Family Income Grades 7-10	Lowest income decile	3.3%	9.5%	12.4%	14.1%	10.0%	7203
	2	3.8%	9.8%	10.6%	12.5%	10.0%	7197
	3	3.2%	10.0%	10.7%	11.6%	10.0%	7227
	4	7.4%	9.9%	10.2%	11.2%	10.0%	7203
	5	6.3%	9.9%	10.0%	11.5%	10.0%	7185
	6	10.3%	10.2%	9.9%	9.0%	10.1%	7256
	7	8.2%	10.2%	9.2%	8.5%	10.0%	7191
	8	12.9%	10.3%	9.0%	7.8%	10.0%	7223
	9	17.0%	10.3%	9.2%	6.8%	10.1%	7253
	Highest income decile	27.7%	9.9%	8.9%	7.0%	10.0%	7229
Total		100.0%	100.0%	100.0%	100.0%	100.0%	72167

Figure 19: Non-Gifted Exceptionalities
Special Education and Regular Classes



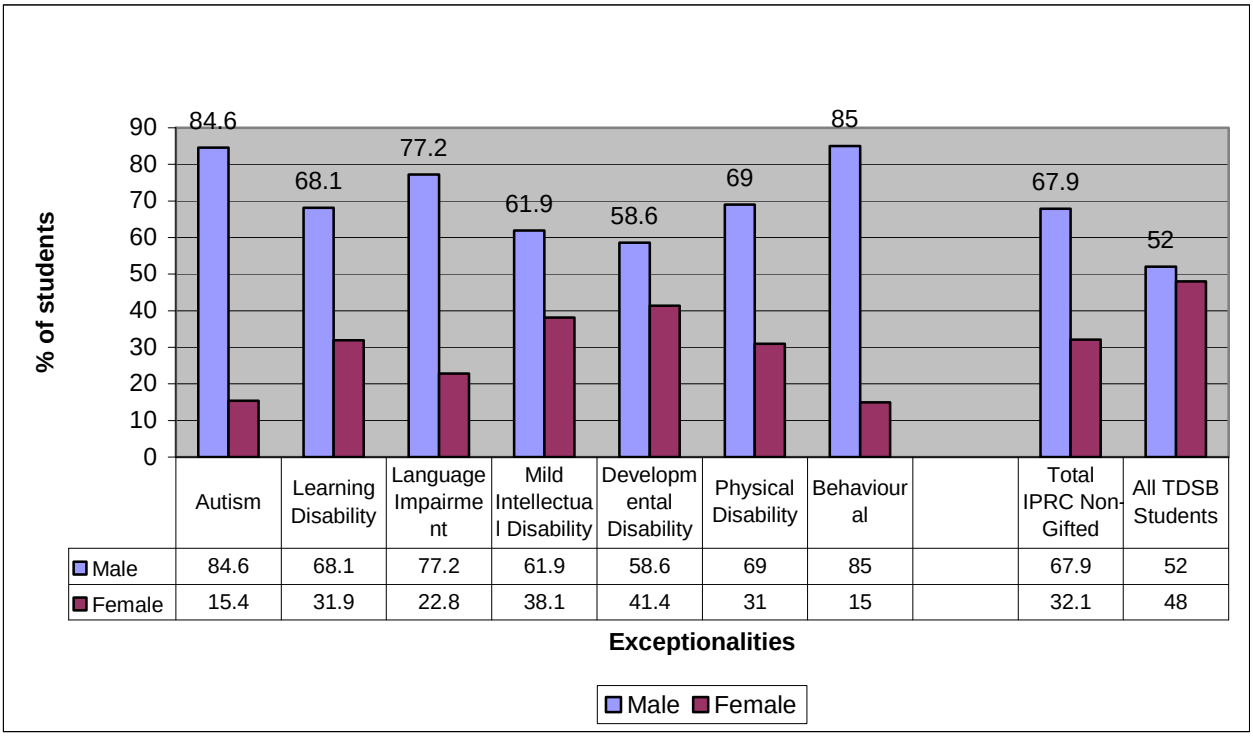
As seen in Figure 19, there was also a relationship between classroom setting and income for students identified as having a non-Gifted exceptionality. Students in full-time congregated Special Education classes were more likely to live in lower income neighbourhoods, while students in regular classes were more likely to live in higher income neighbourhoods.

Non-Gifted Exceptionalities of the Grade 7-10 Student Census Population

Gender

The gender distribution of key non-Gifted exceptionalities in the Grade 7-10 population was similar to the total TDSB exceptionalities shown in Section A. Overall, close to two thirds of non-Gifted identifications were male, with the proportion of male students being highest amongst those students identified as having Autism and students with Behavioural identifications (85%).

Figure 20: Key Non-Gifted Exceptionalities by Gender



	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

The distribution of students identified as having non-Gifted exceptionalities according to self-identified race has already been discussed; however, there were some noticeable differences in looking at key exceptionalities. Thus, of the key racial groups:

- Self-identified **Black students** with an overall proportion of 14% were over-represented amongst students with Behavioural (36%), Mild Intellectual Disability (33%), Developmental Disability (30%), and Language Impairment (24%) identifications but were approximately their distribution of students with Autism (13%).
- Self-identified **East Asian students** with an 18% overall distribution were under-represented in most exceptionalities, but were approximately their distribution with Autism (15%) and Language Impairment (17%) identifications.
- Self-identified **South Asian students** were under-represented in general but were approximately their distribution with Mild Intellectual Disability (19%) Developmental Disability (23%) and Physical Disability (24%) identifications.
- Self-identified **White students** with 32% of the Grade 7-10 population were over-represented amongst those with Autism (50%), Learning Disability (50%), Physical Disability (41%), and Behavioural (41%) identifications but were approximately their total distribution amongst students with Developmental Disability (30%) identifications and were under-represented amongst those with Language Impairment (23%) and Mild Intellectual Disability (23%) identifications.

There was no immediate explanation for the differing distributions of Race and Exceptionality. This is a critical area where more investigation is required.

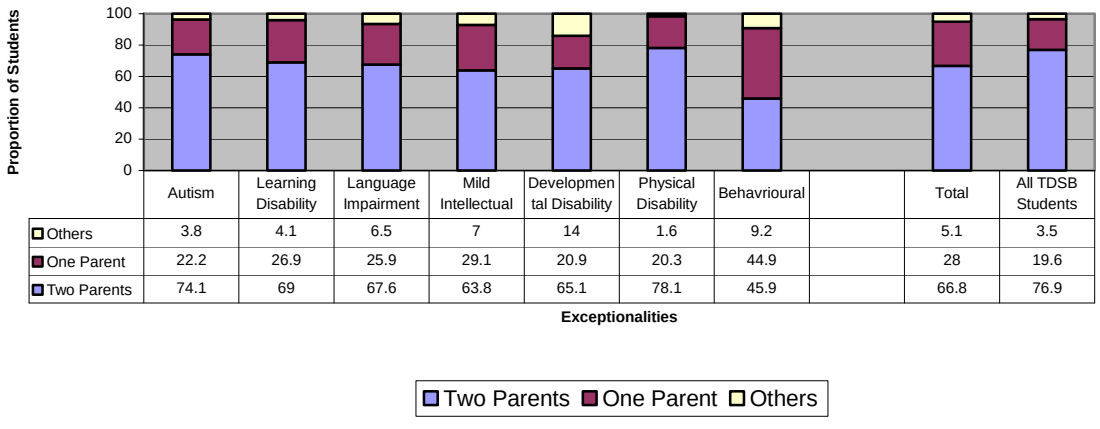
Table 13: Key Non-Gifted Exceptionality Distribution by Race

	Autism	Learning Disability	Language Impairment	Mild Intellectual Disability	Developmental Disability	Physical Disability	Behavioural	Total Students with Exceptionalities	Total Students from 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

Exceptionality by Parental Presence

In general, students identified as having non-Gifted exceptionalities were less likely to live with two parents (67% compared to the full Grade 7-10 population of 77%); however, students with Autism and Physical Disability identifications presented rates of parental presence similar to that of the full population. Less than half of all students with a Behavioural identification lived with both parents (see Figure 21).

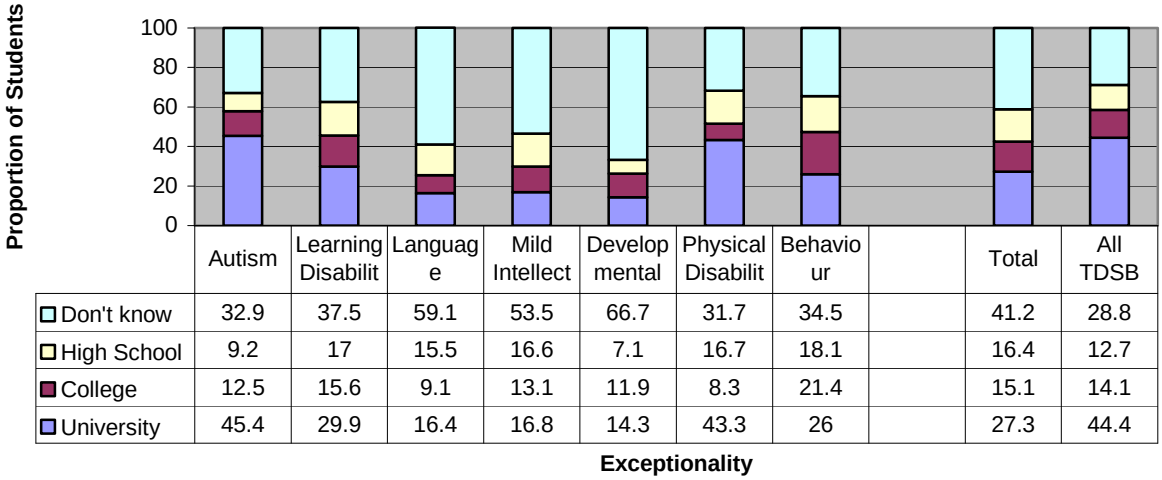
Figure 21: Key Non-Gifted Exceptionality Distribution By Parental Presence



Exceptionality by Parental Education

Students identified as having non-Gifted exceptionalities were less likely to have parents with a university education (27% compared to 44% for the full Grade 7-10 population) but again, as with parental presence, those with Autism identifications and Physical Disability had parental education levels similar to the full population (see Figure 22).

Figure 22: Key Non-Gifted Exceptionality Distribution By Parental Education



	Autism	Learning Disabilit	Languag e	Mild Intellect	Develop mental	Physical Disabilit	Behavio ur		Total	All TDSB
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

SECTION E:
EDI STATUS IN KINDERGARTEN AND SPECIAL NEEDS STATUS BY GRADE 9

In Spring 2000, the pilot of the Early Development Indicators (EDI) was administered to SK students in schools within the Toronto and North York regions (legacy boards) of the TDSB. Although many students had moved out of Toronto, we were able to monitor the academic progress of approximately 5,699 students. An examination of EQAO Grade 3 and Grade 6 results demonstrated a very strong relationship between EDI assessment in SK and later achievement. According to EDI domain assessments in SK, the majority of students assessed as 'low risk' were found to be at or above the provincial standard in both the Grade 3 and Grade 6 tests. However, the majority of students found to be 'high risk' in SK were found to be below the provincial standards in both the Grade 3 and Grade 6 tests. Results indicated that, for some children, the EDI assessment of risk accurately reflected future academic achievement in school (Yau & Brown, 2007).

The TDSB looked at further ways to examine long-term student progress. Given that few students were identified with Special Needs prior to Grade 1 (and those that were had been eliminated from the EDI sample) this cohort could partially explain two questions: a) what proportion of students who start Kindergarten will be given Special Needs status by the beginning of high school? and 2) what is the relationship of Kindergarten assessment of EDI and Special Needs status?

METHODOLOGY

Special Needs records became available as of October 31, 2004 when students in this cohort began in Grade 3. Therefore, we matched student information from the EDI cohort to Special Needs status as of Grade 3, Grade 6, Grade 8, and Grade 9 (i.e., October 31, 2008).

RESULTS

Proportion of Special Needs by Grade 9

By the beginning of Grade 9, 1,335 out of 5,699 (or 23%) of students in the cohort had some form of Special Needs status as of Grade 9 (that is, the student had been identified as having a non-Gifted exceptionality or given an IEP at some point in our records). Assuming that this Toronto and North York cohort was representative of the TDSB as a whole, it would appear that between a fifth and a quarter of students will have Special Needs status by the time they start Grade 9.

This was a much higher proportion than the 15% of non-Gifted Special Needs students currently in the TDSB. Why the difference? We cannot say for sure but it may be partly explained through the high mobility and high ESL population of the TDSB. The TDSB has very high mobility, with 5-10% of students leaving and also entering the TDSB in any given year. As seen earlier, the IPRC and IEP process was less likely to occur after the middle years of elementary school. As well, assessment of ESL students will take longer due to concern over improper diagnosis due to language barriers. Consequently, at least part of the explanation of the higher Special Needs proportion of this cohort was that the students have been around long enough for Special Needs to be officially recognized through IPRC or IEP status.

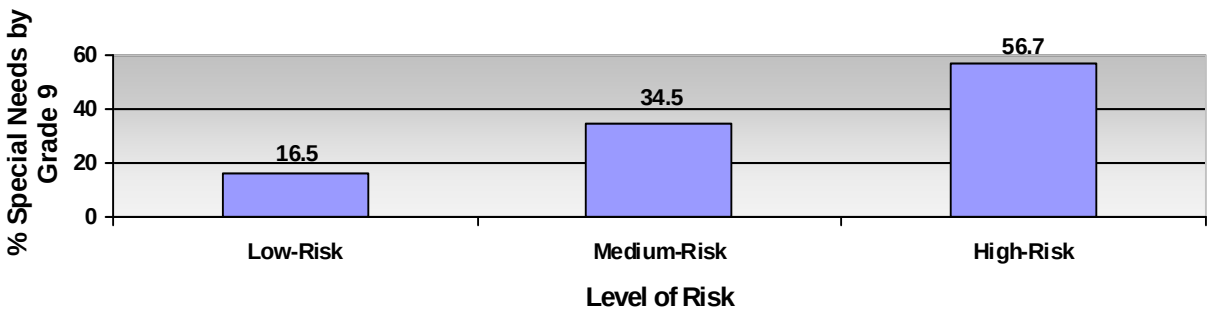
If this was a correct explanation, this then leads to another conclusion: that the 'true' proportion of students identified as non-Gifted Special Needs in the TDSB was much higher than the current 15% due to the mobility of the TDSB population.

Relationship of EDI to Special Needs by Grade 9

Administered in SK, results of the EDI showed three groups: the majority (76%) of students at ‘Low Risk’ (at or above the provincial average in all five EDI domains), a large group (13%) at ‘Medium Risk’ (below the provincial average in one of the five domains), and the smallest group of 12% at ‘High Risk’ (below the provincial average in two or more domains).

There was a strong relationship between EDI results and being given Special Needs status by the end of Grade 9, similar to the relationship to EQAO test results found in Yau and Brown 2008. While 16% of 'Low Risk' students had been given non-Gifted Special Needs status by Grade 9, this increased to slightly over a third (34%) of those with 'Medium Risk' and a majority (57%) of those with ‘High Risk’.

Figure 23: EDI Status TBE Spring 2000



There is an important proviso since the vast majority of students were ‘Low Risk’ or ‘Medium Risk’ in SK, those students also provided the majority (72%) of students identified as non-Gifted Special Needs. Nonetheless, it was clear that over a quarter of cohort students who were provided with a formal non-Gifted Special Needs identification by high school were identifiable as 'High Risk' before starting primary school.

SUMMARY

In 2009-10, two percent (2%) of the Toronto District School Board (TDSB) student population was identified as having a Gifted exceptionality (enrolled in either full-time special education or regular classrooms) while 15% of students were identified as having a non-Gifted exceptionality. Breaking down the group of students identified with non-Gifted exceptionalities further, there were:

- 10,165 students (3.9%) in **IPRC non-Gifted - Special Education Classes**; that is, they had been formally identified as one of the 12 non-Gifted exceptionalities and were taking 50% or more of their classes in congregated Special Education.
- 6,603 students (2.5%) in **IPRC non-Gifted - Regular Classes**; that is, they had been formally identified as one of the 12 non-Gifted exceptionalities and were taking the majority of their classes in the TDSB regular day classrooms.
- 14,970 (5.8%) **IEP- Non-identified** students; that is, students who had an IEP but had not been formally identified; however, they were still receiving Special Education programming during the 2009-10 school year.
- 7,029 students (2.7%) had **IEPs** and were receiving direct assistance in the classroom rather than formal Special education programming.

The number of students identified with either Gifted or non-Gifted Special Needs increased by 6,216 between 2005-06 and 2009-10, even while overall enrolment declined by 14,094. The exceptionality grouping that increased by the largest number of students was the Gifted exceptionality, followed by the Learning Disability, Autism, and Behavioural disorder exceptionalities.

THE PATTERNS OF NEW SPECIAL NEEDS STUDENTS

Pattern examination of when students were identified as Special Needs shows great consistency over time. The vast majority of new IEPs were created for students in Grades 1-4, and students were most likely to be formally identified as having a non-Gifted exceptionality in Grades 3-6. Interestingly, of those students formally identified through the IPRC process as having a non-Gifted exceptionality, approximately three-quarters had a prior IEP. Three-quarters of new Gifted exceptionalities were identified in Grades 3-6 and half took place in

Grade 3 alone. Comparatively few IEPs or exceptionalities were created/identified within the secondary panel.

For the TDSB, these patterns hold profound implications. First, despite the current emphasis on early intervention, formal identification tends to occur in later elementary grades. The pilot EDI found that most students identified as "high risk" in Kindergarten had, by Grade 9, been identified as students with Special Needs. Conversely, over one-quarter of all students ultimately identified as Special Needs had previously been identified as "high risk" in Kindergarten. Current literature supports that earlier interventions increase student success (Mastropieri, White, & Fecteau, 1986; Lieber, 2008). Considering that most students who were eventually identified as having a non-Gifted exceptionality had already been placed on an IEP for one or more years, it raises questions as to whether the IPRC process could be done earlier.

A second major implication has to do with student mobility. Due to the significant time lapse between initial IEP implementation and formal IPRC identification, coupled with few new identifications occurring at the secondary panel, high student mobility could create inequitable access to Special Education programming for high needs students. Within the TDSB, a high proportion of students enter into the system from other boards or other countries, stay in one residence for only a few years, and then move to another location, either in Toronto or throughout the Greater Toronto Area (GTA). Typically this means they also change schools. As well, even stationary students often move schools (e.g., junior to a middle school). If the implementation of IEPs and the identification of exceptionalities are largely occurring over a relatively small number of grades, it is possible that students with Special Needs entering and exiting the system outside these grades could be missed. This has been clearly documented in the secondary panel. An examination of secondary students found that of Grade 12 students who entered the TDSB after Grade 9, comparatively few had Special Needs status.

Student mobility may also partly explain the continued increase of the number of Special Needs students, even as the total number of TDSB students has declined. Examination of the EDI cohort found that approximately a quarter (23%) of Kindergarten students who started and stayed within the TDSB were identified with a non-Gifted exceptionality by the time they started secondary school, compared to 15% of the overall TDSB population. The difference might be partly explained because the consistent TDSB students who started in Kindergarten had the greatest opportunity for Special Needs assessment. Overall, student mobility throughout the TDSB has declined. For example, the within-year student mobility (students who left during the

school year) declined from 9% to 6% between 2003-04 and 2008-09. Therefore, the pattern seen here suggests that a decrease in student mobility should lead to an increase in the number of Special Needs students.

Gender

Gender ratios within the TDSB have remained constant over time (52% male, 48% female); however, Special Needs students are disproportionately male. Boys account for 63% of all Special Needs students, 60% of students with only IEPs, and 67% of all exceptionalities. The overrepresentation of boys within Special Education has been clearly supported by current literature (Oswald, Best, Coutinho, & Nagle, 2003; Wilkinson, 2008; Daniels, Hey, Leonard, & Smith, 1999). Of students with Gifted exceptionalities, 61% are male, even though female students have consistently demonstrated higher achievement in all subjects and grades, regardless of socio-economic or other factors; however, this is consistent with the literature (Freeman, 2004). Students identified as having a Behavioural Disorder (87%) or Autism (84%) were predominantly male; again, this is consistent with the literature (Lloyd, Kauffman, Landrum & Roe, 1991; Oswald et al., 2003; Wilkinson, 2008).

Many critics believe that there continues to be a systemic bias that prevents girls from having equitable access to Special Education programming and resources (Lloyd, et al., 1991; Daniels, et. al., 1999; Oswald et al., 2003). Others suggest that since girls are socialized differently, the symptomology of various disorders may manifest in less obvious ways, thereby reducing the number of female students referred for formal identification (Wilkinson, 2008). Regardless of cause, the gender gap apparent for students identified as having Special Needs requires greater attention and investigation.

Student Achievement

Three successive years of patterns were examined with three representative achievement variables: the proportion of Grade 6 students meeting the Ontario standard in the provincial (EQAO) test of Mathematics; the proportion of students in the Grade 9 cohort 'at risk' due to low credit achievement; and the proportion of Grade 10 students who passed the provincial literacy test (OSSLT). All categories of students identified as having non-Gifted Special Needs had noticeably lower achievement than students without Special Needs identifications. Students taught in congregated Special Education classes had the lowest overall level of achievement.

All three measures presented a similar pattern. Students identified as Gifted demonstrated greater levels of achievement than TDSB students without Special Needs, and achievement levels were the same for these students whether they were taught in congregated or regular classes. However, achievement levels were similar between students identified with non-Gifted exceptionalities taught in regular classes, students who were 'Non-identified' but receiving Special Education programming, and students with IEPs receiving teacher directed accommodations (Local IEPs). These findings have very important implications for Special Education programming, particularly at the secondary level, where only a comparatively small proportion of students remained in congregated Special Education settings. Outside this group, there is little to differentiate between students who received formal Special Education programming (IPRC in regular classes and Non-identified) and those who had an IEP but no Special Education programming. It appears that for students identified as having non-Gifted Special Needs, the assignment of an IEP is a more significant predictor of achievement than formal identification through the IPRC process.

Special Education (Congregated) and Regular Classes

Students with exceptionalities were either in full-time Special Education classes (congregated) or in regular classes receiving Special Education assistance (categorized as Indirect Service, Resource Assistance, and Withdrawal Assistance).

Most students identified as Gifted received their designation in Grade 3 and then joined a congregated program. Once part of the Special Education Gifted classroom, most students spent nearly the rest of their public education in congregated classes. Over three-quarters (78%) of TDSB Grade 8 students identified as Gifted were in congregated Gifted classes; this number declined to 58% in Grade 9. Only in Grade 12 were the majority of students identified as Gifted part of the regular secondary classroom stream.

The pattern for students with non-Gifted exceptionalities is entirely different. The vast majority of Grade 1-4 students identified with a non-Gifted exceptionality (83-87%) were taught in congregated Special Education classes, and this declined only slightly to 81% in Grade 8. However, once students entered the secondary panel in Grade 9, this figure dropped to 38%; therefore, in a single year, a significant number of students switched from a congregated setting to regular classes.

The reasons for this dramatic shift are unclear. In both the elementary and secondary panel, students with non-Gifted identifications who were in regular classes had a much higher level of achievement than those in congregated Special Education classes. The initial placement decision may have been based on apparent severity of the student's exceptionality. However, over half the students initially placed in congregated classrooms were then determined to be eligible to participate in regular classrooms once they reached Grade 9. Presumably, students who remained within congregated Special Education classes throughout the secondary panel were perceived as being unable to manage the curriculum without significant accommodations and modifications. It was also observed that many of the students leaving a congregated setting in Grade 8 and moving into a regular classroom setting in Grade 9 were part of the TDSB's Home School Program. This program is unique to the board and is only supported through the elementary panel.

This shift may also be related to the structural change from whole classes in the elementary panel to a credit system in the secondary panel. It would be markedly more difficult to maintain a fully congregated class within a system based on individual students taking various combinations of credits. Another possible explanation may be revealed within the current TDSB funding model. According to the Ministry of Education's 2010-2011 Education Funding Technical Paper, the Special Education Per-Pupil Amount (SEPPA) Allocation is almost double for students falling between JK to Grade 3 ($799.76 per child) as compared to secondary school students in Grade 9-12 ($406.18 per student) (Ministry of Education, 2010). It appears that the elementary panel may have more congregated classrooms because there is more funding.

None of these explanations truly clarify why, among students with non-Gifted exceptionalities, the proportion in congregated classrooms plummets from 81% in Grade 8 to 38% in Grade 9, while the change in their Gifted contemporaries is a much more limited decline from 76% to 58%. They also fail to fully explain why 62% of secondary school students identified with non-Gifted exceptionalities are deemed able of being immersed in the regular stream whereas less than 20% are presented the same opportunity at the elementary level. As there appears to be no comparable information from other boards at this time, it is also unclear whether this is a pattern consistent across Ontario, or limited to the TDSB. More research is required.

Setting and Neighbourhood Income

Our examination of socio-economic variables for students in congregated Special Education classrooms and students who were taught in regular classes demonstrated a clear income relationship. Looking at Grade 7-10 students with non-Gifted exceptionalities, students from the lowest income neighbourhoods were more likely to be taught in congregated Special Education classes, while students from the highest income neighbourhoods were more likely to be in regular classes. Reasons for this dramatic difference deserve further study.

EXCEPTIONALITIES

Half (50%) of students with Special Needs were formally identified through the IPRC process. The Ontario Ministry of Education outlines five general categories of exceptionalities (Behaviour, Communication, Intellectual, Physical, and Multiple Exceptionalities), which expand into 12 specific exceptionality identifications that can be assigned to students. However, of these 12 exceptionalities, five were assigned to fewer than 100 TDSB students and three exceptionalities – Learning Disability, Giftedness, and Mild Intellectual Disability – accounted for 8 in 10 students identified with exceptionalities. When the Gifted category is excluded, the majority of exceptionalities (54%) are Learning Disabilities.

Clear patterns emerged upon examining the socio-economic and demographic characteristics of IPRC-identified students taught within regular classes, as compared to other students designated Special Needs. For instance, students identified as having a learning disability tended to share similar socio-economic and demographic characteristics with students who had IEPs but not IPRC-granted exceptionalities. While students with a Behavioural identification had much lower secondary panel achievement patterns than students identified with Learning Disabilities or Mild Intellectual Disabilities, the number of students identified with a Behavioural exceptionality was relatively small and makes little difference in the big picture of Special Needs.

Despite the continued evolution of the education system and related psychology, the IPRC process of determining student exceptionalities has generally remained unchanged since its implementation throughout the US and Canada during the 1970's and 1980's. During that time, the educational system has altered from one where most students finished elementary school but did not finish secondary school, to a system where most students now finish high school and enter post-secondary. This is most noticeable in Canada, which now has the highest post-

secondary access in the world (Lewin, 2010). A system originally designed for the elementary panel is dealing with the challenge of adapting to a world where post-secondary is the norm.

The more generalist system, developed to accommodate the education needs of students identified with Developmental Disabilities, Learning Disabilities, and Mild Intellectual Disabilities, is continually evolving. When Autism was introduced into the list of exceptionalities 10 years ago, it was the first time a specific cognitive term was used for an exceptionality. However, there has been great difficulty in reaching a collective understanding of what is now considered Autism Spectrum Disorder (e.g., the classification of Asperger's is not clear). Also, notwithstanding significant criticism, the Ministry has not included Attention Deficit Hyperactivity Disorder (ADHD) within its list of exceptionalities. Therefore, students who have been externally diagnosed with ADHD may be formally identified by IPRC as having a Behavior Disorder, Learning Disability, or some other exceptionality. They may also be simply given an IEP, without formal IPRC identification.

Selecting an appropriate exceptionality is an incredibly complex process. This is made even more difficult due to considerable overlap in symptomology between several exceptionalities (e.g., Language Impairment involves impairment in comprehension whereas a Learning Disability can involve language processing which also *impacts* comprehension). Since each exceptionality label carries significant social connotations, and also greatly impacts the student's sense of identity, exacting the appropriate identification is critical. However, the Auditor General's recent report on education found that IPRC outcomes were often inadequately supported rationale or evidence (Office of the Auditor General of Ontario, 2008). "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." (pg. 366) Not only does insufficient information create opportunity for subjectivity in determining identification, but it also creates a void of critical information that could be used to appropriately prepare for the student's IEP.

There is much debate over the identification process in general. Critics argue that students emerge from these meetings with a 'label' that is generally accompanied by stigma and low expectations of performance. According to Goffman (1963), stigma results from the reaction to pre-conceived notions regarding personal characteristics. Stigma derived from the labeling of student abilities leads to "othering" – the practice of establishing certain students as outsiders. Reid and Knight (2006) argue that the widely popular perspectives purported by the medical

model have created a 'special education system' based on exploiting student deficits. However, the current system is structured in such a way that the identification of an exceptionality could be hugely beneficial for a student, as it would provide access to funding and resources, both externally and within the school system (Ministry of Education, 2010). Therefore, Special Education staff and TDSB teachers may feel they have little option other than to pursue identification on behalf of a student. They may believe that securing critical resources to improve student success takes priority over the possibly stigmatizing effects of a disability label.

Individual Education Plan

The Individual Education Plan (IEP) is one of the most interesting aspects of the Ontario special education system. The American Special Education process served as a blueprint for Ontario's Special Education System (Winzer, 1993). At its inception, the IEP was intended to document means and strategies to provide curriculum modifications or accommodations to increase student success. Its original purpose was to outline students' programs once they had been formally identified with an exceptionality through the IPRC process. However, principals and school staff were eventually given the ability to create and implement IEPs without direct involvement of the Special Education Department. This autonomy creates three significant deviations from the original purpose of the IEP. First, the vast majority of students already had an IEP long before they reached the IPRC process, not after. Second, half of all Special Needs students in the TDSB had IEPs without ever having been through the IPRC process. When students identified as Gifted are excluded from this equation, students with IEPs were the majority of students identified as having Special Needs (57%). Third, in terms of achievement, there were limited differences between students formally identified as having non-Gifted exceptionalities and those who only had IEPs. Given that students with non-Gifted exceptionalities fared about the same overall – whether they were identified by the IPRC or solely placed on IEPs – the impact of the IPRC process is challenging to measure.

As discussed in previous research, the issue of Section J reporting requires further examination (Brown, 2008a). Section J is the reporting process by which Special Needs information is reported to the Ministry of Education. However, Section J only reports on students who have been placed on IEPs by the Special Education department (Non-identified) and excludes data on students who have been placed on IEPs by their teachers or school administrators (for the purpose of this report known as Local IEP). The cohort study analysis reveals that membership of either group was porous, students tended to drift from group to group throughout their

academic tenure, and there was little difference in achievement between the two groups. Collapsing them into one 'IEP' category, which EQAO already does in its reports, may be the most logical approach to eliminate further reporting complications. As an aside, the term 'Non-identified' students is in itself a misnomer as it is intended to describe a group of students who, though not identified through IPRC, have nevertheless been identified by the school's Special Education Department.

Multiple Exceptionalities

Over 2,300 students – accounting for 10% of all IPRC identified students – had two or more current identifications. This is surprising, given that only a handful are officially reported to the Ministry as "Multiple Exceptionality". If all eligible students were included, the Multiple Exceptionality designation would be the fourth largest group overall. For one thing, the most frequent multiple exceptionality identifications were non-Gifted exceptionalities, such as Learning Disability, Behaviour Disorder, Autism, Mild Intellectual Disability, and Developmental Disability. Also, students were much more likely to be identified as having multiple exceptionalities if they were male, born in Canada, spoke English, and had already received an initial Special Needs identification. One explanation for the number of multiple exceptionalities may be that Special Needs categories are not always precise enough to accurately reflect student characteristics. This creates a tendency for students with particularly complex characteristics to be identified as having more than one exceptionality.

Socio-economic Challenges

Neighbourhood Income

All Fall 2009 students' postal codes were matched to family incomes identified by the 2006 Federal Census. The overall range of income was then organized into 10 'deciles' from the lowest 10% to the highest 10% of income. When neighbourhood income of students using IEPs and students with non-Gifted identifications was examined, there was little discernable pattern. However, within specific exceptionalities there were some income differences. Students identified as having a Language Impairment, a Developmental Disability, a Mild Intellectual Disability, or a Behavioural Disorder were more likely to come from lower income neighbourhoods. Also, there was a noticeable variance in the distribution of students identified as Gifted. The majority of students identified as Gifted were from the most affluent areas of the city, while the lowest income neighbourhoods were largely unrepresented within the Gifted designation. This finding is supported in other research (Brown, 2010).

The Grades 7-10 population in Fall 2006 demonstrated similar patterns. However, data from Fall 2006 also demonstrated that there was an overrepresentation of students from low income neighbourhoods being placed on IEPs; students from more affluent homes were less represented within the IEP category. Due to the completeness of the Grade 7-10 population data on Special Needs records, this may present a more valid indication of neighbourhood income patterns.

Self-identified Race

Earlier research (Brown, 2008a) had found a clear pattern that students with Special Needs are more likely to be born in Canada, and to speak English. This was also found in the most recent (2009-10) Special Needs data. The Special Needs of students who participated in the TDSB's Fall 2006 Student Census were examined. There were several challenges in looking at the role of self-identified Race within the population identified as Special Needs. To work around the issue of IEP and IPRC identification largely occurring within middle elementary grades, we decided to look at Race within the Grade 7-10 population (where the Special Needs picture is more complete). Of Grade 7-10 students who participated in the 2006 Student Census, 32% were self-identified White, 20% were South Asian, 18% were East Asian, while the remaining students were either Mixed (6%), Middle Eastern (5%), South-east Asian (4%), Latin (2%), or Aboriginal (a third of 1%).

Within the identified Gifted population, White and East Asian students were over-represented, while Mixed students were shown to be approximately equal to their total overall population proportions. All other self-identified racial groups were largely under-represented within the identified Gifted population. For example, South Asian students accounted for 9% of students identified as Gifted as compared to 20% of the total population. Black students accounted for 3% of students identified as Gifted compared to 13% of the total Grade 7-10 population.

Non-Gifted exceptionalities demonstrated a different pattern. White and Black students were largely overrepresented within the identified non-Gifted exceptionalities population. White students accounted for 43% of students with non-Gifted identifications and Black students accounted for 22%. Mixed students were approximately equal to their total population proportions (similar to Gifted). All other self-identified racial groups were under-represented in the non-Gifted exceptionalities population much like Gifted.

Given the high proportion of Canadian-born and English-speaking Special Needs students, students who have English as a Second Language (ESL) difficulties as well as Special Needs may not receive an IEP or IPRC until the impact of ESL has been determined. Another challenge is that recent immigrants are more likely to arrive in the secondary panel than the elementary panel. To ensure late arrival due to immigration was not a factor, we looked only at Grade 7-10 students who had been born in Canada, or arrived in Canada five years or more before completing the 2006 Student Census. Even after the removal of 10,000 recent immigrants to Canada from the data set, we found little difference in racial patterns from our more complete sample.

These patterns do not clearly fit with most research on Special Needs and Race, but on the other hand, most of this research originates from the United States, where the racial composition is quite different from Toronto. According to studies looking at racial disproportionality within the United States, the three most prevalent groups included European American, African American, and Hispanic American (Skiba, et. al., 2006; De Valenzuela, et. al., 2006). Toronto's population represents a much more diverse racial backdrop where the largest portion of the TDSB population is made up of White, South Asian, East Asian, Black, Mixed and Middle Eastern students (see Table 8).

Parental Status and Parental Occupation

Student Census data pulled from the Grade 7-10 population indicated that students living with both parents were more likely to be identified as Gifted and were less likely to be given a non-Gifted identification. Students living with only one parent or within other living arrangements were less likely to be identified as Gifted and more likely to be given a non-Gifted identification. Students whose parents had university education were more likely to be identified as Gifted and less likely to be given a non-Gifted identification. These findings are similar to those found in our earlier analyses on student achievement (Brown & Sinay, 2008). Current literature also supports these findings. Brantlinger (2003) discusses the direct positive relationship between student's class and academic achievement. She also examines how hierarchies develop upon a highly meritocratic system which determines the allocation of resources and opportunities.

Non-Gifted Exceptionalities

Grade 7-10 students identified as having non-Gifted exceptionalities were more likely to self-identify as White or Black and were less likely to be from other key racial groups. They were also more likely to have parents without a university education and to live with only one parent

(although a majority lived with both parents). The patterns within specific exceptionalities demonstrated great variance. Students identified with Behavioural exceptionalities, however, consistently faced cumulative challenges: they were much more likely to be male, to be from lower income neighbourhoods; were more likely to be self-identified as White or Black, were less likely to live with both parents, and were less likely to have parents with a university education.

Students with IEPs

Demographic patterns of students placed on IEPs closely reflected the patterns of students with non-Gifted exceptionalities although there were some exceptions. For example, self-identified Black students were much more likely to have been placed on an IEP than be given a formal non-Gifted exceptionality through the IPRC process (Black students were overrepresented within both IEP and IPRC groups). Students who could not describe their parents` education were much more likely to have been placed on an IEP. The reasons for these differences are unclear and worth exploring in future research.

POST-SECONDARY PATHWAYS

Over the last four decades the pathways within Ontario's secondary panel have changed dramatically. Four decades ago, the majority of Toronto students started secondary school but never graduated. Now, most TDSB students not only complete secondary school but go on to pursue a post-secondary education. Approximately two thirds of graduating secondary school students will confirm an offer of admission from an Ontario post-secondary institution. We estimate that approximately three quarters will attend post-secondary at one point or another.

This improved rate of post-secondary access (consistent with the larger Canadian picture of increased post-secondary access across all provinces) does not appear to have transcended to students identified as having non-Gifted exceptionalities. Students identified as Gifted demonstrate a much higher degree of post-secondary access than students without Special Needs. Three quarters of students with Gifted identifications confirmed an offer of admission immediately after graduation. However, for most students identified with non-Gifted Special Needs, post-secondary access was not an option. Most students with non-Gifted exceptionalities graduated from high school, less than half applied to post-secondary, and approximately a third confirmed an offer of post-secondary admission. For the minority of students still in congregated (full-time) Special Needs classes, the proportion of post-secondary confirmations of admission was much smaller (around a fifth). Achievement patterns seen in

Grade 6, 9, and 10 Special Needs students also demonstrated little difference between students with formal non-Gifted identifications taught in regular classes and students solely placed on IEPs. Due to this limited difference, it is difficult to see the rationale of providing formal IPRC exceptionalities seeing as it appears to have little impact on student achievement.

Regarding post-secondary access, students formally identified as having Learning Disabilities (the largest group of exceptionalities) fared about the same as students placed on IEPs. Students identified as having a Mild Intellectual Disability had lower post-secondary access. Students identified as having Behavioural exceptionalities, an exceptionality closely tied to socio-economic challenge, had very low post-secondary access. Comparatively few students with a Behavioural identification graduated and, therefore, most were not eligible to apply to post-secondary education.

CONCLUSION

The current Special Education model used in Ontario was implemented in the 1980's following consultation in the 1970's and amendments to the Education Act in 1980. The system utilizes 12 exceptionalities recognized by an IPRC process. Every student formally identified with an exceptionality was to be provided with an Individual Education Plan (IEP). This Canadian process very much reflected American thinking on Special Education in the 1970's and indeed is similar to the American process today (although most countries outside North America follow quite different Special Education practices (OECD, 2003)).

While the implementation of the Special Education system reflected best North American practices of the time, the enormous changes in Ontario's education system have meant that TDSB's Special Education educators continuously face challenges to keep the system relevant. Implementing the IPRC process in the middle and higher elementary grades does not reflect the more recent philosophy of early interventions. Current educational research cautions that by the middle years of elementary school, changing 'at risk' status can be quite difficult (Alexander, Entwistle, & Kabbani, 2001). Moreover, the relative inactivity of the IPRC process in the secondary panel, while acceptable in the 1970's when most students did not finish high school, is less practical in today's excelling educational environment. There is an expectation of stability in the current IPRC system. Focusing on identification in the middle years of elementary school works best in a system where students will continue in the same schools in elementary and then progress into board secondary schools. Student mobility is has become a trademark of the TDSB, where a majority of students in Grade 12 started their education outside the board.

Furthermore, as the Auditor-General noted in his recent report, it is not clear why many students are identified with the exceptionalities that they are given. However, the presence of strong socio-economic factors and their close relation to specific exceptionalities may complicate impressions of student ability. Also, exceptionality categories are broad and often overlap yet they may not be expansive enough to capture the needs of all students. This may also be a partial explanation for the 10% of students who have been identified as having multiple exceptionalities. These students are more likely to have been Special Needs students for a longer period of time than students with only one exceptionality. Assuming there are difficulties finding an exact fit for all students within the current list of exceptionalities, it would make sense that the longer the student is under examination by Special Education, the more likely he (and it is mostly he) will be given a second exceptionality.

These challenges may be behind the fundamental importance of the implementation of IEP policies within the TDSB. Most students who are eventually identified through an IPRC process have been placed on a principal approved IEP long before the IPRC meeting. Half of TDSB's Special Needs population (and more than half of students identified as having non-Gifted exceptionalities) have IEPs but have never been formally identified through the IPRC process. Historically, the IEP was intended to support students who had already been formally identified, not as its own category. Also troubling is the lack of major achievement differences between students who have been officially identified with non-Gifted exceptionalities and students who have only been given an IEP. From an achievement and organizational standpoint, a review led by the Ministry of Education into the purpose and efficacy of the current IPRC process would be in order.

Finally, a number of issues around equity require further examination. Relationships between socio-economic variables and specific exceptionalities paint an interesting picture of who makes up the Special Education population. Two notable exceptionalities exemplify this undeniable relationship. Students identified as Gifted came from disproportionately higher income neighbourhoods, were more likely to be White or East Asian students, more likely to be living with both parents, and were more likely to have parents who had a university education. In contrast, students identified as having Behavioural exceptionalities were more likely to come from lower income neighborhoods, were more likely to be White or Black students, were less likely to come from two parent households, and less likely to have parents who had a university education.

In this review of Special Needs patterns in the TDSB, what should not be lost is the dedication of Special Education professionals and other educators working with Special Needs students. Studies consistently show how parents of Special Needs students appreciate the efforts of Special Education and other TDSB staff during and after the IPRC process (Larter, et al.,1986; O'Reilly, 2006). The challenge these professionals face is working within a Special Education system developed by leading edge thinking of decades past, but may not be as relevant with today's educational expectations.

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