## Secondary Success Indicators

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## Year 1 (Grade 9), Annua Gredit Accumulation

The SSI Fact Sheets incorporate secondary success indicator variables from Toronto District School Board's ( TDSB) School Information Systems (SIS). This Fact Sheet includes data from the TDSB's 2006 and 2011 Student Census: Grades 9 to 12*. The Census data informs us on students' demographic and family background characteristics such as students' sexual orientation, ethno-racial background, parents' place of birth, parental presence at home, parents' educational background, and family socio-economic status (SES). The TDSB's SIS provides students' demographic characteristics such as region of birth,
 language, gender, and student academic characteristics such as Program of Study. In this issue, the focus is on Year 1 students (Grade 9) who, by the end of Summer School 2012, had completed fewer than 8 credits, putting them at-risk of not graduating on time.

## Year 1 Students (Grade 9) - Who are they?

- Year 1 students (Grade 9) consists of 13-15 year old students who attended the TDSB over the full 2011-12 school year (September 2011 through June 2012) and who, according to student records, were new to secondary school studies. In 2011-12, there were 16,945 Year 1 (Grade 9) students. Not all students in Year 1 (Grade 9) wrote the 2011 Student Census. It should be noted from previous analysis, that students who participate in the TDSB Student Census are more likely to be higher achieving students than students who did not write the census.


## What is it?

- Grade 9 credit accumulation examines the proportion of Year 1 students (Grade 9) who, by the end of Summer School 2012, had completed fewer than 8 credits, putting them at-risk of not graduating on time and possibly dropping out of secondary school.

|  | Figure 1: Year 1 Students (Grade 9), Full Year Credit Accumulation (Including Summer School) (2006-07 to 2011-12) |  |
| :---: | :---: | :---: |
| 5 100\% |  |  |
| \% 60\% |  |  |
| 40\% |  |  |
| $\frac{8}{9} \quad 20 \%$ |  |  |
|  |  |  |
|  | Fewer than 8 credits | 8 Credits or more |
| - 2006-07 | 23\% | 77\% |
| - 2007-08 | 22\% | 78\% |
| - 2008-09 | 20\% | 80\% |
| - 2009-10 | 19\% | 82\% |
| - 2010-11 | 17\% | 83\% |
| - 2011-12 | 15\% | 85\% |

Figure 1: Year 1 Students (Grade 9), Full Year Credit Accumulation (Including Summer School) (2006-07 to 2011-12)

Achievement Outcomes

THE TREND: There has been a very gradual but consistent decline in the proportion of atrisk students who completed fewer than 8 credits by the end of Grade 9, from $23 \%$ in 2006-07 to $15 \%$ in 2011-12 (Figure 1).
*Note: For more details about the TDSB 2011-12 Student and Parent Census, please visit:www.tdsb.on.ca/census

## What is it?

- Year 1 students (Grade 9) are classified into Program of Study according to the majority of courses taken. For example, if the majority of the student's courses are in the Academic Program of Study, the student is classified as an "Academic" student. In 2011-12 Year 1 (Grade 9), 74\% of students took a majority of Academic courses, 21\% took Applied, while 3\% took Locally Developed (Essentials) courses.

THE TREND: Slightly less than two-thirds (65\%) of the students in Locally Developed (Essentials) courses and slightly more than one-third ( $36 \%$ ) of the students in Applied courses had completed fewer than 8 credits by the end of Year 1 (Grade 9), compared to $6 \%$ of students taking Academic courses (Figure 2). The proportion of at-risk Year 1 students (Grade 9) enrolled in Academic or Applied courses has declined slightly compared to 2006-07. The proportion of at-risk Year 1 students (Grade 9) enrolled in Locally Developed courses has increased between $56 \%$ to $65 \%$ over the last six years (Figure 3).

Figure 2: Year 1 Students (Grade 9), Credit Accumulation 2011-12
Academic, Applied, and Locally Developed (Essentials)


Achievement Outcomes
Figure 3: Year 1 Students (Grade 9), Achieving Fewer Than 8 Credits
(2006-07 to 2011-12)

Achievement Outcomes

## What is it?

- Students in the secondary school panel were asked about their sexual orientation in both TDSB Student Censuses. There were three main categories: heterosexual, LGBTQ (lesbian, gay, bisexual, transgendered, queer individuals/communities) / two-spirited, and unsure or questioning. Sexual orientation is derived from students who completed the TDSB's 2006 and 2011 Student Census*.
- Students' gender is derived from the SIS. Both gender and sexual orientation have been compared with Year 1 (Grade 9) at-risk information .

Figure 4: Year 1 (Grade 9) Female and Male Students With
Fewer Than 8 Credits (2006-07 and 2011-12)


THE TREND: Consistently, a gender gap has existed between male and female students' academic achievement. Male students are more likely to be at-risk than female students (i.e., completing fewer than 8 credits by the end of the school year) (23\% in 2006-07 and 19\% in 2011-12).

The gap between male and female students has remained the same over the years (i.e., $7 \%$ in 2006-07 and 7\% in 2011-12). However, the proportion of at-risk students has declined, both among male and female Year 1 (Grade 9) students (Figure 4).

Figure 5: Year 1 (Grade 9) Students with Fewer than 8 Credits \& Self-identified Sexual Orientation (2006-07 and 2011-12)


THE TREND: The group of students who identified themselves as LGTBQ have a higher percentage achieving fewer than 8 credits than those who self-identified as heterosexual ( $22 \%$ and $12 \%$ respectively). However, this is 7\% lower than those students who self-identified as LGTBQ on the TDSB's 2006 Student Census (Figure 5).

Furthermore, across all student sexual orientation groups the percentage of those achieving fewer than 8 credits decreased when comparing the 2006-07 and 2011-12 Student Census.
*Note: In the last (2006) Census, we found that the relationship of ESL/ELD was so strong with the Not sure/Questioning response (to the sexual orientation question) that it was apparent that many of the students who were filling out 'Not sure/ Questioning' most likely meant that they were not sure what the question was asking. However, when we looked at those who responded Not-sure-Questioning in the current (2011) Census, this was not the case.

## What is it?

- Students' ethno-racial background is derived from students who completed the TDSB's 2006 and 20112 Student Census. Students'first language and region of birth are derived from the SIS. All three variables have been compared with Year 1 (Grade 9) at-risk information .

THE TREND: In 2011-12, students who describe themselves as East Asian, South Asian, Southeast Asian, and White are less likely to be at-risk ( $5 \%, 8 \%, 9 \%$, and $13 \%$ respectively). Students describing themselves as Black or Latin are more likely to be at-risk ( $29 \%$ and $23 \%$ respectively). Across all ethno-racial groups, the percentage of students achieving fewer than 8 credits has decreased when comparing the TDSB's 2006 and 2011 Student Census.

Figure 6: Year 1 (Grade 9) Students With Fewer Than 8 Credits and Students' Ethno-racial Background (2006-07 and 2011-12)


Students' Ethno-racial Background

- 2006-07 2011-12


## THE TREND:

Students born in the English-speaking Caribbean and Region were more likely to be at-risk when comparing both the TDSB's 2006 and 2011 Student Census ( $47 \%$ and $38 \%$ respectively). Students born in East Asia were least likely to be at-risk in both years (12\% and

Table 1: Students with Fewer Than 8 Credits and Students' Region of Birth

| Region of Birth | 2006-07 | 2011-12 |
| :--- | :---: | :---: |
| Canada | $20 \%$ | $16 \%$ |
|  <br> Mexico | $28 \%$ | $24 \%$ |
| Eastern Africa | $36 \%$ | $24 \%$ |
| Eastern Asia | $12 \%$ | $7 \%$ |
| Eastern Europe | $15 \%$ | $27 \%$ |
| English-speaking Caribbean <br> and Region | $47 \%$ | $38 \%$ |
| South \& Western Europe | $17 \%$ | $12 \%$ |
| South Asia | $14 \%$ | $8 \%$ |
| Southeast Asia | $21 \%$ | $10 \%$ |
| US | $19 \%$ | $11 \%$ |
| Western Asia | $26 \%$ | $17 \%$ | 7\%). Eastern Europe was the only region of birth that had an increase in the percentage of at-risk students (when comparing 2006-07 and 2011-12).

$\Rightarrow$ Students speaking Somalian and Portuguese were the most likely to be at-risk (25\%) in 2011-12. Students speaking Chinese were the least likely to be at-risk (5\%) in 2011-12.

Table 2: Students with Fewer Than 8 Credits and Students' First Language

| First Language Spoken | $\mathbf{2 0 0 6} \mathbf{- 0 7}$ | $\mathbf{2 0 1 1 - 1 2}$ |
| :--- | :---: | :---: |
| Arabic | $22 \%$ | $18 \%$ |
| Bengali | $14 \%$ | $9 \%$ |
| Chinese | $11 \%$ | $5 \%$ |
| Dari | $*$ | $19 \%$ |
| English | $27 \%$ | $19 \%$ |
| French | $*$ | $14 \%$ |
| Greek | $*$ | $11 \%$ |
| Gujarati | $11 \%$ | $8 \%$ |
| Hindi | $*$ | $6 \%$ |
| Korean | $8 \%$ | $8 \%$ |
| Persian (Farsi) | $30 \%$ | $15 \%$ |
| Portuguese | $*$ | $25 \%$ |
| Punjabi | $16 \%$ | $13 \%$ |
| Russian | $39 \%$ | $10 \%$ |
| Somali | $40 \%$ | $25 \%$ |
| Spanish | $21 \%$ | $26 \%$ |
| Tagalog (Pilipino) | $12 \%$ | $9 \%$ |
| Tamil | $19 \%$ | $11 \%$ |
| Urdu | $14 \%$ | $14 \%$ |
| Vietnamese |  |  |

## * Numbers are to small to report

## What is it?

- Parental presence, parents' education, and parents' region of birth are all derived from students who completed the TDSB's 2006 and 2011 Student Census. All three variables have been compared with Year 1 students (Grade 9) at-risk information.


Figure 8: Year 1 (Grade 9) Students With Fewer Than 8 Credits and Parental Presence
(2006-07 and 2011-12)


Parental Presence

- 2006-07 2011-12

Figure 9: Year 1 (Grade 9) Students With Fewer Than 8 Credits and Parents' Education
(2006-07 and 2011-12)


Parents' Education

- 2006-07 2011-12

THE TREND: There is slight variation between students' Grade 9 credit accumulation and parents' region of birth. The group of students with parents born in Canada have the highest percentage of students achieving fewer than 8 credits. In 2011-12, the group of students with parents born in Canada and another country had the lowest percentage of at -risk students.

However, all regions have decreased in the percentage of at-risk students when comparing to 2006-07 (Figure 7).

THE TREND: The 2011-12 achievement shows major differences according to parental presence. While $10 \%$ of students living with both parents are at-risk, this rises to $23 \%$ of those living with mother only and $27 \%$ of those living with father only. This pattern is similar to achievement rates in 2006-07.

However, across all categories the percentage of at-risk students has decreased when comparing to 2006-07 (Figure 8).

THE TREND: The educational level of students' parents has been recognized as closely associated with student achievement. The group of students whose parents attended university had the lowest percentage of at-risk students in both the 2006-07 and 2011-12 school years. The group of students whose parents attended secondary school and responded "I don't know" had the highest percentage of at-risk students in both the 200607 and 2011-12 school years.

However, all categories have decreased since 2006-07 (Figure 9).

## What is it?

- Family income was approximated by using the average family income of the neighbourhood of student residence according to the 2006 Federal Census. All students in the TDSB were divided into 10 income groupings (deciles), from lowest to highest income ( 1 being lowest and 10 being highest). Parents' SES is derived from students who completed the TDSB's 2006 and 2011 Student Census.

Figure 10: Students With Fewer than 8 Credits With Respect to Family Income, (2006-07 and 2011-12)


THE TREND: Year 1 (Grade 9) at-risk status is strongly related to family income. The group of students in families identified as having the lowest income have the highest percentage of at-risk students (Figure 10).

This is the case for both census years (2006 and 2011); however, across all income groups in 201112 the percentage of at-risk students has decreased.

THE TREND: There is a strong relationship between family SES and Grade 9 student achievement. The proportion of at-risk Year 1 students (Grade 9) with Professional parents/caregivers is approximately four five times less than that of students with parents from Non-remunerative backgrounds ( $5 \%$ to $20 \%$ ) (Figure 11). Similarly to family income, across all socio-economic groups in 2011-12, the percentage of at-risk students has decreased.

Figure 11: Year 1 (Grade 9) Students With Fewer Than 8 Credits and Parents' Socio-economic Status (SES) (2006-07 and 2011-12)


## Why is this information important?

The more recent history of TDSB has found a gradual but important increase in most secondary school achievement. The proportion of highly 'at-risk' Grade 9 cohort students has incrementally declined over seven years. Previous analysis, as well as this Fact Sheet, finds that there are clear differences among groups of student demographic variables. The analysis of student demographic characteristics and family background in relation to their achievement is essential for policy decision making, educational improvement planning, and contextual stories of TDSB students. This analysis also provides evidence to evaluate the effectiveness of different types of educational programs and interventions within the TDSB.

