The Grade 9 Cohort of Fall 2000:

Graduation and Post-secondary Pathways

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Montreal, November 2009
1999: Survey of Approaches to Educational Planning--→ Preparing for PSE: New Roles for Governments and Families (2005), McGill Queens

2003: pan Canadian feasibility study in 3 provinces→ Academic Performance and Mobility of Youth of Immigrant Children in Canada: What can we learn from provincial data banks?( 2005)

2007: Funding by CCL and CIC for Pan-Canadian study--- →Educational Pathways and Academic Performance of Youth of Immigrant Origin: Montreal, Toronto and Vancouver

2008: Funding received from Higher Education Quality Council of Ontario & Social Science & Humanities Council of Canada to employ TDSB & linked administrative data to explore PSE pathways & engage in knowledge exchange with school board researchers
1. About the (TDSB)

- Created on January 1, 1998, following the amalgamation of 7 individual boards.
- Largest school board in Canada.
- 592 schools serving 270,000 students.
- Diverse student population in one of the world’s most diverse cities.
TDSB- Key Languages

Most Common Home/Primary Languages Other than English: Spring 2009
(System Level - Elementary and Secondary Schools)

- Chinese: 30,535
- Tamil: 14,395
- Urdu: 11,364
- Gujarati: 5,818
- Somali: 5,645
- Bengali: 5,501
- Spanish: 5,233
- Persian (Farsi): 4,981
- Punjabi: 4,509
- Vietnamese: 4,358
- Korean: 3,818
- Russian: 3,740
- Arabic: 3,650
- Tagalog (Pilipino): 2,965
- Hindi: 2,184
- Greek: 2,004
- Dari: 1,873
- Serbian: 1,727
- French: 1,589
TDSB Students Regions of Birth Fall, 2007

(Number of students born in each region in brackets)

Regions of Birth Fall 07
1. Canada (191085)
2. US (3211)
3. English-speaking Caribbean/region (3161)
4. Non-English speaking Caribbean (349)
5. Central & South America & Mexico (3450)
6. Central Africa (221)
7. Eastern Africa (2362)
8. Northern Africa (541)
9. Southern Africa (151)
10. Western Africa (821)
11. UK & Republic of Ireland (660)
12. South & Western Europe (2312)
13. Eastern Europe (5937)
14. Central Asia (548)
15. Eastern Asia (18302)
17. South Asia (20639)
18. Western Asia (8348)
19. Oceania (247)

Sources: Research and Information Services/Data Warehouse, TDSB; ESRI
Low Income Rates
(City of Toronto)

Before Tax Low Income Rates - All Persons
Selected Geographies, 2006

- Canada: 15.3%
- Ontario: 14.7%
- GTA: 17.7%
- Toronto: 24.5%
- RGTA: 12.2%
- Durham: 9.4%
- York: 12.7%
- Peel: 14.5%
- Halton: 8.5%
Family Income by Race, 2009
(2008 Parent Census, JK-Gr.6)

<table>
<thead>
<tr>
<th>Race</th>
<th>$100,000+</th>
<th>$75,000 - $99,999</th>
<th>$50,000 - $74,999</th>
<th>$30,000 - $49,999</th>
<th>Less than $30,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>52%</td>
<td>14%</td>
<td>15%</td>
<td>11%</td>
<td>9%</td>
</tr>
<tr>
<td>Mixed</td>
<td>30%</td>
<td>13%</td>
<td>19%</td>
<td>18%</td>
<td>20%</td>
</tr>
<tr>
<td>Southeast Asian</td>
<td>7%</td>
<td>10%</td>
<td>29%</td>
<td>27%</td>
<td>27%</td>
</tr>
<tr>
<td>East Asian</td>
<td>13%</td>
<td>12%</td>
<td>21%</td>
<td>26%</td>
<td>28%</td>
</tr>
<tr>
<td>South Asian</td>
<td>4%</td>
<td>7%</td>
<td>19%</td>
<td>34%</td>
<td>37%</td>
</tr>
<tr>
<td>Latin American</td>
<td>8%</td>
<td>7%</td>
<td>21%</td>
<td>26%</td>
<td>39%</td>
</tr>
<tr>
<td>Aboriginal</td>
<td>7%</td>
<td>8%</td>
<td>13%</td>
<td>31%</td>
<td>40%</td>
</tr>
<tr>
<td>Black</td>
<td>4%</td>
<td>6%</td>
<td>15%</td>
<td>30%</td>
<td>45%</td>
</tr>
<tr>
<td>Middle Eastern</td>
<td>4%</td>
<td>4%</td>
<td>13%</td>
<td>23%</td>
<td>55%</td>
</tr>
</tbody>
</table>
SSI - 17 Year Old Applicants to Ontario Post-secondary Institutions
Application Rate Over Time
(% Who Applied)
by Gender

<table>
<thead>
<tr>
<th>Year</th>
<th>Females</th>
<th>Males</th>
<th>TDSB</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-05</td>
<td>55</td>
<td>43</td>
<td>48</td>
</tr>
<tr>
<td>2005-06</td>
<td>59</td>
<td>45</td>
<td>52</td>
</tr>
<tr>
<td>2006-07</td>
<td>59</td>
<td>46</td>
<td>53</td>
</tr>
<tr>
<td>2007-08</td>
<td>61</td>
<td>46</td>
<td>53</td>
</tr>
</tbody>
</table>
Grade 9 Credit Accumulation by SES

2006-07 Grade 9 Credit Accumulation (% Highly At-risk with 6 or fewer credits)

- No income: 20%
- Unskilled clerical: 16%
- Skilled clerical: 11%
- Semi-professional: 8%
- Professional: 4%
Before Tax Low Income Rates - All Persons
Selected Geographies, 2006

Source: City of Toronto
II. What do we mean by the Grade 9 cohort?

- **Cohort rates**, looking at how one group of students did over a period of time.

- In Ontario, this has traditionally looked at how Grade 9 students have fared over a five year period, from when they started their first year of high school in Grade 9 until after they finished their fifth year.
Why Do Cohort Studies?

- Only way to provide the full (or at least fuller) picture of long-term student progress.
- Both at-risk and resilient students take longer to complete high school.
- ‘Dropout’ status changes from year to year; the longer the study the more definitive the outcome.
Most students had either graduated or dropped out by Fall 2007 (end of Year 6/beginning of Year 7):

- 54.5% graduated in 2003-4 (Year 4)
- 14.2% graduated in 2004-5 (Year 5)
- 3.0% graduated in 2005-6 (Year 6)
- by the end of Year 6, 26.1% had dropped out
- by the end of Year 6, 2.3% were still in the TDSB in the Year 7 of secondary.
IV. Post-secondary Access: This Grade 9 Cohort of Fall 2000

Students 1) Apply to post-secondary; they 2) confirm an offer of admission and 3) register (attend) the institution.

We looked at five years of postsecondary applications and confirmations (registration data available only in 2004):

- 2003-4 (Year 4 of this cohort; known by universities and colleges as the 2004 applications cycle)
- 2004-5 (Year 5)
- 2005-6 (Year 6)
- 2006-7 (Year 7)
- 2007-8 (Year 8 if this cohort; the 2008 applications cycle)
The Direct Transition

- Students will apply to post-secondary directly from high school, or within a year or two of graduation. These students are the 'direct transition'.

- Students will apply as adult students in the 'indirect transition'.

- The boundaries between the two are fluid.

- We will be looking at the direct transition, according to student records.
Almost all students who graduated (87%) then applied to post-secondary, over a period of 5 years. The proportion has increased amongst more recent cohorts.

Thus, ‘graduation’ and ‘post-secondary access’ are merging.

Over three quarters of University confirmations happened in 2004, the first year of Grade 12; a fifth happened in 2005.

However, little over a third (38%) of College confirmations happened 2004, the first year of Grade 12.

The majority of College confirmations occurred in 2005 (50%) and 2006 (9%).
Year the Cohort Students Applied to University or College

- **Confirmed university**: 78%
- **Confirmed college**: 50%
- **Graduate-no confirmations**: 58%
- **Dropout**: 100%

Colors and data points represent the years:
- No year
- 2004
- 2005
- 2006
- 2007
We put the 5 years of confirmations data, and the six year cohort study, together in a variable that combines outcomes from when the students started in Grade 9 in Fall 2000, until the final year of applications in the 'direct transition' in 2007-8:

- 43.1% confirmed an offer of acceptance from university;
- 13.9% confirmed an offer of acceptance from college;
- 17.3% applied to post-secondary but did not confirm any offer; or graduated, but did not apply to post-secondary;
- 24.0% dropped out, and did not apply to post-secondary.
Post-secondary Pathways

A Few Key Points:

- Speaking English and being born in and out of Canada in themselves are not especially important (similar to what we found in the earlier study) although the lower-achieving categories are a bit more likely to be born in Canada and speaking English only.

- The two extremes are confirmation to university on one side, and dropout on the other.

- The key differences are gender, streaming, Grade 9 performance, and SES.
Post-secondary Pathways: Gender Differences

- Confirmed University: 50% Male, 38% Female
- Confirmed College: 14% Male, 14% Female
- Graduated but did not confirm: 19% Male, 16% Female
- Dropped out: 28% Male, 20% Female

Proportion of students
Post-secondary Pathways: Moving Schools

- Confirmed University: 49%
- Confirmed College: 15%
- Graduated but did not confirm: 17%
- Dropped out: 21%

Red bars represent those who did not move; light blue bars represent those who moved schools.
Post-secondary Pathways: Low Credit Accumulation in Grade 9

<table>
<thead>
<tr>
<th>Status</th>
<th>Low Credits</th>
<th>Normal Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confirmed University</td>
<td>4%</td>
<td>54%</td>
</tr>
<tr>
<td>Confirmed College</td>
<td>8%</td>
<td>16%</td>
</tr>
<tr>
<td>Graduated but did not confirm</td>
<td>16%</td>
<td>18%</td>
</tr>
<tr>
<td>Dropped out</td>
<td>72%</td>
<td>13%</td>
</tr>
</tbody>
</table>
Post-secondary Pathways: Low and High Math Achievement in Grade 9

- Confirmed University: 81%
- Confirmed College: 10%
- Graduated but did not confirm: 17%
- Dropped out: 67%
Post-secondary Pathways: taking Applied and Academic Courses in Grades 9-10

<table>
<thead>
<tr>
<th>Proportion of students</th>
<th>Applied</th>
<th>Academic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confirmed University</td>
<td>3%</td>
<td>60%</td>
</tr>
<tr>
<td>Confirmed College</td>
<td>20%</td>
<td>13%</td>
</tr>
<tr>
<td>Graduated but did not confirm</td>
<td>30%</td>
<td>15%</td>
</tr>
<tr>
<td>Dropped out</td>
<td>47%</td>
<td>12%</td>
</tr>
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</table>