



# LESSONS IN LEARNING

Understanding the academic trajectories of ESL students

October 2, 2008

Canada depends on a steady flow of immigrants to maintain a viable workforce within an aging population. Without immigration, Canada's dependency ratio—the number of employed versus non-employed individuals—would grow dangerously unbalanced.

In recent years, most immigrants have come from countries where the spoken language is not English or French and settled largely in Toronto, Montreal and Greater Vancouver.<sup>1</sup> As a result, many urban schools are composed predominantly or significantly of students for whom the language of instruction is not one that they speak at home. Over 50% of the Toronto District School Board population has a mother tongue other than English;<sup>2</sup> this figure is about 37% in Greater Vancouver districts;<sup>3</sup> and about 34% in Montreal.<sup>4</sup>

Given the role of school as a major mediator of life opportunities and Canada's particular commitment to equality and multiculturalism, it is important to ensure that these English-as-a-second-language (ESL) students have the necessary support to succeed in Canadian schools. However, until recently, relatively little was known about the academic trajectories of these students. New research has revealed wide variations in outcomes among sub-groups of ESL students.<sup>5,6</sup>

Research recently undertaken in British Columbia has highlighted the need to look beneath labels like "ESL" and "immigrant students" to observe wide variation in the outcomes of students subsumed by these labels.<sup>7,8</sup> Further studies underway in Vancouver,<sup>9</sup> Toronto<sup>10</sup> and Montreal<sup>11</sup> appear to echo these findings.

#### French-as-a-second-language students

The data currently available on second-language students in the classroom focus entirely on students learning English as a second language. Research in progress in Montreal will soon provide data on immigrant students learning French as a second language.

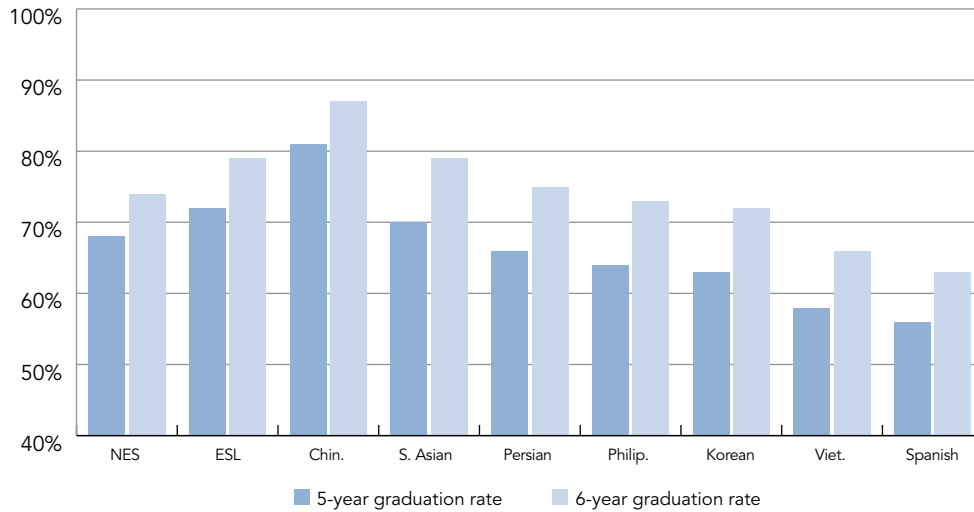
## Graduation rates among sub-groups of ESL students

A recent study of British Columbia's 1997 Grade 8 cohort revealed wide variations in the graduation rates of different sub-groups of ESL students. The British Columbia Ministry of Education reports that ESL graduation rates are higher than among native English speakers. However, more nuanced analyses indicate that very high graduation rates within the large population of Chinese speakers masks substantially lower graduation rates among other language groups (see Figure 1). Graduation rates among Chinese-speaking populations are substantially higher than among native English speakers and higher than any of the other language groups. In contrast, graduation rates among Spanish- and Vietnamese-speaking populations are significantly lower than among other ESL students.

Two different graduation rates are calculated. The five-year graduation rate is based on the proportion of the Grade 8 cohort that graduates within five years of entering Grade 8. Similarly, the six-year rate is based on the proportion that graduates within six years.

**Figure 1:**

Five- and six-year graduation rates in B.C.'s 1997 Grade 8 cohort for native English speakers (NES) and sub-groups of ESL students.

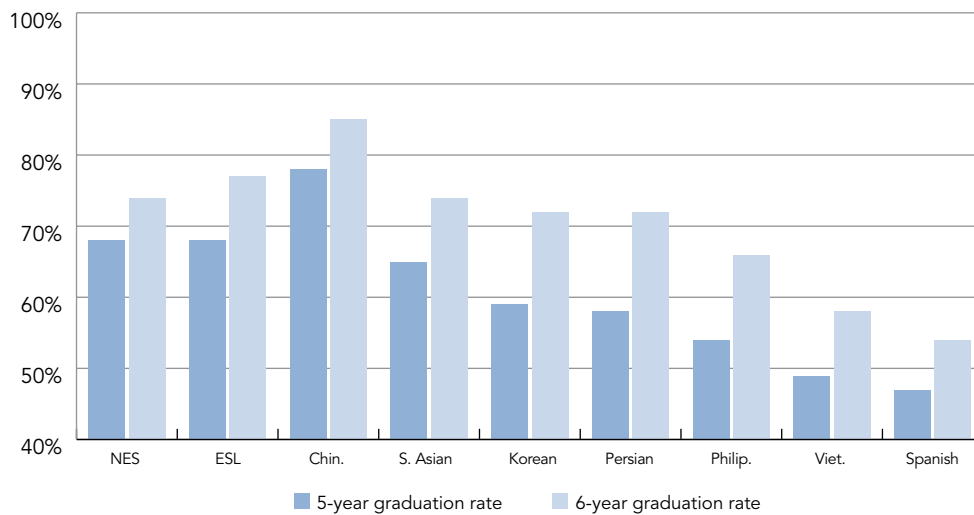


Source: Garnett, 2008

These differences are even greater among “beginner ESL students,” students of low English proficiency requiring two or more years of ESL education between Grade 8 and Grade 12 (see Figure 2).

**Figure 2:**

Five- and six-year graduation rates in B.C.'s 1997 Grade 8 cohort for native English speakers (NES) and sub-groups of beginner ESL students



Source: Garnett, 2008

Comparing the graduation rates of all ESL students with those of beginner ESL students reveals that, while Chinese students' six-year graduation rates drop only 2% at the 'beginner ESL' level, the already low six-year rates of Vietnamese- and Spanish-speaking students fall by eight and nine percentage points.

Language groups already at greater risk of non-graduation suffer a disproportionately greater risk of non-graduation when other factors of vulnerability are added. In addition to English proficiency, factors such as socio-economic status and gender have similar effects. For example, boys are generally less likely to graduate than girls, but Vietnamese- and Spanish-speaking boys are much less likely to graduate than their female counterparts.

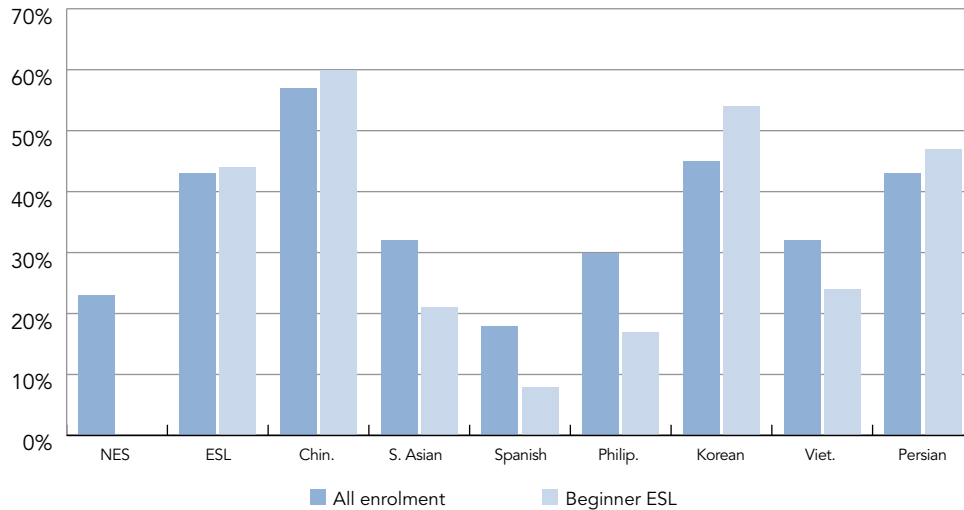
### Participation in academic courses

ESL students from most language groups participate in academic courses, particularly mathematics and sciences, at higher rates than native English speakers (see Figure 3).

All language groups except Spanish speakers enrolled in university track Mathematics 12 more frequently than native English speakers. Participation rates are more than twice as high among Chinese, Korean and Persian speakers as among native English speakers. Among these same three groups, beginner ESL students are even more likely than their more English-proficient counterparts to enrol in Math 12. In contrast, among language groups in which participation rates are already low (e.g., Spanish and Philippino-language speaking), participation rates among beginner ESL students are especially low. Similar patterns of participation can be observed for university track Physics 12 and Chemistry 12.

"Academic" courses such as mathematics, the physical sciences, language arts and social studies are necessary for university entrance. Although there are many alternate paths to graduation and the labour market, a university degree continues to facilitate upward socio-economic mobility. Therefore, the examination of academic coursework is an important component of any analysis of equality of opportunity among social groups.

**Figure 3:**  
Enrolment in Mathematics 12 among B.C.'s 1997 Grade 8 cohort for native English speakers and sub-groups of ESL students

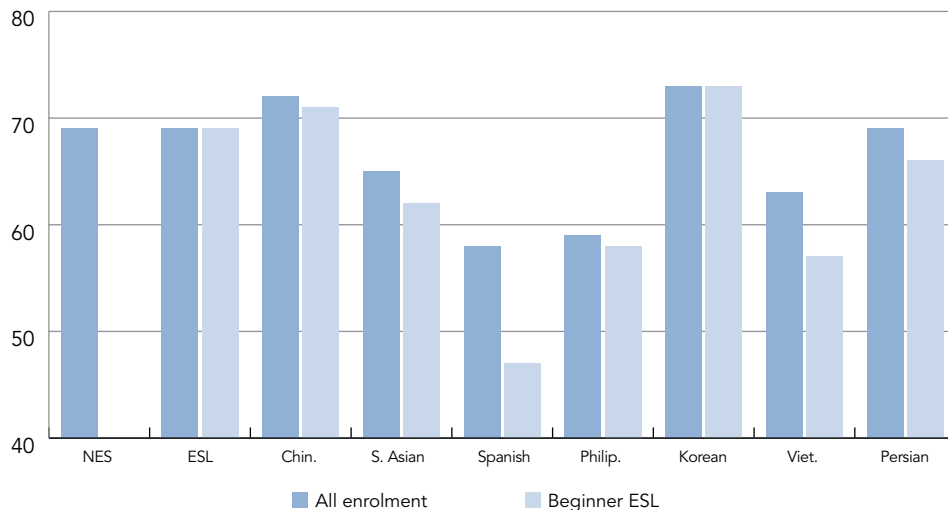


Source: Garnett, 2008

### Achievement in academic courses

As with graduation and participation rates, achievement levels show wide variation across language groups. In Math 12, Chinese and Korean speakers achieved higher grades than native English speakers (see Figure 4). Other groups, particularly Spanish, Philippino-language and beginner ESL-Vietnamese speakers fell substantially below the native English-speaker baseline. This pattern among language groups was consistent in Physics 12 and Chemistry 12.

**Figure 4:**  
Mathematics 12 performance among B.C.'s 1997 Grade 8 cohort for native English speakers and sub-groups of ESL students



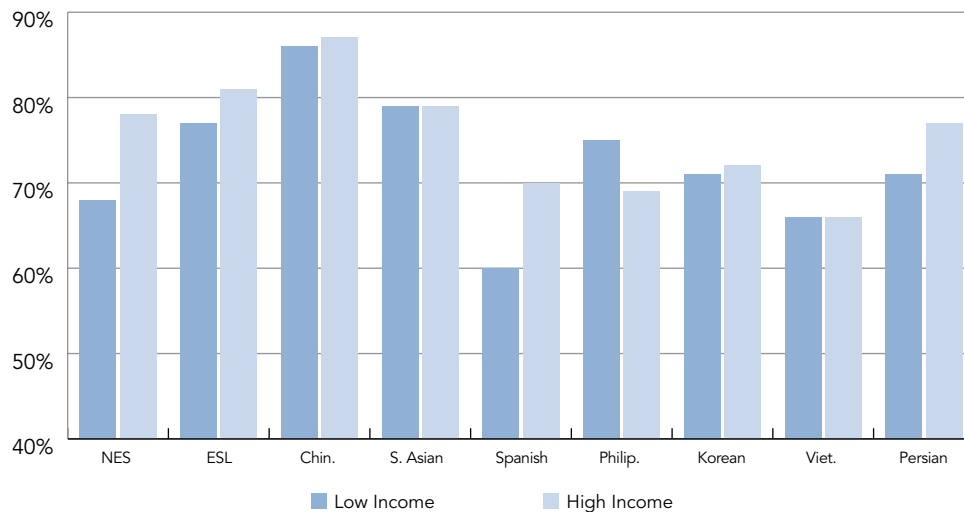
Source: Garnett, 2008

## The role of socio-economic status

Other researchers report similar patterns of strong performance among Chinese speakers and weak performance among other groups, particularly Spanish and Vietnamese speakers.<sup>12</sup> Some of this variation has been attributed to differences in socio-economic status. For example, in some studies many of the Chinese speakers come from high-income families, while many Spanish speakers are refugees. In other studies, the results suggest that socio-economic status ameliorates but does not eliminate language-group effects. In the B.C. data, income has negligible effects on graduation rates, except among Spanish speakers (see Figure 5).

**Figure 5:**

Six-year graduation rates among language groups by estimated family income among B.C.'s 1997 Grade 8 cohort for native English speakers and sub-groups of ESL students

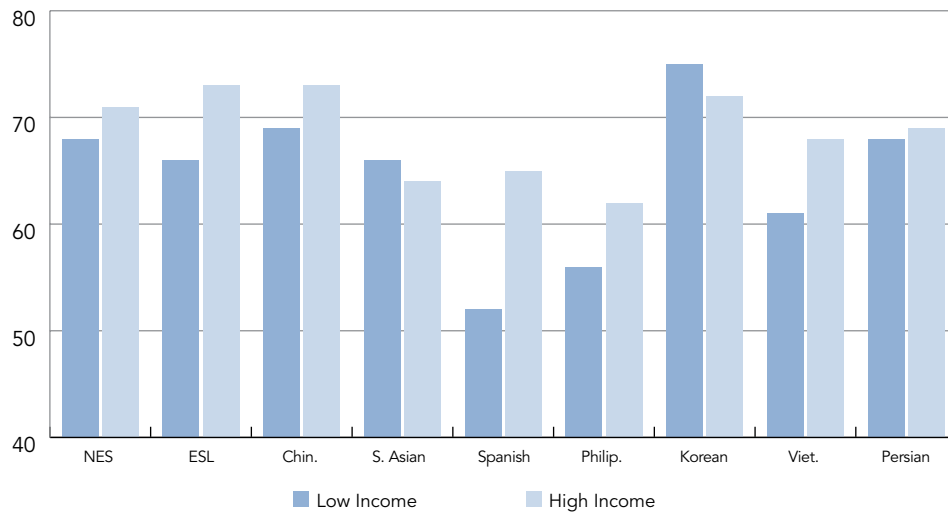


Source: Garnett, 2008

Effects in Mathematics 12 are stronger, but the pattern of high achievement among the Chinese and Korean speakers and lower achievement among Spanish-, Vietnamese- and Philippino-language speakers remains at both high- and low-income levels (see Figure 6).

**Figure 6:**

Mathematics 12 mean scores by estimated family income among B.C.'s 1997 Grade 8 cohort for native-English speakers and sub-groups of ESL students



Source: Garnett, 2008

While high income has a clear positive effect on the Spanish-, Vietnamese- and Philippino-language speakers, their high-income scores still do not match the low-income scores of the Korean or Chinese speakers.

Overall, the B.C. cohort study indicates that many ESL students do exceptionally well in Canadian schools. However, some sub-groups are clearly struggling. These results are mirrored by similar findings in ongoing work in Toronto<sup>13</sup> and Montreal.<sup>14</sup>

### Lessons in Learning: Supporting successful academic trajectories among struggling ESL students

The results of research on ESL students in B.C. as well as in Toronto and Montreal carry a number of implications. The first is the need to disaggregate data for decision-making. To discuss the outcomes of 'ESL' as an aggregated group masks the wide variation among language groups subsumed by these labels. In B.C., the large population of high-achieving Chinese speakers pulls aggregate ESL averages higher than scores among native English speakers in measures of graduation and academic performance, thereby hiding the vulnerability of low-achieving groups.

Second, the finite resources available to support ESL students should be directed toward identifiable groups most in need. Boards and schools can determine, through their own data collection, how their resources (both time and money) could most effectively reduce inequalities. In many cases, extra funding is generated through headcounts of ESL students, and boards must prove additional services are provided to each student counted. The data from B.C. reveal identifiable groups of students in disproportionate need of the support these additional services can provide. Other students, whose outcomes surpass those of native English speakers, may not need nor want such services.

Third, support of second-language acquisition might be coupled with content-area support. The high performance of some language groups, particularly in mathematics and the sciences, probably owes partially to prior schooling in their home countries. For example, Chinese scores dropped minimally in these subjects even when these students were at lower levels of English proficiency. Students from countries with less rigorous education systems do not bring these advantages with them into their Canadian classrooms, and their low-English proficiency amplifies the disadvantage. Content-area support, as well as second-language training, is required to overcome these disadvantages.<sup>15,16,17</sup>

Fourth, teachers may require better and more systematic professional development to meet the needs of students for whom English is not a first language. Pre-service teachers planning to teach in urban areas characterized by high levels of immigration may also require more extensive coursework in appropriate pedagogical techniques. Administrators may also need to consider the policies, programs and procedures that encourage immigrant-student success.

Finally, a greater degree of equity among ESL and native-English-speaking students can be achieved by simply allowing ESL students ample time to graduate. The five-year graduation rate for beginner ESL Koreans and Persians are nine and 10 percentage points below native-English-speaker five-year rates. However, their six-year rates are only two percentage points below the native-English-speaker rates. The six-year gap in graduation rates is narrower than the five-year gap for all language groups except the high-achieving Chinese. Extra time in school is an important equity policy; it raises the bar for, and narrows the gap among, all groups.

Because of its centrality to every aspect of school, ensuring that all students become language proficient should be—and technically is—a priority for schools and school boards. In addressing this important educational dimension, schooling helps to enhance the contribution that immigrants and their children are able to make to Canada and will benefit the students, their families and the wider community.



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