Project Summary and Methodology

There are about 1,800 elementary and junior high schools in Alberta. Can we determine which do the best job of educating students? Yes – but not through the measurement methods that have been prevalent until recently.

Each year, Alberta students in Grades 3, 6 and 9 write the Provincial Achievement Test in various subjects administered by Alberta Education. If a student scores at a level called the ‘standard of excellence’ in these assessments, that student's performance is classified as successful. The percentages of students that achieve the standard of excellence in each subject and grade at a given school are published annually. It is on that basis that schools have generally been evaluated.

In reality, however, a school cannot be considered a success just because a high percentage of students score well on achievement tests, nor can schools be meaningfully ranked on this basis. Under such a system, schools that draw students from neighbourhoods with the highest incomes and best-educated parents will likely have the highest success rates since these factors have been shown to correlate strongly with student performance.

But not all variation in school results can be traced to variation in the social and economic characteristics of the communities where they are located. By linking student postal codes to census data on education, income, employment, housing status and other variables, I have constructed profiles of the Alberta communities from which elementary school students are drawn. I found that only 40 to 47 per cent of the variation in school success rates, depending on whether testing results from grade 3, 6 or 9 are examined, can be ascribed to socio-economic factors.

By focusing on the statistical variation that remains after the influence of socio-economic variables has been accounted for, I have been able to create meaningful performance indicators for almost 1,200 elementary and junior high schools in Alberta, including public, private, charter and independent schools. Only schools where we have results from at least 45 students over a three-year period are evaluated so as to have enough data to compare schools fairly.

Schools are graded using a percentile measure in Grade 3, Grade 6, and Grade 6. The number 90, for instance, indicates that a school's results for that grade are better than the results at 90 per cent of schools with similar socio-economic profiles. This comparison is fair to teachers and principals because it is performed after separating out the effects of the school's student pool. If a school has rated in the 50th percentile, it is performing as expected when compared to others with similar
neighbourhood characteristics. A parent with children at a low percentile school should expect better results. School administrators should be very interested in what is happening at a school with either very low (20 or less) or very high (80 or more) percentile scores.

**Other Education Series Papers:**

- **May 2009** Moussaly-Sergieh, Karim and François Vaillancourt. *Extra Earning Power: The Financial Returns to University Education in Canada*
- **March 2009** Johnson, David. *Collateral Damage: The Impact of Work Stoppages on Student Performance in Ontario*, ebrief.
- **February 2007** Finnie, Ross and Alex Usher. *Room at the Top: Strategies for Increasing the Number of Graduate Students in Canada*, C.D. Howe Institute Commentary 245.

Researchers interested in obtaining this database in a useable electronic format to carry out their own research should contact the C.D. Howe Institute at cdhowe@cdhowe.org with a short description of their research project.