



Labour Market Matters

Special points of interest:

- Study finds that students who go to school with peers who achieve high grades, will tend to score higher grades themselves.
- Students of minority backgrounds found to achieve better educational results with instructors of similar racial or ethnic backgrounds

“[A] 10 point increase in the average peer test score can increase an individual student’s test score by 5 points in French...6.5 points in History and 8.3 points in Math”



While classmate test scores were found to positively impact individual student achievement, peer socioeconomic background was found to have little impact on educational attainment.
Image: [Carlos Porto](#)

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Your classmates can have a significant effect on how well you do in school, study finds

Every year, thousands of parents across Canada strive to put their children in the best schools, paying up to \$20,000 a year for tuition fees for their children to attend some of the best private institutions. The rationale behind these often expensive educational choices is not only to provide children with superior educational opportunities, but often equally important is the exposure to the best peer environment; as there is the belief that students would have the best chance of educational success by being exposed to the best peers as well as the best teachers. Can who a child goes to school with actually affect educational outcomes? A study by CLSRN affiliates Vincent Boucher (Université de Montreal), Yann Bramoullé (Université Laval), Habiba Djebbari (Université Laval) and Bernard Fortin (Université Laval) entitled, **“Do Peers Affect Student Achievement? Evidence from Canada Using Group Size Variation”** ([CLSRN Working Paper no. 56](#)), finds empirical evidence that school peers can indeed affect individual student achievement. Which means that an investment into improving the peer environment that a student is educated in can indeed improve his or her chances of educational success.

Using administrative data on academic achievement from a large sample of secondary schools in the province of

Quebec obtained from the Ministry of Education, Recreation and Sports (MERS). The researchers analyzed 194,533 individual test scores for 116,534 students on four standardized tests taken in June 2005 (Math, Sciences, French and History) by fourth and fifth year secondary school students. All 4th and 5th year students in the province must pass these tests to graduate. One advantage of these data is that all candidates in the province take the same exams, no matter their school and location.

The researchers found evidence that students benefit from their peers’ higher test scores. The analysis indicates that a 10 point increase in the average peer test score can increase an individual student’s test score by 5 points in French (for groups including only students whose language of instruction is the same as the mother Tongue), 6.5 points in History and 8.3 points in Math. The fact that the peer effect is the largest in Math may reflect that this matter provides more opportunities for interactions among students.

The study also found that test scores are significantly higher for female students than for male students, except for History where male students perform significantly better than female students. The performance of foreign students in French was significantly lower than for non-foreign students on the French test, but higher for Science and History and not significantly different for Math. Secondary 5



Empirical evidence indicates that classmates can impact individual student educational achievement.
Image: [Savit Keawtavee](#)

students tend to perform significantly better on all tests than Secondary 4 students, which reflects the positive impact of an additional year of schooling on test scores. Finally, students from a higher socioeconomic category perform significantly better in all tests.

Average age of other students was found to have a negative and significant effect on all test scores except Math. The results are consistent, for instance, with situations where students work together and may pick up work habits of others. Thus, if older students exert less effort, being in a group with a higher proportion of older students may lead to work less, and this may have a depressing effect on grades independent of the other peer effects. Peer’s socioeconomic background, as opposed to peer test scores, was found to have little effect on individual schooling performance.

College Instructor Race and Ethnicity found to have significant effect on educational attainment of minority students

In the United States, traditional minority groups such as: African-American, Latino and Native-American students persistently have lower test scores, grades, high school completion rates, college attendance rates, and college graduation rates than non-minority students. In particular, less than one-fifth of African-Americans and less than one-eighth of Latinos who are between 25 and 29 years old have a college degree. The levels of college completion for Non-Latino Whites are two to three times higher. Large disparities in educational attainment between minority and non-minority groups can have problematic implications for income and wealth inequality across racial and ethnic groups given the large returns to college education.

A paper by CLSRN affiliates Robert W. Fairlie (University of California Santa Cruz), Florian Hoffmann (University of British Columbia) and Philip Oreopoulos (University of Toronto) entitled **“A Community College Instructor Like Me: Race and**



Florian Hoffmann (University of British Columbia)

“Ethnicity Interactions in the Classroom” (CLSRN Working Paper no. 84) examines whether College instructor race and ethnicity can affect educational outcomes for minority students.

Using a new administrative dataset with detailed demographic information on instructors and students from De Anza College – one of the largest and most ethnically diverse community colleges in the United States, this study is the first to test whether the race or ethnicity of instructors influence the academic achievement of students at the college level.

“Blacks, Hispanics, Asians, and Native Americans are 2.9 percentage points more likely to pass courses with instructors of similar background and 2.8 percentage points more likely to pass courses with racially or ethnically related instructors.”

The study finds that Blacks, Hispanics, Asians, and Native Americans are 2.9 percentage points more likely to pass courses with instructors of similar background and 2.8 percentage points more likely to pass courses with



Philip Oreopoulos (University of Toronto)

racially or ethnically related instructors. The effects are particularly large for Blacks. The class dropout rate relative to Whites is 6 percentage points lower for Black students when taught by a Black instructor. Conditional on completing the course, the relative fraction attaining a B average or greater is 13 percentage points higher.

The results suggest that the academic achievement gap between White and underrepresented minority college students would decrease by hiring more minority instructors. However, the desirability of this policy is complicated by the finding that students appear to react positively when matched to instructors of a similar race or ethnicity but negatively when not. Hiring more instructors of one type may also lead to greater student sorting and changes to classroom composition, which may also impact academic achievement.

The researchers conclude that these results likely occur from

students reacting to teachers rather than the other way around for two main reasons. Firstly, the study observes the dropout effects from instructor race and ethnicity prior to receiving grades. Secondly, is the fact that it is the young students who are most affected by the instructor’s minority status while there were no significant effects for older students. If results were driven by instructors discriminating against certain student groups, one would expect minority effects not to vary across age groups.

The effects of minority faculty on minority students may be larger because of the sizeable racial achievement gap and similarities in culture, language and economic backgrounds. By sharing these characteristics, minority instructors may be able to better communicate subject matter in their courses, provide one-on-one help, and advise minority students.

Community colleges enroll more than half of all minority students attending public universities and nearly half of all students attending public universities. Since community colleges, in addition to providing workforce training, serve as an important gateway to 4-year colleges, they can be seen as a crucial part of the post-secondary educational system in the United States. Policy interventions targeting community colleges are therefore likely to have major effects on the educational system as a whole.

Endnotes

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