

Intelligence MEMOS



From: David R. Johnson

To: Ontarians concerned about proposed changes in high schools

Date: May 17, 2019

Re: **RESOURCES AND OUTCOMES AT ONTARIO SECONDARY SCHOOLS: 2005-06 TO 2017-18**

The Ontario government proposes a reduction in resources, and an increase in the number of students per teacher, at secondary schools. There are three lessons to be drawn from the recent history of outcomes and resources at those schools. First, the bulk of the increase in teaching resources at secondary schools only happened two years ago. Second, the link between outcomes and increased resources is not clear. And finally, the most recent increase in teaching resources helps put into perspective the proposed reduction in teaching resources.

One measurement of outcome is the percentage of students passing the Grade 10 literacy assessment on the first attempt. It declines from 84 percent to 81 percent over the period studied.

The other outcome measure is the five-year graduation rate from Ontario high schools, telling us the percentage of students entering a Grade 9 cohort that graduates with a high school diploma within five years. The graduation rate is 73 percent in 2005-06; peaks in 2015-16 at 86.5 percent and declines slightly to 86.3 percent in 2016-17, the most recent year available. The graduation rate increase took place over a long period where resources provided to the secondary school system varied by small amounts until the last two years.

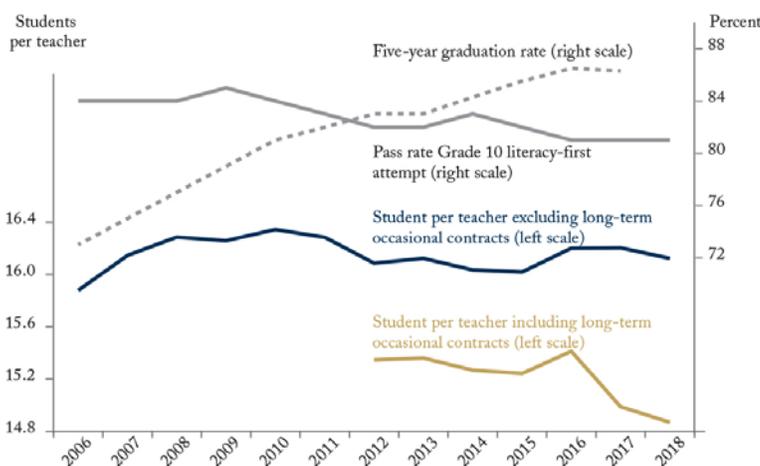
There are two measures of the ratio of students to teachers. One measure, available for the entire period, is the ratio of students to teachers excluding teachers on long-term occasional contracts (LTOs). This number peaks in 2009-10 at 16.34 students per teacher and declines to 16.12 students per teacher in 2017-18. The lowest values (the most resources) are 2006-07 (15.87) and then again in 2015-16 (16.01). The other resource measure, available only after 2011-12, is the ratio of students to all teachers, including LTOs. The ratio of students to all teachers lies between 15.24 and 15.41 in the five years ending in 2015-16. It then drops sharply to 14.98 in 2016-17 and 14.86 in 2017-18 as the numbers of occasional contracts surged. Had the system operated with the same ratio of students to all teachers in 2017-18 as in 2015-16, there would have been 1,491 fewer teachers in 2017-18 (including LTOs).

But those additional resources are not associated with better results. Literacy test results fall consistently over the period as resources both rise and fall. Five-year averages of student-teacher ratios, looking back, capture the resources experienced by each cohort of graduating students. Graduation rates level off exactly when system resources devoted to the matching cohort increase. Graduation rates increase both when cohort resources increase and when cohort resources decline, in either case by small amounts.

The conclusions from this analysis seem clear. There is no simple relationship between better outcomes and more resources. It would be very helpful for the government to provide data on the number of LTOs prior to 2011-12 to clarify changes in system resources over the full period. Finally, outcome levels were either higher or the same in 2015-16 as in the last two years including 2017-18. Had secondary schools had the same teaching resources per student in 2017-18 as in 2015-16; schools would have had 1,491 fewer teachers with, presumably, very similar outcomes.

This suggests that the 1,491 additional teachers in 2017-18 did not improve measured outcomes and that removing 1,491 teachers would move schools back to the outcomes, class sizes and course offerings available in 2015-16, not some far off point in the dark ages of secondary education in Ontario.

Students per Teacher and Outcomes 2005-06 to 2017-18



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The views expressed here are those of the author. The C.D. Howe Institute does not take corporate positions on policy matters.

Sources: Education Facts from the Ontario Ministry of Education, provides measures of enrolments and numbers of teachers in all publicly supported secondary schools. Grade 10 scores are from the EQAO and the five-year graduation rate is from the ministry website.