



# Canadian Labour Market and Skills Researcher Network

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**How Would One Extra Year of High School  
Affect Wages? Evidence from a Unique Policy  
Change**

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# How Would One Extra Year of High School Affect Wages? Evidence from a Unique Policy Change

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## Abstract

This paper uses a unique policy change in Canada's most populous province, Ontario, to provide direct evidence on the effect of reducing the length of high school on labour market outcomes for high school graduates. In 1999, the Ontario government eliminated the fifth year of education from its high schools, and mandated a new four-year program. This policy change created two cohorts of students who graduated from high school together with different amounts of education, thus making it possible to identify the effect of one extra year of high school education on earnings. Using restricted survey data, the results demonstrate that students who receive one less year of high school education receive wages that are approximately ten percent lower than their counterparts one year after graduation, and these effects persist two years after graduation. Using birth year to instrument for educational attainment produces estimates that are even higher than the cross-sectional findings, but quite consistent with the existing literature on the return to education. These results are a significant contribution to the literature on the return to education because unlike prior changes to the educational system, this change in schooling laws results in two cohorts entering the labour market simultaneously. As such, business cycle effects do not confound the results.

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## **Executive Summary**

This paper uses a unique policy change in Canada's most populous province, Ontario, to provide direct evidence on the effect of reducing the length of high school on labour market outcomes for high school graduates. The key change to the Ontario high school system was enacted in 1999 by the provincial government. Prior to this time, students could graduate high school by completing 30 credits: taking eight credits per year for the first three years and then six Ontario Academic Credits (OACs) in grade twelve, a student could, if he or she chose, complete their high school degree in four years. However, the majority of high school students chose to complete their degrees in five years and take more than 30 credits, since a four-year program typically did not allow the student enough time to take all of the courses he or she would like.

But the change enacted by the government instituted a standard four-year, 30-credit program for all students, which essentially forced all students to graduate high school within this time. This policy change created two cohorts of students who graduated from high school together with different amounts of education, thus making it possible to identify the effect of one extra year of high school education on earnings. Using restricted survey data, the results demonstrate that students who receive one less year of high school education receive wages that are approximately ten percent lower than their counterparts one year after graduation, and these effects persist two years after graduation for less-able workers from these cohorts. The findings are generally consistent with the existing literature on the effect of education on earnings, and the results are also reasonably robust in their magnitude. In addition, the results from this particular policy change are important because this particular change in schooling laws results in two cohorts entering the labour market simultaneously. As such, they were competing for equivalent jobs in similar labour markets and under the same macroeconomic conditions. As such, business cycle effects do not confound the results.