

Intelligence MEMOS



From: Rosalie Wyonch
To: Education Policy Makers Across Canada
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Re: **PREPARING PEOPLE FOR A TECHNOLOGICAL FUTURE**

In 2017, Canada needs to establish the foundations for navigating uncertain global tides, and ensure healthy economic growth over the long run. To do so, Canadians need to embrace technological innovations, and be ready for an increasingly disruptive economic environment.

Making the most of technological innovations means equipping Canadians with high-level technical competency. A highly skilled workforce will be able to capture the benefits of the increased productivity that accompanies automation.

A major challenge will be increasing Canadian students' competency in science, technology, engineering, and math (STEM). In the latest International Student Assessment (PISA), 15-year-old students with Canadian-born parents showed [declining scores in math and science](#). Although Canadian students still performed well relative to their international peers, the importance of STEM subjects in a skilled high-tech economy means that math and science scores need to improve.

Canadians are already highly educated, [with the highest proportion of people with a college education or higher](#) among OECD countries. However, to maintain our relative skill advantages it is essential that Canada be able to recruit and retain talented individuals from across the globe. [Over 350,000 international students are studying in Canada](#) and over 50% of them plan to apply for permanent residence status. Last year's changes to the express entry system to favour Canadian education over international education are a step in the right direction; but they are not enough to fully recognize the potential contribution to Canada of international graduates of Canadian universities. More could be done in this respect at both federal and provincial levels, for example through the provincial nominee program.

In the short term, older workers will need to be trained to effectively work with new technologies. Workers aged 45-54 make up the largest share of employment and have also seen [their basic literacy and numeracy decline over time](#). To encourage the upskilling and continuing education necessary to adapt to increased automation, policies that increase employer involvement in workforce training will be an asset. The Canada Job Grant (CJG) provides financial incentives for employers to upskill employees. There are two pilot programs currently underway in Ontario that introduce needed customization into the existing program. Both are set to conclude in 2017 and are worth watching. The CJG may become essential to Canada's labour market policy response to automation and skill displacement.

Technological change is necessary for sustained economic growth. The challenge is preparing both employers and employees for economic disruptions. Through informed and well-targeted policy, Canada can avoid the downsides of technological change while reaping the most of its rewards.

Rosalie Wyonch is a Policy Analyst at the C.D. Howe Institute.