

We're losing out – new report on science learning reveals the economic burden of discontinuing high school science courses

TORONTO, ON (October 8, 2013) – The cost of dropping out of secondary school science and math courses is significantly high for Canada, according to a new research report released today by Let's Talk Science and made possible by Amgen Canada. *Spotlight on Science Learning 2013: The high cost of dropping science and math* highlights three costs – financial, opportunity and societal – that hinder Canada's economy as a result of disengagement of students in senior level science, technology, engineering and mathematics (STEM) courses.

Every year Canada spends \$50 billion on kindergarten to grade twelve education yet less than 50 per cent of Canadian high school students graduate with senior STEM courses. Given that approximately 70 per cent of Canada's top jobs require STEM education, a number that will continue to grow, this is an alarming statistic. As jobs of the future demand education in STEM courses, Canada's economic well-being, quality of life, and ability to remain competitive with peer countries is put at risk. It is important to ensure that our funds are being directed to preparing today's youth for tomorrow's economy, especially when Canada commits almost 6 per cent of GDP toward education.

"Canada must focus on building a strong STEM talent pool with the skills to contribute to our country's long-term prosperity. Ultimately, these skills lie in at least some form of science literacy," says Bonnie Schmidt, Ph.D., president, Let's Talk Science. "We need to inform our youth of the importance of STEM courses for their future careers, engage them in experiential science learning from an early age, and sustain their interest in science throughout their studies. This will take collaborative effort – educators, parents, youth, industry, non-profit organizations and government – to ensure Canada has a bright future ahead."

The 2013 research report outlines the costs associated with high school students dropping out of senior level STEM courses:

- **Financial costs to students, parents, tax payers and high schools when students go back and retake STEM courses.** Not only does it cost millions, but it delays students' postsecondary plans.
- **Opportunity costs associated with lost job options and future earnings.** Students are often late in discovering that their future career requires a background in at least one STEM course. This amounts to a loss of talent pool on the job market, and affects students' earning potential as, on average, people in STEM fields earn 26 per cent more.
- **Societal costs from losing key, talented people with the skills Canada needs to prosper and grow.** A high-performing economy with quality programs depends on innovation – without a solid talent pool, Canada's performance staggers relative to its peer countries.

“Education in science, technology, engineering and math will be essential for many jobs that will be in great demand in the coming years,” says Karen Burke, Ph.D., director, regulatory affairs, Amgen Canada. “As other nations put greater focus on these areas of learning, Canada must follow their lead to secure its future.”

Let’s Talk Science and Amgen Canada’s shared commitment to raising awareness of the importance of science education extends this year with *Spotlight on Science Learning 2013: The high cost of dropping science and math*. The new report is a follow-up to the *2012 Spotlight on Science Learning: A benchmark of Canadian talent*, which looked at Canada’s talent pool for science-based careers and identified that while our talent pool is strong in terms of performance, it is weak in terms of size.

This fall, Let’s Talk Science and Amgen Canada are taking science on the road and visiting high school students across Canada to demonstrate the value of science in everyday life and for jobs of the future. For more information and to access the full report, please visit <http://www.letstalkscience.ca/>

About Let’s Talk Science

Let’s Talk Science is an award-winning, national, charitable, science outreach organization. Let’s Talk Science creates and delivers science learning programs and services that turn kids on to science, keep them engaged in learning and develop their potential to become 21st century innovators and citizens. For more information about Let’s Talk Science, please visit www.letstalkscience.ca.

This report was made possible by Amgen Canada.

About Amgen Canada

As a leader in innovation, Amgen Canada understands the value of science. With main operations located in Mississauga, Ont.’s vibrant biomedical cluster, and its research facility in Burnaby, B.C., Amgen Canada has been an important contributor to advancements in science and innovation in Canada since 1991. The company contributes to the development of new therapies or new uses for existing medicines in partnership with many of Canada’s leading health-care, academic, research, government and patient organizations. To learn more about Amgen Canada, visit www.amgen.ca.

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