



Canada could be left behind in the innovation economy, reveals new report on science learning

2012 report from Amgen Canada and Let's Talk Science - *Spotlight on Science Learning: A benchmark of Canadian talent*

MISSISSAUGA, ON (June 5, 2012) – A report released today by Amgen Canada and Let's Talk Science reveals that creating a large pool of science-based talent is crucial to keeping Canada competitive and Canadians employed.

The report reveals that while Canadian students perform well in national and international tests, there is a huge drop-off in the uptake of science and math courses once they are no longer compulsory, usually after grade 10, and the proportion of students studying these courses in colleges and universities remains flat.

Given our needs as a nation – from filling employment shortages, being more innovative, and growing as a knowledge economy – more needs to be done to attract and retain students in science programs from high school right through to post-secondary if we are to fill the jobs of the future.

“Some degree of learning in science, technology, engineering and math (STEM) 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 and member of the expert panel that helped analyze the report's data. “As other nations put greater focus on these areas of learning, Canada cannot afford to be left behind.”

Spotlight on Science Learning: A benchmark of Canadian talent is a first-of-its-kind look at the key benchmarks of STEM learning, starting in elementary and secondary school, moving on through post-secondary education and going into the workforce. The report identifies a core list of 11 benchmarks that need to be tracked in order to properly monitor Canadian progress in STEM learning. The key indicators, identified and analyzed by an expert panel of knowledgeable and influential members of the science and education communities, include youth attitudes, student performance, participation in optional high school courses, enrolment in and graduation from post-secondary programs at all levels, apprenticeships, job forecasts and employment shortages.

The report calls for collective action among youth, parents, educators, industry, outreach organizations, and government to share the responsibility of developing a culture in Canada that supports STEM learning: And all Canadians are invited to lend their voice to the discussion by visiting <http://www.letstalkscience.ca/spotlight.html> and commenting on the report, the benchmarks and its full list of recommendations.

“We need to revitalize our young people’s love of science,” says Bonnie Schmidt, Ph.D., president, Let’s Talk Science and chair of the expert panel for *Spotlight on Science Learning*. “To keep our youth engaged in science learning, we need to help them understand its value for future careers, not only for those directly related to a science education, but to all jobs that require people to be analytical and curious, to problem solve, and to experiment and explore.”

Jamie Mistry understands this first-hand. As a brewmaster, he says that understanding science helps him be creative, try new approaches and develop ideas to improve a product or process. “I could not do my job without a strong understanding of microbiological techniques, chemistry and engineering science,” says Mistry. “Not all scientists wear white lab coats and work with Bunsen burners.”

“Ultimately, the results of our efforts in creating a culture that supports science learning will be evident in how Canada progresses against the benchmarks outlined in this report,” says Dr. Schmidt. “We need to foster a more science-literate and science-loving population and prepare our young people for a future that’s filled with opportunity, thereby creating a more prosperous Canada in which all citizens enjoy a high quality of life.”

Spotlight on Science Learning: A benchmark of Canadian talent

In 2011, Amgen Canada convened an expert panel of knowledgeable and influential members of the science and education communities to identify key benchmarks for measuring whether Canada is on track to develop the talent needed for the 21st-century demands of citizenship and employment. The panel then analyzed publicly available data gathered by Let’s Talk Science to develop a greater understanding of science learning and ambitions at all educational levels, employment in STEM-related occupations, the growth of those fields, and Canada’s science culture. The data came from a wide variety of sources such as the OECD; the Pan-Canadian Assessment Program; provincial ministries and departments of education across Canada; Statistics Canada; Human Resources and Skills Development Canada; postsecondary applications and enrolment; industry sector councils; science education and outreach organizations; and more.

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.

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.

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