



HUMANS WANTED: HOW CANADIAN YOUTH CAN THRIVE IN THE AGE OF DISRUPTION

RBC Submission to the House of Commons Standing Committee on
Human Resources, Skills and Social Development and the Status of
Persons with Disabilities

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Introduction

Canada is facing a quiet crisis.

In the coming decade, half of all jobs will be disrupted by technology and automation. Some will change dramatically. Others will disappear completely, replaced by jobs that are yet to be invented. We are living through an era of radical change, with the latest advancements in artificial intelligence and automation transforming the way we work, even in unexpected fields such as law and customer service.

How will we prepare 7 million Canadian youth (15-29) for the workplace of the future? And ensure we have the right frameworks in place for the 5 million Canadian children currently in K-12 education?

Over the past year, RBC conducted a major study of the Canadian workforce. We crisscrossed the country, talked to students, workers, educators and employers in every sector. We studied job openings and automation trends and dug into mountains of data to figure out how the country is changing and what we can do to prepare.

We discovered that the four million Canadian youth entering the workforce over the next decade are going to need a foundation of skills that sets them up for many different jobs and roles rather than a single career path. They will need a portfolio of human skills such as critical thinking, social perceptiveness, and complex problem solving to remain competitive and resilient in the labour market.

We found that Canada is shifting from a jobs economy to a skills economy, and yet employers, educators and policy makers are not prepared. Below is a summary of our findings, as well as recommendations from our report. The full report can be found here: www.rbc.com/humanswanted

Key Findings

- Canada's economy is on target to add 2.4 million jobs over the next four years, virtually all of which will require a different mix of skills.
- A growing demand for "human skills" will grow across all job sectors and include: critical thinking, co-ordination, social perceptiveness, active listening and complex problem solving.
- Rather than a nation of coders, digital literacy – the ability to understand digital items, digital technologies or the Internet fluently – will be necessary for all new jobs.
- Canada's education system, training programs and labour market initiatives are inadequately designed to help Canadian youth navigate the new skills economy, resulting in roughly half a million 15-29 year olds who are unemployed and another quarter of a million who are working part-time involuntarily.
- Canadian employers are generally not prepared, through hiring, training or retraining, to recruit and develop the skills needed to ensure their organizations remain competitive in the digital economy.

A New Approach to Hiring

Employers — public and private, big and small — need to step up, with 21st-century approaches to hiring, training and developing 21st-century skills. In our survey of 54 major employers, who collectively

employ 1 million Canadians, we found an overwhelming sense of workforce disruption coming at us, starting with administrative and repetitive roles. Many employers told us they're hiring youth for their digital skills, and yet are discovering the next generation has been so hard-wired for the digital revolution that we've forgotten about hiring for the soft code of sensibility. Sarah Watts-Rynard of the Canadian Apprenticeship Forum says she's seen changes in the way employers interview candidates, throwing in questions about perseverance, dedication, resilience and curiosity. Her favourite question to probe perseverance: What musical instrument do you play? Nearly four in 10 employers told us they're changing their recruitment policies to reflect the need for those soft skills. Electronic Arts Canada, the Vancouver-based video game pioneer, told us it has gone from asking young people what they can do to getting them to explain how they learn. We heard the same from WestJet, Alberta Health Services and the law firm Osler. The Montreal IT conglomerate CGI described its own thinking this way: We look for people who can go wide and then go deep.

Work-integrated Learning is Crucial

At a roundtable we held with the University of Guelph, we heard from employers and students hungry to mix work with learning, to amplify the skills that are most in demand. Take the case of PepsiCo. The soft drink and snacks company can't find enough graduates who have the resilience and adaptability for sales, because no one teaches sales. So it recruits on campuses for personality and puts students in work-integrated training programs to develop their skills for sales, a profession that's not likely to be automated anytime soon. Canadians are seeing this now in a national push for work-integrated learning that allows students to learn in both a classroom and a workplace. More than half of all undergrads are now part of such programs, which should be the turbo charger for our skills economy. In Ottawa, the e-commerce dynamo Shopify has launched a groundbreaking program with Carleton University that allows students to gain a four-year degree in computer science while working over 3,000 hours (paid) at the company. Meals, tuition and a laptop are thrown in. Small wonder there's a line-up to get in. The kicker: Nearly 50 percent of the students are women and approximately a quarter are visible minorities — something few computer science programs have been able to achieve on their own. Those who have experienced work-integrated learning know it can be the great social leveler of the skills economy, opening doors for young people regardless of their background.

Preparing the next generation in K-12 education

For the 5 million Canadian kids in K-12, navigating the future of work must seem like the equivalent of a spacewalk. With an untested tether. Our schools have plenty of highly skilled teachers and guidance counsellors, with little access to real-time information from the world around them. Across the country, we heard about challenges in guidance counselling, from a field that's underfunded and under-informed. When Canada's career counsellors were asked last year to rate their own system in terms of its ability to prepare students for the world of work, they gave it a 2.5 out of 5. Barely a pass. It's a big reason why a quarter of post-secondary graduates end up in jobs they're overqualified for; a good many don't end up in sustainable jobs at all. And almost 900,000 young Canadians are not in any education, employment or training program. While colleges and polytechnics have a clear mandate to prepare students for the world of work, universities have a more tenuous connection with the labour market, often focusing on knowledge acquisition above in-demand skills. Statistics Canada projects that 15 percent of recent school leavers will go into retail sales or food and beverage work, as cashiers, food counter attendants or kitchen help between 2015 and 2024. Those areas currently make up only eight

percent of the job market and are ripe for more automation. If we can't get that information to students when they're making choices about the skills they're choosing to develop, they won't thrive in a skills economy

The coming skills revolution is critical for Canada's future success

The strongest demand is for the foundational skills that separate good from great in every walk of life, and especially in Canada's increasingly services-oriented economy. Communication, emotional intelligence, critical thinking, analysis: young Canadians will need these skills in an age of rapid change. They will need to work well with an increasingly diverse range of other people — business partners from around the world, plus co-workers of all ages, genders, languages and cultures — and to complement technology, which will become ever more pervasive. "I don't think the world will get any less globalized, and the intercultural aspect of that will affect collaboration and working in teams," says Noel Baldwin, co-ordinator of postsecondary education and adult learning for the Council of Ministers of Education, Canada. "There's going to be a big transition in how computers and machines are integrated into these things." Among the 2.4 million jobs in ESDC's forecast, demand will be nearly universal for several key human skills, the ones that help us learn and acquire knowledge. Active listening, speaking, critical thinking and reading comprehension will be "relatively" or "very" important for virtually 100 percent of these job openings, across all industries. Breadth of skills will be more critical than proficiency; this is good for young Canadians, who typically lack the years of experience needed to develop expert proficiency. Among cross-functional skills, which help us perform more complicated tasks, our research shows that social skills such as co-ordination and social perceptiveness will be nearly as important across all occupations, followed by analytical skills such as judgment and decision-making. We should emphasize that the skills above will be in demand across all occupations — including STEM (Science, Technology, Engineering and Math) and trades occupations, whose reputations play down the demand for social skills.

Top Recommendations

- A national review of post-secondary education programs to assess their focus on "human skills" including global competencies
- A national target of 100% work-integrated learning, to ensure every undergraduate student has the opportunity for an apprenticeship, internship, co-op placement or other meaningful experiential placement
- Standardization of labour market information across all provinces and regions, and a partnership with the private sector to move skills and jobs information to real-time, interactive platforms
- The introduction of a national initiative to help employers measure foundational skills and incorporate them in recruiting, hiring and training practices

About the Report

RBC Economics amassed a database of 300 occupations and drilled into the skills required to perform them now and projected into the future. The study groups the Canadian economy into six major clusters based on skillsets as opposed to traditional classifications and sectors. This cluster model is designed to illustrate the ease of transition between dissimilar jobs as well as the relevance of current skills to jobs of the future.

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