



# The Skills Gap in Canada

**CANADIAN PERSPECTIVES FROM  
“THE EQUIPMENT INDUSTRY TECHNICIAN SHORTAGE:  
CAUSES, IMPACTS AND POLICY RECOMMENDATIONS — 2016”**



A COLLEGE OF WILLIAM & MARY RESEARCH STUDY  
COMMISSIONED BY THE AED FOUNDATION

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## **The Equipment Industry Technician Shortage The Skills Gap in Canada**

A skills gap refers to a mismatch between the skills that businesses are looking for in employees and the skills present in the workforce, which makes it difficult for businesses to hire and expand. This report focuses on a shortage of technically skilled workers in the Canadian heavy equipment distribution industry. Businesses in this industry distribute, rent, and support heavy equipment that is used in construction, mining, power generation, and a variety of other sectors.

For context, we'll first look at summary United States information from the study. Analysis of economic trends and of a survey of Associated Equipment Distributors' (AED) members conducted in the summer of 2015 indicates that the anecdotal evidence of a technical skills gap is also borne out in the data. The skills gap has significant negative effects on companies' bottom lines and on their ability to grow. Studies of the manufacturing industry indicate that businesses may be foregoing 11 percent of earnings and 9 percent of revenue due to the skills gap and the inability to hire qualified workers. Assuming that holds true for the equipment industry, the skills gap could be costing the full AED membership in the United States approximately \$2.4 billion each year, at the average estimate of total dealer revenues in the United States. That translates to costs for individual member businesses of around \$6.1 million each. If current AED member employment trends held true, eliminating the current skills gap could lead to an additional 4,000 jobs in the United States.

AED members in the United States report significant difficulty recruiting technicians, with the primary cause of this difficulty being a lack of technical skills among job applicants. More than 50 percent report that the inability to find qualified technicians hinders business growth and increases costs and inefficiencies. More than 60 percent say that the skills gap makes it difficult to meet customer demand. Respondents to the AED survey also report a job opening rate (the percent of jobs going unfilled) more than three times the national average. These factors indicate a significant mismatch in skills that is hampering businesses' ability to hire, grow, and serve customers.

The skills gap in the technical workforce is not a problem unique to the United States. Canadian businesses are also starving for technical talent. A recent survey of Canadian executives found that 59 percent of respondents expressed concern about their ability to find qualified candidates with the skills needed to fill the job openings anticipated over the next two years.<sup>1</sup> Asked how the skilled technical worker shortage had affected their companies, 80 percent of Canadian member respondents said it had made it difficult to meet customer demand. Sixty percent said they had lost customers as a result of the technician shortage. And 40 percent said that it had increased costs and inefficiencies and made it unable to seize new business opportunities.

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<sup>1</sup> Robert I. Lerman, "Expanding Apprenticeship Training in Canada: Perspectives from International Experience," Canadian Council of Chief Executives, April 21, 2014, accessed December 4, 2015, <http://www.ceocouncil.ca/publication/expanding-apprenticeship-training-canada-perspectives-international-experience-2>.

Asked to rate factors that made recruitment difficult, Canadian respondents cited the lack of hard technical skills among applicants as the most significant (4.4 on scale of five with five meaning very significant). A lack of soft skills among applicants (e.g., communication ability) was cited as the second most significant factor (three on scale of five).

A variety of causes are likely to blame for the technical skills gap. Chief among them are failures in the technical education system, retiring Baby Boomers, and poor visibility and perception of vocational careers among youth. United States programs in workforce development at the federal level are often focused on new skills for workers or targeting at-risk demographics, but not on helping youth who want to pursue a technical career. The lack of new technical workers is exacerbated by retirement of Baby Boomers. Among manufacturing executives, 93 percent say that Baby Boomer retirement is an issue contributing to the skills gap. Finally, data from both the equipment industry and the broader economy indicates a poor perception of technical careers. Respondents to the AED survey report that youth are being pushed away from vocational education tracks and towards 4-year degrees. Other studies find only 37 percent of parents would encourage their child to pursue a technical career.<sup>2</sup>

Canadian respondents, when asked to rate the quality of local technical education (how well graduates are prepared to work in technical positions, the relevance of the curriculum to local economic needs, outreach and engagement to the business community), rated private, post-high school technical training schools the highest (3.5 out of five, with five equaling excellent). Community colleges scored three out of five. High schools scored the lowest: 2.7 out of five. Only 20 percent of respondents said local educational institutions in their areas understand their company's workforce needs and align their curricula and train students to meet those needs. This suggests considerable opportunity to encourage cooperation and communication between Canadian dealers and local institutions.

Asked which workforce development activities their companies engage in, Canadian AED members unanimously indicated they provide apprenticeships to technical program students. Additionally, 80 percent said they provided tuition assistance for current employees, and 60 percent provided internships to expose students to industry opportunities and provide financial support or in-kind donations (e.g., equipment, technology) to schools.

Asked what recruitment tools their companies use, the most frequently cited (100 percent of respondents) was word of mouth; 80 percent used general online jobs boards and local media advertising (e.g. newspapers); 60 percent used social media, recruiting from competitors, and professional recruiters; and only 20 percent used job fairs, on campus recruitment, or construction-specific media. This suggests opportunities to promote workforce development best practices among our members.

Much like their counterparts in the U.S., Canadian policymakers who have traditionally identified skills with academic attainment now recognize that traditional classroom strategies

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<sup>2</sup> Deloitte "Overwhelming Support U.S. public opinions on the manufacturing industry," 2014, *Manufacturing Institute*

are insufficient for providing the entire range of hands-on skills needed by industry.<sup>3</sup> The Interprovincial Red Seal Program is responsible for promulgating federal standards for integrating vocational and apprenticeship training into existing academic curricula, and certifying programs developed by the individual provinces. The Canadian provincial governments exercise a significant degree of autonomy in designing, administering, and funding their own separate workforce development programs, but the federal government does provide targeted employer tax credits and educator grant funding to encourage collaboration between employers and provincial governments in developing apprenticeship programs. As in the U.S., the programs comprising the Canadian workforce development system are primarily oriented toward new skills for adult workers, but there is a growing emphasis among policymakers on strengthening apprenticeship and career and technical training programs that will more effectively transition high school graduates into high-demand technical careers.<sup>4</sup>

The survey responses of Canadian AED members demonstrate the importance of maintaining a strategic focus on younger workers transitioning out of school and into technical workforce. Canadian respondents report the highest percentage of workers aged 18-25 (18.5 percent) as well as the lowest job opening rate (0.017) and the shortest number of days a job remains open (36 days). Furthermore, the relative perception of local schools is more favorable on average among Canadian AED members than their counterparts in the U.S., particularly at the high school level (2.75 out of five).

Addressing the skills gap requires the input of all stakeholders to further coordinate and develop effective policy initiatives at the federal, state and local levels. Outside of government, cooperation between technical schools and businesses has proven effective to share curricula that best prepare students for vocational careers. Finally, addressing the skills gap requires engagement with students and parents at the high school level (or earlier) to increase their awareness of viable technical careers and to give interested students the resources they need to pursue these professions.

Note: Data obtained from Canadian AED members was more limited than for the U.S. report, still, AED believes that this report reflects the situation in Canada accurately.

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<sup>3</sup> Robert I. Lerman, "Expanding Apprenticeship Training in Canada: Perspectives from International Experience," Canadian Council of Chief Executives, April 21, 2014, accessed December 4, 2015, <http://www.ceocouncil.ca/publication/expanding-apprenticeship-training-canada-perspectives-international-experience-2>

<sup>4</sup> *Ibid*