



HOW DO CANADIAN YOUTH PERCEIVE CAREERS IN THE TRADES?

Apprenticeship training is important in building a well-educated and highly skilled workforce and represents a valuable part of postsecondary education (PSE) in Canada. However, although registration in apprenticeship programs has more than doubled since 2000,¹ students following through with apprenticeship remains low relative to other PSE programs. More specifically, enrollment in Canadian public colleges and universities totalled slightly over two million students in 2016–17,² while the total number of students registered in apprenticeship programs was around 406,000.³ Furthermore, completion rates are an issue. According to a 2018 Statistics Canada report,⁴ among those who newly registered to one of 19 apprenticeship programs in 2010, only 20 percent received their certification within the typical program duration, while 39 percent did so within 1.5 times of the program duration.

Stakeholders, such as educators, members from business and labour groups, and equity-seeking groups, have supported greater efforts to promote apprenticeship as a postsecondary pathway leading to highly valued, satisfying, and well-paying careers (CAF, 2013). Despite apprenticeship pathways demonstrating promising job prospects and the apparent demand for new trades workers, a relatively low proportion of Canadian youth indicate a desire to pursue careers in the trades. Reasons for this reluctance have been investigated and documented, and both empirical and anecdotal evidence point to attitudes towards the trades (e.g., CAF, 2013; Skills Canada & CAF, 2004). More specifically, the Canadian Apprenticeship Forum (CAF, 2013), which identifies some of the main challenges associated with attracting young people to careers in the trades, maintains that youth hold negative perceptions of the trades, mainly because they do not have access to accurate information. Further, they argue that educators and counsellors are reluctant to pass on information about trades to students and their families. Finally, they also single out the general public and media for perpetuating negative impressions and stereotypes and for not valuing the contributions tradespeople make to the economy and society.

¹ Statistics Canada. 2018. “Pathways and earnings indicators for registered apprentices in Canada.” *The Daily*. December 5th, 2018. Statistics Canada Catalogue no. 11-001-X <https://www150.statcan.gc.ca/n1/en/daily-quotidien/181205/dq181205b-eng.pdf?st=ihcH9ZjT> (accessed October 10, 2019).

² Statistics Canada. 2018. “Canadian postsecondary enrolments and graduates, 2016/17.” *The Daily*. November 28th, 2018. Statistics Canada Catalogue no. 11-001-X <https://www150.statcan.gc.ca/n1/daily-quotidien/181128/dq181128c-eng.pdf> (accessed October 10, 2019).

³ Statistics Canada. 2018. “Pathways and earnings indicators for registered apprentices in Canada.” *The Daily*. December 5th, 2018. Statistics Canada Catalogue no. 11-001-X <https://www150.statcan.gc.ca/n1/en/daily-quotidien/181205/dq181205b-eng.pdf?st=ihcH9ZjT> (accessed October 10, 2019).

⁴ Ibid.

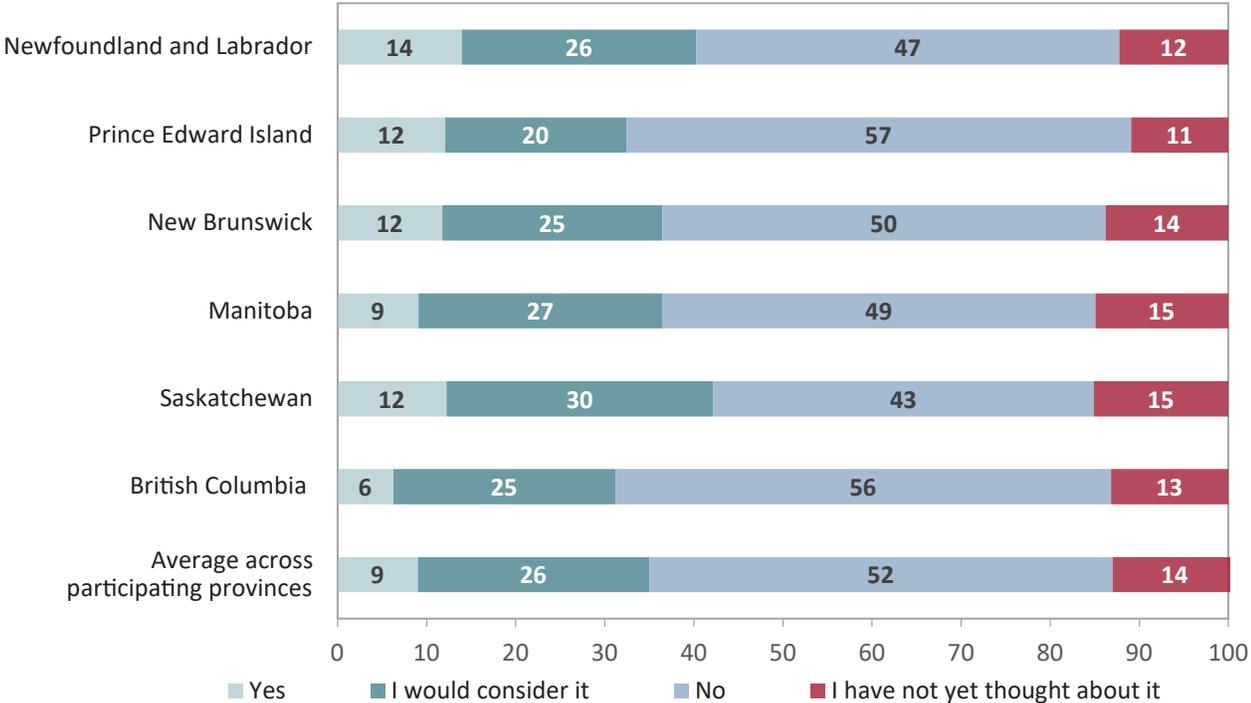
To gain a better understanding of youth perceptions of skilled trades careers, a five-minute questionnaire made up of six questions regarding the aspirations, perceptions, awareness, exposure, and other aspects related to careers in the trades was included as a Canadian option in the Programme for International Student Assessment (PISA) 2015. PISA 2015 marked the second time Canadian 15-year-old students participated in the questionnaire, and it was administered to students in the following provinces: Newfoundland and Labrador, Prince Edward Island, New Brunswick, Manitoba, Saskatchewan, and British Columbia. This issue of *Assessment Matters!* summarizes the main findings of this questionnaire. It looks at the level of interest among high school students to pursue jobs in the trades; how they learned about these jobs; their perceptions of skilled trades jobs; and parental influence. A more detailed analysis of this questionnaire has been prepared by Employment and Social Development Canada (ESDC) and is available upon request.⁵

Less than 10 percent of 15-year-old students plan on pursuing a career in the trades

On average across participating provinces, when asked whether they are planning to pursue a job in the trades, 15-year-old Canadian students responded with a low level of interest in such career pathways. Nine percent of students reported that they plan on pursuing a job in the trades, while 52 percent reported they are not. Close to 40 percent of students were undecided, with 26 percent of students reporting that, although they were not planning on pursuing a job in the trades, they would nevertheless consider it. Finally, 14 percent of students reported that they had not yet thought about it.

Across the participating provinces, the proportion of students planning a career in the trades ranged from 6 percent in British Columbia to 14 percent in Newfoundland and Labrador, while the proportion of students who would consider it ranged from 20 percent in Prince Edward Island to 30 percent in Saskatchewan (Figure 1). Comparatively, the proportion of students who were not planning a career in the trades varied from 43 percent in Saskatchewan to 57 percent in Prince Edward Island.

FIGURE 1 Proportion of 15-year-old students planning on pursuing a job in the trades

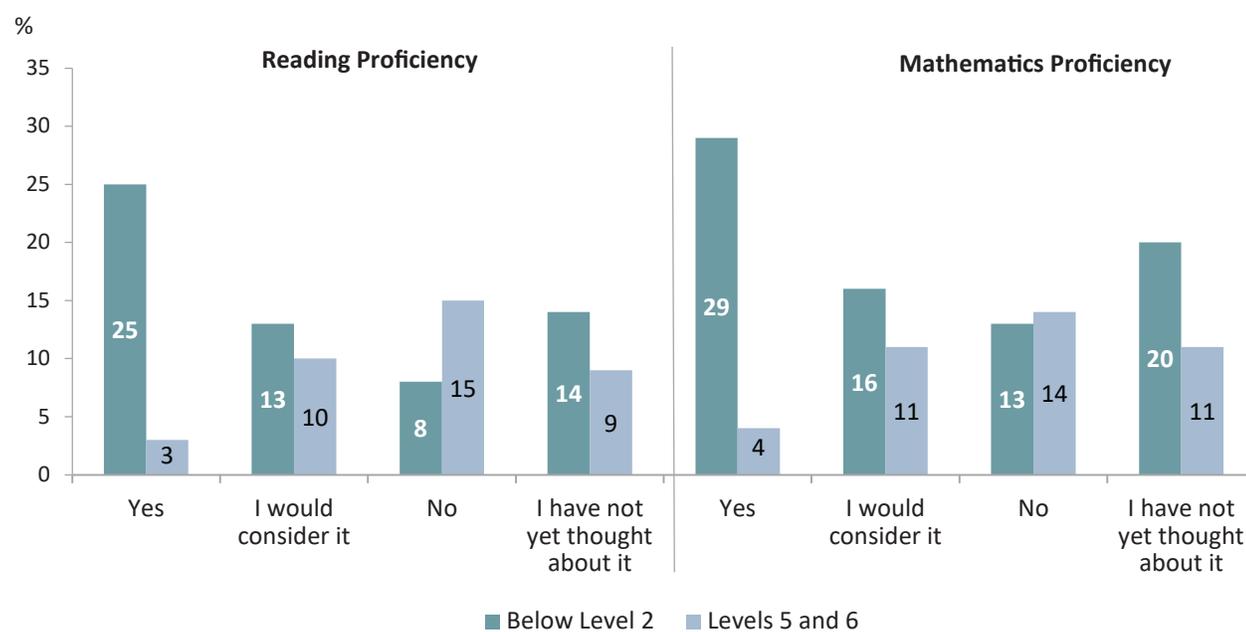


⁵ Deussing, Marie-Anne. 2018. "Attitudes and perceptions of Canadian youth towards careers in the trades: Results from the 2015 Programme for International Student Assessment (PISA)." Gatineau, QC: Employment and Social Development Canada.

Among students planning on pursuing a career in the trades, one out of four did not meet the baseline level of reading proficiency, while close to three out of 10 did not meet the baseline level of mathematics proficiency

Several reports have pointed to essential skills, such as literacy and numeracy, as predictors of success in the skilled trades (CAF, 2009). Results from the PISA reading and mathematics assessment can provide valuable information on the essential skills held by 15-year-olds planning to pursue a job in the trades. More specifically, PISA provides useful benchmarks relating a range of scores to levels of knowledge and skills measured by the assessment. For example, student performance in mathematics is described across seven different levels of proficiency: Below Level 1 (the lowest) and Level 1 to Level 6 (the highest). In reading, scores are represented on a scale divided into eight different levels of knowledge and skills: Below Level 1b (the lowest), Level 1b, Level 1a, and Level 2 to Level 6 (the highest). For both fields, the OECD considers Level 2 as the baseline level of proficiency that is required to participate fully in modern society (OECD, 2016).

FIGURE 2 Reading and mathematics proficiency of students planning on pursuing a job in the trades



Among Canadian students planning a career in the trades in 2015, 25 percent did not meet this baseline level of proficiency in reading, and 29 percent did not meet the baseline proficiency in mathematics, compared to 8 percent and 13 percent, respectively, among students not planning a career in the trades (Figure 2). At the same time, among students planning a career in the trades, only 3 percent of students were top performers in reading (Level 5 or Level 6), and 4 percent were top performers in mathematics. In comparison, 15 percent of students not planning a career in the trades were top performers in reading, and 14 percent were top performers in mathematics.

Characteristics of students planning to pursue a job in the trades

In Canada, boys are more likely than girls to plan on pursuing a career in the trades. In 2015, 2 percent of girls reported that they were planning on pursuing a job in the trades; 17 percent reported they would consider it; and more than two thirds (68 percent) reported they were not interested in a trades job. For boys, 15 percent reported they were planning on pursuing a career in the trades; 36 percent would consider it; and 36 percent were not interested.

Differences were also observed across different immigrant groups. More specifically, non-immigrant students were more likely than immigrant students to plan to pursue a job in the trades, with 10 percent of non-immigrant students planning to pursue a job in the trades, relative to 5 percent of first- and second-generation immigrant students.⁶ At the same time, fewer non-immigrant students (51 percent) reported that they were not planning to pursue a job in the trades relative to first-generation students (56 percent), although no statistically significant difference was observed relative to second-generation students. There were no statistically significant differences in the proportion of students who would consider pursuing a job in the trades across the different immigrant groups.

Sources of information Canadian youth consulted about careers in the trades

As part of the Youth Attitudes towards the Trades (YATT) questionnaire, students were asked whether they had consulted different sources of information about a future career or job in the trades, and, if so, which sources they had consulted. The choices of sources of information presented to the student were: a teacher, a career counsellor, family members, a questionnaire about interests and abilities, the internet, someone working in the trades, visiting a worksite, and attending a school presentation or course about the trades.

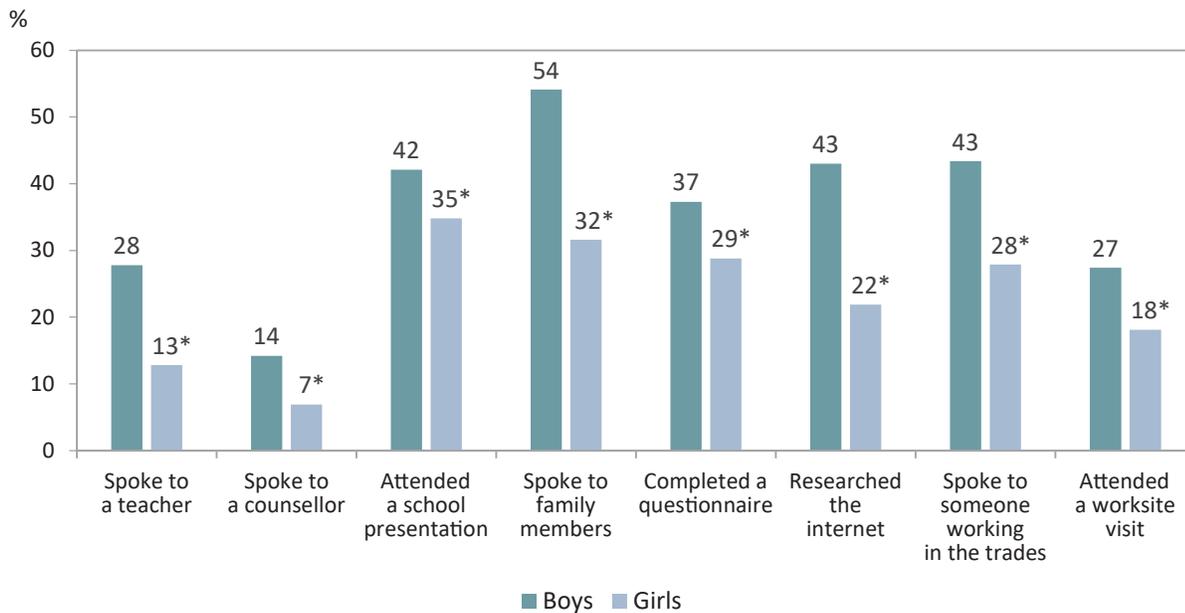
Overall, 72 percent of students in the participating Canadian provinces reported looking for information about jobs in the trades, with the share ranging from 65 percent in Prince Edward Island to 77 percent in Saskatchewan. Results show that the most popular source of information consulted by 15-year-old students was family members (43 percent), followed by a school presentation or course about the trades (38 percent), and talking to someone working in the trades (36 percent). Teachers and career counsellors were the least consulted sources of information about the trades (at 20 percent and 11 percent, respectively).

Students who reported consulting sources of information about careers in the trades averaged lower scores on the PISA reading and mathematics assessments than students who did not. Especially large disparities were observed between students who had spoken to a teacher or a career counsellor and those who had not, which suggests that the discussions teachers and career counsellors are having with students about careers in the trades are happening in large part with students who have lower skills.

Boys were more likely than girls to look for information about careers in the trades, with 80 percent of boys reporting that they had consulted at least one of the sources of information, compared to 65 percent of girls. The most consulted source among boys was a family member (54 percent), while for girls it was a school presentation or course about the trades (35 percent) (Figure 3).

⁶ In PISA, the immigration status of students is reported using three categories: non-immigrant (the student is born in the country of residence with at least one parent who was born in the country of residence), first generation (the student and parents were not born in the country of residence), and second generation (the student was born in the country of residence but their parents were not).

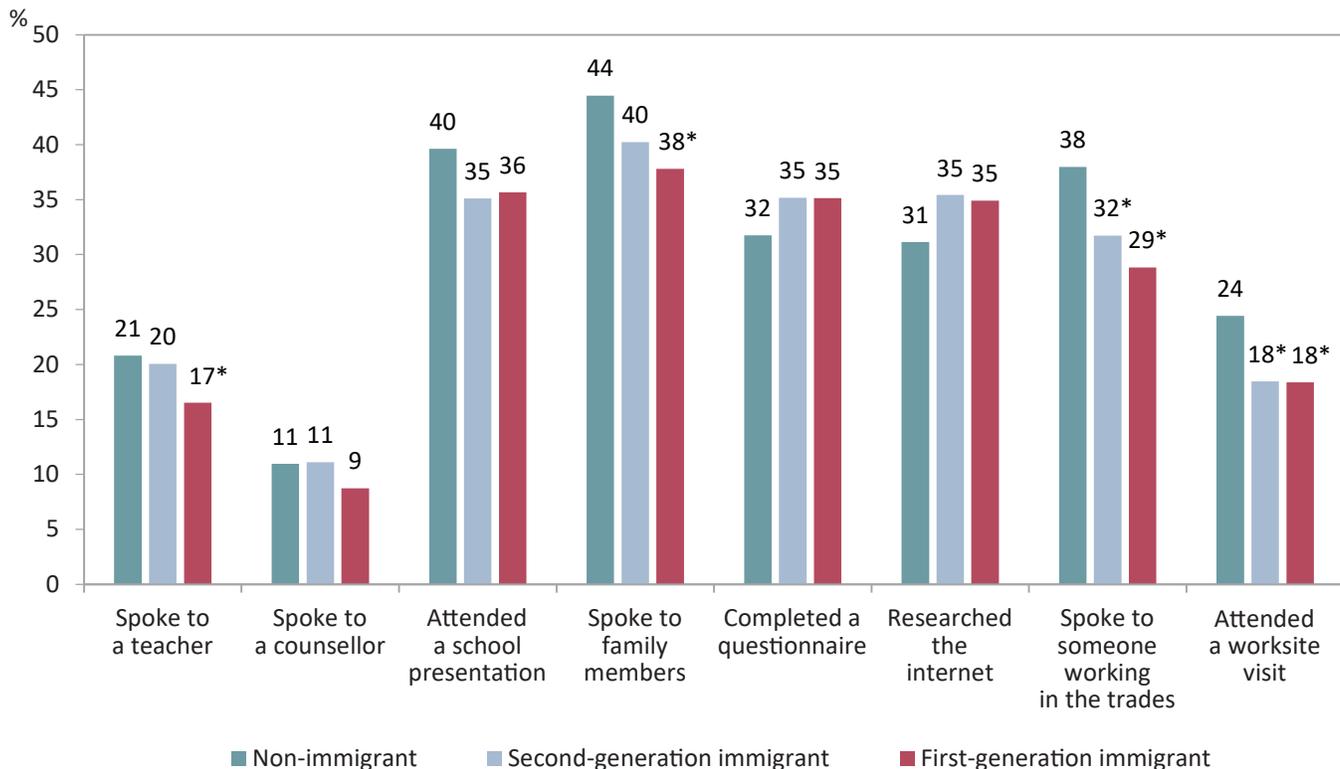
FIGURE 3 Proportion of boys and girls who consulted different sources of information on careers in the trades



Note: Statistically significant differences at the 5 percent level are marked with an asterisk (*).

Immigrant students were as likely as non-immigrant students to look for information about careers in the trades, although there were some differences between immigrant groups with respect to the sources of information consulted (Figure 4). More specifically, relative to non-immigrant students, a lower proportion of first- and second-generation immigrant students spoke to someone working in the trades or visited a worksite. As well, a lower proportion of first-generation immigrant students spoke to a teacher or spoke to family members about careers in the trades, relative to their non-immigrant peers.

FIGURE 4 Proportion of students who consulted different sources of information on careers in the trades, by immigrant status



Note: Statistically significant differences with respect to non-immigrant students at the 5 percent level are marked with an asterisk (*).

The perception of Canadian youth about careers in the trades

To better understand how Canadian youth view careers in the trades, students were asked whether they “strongly agree,” “agree,” “disagree,” or “strongly disagree” with a number of statements about pay, educational requirements, available opportunities, and the nature of jobs in the trades. Overall, Canadian students had a positive perception of jobs in the trades. Almost three quarters of students (73 percent) agreed that a career in the trades pays well; nearly half (49 percent) would enjoy the physical nature of work in the trades; almost all (92 percent) agreed that a job in the trades requires a combination of knowledge and hands-on activity; and over two thirds (68 percent) agreed that there are good opportunities for women to work in the trades. One in two students (50 percent) saw good job opportunities for themselves in the trades, and 72 percent of students believed that people with good grades pursue a job in the trades. About 1 in 4 students (24 percent) found a job in the trades too physically demanding.

At the individual province level and compared to the other participating provinces, British Columbia saw a lower proportion of its students agreeing with the following statements: that a career in the trades pays well (70 percent), that they would enjoy the physical nature of work in the trades (43 percent), and that there are good opportunities for women to work in the trades (63 percent). At the same time, British Columbia had the highest proportion of students who agreed that a job in the trades requires a combination of knowledge and hands-on activity (93 percent). As well, a higher proportion of students in Newfoundland and Labrador, Manitoba, and Saskatchewan than in the other participating provinces agreed that a career in the trades pays well (75 percent, 77 percent, and 76 percent, respectively), that they would enjoy the physical nature of work in the trades (55 percent, 53 percent, and 57 percent, respectively), and agreed that there are good opportunities for women in the trades (79 percent, 70 percent, and 73 percent, respectively). Overall, though, little variation was observed across the provinces, especially with respect to the proportion of students agreeing that a job in the trades requires a combination of knowledge and hands-on activity, where the proportions hovered around 90 percent.

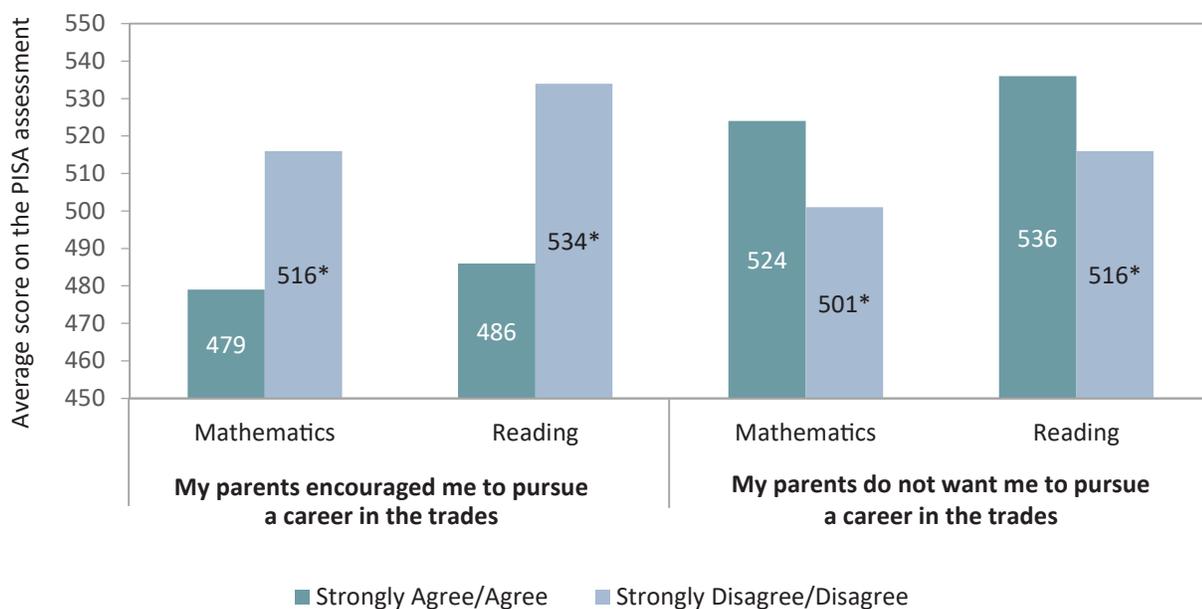
Overall, boys had a better perception of jobs in the trades than girls. For example, 77 percent of boys agreed that a career in the trades pays well, compared to 68 percent of girls. As well, 64 percent of boys, but only 34 percent of girls, agreed that they would enjoy the physical nature of work in the trades. Further, 60 percent of boys believed there were very good job opportunities for them in the trades, compared to 40 percent of girls, and twice as many girls (32 percent) than boys (16 percent) felt that a job in the trades is too physically demanding. Nevertheless, girls (75 percent) were more likely than boys (68 percent) to agree that people with good grades pursue careers in the trades.

As well, immigrant students had a less positive perception of jobs in the trades than non-immigrant students. For instance, 52 percent of non-immigrant students reported that they would enjoy the physical nature of work in the trades, compared to 38 percent of second-generation immigrant students and 42 percent of first-generation immigrant students. A higher proportion of non-immigrant students (74 percent) than first-generation immigrant students (64 percent) also agreed that a career in the trades pays well, although no statistically significant difference was observed with second-generation immigrant students. Non-immigrant students (52 percent) were also more likely than second- and first-generation immigrant students (43 percent and 44 percent, respectively) to see good job opportunities in the trades.

Parental advice to students about pursuing a career in the trades

Parents are direct influencers who young people turn to for advice and guidance on educational and occupational matters. To get a better idea of the advice parents are giving their children about pursuing a career in the trades, students were asked whether they “strongly agree,” “agree,” “disagree,” or “strongly disagree,” with the statements: “My parents have encouraged me to pursue a career such as an electrician, crane operator, plumber or mechanic” and “My parents do not want me to pursue a career such as electrician, crane operator, plumber or mechanic.” Close to one in four Canadian students (24 percent) reported that their parents had encouraged them to pursue a career in the trades, while the same share reported that their parents do not want them to pursue a career in the trades. Furthermore, students who were encouraged by their parents to pursue a career in the trades had lower average reading and mathematics scores than students who weren’t encouraged to pursue such a career, and students who were discouraged by their parents from pursuing a career in the trades had higher average reading and mathematics scores than students who weren’t (Figure 5).

FIGURE 5 Average PISA scores of students who were encouraged by their parents to pursue a career in the trades



Note: Statistically significant differences at the 5 percent level are marked with an asterisk (*).

At the provincial level, British Columbia (20 percent) had the lowest share of students reporting that their parents had encouraged them to pursue a career in the trades, while Newfoundland and Labrador (33 percent) had the highest. At the same time, Newfoundland and Labrador (15 percent) and Saskatchewan (18 percent) had the lowest share of students reporting that their parents do not want them to pursue a career in the trades, while British Columbia (29 percent) had the highest.

Overall, girls (14 percent) were less likely than boys (34 percent) to be encouraged by their parents to pursue a career in the trades and more likely to report that their parents did not want them to pursue a career in the trades (27 percent vs 22 percent, respectively). Furthermore, parents of immigrant students were less likely to encourage their children to pursue a career in the trades and more likely to discourage them, relative to parents of non-immigrant students. More specifically, 26 percent of non-immigrant students reported that they had been encouraged by their parents to pursue a career in the trades, compared to 20 percent of second-generation immigrant students and 18 percent of first-generation immigrant students. Nineteen percent of non-immigrant students reported that their parents did not want them to pursue a career in the trades, compared to 35 percent of second-generation immigrant students and 37 percent of first-generation immigrant students.

Implications

While trade occupations accounted for 21 percent of total employment in 2018 (LFS, 2018), with the share out to 2026⁷ projected to remain relatively stable, findings from this analysis point to an overall low level of interest in pursuing a career in the trades among high school students across the participating Canadian provinces. Among Canadian 15-year-olds, less than one in 10 planned on pursuing a career in the trades in 2015, and around one in two indicated that they were not interested in such a career. Canadian students interested in pursuing a job in the trades were mostly male and non-immigrants. They were also students with lower average levels of mathematics and reading proficiency.

At the same time, a relatively low share of youth were encouraged to consider the skilled trades. Only one in four students reported being encouraged by their parents to pursue a career in the trades, and less than one in five students had a useful conversation with a school career counsellor or a teacher about jobs in the trades.

These results suggest that more work is still needed with respect to providing timely and relevant information about job prospects and earnings in the skilled trades to students and their parents, particularly in underrepresented groups, as well as to teachers and secondary school counsellors, so that students can see apprenticeship as a pathway to a good career. In addition, offering students in apprenticeship programs the opportunity to upgrade their skills, if needed, through remedial programs or other forms of support, will help them achieve the level of proficiency required to successfully complete their apprenticeship.

Note to readers

This article provides a snapshot of results of an ESDC report entitled “Attitudes and perceptions of Canadian youth towards careers in the trades: Results from the 2015 Programme for International Student Assessment (PISA).” For a copy of the report, please contact marianne.deussing@hrsdc-rhdcc.c.ca.

⁷ Source: Employment and Social Development Canada. 2017. Canadian Occupational Projection System (COPS) Projections. For more information on the COPS projections, please visit http://occupations.esdc.gc.ca/sppc-cops/w.2lc.4m.2@-eng.jsp;jsessionid=bH3hl18lMWjeM9HExihQ_DDvWR8M2yuuz5KxdBRsRSPjf5PhnnI1!2073826500.

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