

VOCATIONAL TRAINING: IN SEARCH OF LOST TIME

With the population aging and many people soon to retire, numerous positions will have to be filled in the next few years in specialized trades and techniques. As a result, the wages associated with these jobs are becoming increasingly attractive. Because most politicians and journalists have attended university, there is often a tendency in public debates to forget the importance of vocational training. At the same time, the number of high school dropouts remains a serious problem in Quebec, with one-fifth of 19-year-olds in this situation.¹ This phenomenon deserves greater attention so as to keep more youths from starting their working lives on the wrong foot.



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Educational pathways in Quebec can be regarded as falling into two major phases, each with its own purposes and characteristics. In the initial phase, from kindergarten to the middle of high school, all pupils are required to attend a school whose role is to instil basic learning in them. This means not only knowing how to read, write and count but also how to assimilate the knowledge and develop the attitudes that will turn these youths into adults who are able to understand what is happening in the surrounding world and to continue learning independently.

In the second phase, students are led to build upon their basic learning and to complete their educational journey by earning a diploma that will prepare them to fill their chosen professional vocation. In theory, the first phase prepares youths to succeed in the second phase, which in turn prepares them to succeed when they enter the job market.

Quebec’s education system does an excellent job in the first phase, but things take a turn for the worse in the second phase. The aim of this Economic Note is to provide a better understanding of the reasons for this, to compare Quebec with places that handle it better, and to suggest solutions.

A good start

In the spring of 2006, a sample of 3,695 fifteen-year-old students took a two-hour exam in 159 Quebec schools. A similar procedure was conducted in schools in every Canadian province and in 56 other countries, under the supervision of the OECD. The exam set out to assess the ability of these youths to absorb what they had learned until then in science, reading and mathematics and to apply it to actual problems.



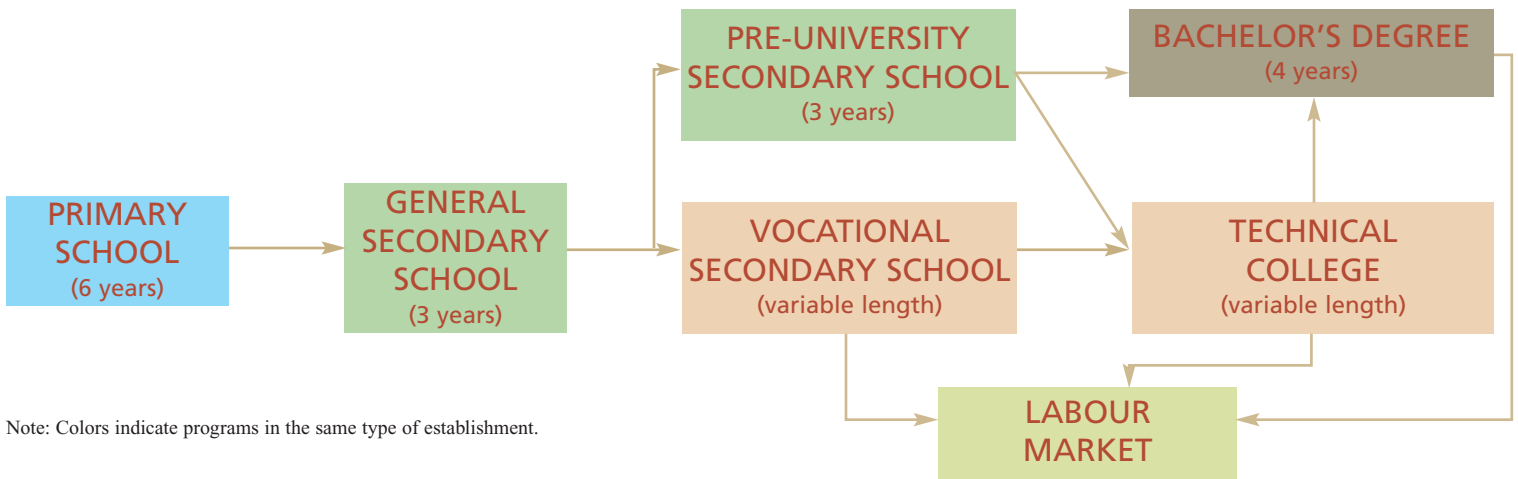
The results were revealing. Among 66 countries and Canadian provinces, young Quebecers came seventh in science, seventh in reading and fifth in mathematics. Moreover, they did better than in previous investigations.²

Finland and Hong Kong were the only two places that got better results than Quebec in all three subject areas that were being assessed (Alberta, British Columbia and Ontario did better in science and reading). These excellent average results were obtained with little variation between schools,³ despite per-student spending that is slightly below the average in OECD countries.⁴

1. Department of Education, *Education Indicators*, 2008, p. 62.
2. Department of Education, *The Performance of Canadian Youth in Sciences, Reading and Mathematics – Results for Québec Students Aged 15*, Program for International Student Assessment (PISA 2006), 2007.
3. OECD, *Learning for Tomorrow’s World – First Results from PISA 2003*, 2004, p. 163: “The proportion of between-school variance is (...) half or less in Canada, Denmark, Ireland, Norway, Poland [and] Sweden. (...) In these countries performance is largely unrelated to the schools in which students are enrolled.”
4. Department of Education, *op. cit.*, footnote 1, p. 28. However, the shorter length of primary and secondary studies in Quebec explains part of this difference.

FIGURE 1

Proposal for a new structure of the Quebec education system



Note: Colors indicate programs in the same type of establishment.

At age 15, young Quebecers are among the best equipped in the world to do well in the second phase of their educational journey. And yet, a surprising number end up dropping out or earning a diploma only after long and costly delays.

Serious guidance problems

The structure of the Quebec education system seems to be one of the factors favouring general education to the detriment of vocational training. Vocational training at high schools is only half as popular in Quebec as the average in OECD countries.⁵ According to the Department of Education, enrolment in vocational training fell sharply in the 1980s because of a requirement for more advanced general education.

Furthermore, among students who went on to vocational training in high school before age 20, more than half already had general high school diplomas. A Department of Education study notes that a general diploma is highly desired by young people, most of whom want to get it even before thinking about vocational training.⁶ From this it may be deduced that obtaining the general diploma is widely seen as a crossroads before moving on to

vocational training at the high school or college level. Yet, general high school diplomas are meant to lead to pre-university or technical studies in college. This misconception of the role of general high school diplomas results in many youths prolonging their studies before they have adequate training for the job market, raising the risk that they will drop out.

Even if it is possible for youths who have completed certain prerequisites from the third year of high school to go directly into vocational training, a meagre 2% of them do so.⁷ Also, only 10% of initial diplomas are obtained in the vocational training sector. Young people are well aware that, unless they continue their general education simultaneously, this choice deprives them of the chance to be admitted to CEGEP afterwards without

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5. Department of Education, *Graduation Rates in Quebec and the OECD Countries*, Education Statistics Bulletin No. 21, January 2001.

6. Department of Education, *Des jeunes en chemin vers la formation professionnelle : parcours et motivations*, 2007, p. 33.

7. Department of Education, *Le cheminement des élèves, du secondaire à l'entrée à l'université*, 2004, p. 11.

envisaging another year or two of general education. They then take the longer and riskier route of obtaining a technical diploma in college even if this means returning later to vocational training. In fact, three-quarters of those who earn vocational diplomas do not do so before the age of 20, many of them following an inconclusive experience at the college level⁸.

There would no doubt be less concern about the problems of success at high school if the college level did not suffer from the same problems. But this is far from being the case. In the technical sector, 62% of youths enrolled end up getting their diplomas, but only 33% do so in the expected three-year period.⁹ Moreover, the technical sector at college is characterized by a higher failure and reorientation rate.¹⁰

The hundreds of technical training programs typically provided at CEGEPs last three years, although there do exist professional diplomas ranging from 600 to 1,800 hours and college study certificates running from six months to two years. This applies both to training that adults can obtain elsewhere (through school boards) in 18 months and to training programs that, in other provinces or countries, last four or five years.¹¹ This relative uniformity in program length does not exist elsewhere in North America.

In a number of U.S. states and European countries, in contrast, the majority of 16-year-olds who are not headed for university opt for vocational training of variable but generally shorter length even if they later add other diplomas, either immediately or during the early years of their working lives. In other words, they get where they want to be by climbing the steps gradually. A number of young Quebecers, on the other hand, overshoot their targets and stumble afterwards.

New, more flexible and more effective programs

To reduce the number of youths who quit school without the training they require for the job market, incentives are needed for those who are not necessarily seeking college diplomas to opt earlier for vocational training at the high school level, with these programs encompassing the general background that can enable them to improve their training later on.

By establishing a high school third-year diploma that opens the way to variable-length training programs right after it is earned, shorter vocational training programs could be made better known and more attractive.

This third-year diploma would not be called a high school diploma and would not represent the end of the school program for anyone. Instead, it would be the start of the last straight line. School attendance would remain mandatory until age 16.

Obtaining this first diploma would give youths a dual signal: they have successfully completed basic learning, and the time has come to select, without the choice being irrevocable or irreversible, the program best suited to where they want to go on the job market.

It would make sense to do it in a way that would enable students headed for university to complete three years of pre-university training at high school rather than at CEGEP after

earning their high school third-year diplomas and then to pursue four-year bachelor's programs at university. This structure would follow a model applied successfully in most other provinces and developed countries.

For colleges to maintain enrolment levels, they could offer high-school-level vocational programs and specialize in vocational and technical training, against a backdrop of greater competition between colleges. Youths with high school third-year diplomas

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8. Department of Education, *De l'école vers le marché du travail : Analyse des trajectoires des élèves selon leur cheminement scolaire et leur insertion sur le marché du travail*, Study Report, July 2007.

9. Department of Education, *op. cit.*, footnote 1, p. 81.

10. Department of Education, *op. cit.*, footnote 7.

11. Even though the workload can differ greatly from one study program to another: the gap may be up to 10 hours a week.

would find it more encouraging to pursue their vocational training alongside future technicians. Changing establishments would add to the new-diploma effect and mark the end of a stage at the end of the first cycle of high school. The length of training programs at CEGEPs would naturally be variable, more closely matching requirements for any given job, and preparatory programs could be set up to precede the final portion of the most demanding technical training. CEGEPs would then have the chance to develop customized training programs for workers already on the job.

However, CEGEPs would lose their pre-university student base to high schools, which in turn would give up vocational training to make room for an added year of general education intended for students who wish to go on to university. These students would avoid the often difficult transition to CEGEP, would benefit from greater supervision and, in many cases, would not have to leave the family home before entering university. This would enable them to reduce the time devoted to paid work during their studies and help them succeed more easily.

To reduce the number of youths who quit school without the training they require for the job market, incentives are needed for those who are not necessarily seeking college diplomas to opt earlier for vocational training at the high school level.

Furthermore, four-year bachelor's programs would help reduce failure and reorientation rates at the university level because the first year would be devoted to more general courses (for example, covering several disciplines within a faculty) to enable students to become familiar with the university environment and to pick more precisely the area of training that suits them.

To avoid too many young people losing their way

In the coming years, many tradespersons will be heading for retirement, and everywhere there lies the risk of too few young people ready to replace them. There are limits to the chances of meeting these shortages by bringing adults back to the classroom.

By resolving the guidance problems that cost time for young Quebecers and money for taxpayers, it will be possible to bring graduation rates in vocational and technical streams closer to employers' expectations and nearer the average in developed countries.



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