Improving articulation in education and work transitions in Canada

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Trends in policy discourse
A recent project sponsored by the European Union (EU), the Leonardo project, focuses on the topic of *hybrid qualifications* (*HQ*). Hybrid qualifications result from education/training pathways that provide access to both employment and higher education (see http://hq-lll.eu/). They may do this through integrated curriculum in a single program (integrative) or through earning vocational and general qualifications separately (additive) (Helms Jorgensen 2010). The key idea is that there is greater articulation between general and vocational education and training (VET) programs and increased access to higher education programs (see also Raffe, Howieson, Spours and Young 1998). In the Canadian context, the term ‘hybrid qualifications’ is not commonly used, although policy makers have expressed interest in increasing the value of VET and improving mobility across career pathways. Interestingly, while countries like Denmark strive to increase access to higher education (Helms Jorgensen 2010), Canadian policy makers express concern about the low number of youth entering apprenticeship programs vis-à-vis the vast majority who aspire to other forms of post-secondary education (PSE).

This paper focuses on whether HQs are seen as a solution for policy makers in Canada as well as Europe, and whether institutional arrangements facilitate or oppose their development. We consider two provinces in Canada—Alberta and Ontario—because education is a provincial jurisdiction and there are differences in systems across the country. After providing a brief overview of the most common pathways for youth and institutional arrangements related to education and training in these provinces, we discuss articulation between different levels of education and PSE programs in comparison with European countries.

Pathways for Canadian youth
Forty-seven percent of Canadians (55% in the 25-34 age group) has a tertiary qualification, which is high relative to the OECD average (OECD 2010). Canadian youth also place a high value on educational achievement; the secondary school graduation rate in 2005 was 88% in Alberta and 90.9% in Ontario (the Canadian average was 89.9%) (ibid, p. 34). Findings from the Youth in Transition Survey (YITS) for 18-20 year olds, a longitudinal survey of youth across Canada, suggest that by age 21, nearly 80% of secondary school graduates had enrolled in PSE (ibid,
For YITS participants overall, 43% attended university, 32% college, and 25% did not attend PSE (ibid, p. 77). Hango and de Broucker (2007, p. 16) add that by age 22-24, approximately 17% of YITS respondents had completed a trade/apprenticeship program. This is in stark contrast to Denmark where around half of an age group take up a vocational education and close to 40% complete an apprenticeship in the dual system (Helms Jorgensen 2010) and Germany where VET is the main route followed by youth (Heinz and Taylor 2005, Deißinger and Heine 2010).

In general, Canadian youth most likely to experience challenges in employment and earnings tend to be those with the lowest levels of certification. Writers looking at the YITS survey for 18-20 year olds in 2003 (when the oldest were 23) found that, on average, PSE grads earned more than the median, and high school drop outs and PSE leavers earned less (Hango and de Broucker 2007). Similarly, a 2003 study of high school graduates in Alberta seven years after graduation found that study participants with university or trades/technical credentials earned considerably more than those without any PSE credentials, other things being equal (Krahn and Hudson 2006). Women (around age 25) were earning, on average, only two-thirds of what men were earning. Authors also found that almost one-third of all employed respondents felt over-qualified in their current job and almost half felt that they were underpaid (ibid). This is consistent with other research, which suggests that Canada has one of the highest rates of reported over-qualification in the OECD (Saunders 2008). This kind of education-jobs mismatch is seen as a downside of education systems like Canada’s, which emphasize comprehensive general education and lack strong corporatist VET arrangements (Helms Jorgensen 2010, Livingstone 1999).

Analysts have also looked at the relationship between outcome measures for youth and socio-demographic characteristics (Bowlby and McMullen 2002, Hango and de Broucker 2007, OECD 2010). For example, using data from the first cycle of YITS in 2000, Bowlby and McMullen (2002) note that secondary school dropouts were three times more likely than graduates to have parents who did not complete high school. Hango and de Broucker (2007, p. 24) add that 27.3% of Aboriginal youth (not living on reserve) compared to 8.9% of other youth dropped out of high school or delayed going to a PSE program. Also, more males (17%) than females (9%) dropped out of high school. Interestingly, youth born outside of Canada had a higher rate of university participation than those born in Canada (OECD 2010). This finding probably reflects the fact that immigrants’ educational attainment tends to be higher than that of the Canadian-born population. Urban youth were also more likely than rural youth to attend university (48% compared to 32%) (ibid, p. 81). Thus, there continue to be concerns about equal access for some groups to PSE.

Provincial differences are also evident in YITS data. For example, 37% of Alberta participants did not enroll in PSE compared to 20% in Ontario—this has been related in part to labour market differences, with more job opportunities for youth without
PSE certification and lower unemployment rates overall in Alberta. In addition, 36% of Alberta youth attended university compared to 50% of Ontario youth (OECD 2010). Hango and de Broucker (2007) also found that youth who attended high school in Alberta were more likely than youth from Ontario to drop out of high school. Krahn and Hudson (2006) acknowledge the uniqueness of Alberta with its younger population, stronger and heavily energy-focused labour market, and more extensive and integrated PSE system.

Education and training in Alberta and Ontario

The compulsory education system

In Alberta, youth are required to attend school to age 16, while Ontario recently increased this to age 18. Compared to Europe, Canada’s schools are more comprehensive. Single-stream schools are rare, and high schools in most provinces offer the same general credential to graduates regardless of course stream. Streaming is by course, not program, and usually occurs as students move into high school, when they are directed toward different levels of core courses based on their grades in the prior year. For example, Ontario students in grades 9 and 10 are offered Academic or Applied courses, while grade 11 and 12 students take Workplace, College, University/College (U/C), or University level courses (Taylor and Krahn 2009). In Alberta, secondary school courses also provide prerequisites for different programs (e.g. Math level 3 is sufficient for trades work, level 2 for PSE programs that do not require calculus, and level 1 for PSE programs requiring calculus) (Government of Alberta 2010, p. 19). High achieving students in both provinces can also enroll in International Baccalaureate or Advanced Placement programs, which articulate with university studies. A study of the course levels taken by 15 year-old students found that 70% in Ontario were taking levels of English, math, and science (core courses) that would provide entry to PSE options that included university, while the figure for Alberta was 63% (Taylor and Krahn 2009, p. 110).

Vocational programs in secondary schools have declined in the past in Canada since the 1970s for a number of reasons including concerns about streaming students too early and a decline in many industrial and commercial occupations and jobs (Smaller, 2003). There also tend to be negative attitudes toward trades training in Canada, which contrasts with the professional identity and social status associated with these programs in European countries like Germany and Denmark (Gunderson 2009). Additional factors include declining enrolments, obsolescence of equipment in many schools, and the tendency to move vocational programs into PSE institutions (Council of Ministers of Canada 1998). According to de Broucker (2005) other barriers to effective vocational education programs include a highly fragmented employer community, jurisdictional debates between provincial and federal governments, and a lack of strategic policy activities to address the issue at a systems level.
However, provinces have taken recent steps to provide more secondary school options for youth who are unlikely to attend university. In addition to required courses in English, math, science, and social studies, Alberta secondary schools (grades 10-12) offer optional off-campus education programs such as the Registered Apprenticeship Program (RAP), Green Certificate (to develop knowledge and skills related to the agriculture sector), career internships, work study, and work experience that count toward their high school diploma (Alberta Education 2010). Similarly, in Ontario, secondary schools (grades 9-12) offer off-campus opportunities through the Ontario Youth Apprenticeship Program (OYAP) and cooperative education courses. Usually, apprenticeship programs are favored by youth who do not plan to attend university, while cooperative education courses are taken by a wider range of students. However, enrolments tend to be low in VET courses and programs (Taylor 2007). For example, high school apprenticeship programs tend to enroll less than five percent of secondary school students (ibid). In addition, cooperative education and technology credits only account for between 14 and 17 percent of credits granted.

**Post-secondary education**
Reflecting a Canadian trend, PSE options in Alberta and Ontario have expanded significantly in the past fifty years. For example, in 1945, public PSE institutions in Alberta included one university, an institute of technology, a school of Fine Arts, two agricultural colleges, and two Normal Schools (for training teachers), whereas by the late 1990s, public PSE institutions included four universities, four private university colleges, more than a dozen public colleges, and two large technical institutes (Krahn and Hudson 2006). The college system in Ontario also expanded in the same period although the two provinces adopted different models for their PSE system (Skolnik 2010). Alberta opted for a model that could combine technical and general education in the same institution (e.g. university-colleges) opening pathways between different types of PSE institution, while Ontario established colleges that focused on the provision of technical education, distinct from universities. However, in recent years, there has been more blurring of lines between institutions characterized as ‘vocational’ and ‘academic,’ for example, as more community colleges in both provinces obtain the authority to award baccalaureate degrees (Skolnik 2009).

But despite increased flexibility around which institutions are offering which programs, the non-university PSE sector across Canada continues to be characterized by greater responsiveness to the vocational training needs of the labour market (Boothby and Drewes, 2006). While universities also offer a host of programs in professional faculties that respond to labour needs (e.g., engineering, medicine, law, education), the average university program is longer (e.g. four year baccalaureate vs. one year certificate and two year diploma offerings in colleges) and baccalaureate degrees can be followed by graduate study in master’s and doctoral programs. In addition, despite the more comprehensive nature of many
colleges, most ‘academic’ programs (associated with university study) continue to be separate from ‘vocational’ programs (associated with colleges and technical institutes) within institutions. For example, some writers argue that needs to be greater articulation of apprenticeship training (which usually occurs as block release in colleges) with college and university programs (Gunderson 2009).

**Movement toward hybrid qualification?**

A look at initiatives that challenge institutional boundaries in Ontario and Alberta suggests that more blurring of boundaries has occurred between schools and colleges in Ontario and between colleges and universities in Alberta. For example, the School-College-Work Initiative (SCWI) in Ontario aims to build province-wide articulation between secondary schools and community colleges to clarify pathways for youth (Taylor with Watt-Malcolm 2010). Similar to programs in the United States (Hoffman et al 2007), SCWI aims to expand participation by secondary students in dual credit courses, which involve a college credit course team-taught by a secondary school teacher, college teacher, or a certified journeyperson. Credit for courses can be used toward a college certificate or diploma program or apprenticeship as well as a high school diploma.

Such courses are intended to facilitate youth school-to-college transitions and increase the skills levels of new entrants to the workforce. In the 2008/2009 school year, the SWCI consisted of 171 programs involving secondary schools and colleges and 4,500 high school students (a small proportion of the secondary school population). The main challenges related to dual credit initiatives include an unwillingness on the part of some players to relax boundaries between schools and colleges, college concerns about a potential lowering of their standards, concerns about sustainability of government funding, and concerns on the part of unions about potential reductions in staff and workload changes as lines between secondary schools and colleges blur.

The Council of Ministers of Education Canada has also urged provinces and territories to improve movement between post-secondary institutions and to develop clear pathways for students by providing timely and accurate information (CMEC 2010). This has been a theme in Alberta government work in recent years towards improving access to the PSE system by continuing to promote the transferability of credits between institutions, by providing financial incentives to PSE institutions to add new programs and to attract students from previously under-represented geographical areas and population sub-groups, and by giving degree-granting status to a number of public and private colleges (Krahn and Hudson, 2006). The Alberta Council on Admissions and Transfers (ACAT) was established in 1974 to develop policies, guidelines, and procedures to facilitate transfer agreements among PSE institutions (Taylor 2007). More recently, Alberta’s 2007 *Roles and Mandates Policy Framework for Alberta’s Publicly Funded Advanced Education System* calls for
‘seamless transitions’ for learners between educational institutions and between work-to-school transitions.

While the technical institutes do not have formal university transfer programs, transferring from college to university is common. A 2004 survey of 2001/2002 graduates of PSE institutions in Alberta found that 45% had taken PSE courses (excluding adult upgrading) prior to enrolling at the institution from which they graduated (Alberta Learning 2004). In 2005, 37% of all transfer students moved from public colleges to universities (Taylor 2007). As noted earlier, while it is common for students to complete the first one or two years of a four-year degree program in a college, the challenge of moving from college certificate and diploma programs to university persists and articulation between apprenticeship training and college and university programs is very limited. However, a blurring of institutional boundaries between colleges and universities is quite apparent in Alberta.

**Conclusions**

The preceding discussion suggests that policy issues in Canada, with particular focus on Ontario and Alberta, are quite different from those in the EU, largely because of differences in compulsory and PSE systems and pathways for youth, and differences in labour market arrangements. In Canada, a market approach to VET is predominant, in contrast to corporatist arrangements involved in dual systems in a number of European countries (Krahm 1996, Heinz and Taylor 2005). While there is streaming by course in Canadian secondary schools, a general comprehensive compulsory education is the norm, compared with countries where youth must choose their pathways involving separate programs in separate institutions around age 14. Differences in VET systems in Canada and countries like Germany have been described in terms of a trade-off between flexibility and transparency (Lehmann 2007). That is, the dual system of apprenticeship in Germany is highly transparent (it provides clear signals to youth about the type of education and training needed to enter an occupation) but lacks flexibility (youth are streamed at an early age with few opportunities to change paths). Canada, on the other hand, is much less transparent (there is greater mismatch between education and jobs and more risk for youth) but is more flexible (allowing youth to consider and pursue alternative paths and shift course more easily).

These differences are reflected in policy discussions where EU countries like Denmark are concerned about creating more bridges between vocational education (e.g. apprenticeship certification) and higher education for the significant proportion of youth who pursue the dual system path, while Canadian provinces are more concerned about increasing the match between educational credentials and work, particularly for the large numbers of youth pursuing general PSE. In both cases, policy makers are interested in increasing access for underrepresented groups to PSE, particularly university studies, by breaking down barriers between institutions and programs to facilitate youth transitions.
In Ontario and Alberta, we see this trend reflected in the blurring of boundaries between schools, colleges, and universities. A question that remains is the extent to which boundaries between ‘vocational’ and ‘academic’ courses and programs are also being blurred. For example, while the notion of dual credit challenges school-college boundaries, Ontario colleges are concerned about losing status vis-à-vis universities through such initiatives. Further, while college-university transfer is common for academic programs in Alberta, the articulation of programs like apprenticeship with university studies continues to be very limited. Therefore the Canadian education and training systems are more “linked” than “unified” (Raffe et al 1998) with few programs that provide integrated HQ. More exchange with European countries about policy approaches, recognizing diverse institutional and social contexts, while also acknowledging the roles played by adult education, will provide fruitful insights into how learning systems can contribute to broad social aims in the future.

References


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