# Is Germany's Dual System Still a Model for Canadian Youth Apprenticeship Initiatives?

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Plusieurs provinces canadiennes ont introduit des initiatives pour l'apprentissage chez les jeunes afin de faciliter les transitions dans le marché du travail. Puisque le système allemand à deux composantes est souvent considéré comme étant le modèle à suivre pour de telles initiatives, cet article tente d'introduire une perspective critique sur les problématiques pouvant toucher ce système dans le futur. La restructuration économique, la réorganisation du travail, les changements dans les pratiques d'embauches, ainsi que les tendances à la hausse dans les préférences des jeunes en ce qui concerne l'éducation supérieure constituent les principaux défis de ce système. Les débats récents sur le système allemand à deux composantes suggèrent que les initiatives d'apprentissage chez les jeunes au Canada doivent donner aux étudiants des choix de carrières qui sont plus transparents en plus de maintenir ou d'augmenter la flexibilité dans le processus de transition.

Many Canadian provinces have introduced youth apprenticeship initiatives to facilitate transitions into the labour market. As the German dual system is often considered a model for such initiatives, this paper attempts to introduce a critical perspective on issues affecting the system's future. Economic restructuring, work reorganization, changing hiring practices, and young people's increasing preference toward higher education form the main challenges for the dual system. The review of recent debates about the German dual system suggests that youth apprenticeship initiatives in Canada need to provide students with career options that are more transparent while at the same time maintaining or increasing flexibility in the transition process.

### Introduction

In the last two decades, labour markets have been increasingly characterized by growing levels of structural unemployment and income polarization. Workplaces are being reorganized to conform to a post-Fordist model of production while at the same time manufacturing, or resource-intensive industries, are making way for service and technology-based industries (Betcherman and Lowe 1997).

Given such long-term structural changes, transitions from school to work are affected in numerous ways. Youth labour markets, especially in more decentralized economies, have been hardest hit by unemployment. In Canada, youth unemployment rates remain significantly higher than adult unemployment rates (Betcherman and Leckie 1997). The recession in the early 1990s had a particularly severe impact on youth employment without any significant recovery trends (Krahn 1996). Young people

about to enter work have to struggle not only with fewer employment opportunities, but also a youth labour market that is characterized by part-time, temporary, contract, and other forms of non-standard work (Lowe and Krahn 1999), as well as increasing levels of underemployment (Livingstone 1998). Either explicitly or implicitly, most school-work transition literature agrees that transition processes have become more complex and less predictable. Whereas youth 20 years ago could rely on more stable patterns of transition, youth today are dealing with higher degrees of risk, uncertainty, and a need for more individualized decision-making (Furlong and Cartmel 1997).

These sentiments are echoed by Human Resources Development Canada which summarize the transition experiences of Canadian youth as more challenging, varied, and open-ended than in the past. Transition processes are seen as influenced by

the high rate of youth unemployment, the changing nature of the Canadian economy and job market, rising expectations of young people for postsecondary education, the concern for adolescents at risk of leaving school without the necessary skills, and the degree to which formal educational programs at the secondary and postsecondary levels are adequately preparing young people for the world of work in the 21st century (1998b, p. 1).

Many provinces have developed youth apprenticeship initiatives to address some of these issues. The introduction of youth apprenticeships is aimed basically at fulfilling two objectives: (i) provide the labour market with the skills needed to thrive in a more competitive global economy (see e.g., Economic Council of Canada 1992), and (ii) provide non-university-bound youth with the skills and credentials to succeed in the labour market and thus facilitate their transition from school to work (see e.g., Buechtemann, Schupp and Soloff 1994).

The skill-centred arguments for youth apprenticeship programs are based on the assumption that Canada has a skills deficit that needs to be corrected. For instance, in a 1996 report entitled A Vision for the Future, the Government of Alberta forecasted that the province was about to enter a period of relatively strong economic growth and industrial development that would create a challenge to match the increased demand for skilled labour (Alberta Apprenticeship and Industry Training Board 1996). More globally, it has been argued that western industrialized countries can no longer compete at the level of costs (due to the emergence of low-cost producers in newly industrialized nations) and that differentiation in world markets is increasingly only possible through high quality products, that is, high skill production (Crouch 1997).

Regardless of whether one subscribes to the notion of skill deficits in Canada or not, the current uncertainty about long-term skill requirements has resulted in more complex and unpredictable schoolwork transition processes. This is especially true for those young people not destined for postsecondary education who can no longer expect to enter labour markets in reasonably secure and well-paying jobs.

In many instances, the dual system of vocational training in Germany is cited as a successful system of skills development and school-work transitions and as a model for the introduction of youth apprenticeship initiatives elsewhere (Blossfeld 1992). The first part of this paper will provide a description of the different aspects that characterize and define the dual system, including the German general education system, the dual system's legal framework, as well as its partners and participants. Many readily available sources on the German dual system of apprenticeship training focus on Germany's relatively low youth unemployment rates (8.5 percent in 1995, compared to Canada's 15.6 percent<sup>1</sup>) and the country's successful postwar history as an industrial and manufacturing giant. In most instances, however, the intricate framework of legislation and voluntary cooperation on national, individual state (Länder) and local levels which is at the very root of the system is ignored. So, too, is the socio-cultural and historical basis on which the system functions and many of the social problems associated with it (see e.g., Lempert 1995).

In recent years, a debate about the system's future has gained momentum in Germany. It appears crucial that Canadian policymakers are aware of the major tenets of this debate as they cut right to the heart of youth apprenticeship issues. The second part of the paper will therefore present a critical discussion of the dual system's current struggle with issues of economic restructuring, work reorganization, changing hiring practices and young people's increasing preference toward higher education. While the possibility of effective learning from the experiences of other countries may be questioned (see e.g., Marsden and Ryan 1991) and comparisons between Germany and Canada are restricted by a number of factors, insight gained from careful investigation of transition systems in other countries, particularly their problems and disadvantages, can still provide important insight to formulate more successful policies in Canada.

The last section relates this debate to the Canadian context. It begins with brief descriptions of recent youth apprenticeship initiatives in different provinces and develops a number of recommendations centred around the demands of transparent yet flexible transitions.

## MAIN CHARACTERISTICS OF VOCATIONAL TRAINING IN THE DUAL SYSTEM

# The General Educational System in the **Federal Republic of Germany**

The apprenticeship system in Germany relies strongly on Germany's streamed general education system. Streaming occurs at a very early stage in a child's education. Aptitude tests as well as parental decision at the end of grade four (when the student is ten or eleven years old) determine whether a student is placed into any one of Germany's three secondary education streams. In the "lowest" stream, the secondary modern school (Hauptschule) has traditionally had the task of preparing students for entry into apprenticeships in crafts and skilled trades. In the "middle" stream, the intermediate secondary school (Realschule) has led to apprenticeships in commerce. The "higher" stream high school (Gymnasium) was traditionally reserved for Germany's elite and prepared a small minority for university entrance. Educational reforms in the 1960s and 1970s have changed participation patterns in these streams significantly with more young people entering the higher stream — a trend that has provided considerable problems for the future of the dual system.

## The Duality of Workplace and Vocational School

While the dual system of vocational training in Germany can be traced back to the guilds and trades of the Middle Ages, the term "dual system" is relatively new (Greinert 1994b). It was first coined in 1964 by the German Commission for Education in its report on Vocational Training and Education (Gutachten über das berufliche Ausbildungs- und Schulwesen) (Münch 1995). Duality in Germany's apprenticeship system is defined by the two different locations in which it takes place: the firm (workplace) and vocational schools.

Training in a firm is characterized by its close links with working and learning. It is argued that vocational training in companies offers an advantage over school-based training, as vocational schools or colleges are rarely in a position to continuously update their machines and equipment. Furthermore, apprentices are said to learn how to work economically and responsibly, to respect and work with others, and to handle customers and suppliers. Furthermore, workplace learning is considered to provide possibilities for reflection on what apprentices do in order to achieve independence in their actions. It is also argued that trainers in companies are better able to integrate new technical demands into training and that graduates from an apprenticeship program can be productive immediately after completing their training (Bundesministerium für Bildung und Wissenschaft 1994).

Vocational schooling in the dual system is offered on a part-time basis. Training capacities are determined by the companies and not by offers made by vocational schools. Training directives developed for in-company training largely pre-define the curricula at vocational schools and in the eyes of apprentices and employers alike, the company has a higher priority than the vocational school (Koch and Reuling 1994). Apprentices attend vocational school one to two days a week or on a block release for a longer period of time. There is no tuition fee and apprentices continue to receive income from their company while attending vocational school, even on a block release (Münch 1995, p. 51).

## **Responsibility and Competence Structure**

In contrast to the loosely structured framework that guides apprenticeships in Canada and the belief in liberal ideals which limits governments' direct influence on labour markets, the German dual system is guided by a rather complex competence and responsibility structure.

Employers decide whether to train at all, how many training places to offer, which applicants they will eventually hire and for which occupations they will offer training. All these functions are carried out in the labour market and once an applicant has been offered an apprenticeship position, the agreement is formalized in a training contract.

Unions play an important and co-determining role in Germany's apprenticeship system. In businesses with more than five staff, employees have the right to elect a works council to represent their interests on a management level. Unions thus have significant co-determination rights concerning management matters such as hiring, layoffs, work reorganization, and training. Rieble-Aubourg argues that this constraint on management flexibility has provided substantial incentives for management to invest in their labour force (1996, p. 182). Further-

more, labour bargaining is usually carried out industry-wide, rather than company-specific. This leads to relatively minimal wage differentials between companies in the same industry, which in turn reduces incidences of poaching trained workers.

The federal government is responsible for overseeing the training in firms and defines the required duration of the training period, the description and designation of the job, the knowledge and capabilities associated with it, as well as achievement criteria (Pritchard 1992). The Federal Institute for Vocational Training (Bundesinstitut für Berufsbildung, BiBB), which was founded as a result of the 1969 Vocational Training Act, makes recommendations and counsels the various ministries of the federal government that are involved in vocational training, most notably the Federal Ministry of Education and Science, the Federal Ministry of Labour and Social Affairs and the Federal Ministry of Economics (Münch 1995).

The Chambers are employers' organizations on a regional level, with obligatory membership. Generally, their tasks are to promote the interests of their members and to provide leadership in the respective trade (Pritchard 1992). In terms of vocational training legislation, the Chambers are responsible for such issues as controlling whether companies and their trainers qualify to offer vocational training, promoting vocational training by providing counselling to enterprises and trainees, supervising the quality of the apprentices' training, organizing their final examinations and issuing certificates, and organizing continuing vocational training (Münch 1995).

Similar to the provinces in Canada, the *Länder* (federal states) are responsible for education and as such for vocational schools and their curricula. The *Land* gives guidelines for general education, special and optional subjects and defines the number of contact hours, how many days a week an apprentice is to be released to attend vocational school, etc. (Pritchard 1992).

As the above descriptions indicate, vocational training in the dual system is characterized by close cooperation on many levels. The Principle of Consensus is a crucial aspect of the success of the dual system in Germany (Schlicht 1994). Interests of both employers and employees have been taken into account through legislation specifying that employer and employee representatives be present in equal numbers in all institutions and committees dealing with vocational training (Münch 1995). While this Principle of Consensus ensures that training regulations, once passed, are met with universal approval, it also makes the process of change within the system rather cumbersome.

## **Participants in the Dual System**

Apprentices are workers, trainees, and students contributing to output and, as part of the workforce, are represented by unions. They have training contracts, are counted as full-time employees, are covered by social insurance programs, are paid for attending part-time vocational schools and are protected against dismissal under the Vocational Training Act. The often quoted average age of 15 for a German youth entering his/her apprenticeship has recently moved up to 17 years, as a result of the increasing number of Realschule and Gymnasium graduates entering apprenticeship training in white-collar trades (Heidenreich 1998, p. 327; Münch 1995, p. 42). The majority of German apprentices live at home during the duration of their training, which is not just a factor of age, but also an economical necessity, considering the relatively low wage an apprentice earns.

Apprenticeships are allocated via the labour market, like any other employment relationship. An individual does not have a right to vocational training, just as firms do not have an obligation to provide apprenticeship positions. Employers participate because apprenticeship wages are kept very low. Furthermore, extensive systems of sector-based wage bargaining fix rates for skilled jobs and thus discourage firms from paying wage premiums to poach workers other firms have trained. Young people participate because access to skilled jobs is restricted to those with qualifications achieved within the system (Green 1997). Critics, especially amongst unions, argue that supply of apprenticeship positions is too dependent on short-term labour market requirements and that this dependence seriously limits the "Freedom of Occupational Choice" guaranteed in Germany's Basic Law (Grundgesetz) (Oppel 1994). This discrepancy between reality and law is especially blatant in the new Länder — the federal states that comprised the former German Democratic Republic. Severe economic difficulties since unification and an incomplete training infrastructure have led to a significant shortage of apprenticeship positions in the new Länder (Mitter 1992).

## IS THERE A FUTURE FOR THE DUAL SYSTEM?

The above descriptions of the German dual system already point to some of its inherent problems. Most importantly, its strong channelling into different career tracks that precludes cross-track upward mobility into higher skill and wage strata is increasingly at odds with the changing aspirations of young people in a more open and fluid society (Buechtemann, Schupp and Soloff 1994). Traditionally, the differentiation between vocational and academic education has been regarded as a strength of the German postsecondary educational system as it opens career alternatives for young people with different academic aspirations and capabilities. However, differentiation between academic and vocational demands has become increasingly fluid. Changing skill and attitude requirements in the workplace caused by new technologies and different organizational structures will further enhance the problems of the German dual system by emphasizing individuality, problem-solving skills, and other skills more traditionally associated with academic careers.

## **New Workplace Requirements**

The extent to which the dual system (and apprenticeship training in general) is considered anachronistic largely depends on how much one subscribes to the notion of the knowledge-based or post-industrial society. The emergence of a post-industrial society was first expressed by the American sociologist Daniel Bell (1973). Bell argued that post-industrial societies would be characterized by an emphasis on the production and dissemination of knowledge rather than the production of goods as is characteristic of industrial societies (Krahn and Lowe 1998). The concept of post-industrial society has been the focus of much debate and modification (Kumar 1995). Critics point out that there is little concrete evidence of a change in the power structure in the economy or society that would indicate that a discrete knowledge class controls businesses or holds significant political power. While new forms of flexible production, organization and management are considered to have indeed broken with earlier patterns of capitalism, Marxist theorists especially claim that new forms of capitalistic developments have remained the main engine of change (ibid.).

In the case of Germany, its economy's strong performance was traditionally built on high-quality manufacturing and production. However, economic restructuring and the increasing move of labourintensive production processes to low-cost developing nations have begun to impact German labour markets. Unemployment rates in recent years have remained stubbornly high while some observers are concerned that Germany is lagging behind other industrial nations in making the transition from a manufacturing-based economy to an informationand service-based post-industrial society. Still, there has been a significant shift from traditional production occupations to those in services and knowledgebased industries. In 1995, 31.4 percent of all employed worked in Germany's production sector, down from 41.7 percent in 1973. The service and knowledge sectors, however, saw increases from 37.1 to 40 percent and from 21.2 to 28.6 percent respectively (Heidenreich 1998, p. 332). While these numbers do not indicate revolutionary change, they clearly provide evidence of a trend away from Germany's traditionally dominant production sector.

To various degrees, all western industrialized economies have witnessed larger enterprises conforming increasingly to new, flexible forms of production and work organization. As a result, skill requirements appear to be in a state of uncertainty. Young people in the transition process are caught in the crossfire of largely conflicting expectations and requirements (ibid.). While there is evidence of increased educational expectations in hiring practices (Rosenbaum and Binder 1997), postsecondary education has also been criticized for being too costly and too lengthy. While there is a call for education and training to be more practical and immediately relevant (see e.g., Economic Council of Canada 1992), there are also those who defend the need for more theoretical and academic knowledge to succeed in the labour market (see e.g., Reich 1992). And while there are arguments for a greater emphasis on problem-solving, working in teams, and other so-called soft skills (McLaughlin 1992), the labour market appears to be lacking skilled workers with solid, technically defined skills and expertise (see e.g., Alberta Apprenticeship and Industry Training Board 1996).

Blossfeld's analysis of occupational changes states that there has indeed been a significant shift away from manual and productive jobs to nonmanual service and administrative jobs. Furthermore, the greatest increase in non-manual employment has been in skilled administrative and service positions (1992, p. 169). This argument is important for the transition from school to work and for the success of national training systems, particularly in terms of how well they can adapt to the increased speed in which these occupational changes take place. According to some observers, narrowly defined skills and knowledge are increasingly less important, whereas ability to work independently, to evaluate critically, to solve conflicts, to work in teams, and to be socially and morally competent become increasingly important not just for managers and executives, but for employees at all levels (Betcherman and Lowe 1997).

In many instances, however, training in Germany's dual system has been described as outdated and archaic, narrowly skill-based and more concerned with antiquated virtues of discipline, punctuality, and cleanliness than with the more broadly defined demands of new workplaces (see e.g., Geißler 1994). Training in the dual system still concentrates mostly on occupations in production and primary service occupations, including retail, clerical, and lower management positions. Occupations that are said to become increasingly important in a post-industrial society (e.g., occupations in research and development, health care, information technology, etc.) are characterized by a very high level of qualification required and by mostly school-based or academic preparation.

# **Discrepancies between Vocational Training** and University Education

Proponents of a German-style apprenticeship system in North America have long argued that such programs lead to a respected alternative for nonuniversity-bound youth. This view, however, is increasingly challenged in Germany itself. Academic qualifications still lead to better positions in the labour market. Academics still have a better chance of finding employment upon completion of their education than do apprentices, they are less likely to be affected by unemployment in subsequent years, they have a significantly higher income than a skilled worker and they enjoy a higher status in society (HRDC 1998b).

Both proponents and opponents of the dual system in its current form acknowledge the fact that an increasing number of young people choose higher education at a university or Fachhochschule (polytechnic) over entering apprenticeship training in the dual system. Drexel (1994) argues that this trend is not so much an indication that training in the dual system has become unattractive, but rather that typical professional patterns for skilled workers are increasingly lacking in attractiveness and provide fewer and fewer chances for a successful career. Even a simple analysis of costs and benefits tends to favour university attendance. In Germany, neither students nor apprentices pay for their education, but university students usually have much more freedom and independence in, and more control over, their education. Furthermore, the fact that apprentices earn a small income during their apprenticeship is easily compensated by the higher income prospects of university graduates in their future careers.

In the past, academic education and vocational education prepared young people for different jobs in many different segments of an organization. Heidenreich observes that a glass ceiling separates skilled workers from higher positions in an organization that are generally filled by academic graduates, whereas graduates from the dual system had a virtual monopoly on skilled production jobs (1998, p. 331). This traditional division between "brain" work and "manual" work, however, is increasingly under pressure. The reform and expansion of the education system since the late 1960s has seen an increasing participation in higher education. But, as outlined earlier, there is also the expansion of highly skilled service and administrative positions and the reduction of supervisory middle-level jobs. An increased number of academically trained entrants into the labour market means that employers can hire university graduates into middle-level positions. This option becomes attractive as workplace requirements change and as the increased availability of academically trained candidates makes their hiring more affordable. Academic and vocational education graduates thus enter into direct competition for skilled middle-level positions. Higher technical or administrative occupations, however, remain beyond the reach of graduates from the dual system (Heidenreich 1998, p. 331). This development seriously limits the career possibilities for vocational education graduates and consequently puts the longterm value of vocational education at risk. Despite a temporary increase in participation in the dual system in the 1980s, the percentage of 16 to 18 year olds in apprenticeships dropped from 74.8 percent in 1990 to 59.8 percent in 1996 (ibid.). Not only does this recruiting strategy compromise the attractiveness of vocational training, it also undermines German employers' own position as defenders of the status quo in workplace-based vocational education.

The problems of the dual system vis-à-vis academic education are worsened by the fact that the dual system has been very slow in developing apprenticeship programs for newly emerging occupations in information technology, health care, and other service and knowledge industries. Universities and other school-based education providers have been much faster and more successful in claiming these new occupations as their educational domain (ibid., p. 333).

To overcome these problems, some support a concept in which graduates from an apprenticeship program would be allowed (usually limited) access to universities and polytechnics. University-based programs/courses could be integrated to complement vocational training, allowing for an upgrading of skills and qualifications and eventually leading to better chances of promotion, without the individual having to attend university for a complete four- to five-year academic program. An alternative would be to foster labour market conditions in which skilled workers enjoy equivalent status to university graduates (Greinert 1994a).

Greinert argues that quick fixes and isolated measures will do little to cause real change. He continues that a rational strategy to save the dual system has to consider at least three dimensions. First, revision of wage agreements in the private and public sector is necessary, as is the lowering of wage privileges of academic positions. Second, an attractive and clearly accessible system of career options with corresponding positions for graduates of the dual system needs to be created. And third, integrated educational paths should be established in the form of doubly qualifying programs within a form of dual system. It is argued that if young people have the choice between entering *Gymnasium* and only receiving an academic university entrance

qualification or entering a program in a dual system and receiving both a vocational training and university entrance qualification, educational choices could be significantly changed (Greinert 1994a, p. 370). While this last point is actually reflected in Canadian youth apprenticeship programs, Greinert acknowledges that in Germany this would in effect lead to the dissolution of the traditional *Gymnasium* and the whole streaming process — a prospect that currently does not appear to be a realistic option.

## **Reproduction of Inequality**

According to Münch, "the dual system is an 'open' training system with no formal restrictions on admission such as age, educational level, nationality or sex" (1995, p. 42). Reality, however, presents a slightly different picture. A number of studies dealing with issues of participation reveal that foreign nationals and young women graduating especially from the Hauptschule stream experience greater difficulty in obtaining an apprenticeship position (Damm-Rüger 1994). As noted earlier, graduates from the higher school stream (Gymnasium) increasingly replace graduates from the middle (Realschule) and lower (Hauptschule) streams in gaining access to high quality apprenticeships, and university graduates displace apprenticeship graduates in many technical and supervisory middle-level positions (Heidenreich 1998; Lempert 1995). This trend supports the main arguments of credential inflation theories. Despite expansions in education systems, inequalities in the labour market are considered to have largely persisted due to increased entrance requirements for many occupations (Müller and Haun 1994). As well, the selection of apprentices based on labour market requirements puts those in areas with high unemployment at a significant disadvantage. This problem finds its strongest evidence in the problems of the former East German states outlined earlier.

These issues have led some observers to question whether the chief value of an apprenticeship system is actual skill building or whether it serves the purpose of reproducing social and cultural inequalities (see e.g., Kantor 1994; Pritchard 1992). Kantor claims that "the arguments for apprenticeship are based on flawed assumptions about the nature of the youth labour market and the connections between school and work as well as on unsettling assumptions about the purposes of public education" (1994, p. 446). While those in favour of apprenticeships argue that offering alternatives for youth not entering postsecondary programs will make education more democratic, Kantor claims that apprenticeships may actually lead to more dead ends with a qualification of questionable value. Instead of equalizing opportunities for the least advantaged, he argues that youth apprenticeships will only add another dimension of inequality to an already unequal system.

## THE CANADIAN CONTEXT

## Youth Apprenticeship Initiatives in Canada: **Some Examples**

It is fair to say that school-work transitions in Canada's more liberal labour market have never seen the level of corporatism that is characteristic of the German dual system. Nevertheless, both the federal government, most of the provinces and territories, as well as schools and the private sector have been involved in special programs dealing with young people's problems of making the transition into the workforce. Human Resources Development Canada (HRDC) has funded initiatives such as Youth Internship Canada, Youth Services Canada, and the Youth Information Initiative. High schools offer career, technology, and vocational programs and increasingly forge partnerships with the local business community. Cooperative education, internship, and youth apprenticeship programs have received growing attention as alternative forms of improving school-work transitions.

Youth apprenticeship programs are designed to provide opportunities for high-school students to begin training in a skilled trade while at the same time completing high school. Ontario was the first province to introduce a youth apprenticeship program. Participating students in the Ontario Youth Apprenticeship Program (OYAP) earn credits toward an Ontario Secondary School Diploma (OSSD), while hours worked on the job are applied to their journeyperson certification. To be eligible, students must be at least 16 years of age and must have completed Grade 10. While working as a youth apprentice, students have to keep up their academic record as well as satisfactory workplace performance. Participants are paid a percentage of a journeyperson's wage for the time they spend on the job and can return to their regular school program within the first year if they find that they are not suited to a career in the chosen trade (Marquardt 1998).

Other provinces and territories have since established similar youth apprenticeship programs. Alberta, for instance, established the Registered Apprenticeship Program (RAP), designed to allow full-time high-school students to begin an apprenticeship as early as grade 10, earning credit toward a high-school diploma and a journeyperson certification at the same time. RAP apprentices are paid at least minimum wage and, until they leave high school, work only part-time in order to uphold their status as full-time high-school students. The program depends upon flexible agreements between schools, employers and students to work out a mutually agreeable schedule. RAP Plus, an "enhanced" version of RAP, has recently been initiated through a private foundation called Careers: The Next Generation. This foundation hopes to improve upon RAP by including a screening process for participants which includes "demonstrated high academic standing, good attendance and good citizenship" (Careers: The Next Generation 1998).

The Dufferin-Peel Roman Catholic Separate School Board is in the process of designing a curriculum for their Youth Access to Apprenticeship Program (YAAP), which is aimed at raising the profile of trades training and providing attractive alternatives to community college and university (Bloom, Brady and Kitagawa 1998). Once their three-phase development has been completed, the work-based portion of the program will allow students to explore the world of work through classroom activities in Grade 10, gain industry exposure in Grade 11, and receive actual workplace training in a specific occupation in Grade 12. Students will receive academic credit for both the in-school and on-the-job portions of their training (ibid.).

The New Brunswick Youth Apprenticeship Program (YAP) permits high-school students in grade 10, after participation in career development and career exploration activities, to enrol concurrently in a secondary school program leading to a high-school diploma and to become involved in career preparation in their chosen occupational area. While this program is less linked to traditional trades training and does not automatically grant credit toward journeyperson certification, it guarantees participants a community college seat in a related field and preferred status at the University of New Brunswick.

As a final example, in 1994 British Columbia introduced the Secondary School Apprenticeship program in which participating students are employees of a firm and registered as apprentices while completing high school. One of the major aims of this program was to introduce young women to a range of occupations, although with only limited success so far (Gallagher, Sweet and Rollins 1997).

## **Participation in Youth Apprenticeships**

There is evidence that the Canadian labour market has seen its strongest demand in both very highly skilled services and administrative jobs, requiring upwards of 16 years of formal education and very low-skilled service and production jobs, requiring little to no formal postsecondary education (HRDC 1998a). Betcherman and Lowe argue that this has led to "more Canadians in high-earner and low-earner categories, with relatively fewer in the middle" (1997, p. 28).

There is little doubt that academic credentials still lead to better career and income prospects (HRDC

1998b). In Canada, this has generally led to an increase in participation in higher postsecondary education. For most young Canadians, the introduction of youth apprenticeship initiatives therefore does not signify the emergence of an alternative to university and college, but more likely an alternative to unskilled labour and unemployment. If youth apprenticeship initiatives are to be established as postsecondary education paths in their own right, they will have to define their role vis-à-vis academic credentials. The majority of high-school students indicate a clear preference for a university education over a trade or technical education. This preference is even stronger with students who are already enrolled in academic programs at high school (Lowe, Krahn and Bowlby 1997, p. 34). Approximately 85 percent of young people in Canada now complete secondary education, of which 40 percent enter university and another 30 percent community colleges, making Canada's population one of the best educated among OECD countries (HRDC 1998b).

The 15 percent not completing secondary school and the 30 percent not entering either university or community college form the most important target group for the introduction of youth apprenticeship programs. While this may raise some serious concerns over reproduction of inequalities, it is undeniable that access to youth apprenticeships would benefit a significant minority that might be able to avoid periods of unemployment and low-paying work and instead enter potentially rewarding careers in trades and other skilled occupations. Furthermore, if high-school graduation becomes a requirement to complete a youth apprenticeship program successfully, these young people retain the option of pursuing further postsecondary education at a later time (Krahn 1996, p. 52).

The integration of a youth apprenticeship into the student's high-school program signals, I believe, a significant improvement over the German dual system. Germany's streamed school system precludes higher education options for most apprentices who entered their apprenticeship upon graduation from

either the *Hauptschule* or the *Realschule* stream. A Canadian youth apprentice retains the opportunity to obtain a double qualification. As mentioned earlier, New Brunswick's Youth Apprenticeship Program (YAP) has a built-in guarantee for a seat at a community college and preferred status at the University of New Brunswick. This potential for a double qualification may ultimately help organizations like Alberta's Careers: The Next Generation fulfil their goal of recruiting high achieving students into a skilled trades career.

## Transparency versus Flexibility

One of the most important advantages of youth apprenticeship initiatives may be in their role of making the labour market and career options more transparent at an earlier stage. Hamilton and Hurrelmann define transparency as "how well young people can see through the system to plot a course from where they are in the present to a distant future goal" (1994, p. 331).

With its central role of credentials and occupations, the German system is very transparent, albeit to the detriment of flexibility and permeability. Through early streaming and specialization in school and by restricting access to many jobs to those with official credentials, the German system sends very clear signals to young people as to the transition paths that have to be taken to achieve specific career goals.

In comparison, the Canadian system is very opaque with relatively loose connections between the education system and the labour market, but also a much higher level of flexibility and mobility. This lack of transparency is especially problematic for those high-school students not planning to attend postsecondary education. As there are no clear, obvious connections between school achievement and the labour market, planning for the future and even high-school course selection become rather difficult and arbitrary (ibid., p. 338).<sup>2</sup>

It seems crucial for the success of any new youth apprenticeship initiative to overcome this apparent dichotomy of transparency and flexibility. In other words, it is important that an increase in transparency does not come at the cost of flexibility for the individual. A key component of youth apprenticeship programs should always be the early orientation of high-school students about career possibilities and how they are related to their current and future academic studies. Creating this level of transparency should not only ease the transition process for individual young people, but should also make education a more relevant and rewarding experience for those not university bound, with the possible sideeffect of actually improving their academic performance (ibid., p. 340). Germany achieves this transparency through rigorous streaming at school and by restricting access to occupations to those with the "right" credentials. Neither option should be part of the Canadian youth apprenticeship agenda. The growing popularity of cooperative education programs, both at the secondary and postsecondary level, as well as various initiatives provided federally through HRDC already indicate increased efforts to make the transition process more transparent (HRDC 1998b).

One of the main problems with increasing the transparency of the transition process is the reluctance of federal and provincial governments to engage in more active labour market policies. Youth apprenticeships and many of the other initiatives outlined above address school-work transition problems as if they were largely human capital deficiencies. However, problems encountered by young people in their transition to work are not necessarily located in the individual's role in the transition process, but often in the lack of employment opportunities for young people. Downsizing, organizational restructuring, and the integration of processes have allowed many organizations to cut personnel, not only in low-skill but also in skilled occupations. If the demand for skilled workers does not increase with the number of youth-trained, apprenticeship initiatives will end up being little more than waiting rooms for unemployment upon graduation, rather than "launching pads" for meaningful careers (Hamilton 1994, p. 248). Some observers have therefore argued that rather than investing too much effort in the introduction of youth apprenticeship and other training and education programs, public policy should also focus on generating enough employment opportunities for young people (Kantor 1994).

## DIRECTIONS FOR FUTURE RESEARCH

Both the novelty of most youth apprenticeship initiatives in Canada and the scarcity of data evaluating these programs make it difficult to analyze their impact and their future potential. Although not a youth apprenticeship or cooperative transition program per se, the Nova Scotia School-to-Work Transition (NSSWT) Project is one initiative that has been thoroughly evaluated (Thiessen and Looker 1999). Like many of the youth apprenticeship initiatives described earlier, this program was offered to students in Grades 11 and 12 and involved an inschool component and a work experience component. The objectives of the program were to provide generic and specific skills that would increase students' likelihood of making a successful transition to a rewarding career and to gain realistic expectations about their future jobs while at the same time improving partnerships between schools and employers. Students were placed in "assistant" type positions (e.g., assisting veterinarians, lawyers, teachers, and mechanics). These placements gave students access to a much wider range of occupations than those covered by traditional apprenticed trades.

The outcomes of this project, however, prove to be mixed, at best. While participating students generally evaluated their experience positively and as having prepared them better for their subsequent transitions, their high-school performance eventually fell behind that of other students (Thiessen and Looker 1999). As the program's design tried to encourage students from varied backgrounds to enter the program, this difference in school performance cannot be entirely traced back to self-selection. The program also fell somewhat short of establishing

sufficiently close relationships between schools and the local business community to truly affect longlasting structural changes. And finally, there was some concern expressed about a lack of integration between the development of strictly workplacerelated skills and skills required to succeed in postsecondary education (ibid., pp. 264-68). Still, the program was considered to be generally on the right track for making high-school experiences more relevant to participants, for encouraging students to consider a variety of postsecondary pathways, for providing participants with necessary work experience in their chosen career fields, and for providing reflective learning opportunities which allowed participants to identify their strengths and weaknesses in both workplace and school (ibid., pp. 262-64).

As youth apprenticeship initiatives mature, further research should look at the young people currently enrolled in youth apprenticeships and their perceptions of their programs. This would help to establish a better understanding of who the young people are that enter these programs, what their reasons are for entering, and how participation in youth apprenticeships affects their knowledge of the labour market and ultimately their career aspirations. More critically, such research should also attempt to gain insight into the reflexive understanding these young people have of their position in both the education system and the labour market.

Further data should be collected on the postgraduation biographies of participants. Are graduates finding employment in their trade? Are they staying in their trade? Do they eventually abandon the trade and work as unskilled workers or enter university? How receptive is the labour market to these young people and their qualifications? Research projects should therefore be set up as longitudinal studies which would attempt to re-visit participants in regular intervals to determine their "progress" in the labour market or education system.

At the same time, an investigation into youth apprenticeship may be better informed if it could

include research on participating (and non-participating) employers, parents, teachers, and bureaucrats at federal and provincial levels. Do employers participate out of genuine concern for young people, concern about the skill content of their workforce or are they more interested in the exploitation of cheap youth labour? To what extent do parents, other family members or friends influence a young person's decision to participate in youth apprenticeships? What government initiatives may increase interest in employers to hire apprentices?

#### Conclusion

Although the youth apprenticeship debate in Canada is scarcely a new one, it has certainly enjoyed renewed interest in recent years. Interestingly, this renewed interest in the potential of youth apprenticeships to facilitate school-work transitions comes at a time when the German dual system, often described as a model of transition excellence, is considered to have entered a crisis period. Many critics question whether the dual system can adapt to new forms of workplace organization and changing skill requirements. As a system that prepares young people for skilled trades and other intermediate skilled occupations, the current uncertainty about future skill requirements creates a particularly problematic situation. The relative lack of flexibility in the transition process in Germany and the associated rigorous streaming seriously limit the career possibilities of young people — a fact that could have severe repercussions if one is to believe that skill requirements are becoming increasingly polarized.

Returning to the question posed in the title of this paper Is Germany's Dual System Still a Model for Canadian Youth Apprenticeship Initiatives?, does this knowledge of the German experience mean that youth apprenticeship initiatives in Canada are less than sound investments and ultimately doomed? Not if a number of features are considered that would continue to borrow, yet also set Canadian youth apprenticeship programs apart from German practices. There is little doubt that some form of alternation between the classroom and the workplace allows students to receive an introduction to the reality of an occupation. At the same time, it may offer the potential to make the school experience of practically minded students more relevant. This paper has presented a number of suggestions and possibilities for the improvement of school-work transitions. It is interesting to note that many of the suggestions currently discussed in Germany to improve the traditional dual system are already being integrated into Canadian youth apprenticeship (or other cooperative) programs.

Rather than limiting the credits that participants receive toward journeyperson certification, policymakers should consider the possibility of extending some form of credit toward community college or university programs. The New Brunswick Youth Apprenticeship Program (NBYAP) has taken a significant step forward by guaranteeing participants acceptance to the province's community college system and giving them preferential status for admission to the University of New Brunswick. If this policy were adopted by programs in other provinces, young people would retain the option of taking their workplace assignment credits either into a career in the trades or into postsecondary education. This should not only improve the transitions of individual participants, but also make the programs more attractive to a broader range of high-school students.

This paper has identified the structure of labour markets as one of the main differences characterizing the transition processes in Germany and Canada. Despite much criticism, Germany's dual system continues to have great relevance in an occupationally stratified labour market. In most instances, career mobility in Canada relies much more on accessing an employer's internal labour market, rather than on very specific occupational qualifications. Young people in particular are faced with a "Catch-22" situation in which they need appropriate work experience to enter an internal labour market, but they cannot gain this experience without getting relevant jobs. A youth apprenticeship or similar program can break this vicious cycle by providing young people with relevant work experience needed to break into careers. It is therefore important, as is the case with Nova Scotia's School-to-Work Transition Project or with New Brusnwick's YAP, that youth apprenticeship initiatives extend their focus to include emerging and increasingly important occupational fields outside the trades.

It is probably no coincidence that the direction the eastern provinces have taken may be more instructive for transitions in a post-industrial economy. While the traditional trades continue to be important in the resource-based industries of the western provinces and the manufacturing-based industries of the central provinces, the eastern provinces have expanded their youth apprenticeship and transition programs beyond the realm of traditional apprenticeships. These are regions where traditional trades play a far less important role and where employment opportunities are increasingly created in post-industrial sectors. The focus of a youth apprenticeship program like New Brunswick's YAP is therefore on gaining exposure to different occupations while encouraging participation in postsecondary education, rather than on providing credit toward journeyperson certification.

As changes in labour markets and societies continue to challenge established school-work transition patterns and as risk and uncertainty about career decisions increase, public policy needs to be informed about its possible consequences for the life course of young people. Public policy can neither depend on out-dated solutions nor can it rely on simple prescriptions based on a superficial analysis of other systems (such as the German dual system) perceived as successful. Instead, the careful investigation of transition systems in other countries, including their structural and individual dimensions and outcomes, their cultural peculiarities as well as

their problems and disadvantages can provide the necessary insight to formulate more successful policies. It is necessary that comparisons with other apprenticeship systems (like Germany's dual system) move beyond mere economic variables of productivity and unemployment. Rather than implementing the same problems that plague systems in other countries, Canada should continue to look for innovative and alternative ways to integrate work and school into a more genuinely polytechnical program that can help young people develop a vocational identity while not closing off access to higher education and social mobility.

## Notes

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<sup>1</sup>Youth unemployment figures are quoted from Human Resources Development Canada (1998*b*).

<sup>2</sup>Hamilton and Hurrelmann write about the United States. However, despite the many differences in Canadian and US education, the lack of transparency appears to be similar enough to extend their comments to the Canadian situation.

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