Dual Credit: Creating Career and Work Possibilities for Canadian Youth

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Author's Note

Abstract

In this article, I investigated the problems that educators are addressing with dual credit initiatives and consider tensions that have limited the seamless implementation of dual credit programming. Stakeholder representatives clearly identified common resources and support required to sustain their dual credit programs. Study participants noted the need for strong partnerships for dual credit initiatives, for government policies to allow for articulation of credits between secondary and post-secondary and, in particular, for the means to fund these programs. Findings from individual interviews and focus groups conducted in British Columbia and Ontario with individuals who had formal work-related involvement (e.g., industry associations, government, organized labour, high schools, school boards, colleges, and industry) in dual credit initiatives suggest that access to dual credit options provide secondary students valuable opportunities for future career and post-secondary education, giving support for policies to support stakeholder partnerships to advance the effectiveness of dual credit models. However, with partnerships, tensions exist because stakeholders compete to gain and maintain control of their institutional terri-tories and established standards. Questions arise – "who is going to pay?" and "who is going to benefit?" – that suggest concerns about student access and who is allowed to make use of the resources allotted for these initiatives.

Key words: dual credit, youth, educational policy, secondary education, post-secondary education, Ontario education, British Columbia education, post-secondary credits, apprenticeship training, school to work transition programs

Résumé

Dans cet article, l'auteure analyse des programmes à double reconnaissance de crédit en Colombie-Britannique et en Ontario. Des représentants des parties intéressées ont clairement identifié les ressources communes et le soutien que requiert le maintien de telles initiatives. Elles ont noté que ces initiatives exigent des partenariats solides, des politiques gouvernementales permettant l'articulation des crédits entre le secondaire et le

postsecondaire et, surtout, des ressources financières. D'après les entrevues individuelles et les discussions en groupe menées avec des personnes impliquées professionnellement dans des initiatives à double reconnaissance de crédit, l'accès à des options de ce genre offre à des élèves du secondaire des possibilités intéressantes pour la planification de leur carrière et de leurs études postsecondaires, ce qui milite en faveur de politiques qui, en favorisant des partenariats entre les parties intéressées, assurent la promotion de modèles à double reconnaissance de crédit. Ces partenariats engendrent toutefois des tensions, les parties intéressées tentant chacune d'obtenir et de maintenir le contrôle de leurs territoires institutionnels et des normes qu'elles ont établies. Les questions qui surgissent, comme « qui va payer? » et « qui va en profiter? », font état de préoccupations quant à l'accès des élèves à ces programmes et au contrôle des ressources allouées à ces initiatives.

Mots clés : double reconnaissance de crédit, politiques en matière d'enseignement, éducation secondaire, éducation postsecondaire, éducation en Ontario, éducation en Colombie-Britannique, crédits au postsecondaire, formation en apprentissage, programmes écoles-entreprises.

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Introduction

In Canada, dual credit initiatives are not well-established in educational systems, unlike the United States where dual credit programming has been available for at least three decades. However, recent government policies in some Canadian provinces provide high school students with opportunities to earn secondary credits to contribute to their grade 12 diploma requirements while at the same time securing university, college, or apprenticeship post-secondary credits. Individuals with work-related associations to dual credit programs in British Columbia and Ontario were invited to share their views about government dual credit policies and their implementation. Little research has been done on dual credit – how it works, challenges, and outcomes.

In this article, I begin with a review of the literature that informs this discussion, including an examination of recent North American dual credit initiatives both in the United States and Canada. Following these sections I further elaborate dual credit programming in British Columbia and Ontario. An overview of collaborations between post-secondary and high school is included. I also investigate the problems dual credit initiatives address and some tensions that limit the seamless implementation of dual credit programming. Following this section is a description of the research methods and data sources. Data collected from two sites, Ontario and British Columbia, are reviewed. The focus of this investigation is dual credit for apprenticeship training. These provinces are profiled in this discussion because of their explicit implementation of dual credit transition policies to promote opportunities for high school students to acquire post-secondary credits. Provincial education policies are examined with research participants' perspectives and experiences to study the value and possibilities for the dual credit model in Canada. Study findings suggest that, for some students, access to dual credit options, especially in the area of acquiring formal apprenticeship training, is valuable for future career and post-secondary education.

United States: Dual Credit Concepts

"Dual credit" and "dual enrolment" are now familiar terms in the North American educational policy arena because of reforms that endeavour to advance high school students' transitions to college. Although these terms are often used synonymously in the literature, I acknowledge the distinction made by Lekes et al. (2007): "the term *dual credit* [is preferred] because it clearly denotes college credit earned by secondary students who have yet to graduate from high school, thereby transcripting credit at the secondary and collegiate levels simultaneously" (p. 7).

Rojewski (2002) studied American educational initiatives and reforms as the basis for his conceptual framework of career and technical education. He argues that two crucial views held among many people about vocational education as well as federal legislation have and continue to affect vocational education. Gill, Dar, and Fluitman (2000) observe that governments often implement policy to counter high unemployment or to train for specific skills required by industry. These authors also maintain that numerous

stakeholders expect vocational training policies to achieve outcomes that are not generally found within general education policies.

Recent initiatives among stakeholders (e.g., high schools, post-secondary institutes, business, etc.) integrate academic subjects with traditional vocational education and training (VET) programs by means of secondary and post-secondary articulation, promotion of work skills, use of technology, and the development of teamwork, problem-solving, and decision-making skills. This approach to VET is noticeably different from past reforms where academic and general skill acquisitions were distinctly separate (Lekes et al., 2007). A predominant initiative in this area is the implementation of dual credit courses and programs.

Dual credit initiatives are not new – they have existed for at least three decades in the United States (Lekes et al., 2007). In many locations, earning dual credits was initially limited to high-achieving, senior secondary school students, that is, for university-bound students only. However, as will be shown below, colleges and high schools are putting in place mechanisms for interested secondary students to obtain formal university as well as apprenticeship and college credentials. The impetus for dual credit programming, according to Morrison (2008), are the current and predicted workforce labour shortages, the anticipated gap between educational credentials earned by post-baby boomers and those considered necessary for the workforce, and the global demand for skilled and knowledgeable labour whereby higher levels of educational attainment are needed to compete in a world economy.

In their study of multiple pathways for American youth to achieve post-secondary credentials, Callan and Finney (2003) assert that students require two years of post-high school study to obtain the advanced skills and knowledge needed in many labour markets; thus it is imperative that youth obtain education and/or training beyond high school. Some researchers suggest that students who enrol in dual credit programs or courses are more likely to complete their high school and to consider post-secondary education (Karp & Hughes, 2008). An opposing view is presented by Pennington (2004): "[D]ual enrollment does not necessarily accelerate *degree completion"* [italics in original].

Credits earned at one postsecondary institution often do not transfer to another. Worse, courses that students take at the college level may or may not count toward fulfilling their high-school course requirements in the same academic subject areas. (p. 14) Similarly, Lekes et al. (2007) comment that these projected benefits are worthy but there is limited research to confirm the value of dual credit initiatives. These authors point out, based on their review of the literature, that it is not guaranteed that attainment of dual credit courses directly corresponds with college enrolment, retention, or completion. In support, Karp and Hughes (2008) note that the dual credit approach to advancing youth transitions to post-secondary institutions to obtain valued skills and knowledge is an area of study where not much is known "about its effectiveness as a strategy for increasing students' college success" (p. 15).

Besides the lack of evidence that high school students enrol and complete post-secondary programs because of their dual credit activities, there are problems and misgivings associated with (a) the coursework and program quality and consistency, (b) the students who take college courses instead of high school courses, and (c) the complicated process for credit transfer. Equity concerns about limited access also exist because of income disparities, gendering of occupations, ethnicities, and rural locations. Pennington

(2004) maintains that dual enrolment as well as Advanced Placement options are ineffective mechanisms for advancing college success of underrepresented students and, in general, do not encourage faster attainment of post-secondary qualifications for a substantial number of individuals. Students are confused by the number of secondary and post-secondary courses and there is a discernible trend for individuals from more economically-privileged families to enrol in these courses (Pennington).

Male students are heavily represented in dual credit technical courses linked to occupational areas traditionally associated with men. This observation suggests that school personnel, family, and peers may encourage young men to enrol in these particular courses or advise young women against these occupational pathways. Similar to the lack of young women in non-traditional dual credit opportunities, minority groups are not as active in these programs in comparison to non-minority youth (Lekes et al., 2007). Bragg, Kim, and Barnett (2006) contend that schools with few minority students tend to offer dual credit courses. These authors also note that urban students have dual credit opportunities unavailable to rural students. Rural schools typically do not have the resources to support the number and quality of dual credit offerings found in urban regions. Their study results indicate "that students' opportunities to participate in dual credit programs are not distributed equally; access depends on demographic, geographic, and econ-omic variables" (Bragg et al., pp. 12-13). However, some studies have highlighted the increasing number of disadvantaged students who are able to access post-secondary opportunities because of dual credit courses and programs (cf., Lynch & Hill, 2008). Compounding equity concerns is the awareness that many institutions admit students based only on their grade point averages, restricting access and subsequently the effectiveness of dual credit courses for students who have not attained adequate grades (Pennington, 2004).

Other aspects of dual credit initiatives may also offset their potential benefits. Attempts to link or bridge high school and post-secondary curricula have encountered numerous challenges (cf., Bailey, Hughes, & Karp, 2003; Kirst & Venezia, 2004). In a study of community colleges' role in workforce development, Orr (2001) identifies five areas that can impede or, conversely, support partnerships to advance high school students' participation in dual credit courses and/or programs.

(1) First, organizational structure, routines, and management of day-to-day activities between high schools and post-secondary institutions often do not align, for example, timetables and curricula.
(2) Second, organizational capacity varies among secondary schools, post-secondary institutions, industry, and communities. Resources, budgets, and expertise affect an organization's ability to enter into and maintain partnerships to allow dual credit opportunities. According to Orr, organizational capacity has the potential to create tensions about solving problems and subsequent decisions made by partners because of resource disparities that organizations can offer the partnership.
(3) Third, the institutional field(s) that an organization is attached to by virtue of its services and expertise may have conflicting expectations.
(4) Fourth, each organization is founded on a belief system, which may match or rival those involved in the partnership activities. Although business, industry, secondary and post-secondary schools, and union and trade organizations may have similar goals

to advance individuals' workforce engagement, the underlying objectives and
motivations for these goals may differ.
(5) Lastly, power and political clout influence singular or group efforts to obtain private
and public funding.

For a partnership to exist, Labonte (2005) argues, organizational groups need to establish
their own power and legitimacy, perhaps involving tensions particularly between weaker
and more powerful members. Labonte further suggests that for partnerships to achieve their
intended goals and to maintain the boundaries of their power and legitimacy, groups must
autonomously control resources.

The Canadian Context

According to the Canadian Education Association (2007), Canada is the only
federated nation member of the Organization for Economic Co-operation and Development
(OECD) without "direct federal involvement in the direction of elementary and secondary
education" (p. 1). The responsibility for secondary education rests with the 10 provinces
and three territories. Yet, structurally, many similarities exist, with some variations, across
Canada; for example, compulsory school ages, a similar number of school days, and
systems that accommodate kindergarten to grade 12 students. Noticeable differences are
curriculum, assessment, accountability, and education policy reforms (Canadian Education
Association).

In Canada, the youth unemployment rate is more than two times the adult rate and
it is documented that "[p]ost-secondary graduates fare better in the labour market in terms
of their rate of unemployment than secondary school graduates, who, in turn, do better than
high school dropouts" (Kitagawa, 2002, p. 4). Parents and students are aware that some
post-secondary education aids in upward social mobility and may help secure stable
employment (Haycock, 2006). Students feel pressured to enrol in post-secondary programs
although, as Kitagawa (2002) proposes, these programs do not give some youth the skills
and knowledge they need to access steady and long-term employment. Even if students do
enrol in post-secondary programs, it is unknown how those who drop out fare in their
ensuing employment. American research suggests that students may not be prepared for
post-secondary level courses even after enrolling and completing dual credit courses
(Lekes et al., 2007). However, researchers see dual credit as a way of increasing both high
school and post-secondary retention.

Unlike the United States, dual credit initiatives are not firmly entrenched in the
Canadian educational system where there is a distinct lack of coordination between the
secondary and post-secondary educations systems, governments, unions, trade and
business organizations, and industry and businesses. More recently, however, some
provincial education ministries have moved in the direction of providing dual credit
opportunities. These education policies allow secondary students to enrol in post-secondary
courses and the earned course credits are used for the secondary education diploma
requirements and as credits towards post-secondary study including university, college,
and apprenticeship. Although programs that articulate with university (e.g., International
Baccalaureate and Advanced Placement) are not new, initiatives to link high schools with

colleges and apprenticeship systems are. Because of this, there are few scholarly writings about the development of K-14 systems in the Canadian context.

Dual Credit in British Columbian and Ontario

British Columbia and Ontario, similar to some other provinces in Canada (e.g., Manitoba), have sanctioned high school apprenticeship programs and other dual credit options to help students complete high school diploma requirements and to consider post-secondary education. Such programs are also designed to aid students to obtain work-related skills and recognized post-secondary credentials, which, ideally, match local employers' skill requirements thus developing a skilled labour pool for regional industries. Comparable to the United States, historical and current philosophies, legislation, attitudes, and subsequent policies of the various Canadian provinces continue to shape vocational education.

High school students have two primary pathways to access the appronticeable trades and college programs in British Columbia: (a) Secondary School Apprenticeship (SSA) and (b) Accelerated Credit Enrolment in Industry Training (ACE IT). SSA programs offer students opportunities to (a) gain work experience in industry training programs, (b) earn credits (up to 16 or one-fifth of total credits required for graduation) towards their high school diplomas, (c) acquire hours for their apprenticeships, and (d) receive an income. ACE IT, which can be taken at the same time as a SSA, makes it possible for students to earn high school credits, and obtain their first-year technical apprenticeship training or enrol in a foundation program that aligns with apprenticeship or college programs.

Technical qualifications can be obtained in the traditional craft trades (e.g., carpenter, welder, steamfitter-pipefitter) as well as recognized industry programs (e.g., graphic arts, florist, electronics technician). Depending on a school districts' policies, students also secure high school credits and/or post-secondary credits (Industry Training Authority [ITA], 2006). In addition to apprenticeship dual credit programs, college courses are available to high school youth where credit is granted towards their high school diplomas and post-secondary programs.

The ACE IT program began in 2005 with 853 students and the SSA program, which started about eight years ago, now includes about 1,500 to 2,000 students (BC I-10 Government representative).[1] For the 2008-2009 reporting year, there were 1,824 SSA and 3,481 ACE IT student participants, a total of 5,305. Of this total, 367 students were enrolled in both SSA and ACE IT. At the beginning of March 2009, 1,152 additional students participated in SSA and ACE IT programs (Industry Training Authority [ITA], 2009).

In Ontario, the School College Work Initiative (SCWI) is one part of the provincial Student Success/Learning to 18 Strategy. A recent goal and priority for SCWI is to expand college and school board participation in dual credit and/or dual program pilot projects, many of which relate to apprenticeship (Ontario Ministry of Education, 2007). The SCWI, co-managed by the Council of Ontario Directors of Education and the Ministries of

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[1]   Interviews and focus groups are acknowledged with British Columbia denoted as BC complete with the interview number (e.g., BC I–10), and Ontario is abbreviated as ON complete with the interview number (e.g., ON I–10). In cases where the research participant is not identified in the text, the role is identified in the reference (e.g., BC I–10 Government representative).

Education, provides policy guideline for high school youth to gain post-secondary education credits while earning eligible high school diploma credits.

In the 2008-2009 school year, the SWCI consisted of 171 programs and 4,500 high school students. Students can earn up to four optional credits of the 30 required credits for their Ontario Secondary School Diploma (OSSD) outside the secondary school system. Optional credits may also transfer to college or apprenticeship programs. An exception to this guideline is team-taught courses (e.g., involving a secondary teacher and college instructor/professor) that have an Ontario Ministry of Education course code and follows the prescribed curriculum (Ontario Ministry of Education, 2008).

The SCWI is coordinated with the Ontario Youth Apprenticeship Program (OYAP). In OYAP, Ontario youth 16 years of age or older in grade 11 are eligible to obtain apprenticeship hours and technical training and simultaneously earn high school credits. OYAP students also acquire cooperative education credits (Ontario Ministry of Education, 2009). Similar to British Columbia, apprenticeable trades are the more traditional occupations such as carpenter, welder, and steamfitter-pipefitter. Other trades available to OYAP students are network cabling specialist, gem setter/goldsmith, and educational assistant. Technical training can be offered in conjunction with the school and a union or college.

Research Methods/Data Sources

Data include 35 interviews and two focus groups with participants involved with a northern British Columbia Peace River District high school transition program in apprenticeship and a similar program in Simcoe County in southern Ontario. These two sites were selected because of their resource-based, industry focus and similar reliance on construction-type occupations to support local labour markets as well as a collection of community, industry, school, government, and post-secondary partners who were plainly involved in dual credit initiatives. Research participants were identified, contacted, and invited to join this study by preliminary discussions and interviews with government and partnership representatives. Details of the study were shared with potential participants; all those who agreed to participate then signed informed consent forms. The Faculties of Education, Extension, and Augustana Research Ethics Board (EEA REB) at the University of Alberta gave ethics approval for this research.

The participants represent local training boards, industry associations, government, organized labour, high schools, school boards, col-leges, and industry.[2] The interviews and focus groups were conducted from November 2007 through to July 2008. Interviews were fully transcribed and NVivo software was used to aid in data analysis. Institutional and government documents and scholarly literature were also reviewed.

Sites

British Columbia and Ontario have implemented explicit government-sanctioned policies to support secondary and post-secondary dual credit initiatives. These provinces have a significant number of high school students in dual credit apprenticeship and technology courses. These sites were selected for their economic growth (e.g., resource-

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[2]   Youth were not interviewed in these two sites; however, youth were interviewed in another site that was part of the larger study where this research is located.

based industry in British Columbia and the construction and manufacturing industry in Ontario) and the partnership activities undertaken between secondary schools, colleges, and employers. The possibility for union involvement was also a consideration in selecting the sites. Similar to participant selection noted below, discussions with government, training board, and provincial career organization representatives guided the selection of research sites using the criteria previously identified.

According to Statistics Canada (2010), the total population in 2006 of those individuals 15 years of age and older in British Columbia's Peace River District was 45,180 with 34,405 employed, 10,775 not in the labour force, and 1,875 unemployed. The unemployment rate was 5.4 per cent. Likewise, for Simcoe County in Ontario, the total population 15 years of age and older in 2006 was 336,735: 217,539 employed, 105,940 not in the labour force, and 13,270 unemployed. There was a 5.7 per cent unemployment rate (Statistics Canada).

The educational attainment of those 15 years of age of older and more specifically, those who were 15 to 24 years of age is an important aspect to consider. In Table 1, 2006 educational attainment data of these two age-related categories for Simcoe County and the Peace River District as well as comparable statistics for Canada is presented. The educational attainment statistics for the 15 to 24 year group are included in the 15 years and older age data.

Although Simcoe County is located in a more populated area of Ontario when compared to the northern Peace River District of British Columbia, the educational attainment percentages for the 15 to 24 years are similar with the exception of the apprenticeship or trade certification category in these two locations: three per cent and seven per cent, respectfully. For the 15 years and over category, differences exist for those who have less than high school (30 per cent for Peace River District and 24 per cent for Simcoe County). A higher percentage of individuals have apprenticeship and trade qualifications in Peace River District (14 per cent versus 10 per cent) whereas in Simcoe County 22 per cent have college or other non-university certificate or diploma qualifications in contrast to Peace River District's 16 per cent (Statistics Canada, 2010).

During the selection process to determine research sites, the location's economic base was examined. An industrial-intensive economic base has the potential to create spaces for partnership building around dual credit initiatives related to construction-type apprenticeship and technology programs and courses. According to the data obtained from the 2006 *Census*, Simcoe County had distinct construction and manufacturing sectors with 8.6 per cent of the labour force working in construction and 15.0 per cent in manufacturing; however, the agriculture and other resourced-based industries were quite weak (2.6 per cent). In contrast, Peace River District's agriculture and other resource-based industries involved 21.1 per cent of the labour force as well as 10.7 per cent in construction and 4.8 per cent in manufacturing (Statistics Canada, 2010). Overall, site selection was based on labour markets, dual credit activities, diverse stakeholders, and the possibility that participants would share a wide-range of ideas and perceptions about their partnership work in the development and implementation of dual credit opportunities for high school youth.

Table 1.

2006 Statistics Canada Education Attainment Data: Canada, Peace River District, Simcoe County

Description	Location					
	Canada (per cent)		Peace River District British Columbia (per cent)		Simcoe County Ontario (per cent)	
	15 years and over	15 to 24 years	15 years and over	15 to 24 years	15 years and over	15 to 24 years
Less than high school	24	40	30	45	24	48
High school graduation certificate/diploma	26	36	29	38	29	35
Apprenticeship or trade certification	11	4	14	7	10	3
College or other non-university certificate/diploma	17	11	16	8	22	9
University below bachelor level	4	2	3	1	3	1
University degree	18	7	8	1	12	4
Total	100	100	100	100	100	100

Source: Statistics Canada (2010).

Participants

Conversations were held with government personnel and representatives from training boards and provincial career organizations to identify potential participants. The main goal for participant selection was formal work-related associations with the specific initiatives (e.g., British Columbia's ACE IT and SAS; Ontario's OYAP and SCWI) and representation from identifiable stakeholders in these initiatives. Thus the participants involved in this research represent local training boards (1), industry associations (3), government (6), organized labour (3), high schools (9), school boards (5), colleges (5), and industry (5).

Data Collection

From November 2007 through to July 2008, data were collected by means of 35 semi-structured interviews and two focus groups. Interviewers used guiding questions to frame the discussion; however, participants were encouraged to share ideas and perspectives that they found import-ant. Interviews and focus groups were selected as the research method for this study because these techniques provide opportunities for the researchers and the participants to engage in conversations and to explore ideas in greater detail. A sample of guiding questions for both the interviews and focus groups includes:

1. How does the partnership work and who is involved?

2. What resources and supports are needed for this program to be sustainable?
3. What are the various stakeholders' roles in high school transition programs?
4. What changes, if any, should be considered in the level of or type of participation from different stakeholders?
5. What is required to develop and maintain effective partnerships?
6. What are the influences of the local labour market, changes in construction work, changes in apprenticeship training, and labour relations context on high school apprenticeship?

The voice recordings obtained from the interviews and focus groups were professionally transcribed. When the interview transcriptions were complete, transcripts were checked for errors and omissions. At this point, the transcribed word documents were sent to participants for their approval. Upon receiving approval from the research participant, the transcript was added to the data pool for analysis.

Interviews. Face-to-face interviews were conducted in the Simcoe County and Peace River District research sites, with the exception of four telephone interviews, in the locations where the participants worked. The average interview length for the Simcoe County site was 60 minutes and the Peace River District was 70 minutes. The length of the telephone interviews was similar.

Focus groups. The two, in-person focus groups averaged 90 minutes in length with three participants each and, similar to the interviews, occurred at the participants' workplaces on a convenient date.

Data Analysis

A qualitative analysis was conducted to expose patterns discerned from reading the participant-approved transcripts. Key ideas were identified based on the emerging themes, with particular attention to concepts surrounding partnership, dual credit, funding, tensions, solutions, and organizational concerns. NVivo software was used to aid data organization and analysis. Throughout this process, pertinent institutional and government documents and related scholarly literature were studied.

Findings

The study participants expressed their opinions and ideas about how to organize and manage partnerships concerned with dual credit initiatives. These individuals, because of their partnership experiences, principally the development and implementation processes, brought forward issues to advance the continuation of dual credit programming in British Columbia and Ontario. In this section, participants' experiences point to a need to define boundaries for dual credit partnerships including training qualifications of instructors/teachers, to establish clear standards and funding guidelines, and to consider possible alignment of secondary and post-secondary organizational structures. Arguably, participants were also concerned about program funding, student access, and the availability of resources for these initiatives.

Dual Credit Partnerships

Although the dual credit program goals are comparable for Ontario and British Columbia, the program origins are different. The Ontario SCWI and OYAP were built on

previous programs: *"[this government] moved ahead and made the adjustments to transition it into OYAP and provide[d] . . . funding to start making it happen"* (ON I-5 Government representative). OYAP grew from 2,500 students in 2000 to approximately 30,000 in 2008. These students were not necessarily registered as apprentices but were taking courses in apprenticeship areas. Some might have accessed dual credit opportunities which provided formal educational credit as well as work hours toward an apprenticeship. Prior to this policy implementation, students completing their Level 1 apprenticeship technical training at the college did not earn any credits: *"They only got the co-op placement credit. Now with this, they're going to get the high school credit for having completed the Level 1 course. So for each year Grade 11, 12, the student could potentially pick up eight credits"* (ON I-5).

An Ontario government representative outlined the application process to establish dual credit. First, the regional planning team reviewed the initial submissions and assessed the applications. Second, the regional planning team, not the board or the college, submitted *"the actual applications to participate. . . . All of the proposals that are approved for a particular planning team are bundled and the planning team is given that bud-get"* (ON I-5). This representative went on to say that the planning team then distributed monies to both the secondary schools and the colleges.

Dual credit programming may include college courses or programs not associated with apprenticeships. For example, a college representative commented that students learn current skills and knowledge in high school and when they transition to their post-secondary studies, *"let's say they've done a dual credit where they've earned a blueprint reading course or a architectural drafting 101 course that was actually taught by college faculty . . . they're given a prior learning recognition"* (ON I-10).

The policy that the Ontario government has sanctioned for high school students to earn college credit as well as apprenticeship technical training credit is comparable to the initiatives that are well-established in British Columbia. A British Columbia government representative explains:

> *[A] youth apprentice is someone who is registered in a high school program under the age of 20 and not graduated. We have some very clear definitions of what we consider a youth apprentice in BC [British Columbia]. We have a target of twenty two hundred funded students for technical training per year.* (BC I-10)

British Columbia's dual credit programs evolved because of concerns about clarifying pathways for youth. A college representative commented that dual credit programming started about 18 years ago in his post-secondary institution:

> *Oh, there was nothing formalized. Nothing formal. It was just, we were helping out this young fellow. . . . And it just, it grew from there. First we had one and then in a couple of years we had a couple more and just kind of kept moving and moving . . . to a more formal environment.* (BC I-11)

At present, a college representative pointed out that *"we have 10 percent of the high school population involved in our dual credit programming"* (BC I-11), or

approximately 100 students. In a northern British Columbia school district, the school coordinator noted that:

> [W]e have been doing dual credit trades programs for 15 years plus . . . and have had kids come from the high school and do the culinary arts program at the college or the visual arts program. We support students, not only in trades programs, but in other programs as well – post-secondary programs. (BC I-9)

According to a college representative, there were dual credit programs *"for applied business technology, our visual and graphic arts as well. I mean we're trying to expand that into some of the health sciences"* (BC I-11). A secondary school vice principal affirmed that dual credit opportunities were not only for the traditional apprenticeship areas: *"We have some students who right now are enrolled in Oil and Gas Field Operator courses which is not an apprenticeable trade. But the students are at the college, they receive a credit from the college and credit from us"* (BC I-2). In addition to these programs, stakeholders were investigating other dual credit options. For example, an employer actively involved in the community was promoting dual credit programs for business administration (BC I-8). Other occupational areas under consideration and, in some cases, implemented were *"health sciences, nursing in particular, teaching, . . . geomatics. . . . We can do dual credit anywhere we want, but . . . we don't have any additional funding through Industry Training Authority because it's not a recognized trade"* (BC I-3). Although the SSA programs were not typically government funded, a government representative commented that *"we gave a million dollar grant to a non-profit organization to work with school districts to develop their secondary school apprenticeship [SSA] programs"* (BC I-10).

Dual Credit Issues

There were concerns about the quality of teaching and content delivered during classes where both college and high school students were enrolled. In response, a government representative stated that there was *"no difference in standards, none whatsoever, they write the same tests, they do the same curriculum, they sit shoulder to shoulder with an adult that's at the college"* (BC I-10). In addition to concerns about standards, the organization of college and high school semester schedules typically differed. A British Columbia school district representative clarified that their local college shifted their September to December schedule to September to January:

> [B]y doing that transition that opened the doors to us. . . . They were the first ones in the province that did that, and . . . they've received quite a bit of flak from other colleges saying, "what are you doing to us?" . . . I think other areas have gone that route as well. But that was a huge step. (BC I-3)

Aligning college and high school schedules created possibilities for secondary students to engage in dual credit opportunities, especially, as a school district representative pointed out, for those who *"had it with classroom[s]"* and did not *"want to sit in that high school, in that building, in those classrooms anymore"* (BC I-9).

Nonetheless, issues about dual credit implementation existed. Some college representatives voiced concern about the possibility of secondary schools delivering apprenticeship training:

> *We [the college] have what they call TDA, Training Delivery Agent status, and the colleges feel that they've fought long and hard to have that status . . . we want the control of it and therefore the funding and all the pieces that relate.* (ON I-18)

Further, a school teacher suggested that the province was consequently thinking twice about dual credit, saying:

> *"Whoa, whoa, whoa, we're not going to fund them. We paid for the first tab, we're not paying for the second". . . . And it sort of has been a realization that well it was never [government's] intention to have a student at high school actually complete an apprenticeship at high school.* (ON I-2)

A union representative agreed that it was unreasonable to expect the government to pay for secondary school as well as multiple sessions of technical apprenticeship training: *"its triple dipping, it's already double dipping"* (ON I-1). A college representative supported this assertion, for instance, if both the secondary school and the post-secondary institution were receiving funding for teaching the same credit, then the cost was double (ON I-10).

In British Columbia it was possible, contingent upon the students' programs, to acquire second- and third-year technical training qualifications. A school coordinator commented that they currently have students in their second year of technical training (BC I-1). A teacher further explained that although these students were enrolled in college courses *"they're high school students . . . that's basically the way we run it so that they're concurrently students at both"* (BC I-7). For these students, the teacher stated that *"there are different expectations in that they're adults . . . it's an adult environment, and you will see a big difference in the way they respond when they're in the college versus when they're in the high school"* (BC I-7).

Post-secondary personnel were also apprehensive that the promotion of dual credits might lower standards in their programs. An Ontario employer speculated, *"[w]ho is the dual credit learner? At risk, disengaged?"* and maintains that colleges are not willing to *"lower the bar"* (ON I-18). But even if the success criteria for the high school students were identical for the college students, there was an issue about who was teaching the course. According to a college representative, the Ministries of Education were still working on the implementations of a dual credit system. Teachers' associations expressed great concern about *"who's getting credit for the teaching time; we want to make sure that . . . [high school teachers are] doing the work"* (ON I-10).

Notwithstanding the desire to reduce expenses, additional costs were taken on by the school districts. In Ontario and British Columbia, "dedicated staff" to manage these programs was under consideration or hired because it was crucial that *"people on site that know their job inside out. . . . If you're asking a counsellor to do this off the side of their desk, it's not going to happen, not that soon"* (BC I-3 School district representative). An

Ontario high school teacher concurred *"[Dual credit] requires a coordinator . . . and a college level instructor and a teacher"* (ON I-2).

Discussion: Tensions in Partnership

Participants in this study shared a number of ideas about what is required to develop and maintain partnerships to make dual credit courses and programs possible. Likewise, partner representatives highlighted common resources and support needed to sustain their dual credit programs. Dual credit initiatives relied on developing strong partnerships, implementing government policies to allow for articulation of credits between secondary and post-secondary courses and, in particular, the means to fund these programs. However, with partnerships, tensions existed. Participants' views highlighted concerns about controls and standards for dual credit programming as well as funding. Stakeholders, who vied to maintain control of their territory, often sought to limit infringement upon established standards. The question about "who is going to pay?" surfaced at the onset of implementation. Embedded in these concerns was the question "who is going to benefit?" thus creating implications about student access and who was allowed to make use of the resources allotted for these initiatives.

Perceived Threats to Control and Standards

Provincial policies that formalize the processes for schools to work with industry and post-secondary institutions come with high expectations. Gill et al. (2000) contend that governments presume that some policies will help address training demands if labour supplies are needed by industry or if unemployment rates increase. Furthermore, these authors observe that governments and even non-profit and private sector stakeholders in more vocational education and training areas anticipate that these policies will "perform feats that they would not expect from other systems such as general education" (Gill et al., p. 1). Evidenced by the approaches taken in Ontario and British Columbia, rather than implement rigid policies, creating policies to promote more localized, yet government sanctioned, school-college/university partnerships, are increasingly seen as the direction for dual credit development.

Lekes et al. (2007) argue that localized partnerships are more apt to be successful compared with those that try to include a large number of school districts and colleges. These authors also demonstrate in their review of various studies that a tendency occurs for programs to be implemented in a piecemeal fashion with few opportunities to accommodate the organizational structures of schools and post-secondary institutions (cf., Orr, 2001). However, in contrast to these authors' review, there are instances where colleges have aligned their timetables to the secondary school system. For example, the northern British Columbia education stakeholders in this study realigned their college to secondary school schedules, which, although other post-secondary institutions did not receive this change well, the students in this area were the beneficiaries because of increased options to explore dual credit opportunities.

But, more generally, post-secondary stakeholders, while outwardly supporting dual credit initiatives, may be hesitant to streamline the process until they are assured that their institutional boundaries will not be jeopardized. Technology, technical, and apprenticeship training delivery agents, typically colleges and technical institutes, are extremely concerned about who can offer this type of training. Study participants presented two

opposing views. On one hand, some participants believed that standards would not diminish while others felt that allowing other organizations to deliver what was considered to be "college" curriculum would undermine the content and value of the course.

In contrast to this view, Pennington (2004) proposes that high school students enrolled in dual credit courses will have the benefit of learning about college requirements and related careers, and have opportunities to "adjust their efforts accordingly" (p. 21). The school district representatives in this study followed this approach and sought opportunities to engage youth, whereas, colleges and governments were promoting efficient credential acquisition. From a school district perspective, although a student does not necessarily follow a career path, the potential for student engagement overrides the need to concentrate on achieving credits that lead to a specified occupation.

Colleges and secondary schools have institutional boundaries in the same way government agencies have established distinct organizational boarders (Orr, 2001). Most of the study participants representing government departments were strong supporters of dual credit courses and programs. However, there was resistance from some players who sought to preserve traditional ways of conducting business. For example, a local apprenticeship office in Ontario refused to support high school apprenticeships involving dual credit. Tensions may also arise if unions that have government-approved training status in Ontario seek to participate in dual credit programming.

Funding

In Canada, provincial and territorial policies maintain distinct divisions between secondary and post-secondary funding. Dual credit initiatives challenge these traditional boundaries. Kirst and Venezia (2004) emphasize that without strong commitments to implementation, government funding provisions and mechanisms to equitably distribute funds, and the means to increase institutional capacity, it will be difficult to implement and maintain dual credit courses and programs. In Ontario and British Columbia, both Ministries of Education financially support dual credit initiatives, and, in the case of British Columbia, high school apprenticeships, for example, ACE IT enrolments are funded by the Industry Training Authority. However, non-recognized trades are typically not funded.

As programs mature, policy shortcomings become apparent. For example, some students complete more than one level of apprenticeship training, which is costly for governments because they pay for students' training while they are in the secondary school system. Adults outside of the secondary school system pay a portion of the apprenticeship training costs. In response to the situation where secondary students are completing more than one level of apprenticeship, the Ontario government has amended policy to pay for only the first technical training session per student. Formal second-year training is to be undertaken by youth who are not enrolled as secondary students. In actuality, the cost is not quite double at present; rather the province funds the primary provider (e.g., college or school) and provides some extra funds to their partner (former Ministry of Education staff, personal communication, August 10, 2009).

Ontario's OYAP and British Columbia's ACE IT currently have buy-in from government, many post-secondary and secondary educators, unions, and industry, and the funding guidelines for dual credit programming in the apprenticeable trades have become more clearly identified. However, more "academic" courses offered by post-secondary institutions appear to present major concerns (e.g., funding allocation, timetable coordination, teacher/instructor resource management). Similar issues are evident in the

dual credit program development for apprenticable occupations. The United States' experiences provide insights for other government funding agencies. Pennington (2004) offers a solution to cost burdens for dual credit courses and programs: "start by giving institutions an incentive to participate. . . . This intentional "double dipping" would end after a period of experimentation and evaluation. Longer-range financial decisions to phase out this double dipping would be made on the basis of early experience and results" (p. 28). During the transition, the secondary and post-secondary educational institutions would be paid for the same student earning the same credit; however, after a period of time, the policy would be changed to pay only once for the credit. The added benefit for this approach would be that "institutional resistance that might overwhelm chances for adoption" (Pennington, p. 28) may be avoided. This appears to be the plan in Ontario. In British Columbia, government funding is currently distributed to both high schools and post-secondary institutions for credits earned by youth enrolled in dual credit courses (Industry Training Authority representative, personal communication, December 5, 2009).

Although dual credit initiatives present tremendous post-secondary cost savings for youth and parents (Bailey et al., 2003), colleges as well as governments find it costly when funding for dual credit courses does not cover all costs. One means to offset programming costs is for secondary schools to partner with community and local businesses to sustain their dual credit programs, especially apprenticeship training. Costs of dual credit programs are also offset at the local level, for example, a northern British Columbia college donates classrooms to be used for dual credit classes.

Concluding Comments: Need for Strong Partnerships

The preceding discussion, which has described some of the issues involved with dual credit initiatives in two provinces, begins to address the problem of the paucity of research identified in the introduction. Further research into different models of dual credit, the factors that contribute to effective partnerships, and outcomes for students is needed. The research cited above explored perspectives from some of the partners engaged in dual credit initiatives related to college courses and apprenticeship training.

Because labour markets are influenced by the wider context of politics, geographic locations, and local, provincial, national, and international economies, linkages between education and work need to be planned. One element that undermines partnerships involved in dual credit initiatives is the challenge of determining the knowledge and skills young people require. From employer perspectives, school staff may not have an understanding about what entry-level skills youth need. Thus programs have a tendency to depend on "ad hoc and instructor-dependent linkages to labor markets as sources of labor-market information" (Maxwell, 2007, p. 276). Added to this tension are the contrasting motivations and interests of other dual credit partners (e.g., employers, government, organized labour, training delivery agents, etc.), who may not align with the objectives of high schools. Contradictions and struggles emerge as different partners vie for control of labour power (Taylor, McGray, & Watt-Malcolm, 2007).

A government representative mentioned that one objective of dual credit initiatives is to create *"flexible options for students"* (BC I-10). Offering flexible options requires a supportive infrastructure as well as an organizational culture to manage these programs. These exemplars become models for other districts attempting to organize dual credit

courses and programs for their students. In addition to government policy to sanction "prior learning recognition" for post-secondary credits earned while in high school and funding mechanisms, cooperation among the school district and its staff, employers, colleges, unions, and dual credit coordinators is critical to success.

However, dual credit initiatives challenge traditional boundaries, the institutionalization of defined organizational fields, the historical educational and subsequent funding divisions between secondary and post-secondary institutions, as well as the relationships among school districts, unions, employers, and schools. During the interviews, jurisdictional issues were embedded in the participants' responses. Barriers to dual credit initiatives include perceived threats to control, standards, and funding. In some locations, local secondary schools, colleges, and employers have found ways to work with the policies in place. Other locations are in the process of seeking solutions to their particular partnership dynamics.

I argue that further policy attention needs to focus on how to develop strong partnerships among government, schools, colleges, and community for dual credit models to work effectively. Strong government support for developing these partnerships and working through institutional tensions is clearly needed, at least initially. Lessons about opportunities and challenges can be also learned from countries like the United States where dual credit has gained wider acceptability. The goal, which is laudable, is for youth to experience more supported and effective inter-organizational education transitions.

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