Advancing Articulation: Models of College-University Collaboration in Canadian Higher Education

by Dale Kirby

Abstract

This paper reports on the results of an analysis of program articulation between the college and university sectors in Canada. The Canadian post-secondary system is best described as a binary system with discrete university and non-university sectors. While there are complex sectoral differences between the two institutional types in terms of their history, mandate, culture and governance and significant differences between the level of coordination existent in each of the provinces, a number of transfer and collaborative program models have emerged and are identifiable. The program transfer models include the course-by-course transfer model, the multiple course transfer model, the block transfer model, and the program bridging transfer model. The identified collaborative models outlined include the integrated model, the articulated model, the parallel model, the sandwich model and two different hybrid models. As the categorization provided indicates, these models require varying levels of institutional integration and cooperation.

Transfer and Collaboration in Canadian Higher Education

This paper provides an overview and analysis of the predominant models of college-university articulation in practice at Canadian post-secondary education institutions. Based on an evaluation of the limited research literature in this area, the paper provides a classification of various structures of college-university collaborative programs that have emerged in recent years with a specific focus on collaborative nursing education programs. In carrying out this review and evaluation for the Saskatchewan Academic Health Sciences Network, I relied on two primarily data collection methods: a) a comprehensive review of research literature, and b) interviews with selected staff and faculty at colleges and universities as well as agencies that are engaged in some aspect of college-university transfer and/or collaboration. These interviews were conducted by telephone and email between May and June 2008.
Canada, it should not come as a surprise that the level of coordination and cooperation between the university and non-university sectors varies from one jurisdiction to another. Because of differences in the history, governance, mission and orientation of Canadian universities and community colleges and the absence of formally mandated central coordinating agencies in most jurisdictions, program articulation between the two post-secondary education sectors is generally not well developed in most provinces.

In some provinces, such as Alberta, British Columbia, and Quebec, the transfer function of the non-university sector has been formally mandated and preparation for university transfer is explicit in many college-level programs (Dennison & Gallagher, 1986; Gallagher & Dennison, 1995). Preparation for college to university transfer has also been a major consideration in the development of the curriculum in the non-university sector in these provinces. In comparison, the community college sectors in provinces such as Manitoba, Ontario and the four Atlantic provinces have no formally mandated university transfer role. Transfer programs in these provinces have largely developed on a voluntary basis with colleges and universities negotiating bi-lateral, and, in some cases, multi-lateral agreements. In recent years, the community college systems in many provinces have taken on a greater transfer role through the negotiation of various transfer arrangements with degree-granting institutions across Canada and the United States (Skolnik, 1995; 2004)

Collaborative Nursing Programs

The first inter-institutional collaborative programs to emerge in Canada were baccalaureate-level nursing programs that were developed and implemented in the provinces of Alberta and British Columbia in the late 1980s (Wood, 2003). With the transition from diploma entry-level to degree entry-level education for Registered Nurses (RNs), a collaborative program model that brings together independent college and university programs has been widely adopted as a preferred model for baccalaureate nursing programs across Canada. In the provinces where college-university collaborative baccalaureate nursing education programs have been introduced, nursing educators, regulatory agencies, professional associations, and policy makers have endorsed the college-university collaborative model because of its perceived advantages over the other available alternatives for implementing the baccalaureate entry-to-practice requirement for RN education (Kirby, 2007).

One of the key perceived advantages of the college-university collaborative nursing model has been the belief that such a partnership model more fully utilizes the nursing education resources and expertise that existed in provincial community college and university sectors before the move to the baccalaureate standard. Also, the model is seen as an effective mechanism for combining the practical orientation of the college sector and the theoretical orientation of the university sector. Because networks of community college campuses are more
geographically dispersed in most provinces, college-university programs are an attractive option for maintaining the geographic access that is unique to the community college model (Skolnik, 1996). Finally, because programs in the community college sector are, on average, less expensive than university-level programs, collaborative models have been viewed as the most cost efficient option for implementing the baccalaureate entry-to-practice requirement in nursing (Kirby, 2007). Before proceeding to a discussion of collaborative program models, the more traditional credit transfer model and its most common forms will be outlined.

College-University Transfer Models

Under the traditional credit transfer model, students can receive program credit when transferring from one post-secondary institution to another regardless of the types of institutions involved (i.e., college to college, university to university, college to university, or university to college). While in many cases colleges and universities do enter into inter-institutional transfer arrangements that formalize credit recognition, it should be noted that students frequently transfer from college to university in the absence of such agreements. In this case, the ‘negotiation’ occurs at the individual-institutional level and the recognition of credit that results is often far less efficient and advantageous for the student as compared to credit transfers that take place in accordance with more formalized college-university transfer agreements.

For the purposes of this discussion, it will be assumed that the two institutions involved in the transfer are a community college and a university. It will also be assumed that articulation agreements involved in these transfer models are intended to assist students who have attended a college to pursue a degree program with advanced standing at a university. Such articulated transfer agreements usually take one of the following four forms: a) course-by-course transfer; b) multiple course transfer c) block transfer; and d) program bridging transfer.

Course-by-Course Transfer Model

Under the course-by-course transfer model, individual courses completed by students at a community college are recognized as equivalent to individual courses at a university. While this transfer model is less comprehensive than the block transfer and bridging transfer models described below, course by course transfers strengthen coordination between the sending and receiving institutions and often open the door to more comprehensive opportunities for program articulation (Townsend & Wilson, 2006). This model also increases the visibility of the transfer route for students, creating the potential for increased transfer rates between post-secondary sectors in general. This model is not feasible in instances where the scope of the material completed in courses at a community college is perceived to be less comprehensive than that of a university-level program. The
potential for this type of transfer is significantly reduced in cases where the structure of programs is more integrated and not separated into individual courses.

Multiple Course Transfer Model

The multiple course transfer model is advantageous when course-by-course credit transfer is not possible because, for example, the course content at the community college level does not include the same competencies included in courses at the university level. This can occur in instances where there is a difference in program content organization or a difference in program comprehensiveness. The advantages of this model of transfer are similar to the course-by-course model.

Block Transfer Model

Inter-sectoral transfer arrangements that follow the block transfer model recognize a certificate program, diploma program or some block of courses completed at a community college and, depending on the articulation agreement, allow students to transfer directly into the second or third year of a university baccalaureate degree program. Block transfer arrangements allow for improved accessibility and increased mobility between degree and non-degree programs.

There are many examples of block transfer articulation arrangements between colleges and universities in Canada. For example, under a 1999 Memorandum of Understanding between the Saskatchewan Institute of Applied Science and Technology and the University of Regina (U of R), graduates of selected two-year SIAST diploma programs are eligible for advanced standing in the third year of a number of degree programs at the U of R. This includes degree programs in Computer Science, Environmental Biology and Medical Laboratory Science (Council of Ministers of Education, Canada, 2003). Similarly, the Bachelor of Technology program at Memorial University of Newfoundland gives block transfer credit to students who have completed a 3-year community college diploma in a technology discipline (Memorial University of Newfoundland, 2008). Another group of programs that follow the design of the block transfer articulation model are the post-diploma (also called post-RN) programs that provide opportunities for Registered Nurses with three-year diplomas to complete the requirements for a baccalaureate degree in fewer than two years.

Program Bridging Model

Like the block transfer model, the program bridging model allows students to receive advanced standing in a baccalaureate degree program at the receiving university in recognition of a certificate program, diploma program or some block of courses previously completed at the community college-level. However, prior to receiving advanced standing, students are required to complete one or more
bridging courses at the university in order to upgrade their knowledge and skills in areas where additional preparation is perceived to be needed.

The bridging model is frequently used in Licensed Practical Nurse to Bachelor of Nursing programs (LPN to BN) programs and for Bachelor of Nursing programs that are designed for internationally-educated nurses. For example, LPNs who complete the LPN to BScN Transition Studies program at Vancouver Community College are eligible for admission into year three of the four-year nursing degree program offered at the college (Vancouver Community College, 2008). Algonquin College in Ottawa similarly offers an 11-month bridging program for registered nurses that bridges to the third year of the University of Ottawa-Algonquin College collaborative baccalaureate program (Algonquin College, 2007). In some cases, such as in the University of Ottawa-Algonquin program, bridging programs models recognize and give credit for the prior learning experiences of prospective students.

College-University Collaboration

Like credit transfer program models, collaborative college-university programs are jointly planned and offered by community college and university partners and involve formalized inter-institutional articulation agreements. Collaborative programs are also jointly delivered by qualified college and university faculty members at one or more sites and, upon completion of the program, graduates receive a baccalaureate degree that is conferred by the university partner. Compared to credit transfer models, however, collaborative programs are characterized by joint governance models and a more seamless transfer of students. Collaboration is perhaps best defined as “a mutually-beneficial and well-defined relationship among two or more organizations to jointly develop structure and share responsibility, resources, authority, accountability, and rewards for attaining common goals” (University of Pittsburgh Office of Child Development, 2008, p. 1).

The admission requirements, duration and curriculum of collaborative programs are the same or similar for all students in the program, and collaborative programs in their entirety must meet the same accreditation and approval requirements as stand-alone university programs. Colleges and universities involved in collaborative programs may choose to share library resources and purchasing powers; jointly develop distance education resources; and combine research capacity. Depending on the collaborative program model, faculty may teach only at one site or they may teach at multiple sites.

College-University Collaboration in Canadian Nursing Education

As noted earlier, the college-university inter-sectoral collaboration model has been widely adopted in recent years for the delivery of baccalaureate nursing education. Because of the current and emerging
challenges in the delivery of health care, the Canadian nursing profession has developed a widespread consensus that a broad-based university education is necessary to prepare RNs for the complex nature and scope of nursing practice. In 1982, the Board of Directors of the Canadian Nurses Association (CNA) unanimously endorsed the notion of a baccalaureate degree as the minimum entry-to-practice educational requirement for all new nurses seeking registration as RNs by the year 2000 (CNA, 1984). The CNA subsequently encouraged nursing associations in each province and territory to also endorse the baccalaureate standard. In keeping with the position of the CNA, most of the provinces have now mandated baccalaureate programs as the RN entry-to-practice requirement. These include British Columbia, Manitoba, Newfoundland and Labrador, New Brunswick, Nova Scotia, Ontario, Prince Edward Island and Saskatchewan. As of January 1, 2010 a bachelor's degree in nursing will also be required for entry-to-practice in Alberta.

In advocating baccalaureate entry-to-practice, the CNA did not specifically recommend how this educational transformation would take place. In its 1982 background paper, entitled “Entry to the Practice of Nursing”, the CNA acknowledged that “the logistics of such a ‘change over’ would take ten to twenty years to develop, given that existing degree programs are not currently equipped to handle greatly increased student enrolments” (CNA, 1984, p. 29). The paper further envisioned that the move to the baccalaureate standard would be aided by “increased articulation between various educational and research institutions and health care agencies” in subsequent years (CNA, 1984, p. 30).

In the 1980s, the majority of Canadian RNs were educated in three-year community college or hospital-based programs. The widespread adoption of the college-university collaboration model has occurred in nursing specifically because governments and nursing education stakeholders recognized that a successful shift from diploma to baccalaureate programs should necessarily utilize the infrastructure, resources and expertise existent in the diploma schools of nursing. As a result, nurse educators and policy-makers have worked together to develop collaborative programs that lead to a baccalaureate degree while maximizing the combined nursing education capacity of university and community college sectors.

College-University Collaborative Program Models

While by definition, college and university collaborative partners share responsibility for the delivery of a common curriculum, the extent and type of collaboration that may exist between a university and its collaborating partner (or partners) can vary substantially. At one extreme, the university may be heavily involved in approving academic standards and also in delivering a significant portion of the program curriculum on its campus. At the other extreme, the university partner may only be involved in ensuring that the approved joint curriculum adheres to the university degree standards with the community college...
partner or partners responsible for delivering the entire curriculum with significant autonomy.

A comprehensive list of potential collaborative models is outlined below including a) the integrated model, b) the articulated model, c) the parallel model, d) the sandwich model and e) two hybrid models.

Integrated Model

In programs that follow an integrated program model, both the college and university partners are involved in each year of the program from the beginning, with different instructional activities provided by each institution. In some cases, students move regularly between institutions taking some courses at the college site and some courses at the university site. Faculty may also move back and forth between the institutions and for some partnerships it may be appropriate for programs to be structured so there is inter-institutional movement of faculty but not students. In some college-university integrated programs, students complete the requirements for a degree from the university partner and a diploma from the community college partner in the same amount of time that takes to earn a bachelor's degree. The University of Guelph-Humber College Justice Studies program and the University of Winnipeg-Red River College Communications program are two examples of this type of integrated degree-diploma program (University of Guelph-Humber, 2008; University of Winnipeg, 2008).

The integrated model is an ideal one if the campuses and facilities of partner institutions are located near each other and students do not have to travel a significant distance between locations. The integrated model is advantageous for a number of reasons. First, this model provides a greater degree of continuity for students who share a common cohort, instructors and facilities for all years of the program. Second, the integrated model provides a greater opportunity to capitalize on the strengths of all program partners. In addition, this program model can provide more opportunities for faculty members at each partner institution to teach in all years of the program. Depending on the extent and organization of program integration, this model may create challenges for the partner institutions in terms of human resources (e.g., collective agreements) and logistics (e.g., class scheduling).

Articulated Model

Under the articulated program model, the first part of the program, usually the first two years, are delivered by the college partner (2+2 model). Following the initial two years, students transfer to the university site and complete the remaining two years. In addition to the 2+2 model, the articulated program model could operate on a 3+1 basis.

An articulated program structure may be somewhat easier to
negotiate and implement in comparison to the integrated program model, which is likely to require more time and resources to fully develop. As with the parallel model, the articulated model is useful if the college and university program sites are located at a distance from one another. The model is also useful if maintaining accessibility to education opportunities for populations in remote and rural areas is a concern. In addition to colleges’ wider geographical distribution, the articulated model presents an avenue for maintaining the accessibility of community college academic admissions requirements (Skolnik, 1996).

One important critique of the articulated program model has centered on whether or not programs that build an academic university degree program on the base of technical competencies provided by community colleges uphold the “concept of a professional discipline approach” intended by the baccalaureate entry-to-practice requirement (Gallop, 1984). Considering the differences between college and university programs, there may also be perceived differences between graduates of articulated programs and graduates of integrated programs. The articulated program model can pose a challenge to students transferring from the college to the university site because they must negotiate new roles and relationships to become fully integrated into the university environment (Cameron, 2005). Additionally, transferring students sometimes have negative experiences related to their academic abilities if their knowledge is initially deemed to be inadequate by the university faculty (Diaz, 1992).

Parallel Model

For programs that follow the parallel model, cohorts of students separately begin their programs at the college or university site. Students stay at the same site through all four years of the program and complete a common agreed curriculum. Student and faculty interaction is very limited in comparison to other program delivery models.

Because there are fewer points of intersection between the partner institutions, this program structure may be easier to negotiate and implement in comparison to the other possibilities. Like the articulated model it may not be seen as consistent with the intent of the move to baccalaureate entry-to-practice.

This model may be preferred if other program models are not seen to be feasible or college and university sites are located far away from each other so as to make travel between the two sites difficult. Like the articulated model, this model is useful if there is an interest in delivering post-secondary programs at sites in remote or rural locations that are more easily accessible to populations. An added advantage of this model is that it allows students to undertake their entire program in one geographic location which accommodates student access to the program and enhances the potential for the program to produce graduates in multiple communities.
Sandwich Model

The sandwich model involves student access to two or more educational institutions for completion of the four-year degree program. The first and final years of the program are taken at the university site and the middle two years (the ‘sandwich’) are delivered by the community college partner site(s). This model was used to deliver the first university-level nursing program in Canada, which was introduced at the University of British Columbia in 1919. In this instance, two years of hospital-based training was sandwiched between the first and final years at university (Dick & Craig, 2005). Sandwich models that combined hospital-based technical training with university programs were often criticized for an insufficient level of emphasis on liberal education and high levels of student attrition after the initial year of university experience (Richardson, 2001).

While the sandwich model does not appear to have been used to date in the delivery of college-university collaborative programs, the model appears to be a feasible option for joint programs. The content for the middle portion of the program could be jointly developed by the college and university partners in keeping with curriculum standards of degree-granting and the requirements of professional regulation. Because all students enter the ‘sandwich’ portion of the program at the college with the same common first-year of university, it is possible for several colleges to offer the same ‘sandwich’ program with one university partner. If resources exist, the first and final years in the sandwich model may be delivered via distributed and/or distance learning methods.

One advantage of this model is that it offers an opportunity for universities to free up resources that can be redirected toward specialized or graduate-level programming (McGraw, 1993). The incorporation of flexible decentralized distributed delivery methods may a) help to ensure program accessibility to remote and rural constituencies and b) minimize the disruption, academic and otherwise, sometimes encountered by transfer students. This model is also a potential option in instances where the university partner does not already house a school of nursing (Gerhard et al., 1994).

Hybrid Model: Articulated-Parallel Model

In the articulated-parallel model, students can complete the first two program years at a college partner site and transfer to the university site following the second year. However, in addition to the articulated program component, the university also enrolls students in the first two program years. Years three and four of the program includes students who completed two years at the college site and students who completed two years at the university site.

In addition to the academic challenges students in college-university transfer programs sometimes experience, the articulated-parallel hybrid model has the potential to create a real or perceived
academic hierarchy between students who began their programs at the university site and students who began their programs at the college site.

Hybrid Model: Partially-Integrated Model

As the name suggests, in partially-integrated models some years, semesters or classes of the program are integrated. While, for the most part, these programs operate like the parallel or articulated models, some program components are jointly delivered and there is a crossover of students and faculty between sites. For example, the first two years of a program may be offered in their entirety by the college partner but in the remaining two years university faculty provide classroom instruction at the college site.

If distance education is an option, this delivery structure is likely to be attractive when there are larger distances between partner campuses. In addition to facilitating greater student access, partially-integrated models have an increased potential to supply nurses to multiple communities. Like the integrated model, this model may pose challenges with respect to human resources and logistics.

Future Directions for Articulation and Collaboration

Fifteen years ago, Skolnik and Jones (1993) made the following observation about the state of college-university collaboration in Canadian post-secondary education:

inter-sector coordination is perceived as an important issue; coordination structures are most developed in the provinces in which there is the strongest mandate for articulation between sectors; and efforts are under way in most provinces to refine and improve structures for inter-sector coordination. (p. 57)

While there have been modest advances in inter-sector coordination since the 1990s, these changes have not profoundly changed the post-secondary education landscape. Quite a bit of variability in credit transfer and articulation still exists across the provinces, and despite commitments from the Council of Ministers of Education, the potential for the future development of a national, standard credit transfer system appears to be far off (Canadian Council on Learning, 2007; Council of Ministers of Education, Canada, 2003, 2005).

As this article makes clear, nursing education programs in Canada have been at the forefront of developments in college-university collaboration over the past 10 years. In many instances, the characteristics of the collaboration models that have emerged share much in common with the transfer models that preceded them. It is important to recognize that the wide-spread adoption of collaborative baccalaureate nursing programs has largely been driven by the nursing
profession itself in response to the challenges of an increasingly complex health care milieu. Many of the collaborations in nursing education have remained stable since their inception, however, in other cases collaborative partnerships have, for various reasons, been modified or dissolved since their original implementation.

Each of the transfer and collaboration models described has particular advantages, and while it may be true that collaborative programs are more effective in utilizing the expertise in each of the sectors, it should be recognized that institutional cooperation of any sort, regardless of the model, requires significant effort. Because colleges and universities have different mandates, different governance structures, different academic and institutional cultures and different historical traditions, various issues and challenges arise in the development of collaborative degree programs. As in any relationship, there is a possibility that one party or the other will feel that it is putting more in than it is getting from the partnership. In a fiscal environment where public funding is becoming more and more constrained, college-university collaboration is sometimes put forward as a more efficient mechanism for utilizing scarce funding. However, there is evidence to suggest that inter-sectoral collaboration comes with some added cost, at least in the initial stages. While it may result in less system-wide cost in the long run, it is perilous to assume that it does not require some specific, additional up-front investment.

Because degree granting has traditionally been the domain of universities in Canada, articulation between the college and university sectors has been advantageous for college graduates seeking to complete degrees. With the introduction of independent community college degree-granting in several provinces, the necessity, and public pressure, for colleges to partner with universities is lessened to a significant extent. In fact, the future direction of program articulation in Canadian post-secondary education could very well depend on the success of the new community college baccalaureate degrees.

Footnotes

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