

**CAATs, Universities, and Degrees:
Towards Some Options for Enhancing the
Connection between CAATs and Degrees**

**A discussion paper prepared for
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by

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CAATs, Universities, and Degrees: Towards Some Options for Enhancing the Connection between CAATs and Degrees*

The present structure of postsecondary education in Ontario was established in the 1960s and has not changed appreciably since then. This is in contrast to several other provinces of Canada and other industrialized countries in which there have been major changes in the organization of postsecondary education during the past decade. These changes have been in response to developments since the 1960s in regard to such factors as the demands of the global knowledge economy, the role of information technology in learning, the demand for higher level conceptual skills in the workplace, the increased importance of credentials, and increased emphasis upon lifelong learning for personal and societal development.

One of the aspects of the present structure of postsecondary education in Ontario which is most in need of reexamination is the role of the Colleges of Applied Arts and Technology in relation to degrees. Unlike the university, which had evolved over many centuries, the CAAT was a brand new type of postsecondary institution invented by the Provincial Government in the 1960s, to serve certain economic and social needs. Given both the newness of the institution and the rapid changes in the nature of the economic and social needs it was established to serve, it would not be at all surprising if the particular model of the CAAT that was in the mind of its founders in the 1960s were in need of some modifications for the 21st Century.

The aspect of the original CAAT model which has been the object of the most calls for reform in recent years is the absence of any substantial linkage between CAATs and universities and the corresponding lack of significant opportunity for individuals who begin their postsecondary education in a CAAT to earn a degree in a reasonable period of time. Over the past few decades the importance of the degree, both as a credential and for the knowledge and skill which it represents, and the consequent benefits which it brings to both the individual and to society, has increased substantially. Perhaps of more significance than this general proposition is the fact that increasingly in the career fields for which the CAATs have traditionally provided preparation, degree completion is becoming a requirement to be a fully proficient and recognized practitioner. In many fields, such as nursing and accounting, the former job market niches for the highly trained but non-degree worker are disappearing. **If this trend continues - and there is no reason to expect that it won't - a growing part of the career education role of the CAATs could become obsolete if students and graduates in those CAAT programs cannot continue on to degree completion in an expeditious manner.**

That incoming CAAT students recognize this reality is suggested by the relatively large proportions who indicate their intention to obtain a degree. For example, in one Toronto CAAT, the percentages of new students who reported that obtaining a degree was a major goal were: Accounting Diploma, 48%; Social Service Worker, 48%;

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Chemical Lab Technician, 48%; Early Childhood Education, 42%; Child and Youth Worker, 42%; Business Administration Diploma, 37%; Electronics Engineering Technology, 34%.¹

How to Improve Access to Degrees for CAAT Students

In general, there are three approaches to improving access to degrees for CAAT students. These are:

- I) Degree Completion Arrangements (including transfer and articulation agreements);
- II) Collaborative Programs (also called blended or joint programs); and
- III) Applied Degrees for CAAT Programs

Degree completion

The conventional notion of degree completion means that a university makes a determination of how much credit toward its degree to give a student from a CAAT and prescribes the additional coursework which the student must do at the university in order to obtain the degree. The CAAT and the university act largely independently of one another, although the CAAT may modify its curriculum on the basis of information from the university in order to increase the amount of credit which the university gives for CAAT courses. Degree completion may be handled by the university on an individual case by case basis, or there may be policies and/or transfer or articulation agreements which stipulate the amount of credit that the university will give for various CAAT courses/programs.

Though all three approaches can make an important contribution to degree access for CAAT students, degree completion is the one which can impact on by far the greatest number of CAAT students - and also the million or so CAAT graduates already in the workforce - and for that reason merits a high priority. There has been an apparent substantial increase in the number of transfer and articulation agreements between the CAATs and Ontario universities during the past decade, to the point where the Ontario College-University Transfer Guide (which went on the World Wide Web in December thanks to the efforts of the CUCC) now lists about 1,350 such agreements.² However, while the number of agreements appears to have increased, the typical amount of credit given for CAAT studies does not seem to have increased at all. Moreover, the amount of credit given by Ontario universities is generally substantially less than that given to CAAT students by out of province universities, a point to which I will return shortly.

Student movement from university to CAAT

¹Humber College Survey of Incoming Students, 1998, Responses to Question #87, "Possible Reason for Attending a College: Obtain a college diploma, then continue on to university and obtain a degree".

²The website for the transfer guide is <http://www.ocutg.on.ca>.

Although the major focus of attention on student movement between CAATs and universities in this paper is that from CAATs to universities, mention should be made also of movement in the other direction. Movement of students from universities to CAATs is substantial, probably greater than the other way round. In the latest years for which data are available, it appears that close to 11,000 persons who had attended or graduated from a university applied for admission to a CAAT, about double the number of former CAAT students or graduates who applied to a university.³ King and Peart estimated that in 1992, 3% of full-time first year students in the CAATs had attended university and 2% were university graduates.⁴

The fact that a significant number of university graduates continue their studies in a CAAT suggests that for at least some program areas, students see the two sectors as providing a total set of resources which from which they may choose various combinations to meet their educational and career needs. Data provided by Rodger Cummins show that in 1996, the first choice for about a quarter of students with university experience who applied to a CAAT was a post-diploma program with most of the rest opting for 2- and 3-year programs.⁵ There do not appear to be data on the amount of prior credit given to students moving from universities to CAATs. In interviews with CAAT officials, I was told that the common practice was for CAATs to award full credit toward CAAT general education requirements for courses taken in universities. I am not aware that there have been complaints by these students about the number of occupation-specific courses they are required to take in the CAAT - which is not surprising since the students' reason for attending a CAAT is to take those occupation-specific courses.

Collaborative programs

Collaborative programs are designed, planned, and delivered jointly by a CAAT and a university. They may provide for students to obtain a credential from each institution or just a degree from the university partner. There is often an explicit arrangement between the partners for sharing revenue and costs.

It could be argued that the conventional distinction between degree completion and collaborative program arrangements has become outmoded. What has blurred the distinction is the tendency in recent (so-called) degree completion agreements for the two parties to have considerable interaction with respect to the overall curriculum for the students. Both parties have learned that in such arrangements, unless the university has good knowledge of the content of the coursework provided by the CAAT, it runs the risk of awarding its credit on a pig-in-a-poke basis; and, unless the CAAT has good knowledge of the coursework provided by the university, there is a risk of duplication of course content.

³Rodger Cummins, Movement Between Ontario Colleges and Universities. A Report to the College-University Consortium Council, March 10, 1998, 7, 14. Cummins's Report is presented as Appendix B in Report of the College-University Consortium Council, Submitted to the Minister of Education and Training, August, 1998.

⁴Alan J. C. King and Marjorie J. Peart. The Numbers Game: A Study of Evaluation and Achievement in Ontario Schools. Toronto: The Ontario Secondary School Teachers' Federation, 1994 (cited in Cummins, 1998).

⁵Cummins, p. 8.

Even the traditional distinction between the two models pertaining to the sequence of the two parties' contributions is being compromised. It used to be that the litmus test for differentiating the two models was whether students did all their CAAT coursework first and then their university coursework (e.g., the "two-plus-two" arrangement) or took courses in each institution concurrently. However, in some recent agreements which have been popularly referred to as degree completion agreements, these two sequences are mixed. For example, in the agreement between Seneca College and York University in Arts and Science, students enrol in Seneca for the first two years and in York for the third year; however, during the two years in Seneca, students take several York courses. Similarly, in the proposed agreement between Centennial College and the University of Calgary in Nursing, students would take some University of Calgary courses concurrently with their Centennial College courses, and then take the remainder of their Calgary courses after they have met all the Diploma course requirements at Centennial.

The advantage of viewing all these agreements as collaborative is that it highlights the importance of discussion and negotiation between the two parties regarding the entire student experience; it draws attention to the fact that what all these arrangements are about is finding the optimal way of bringing to bear the total resources of the postsecondary system for the benefit of the student; and it recognizes that there is a great variety of different ways of integrating coursework from the two sectors.

Applied degrees

Degree completion and collaborative program agreements may not be as numerous or as generous in terms of transfer credit as many interested parties would wish. However, examples of both abound in Ontario. Not so with applied degrees for programs wholly delivered by the CAATs. Although applied degree programs by non-university institutions have existed for a long time in Europe and were introduced in Alberta in 1995, the idea is considered quite radical by the universities and is highly contentious.

Discussion of CAAT involvement in applied degrees in Ontario goes back to the Vision 2000 review of the mandate of the CAATs when some educators and industrialists argued that in some fields Ontario industry could benefit from being able to hire graduates of applied degree programs which differed from those of the universities in having a stronger applied focus and orientation to the needs of industry. The Vision 2000 recommendations on CAAT-university relationships envisaged that several such programs would be developed collaboratively between CAATs and universities, but this has not yet happened.⁶

⁶Ontario Ministry of Colleges and Universities, *Vision 2000: Quality and Opportunity*, Toronto, 1990. Vision 2000 recommended that an institute-without-walls to facilitate the development and certification of such degree programs be established by an Ontario university, and that if no university established an institute within 18 months of the submission of the report that the Provincial Government establish a freestanding institute for this purpose. Subsequently, the Task Force on Advanced Training established by the Minister of Education and Training made a similar recommendation for the establishment of the Ontario Institute for Advanced Training. Task Force on Advanced Training (W. Pitman, Chair). *No Dead Ends*. Toronto: Ministry of Education and Training, April, 1993, 149-154. The Task made clear that the OIAT should have the power to grant degrees.

The present interest of at least some CAATs in applied degrees seems to perpetuate the Vision 2000 concern for the value of an applied, industry-oriented degree program of a type not generally offered, or perhaps even deemed appropriate, by the universities. Many CAAT leaders maintain also that some of their highly specialized, sophisticated, applied programs are equivalent or close to equivalent to programs for which degrees are awarded in other jurisdictions; and thus, the graduate of an Ontario program is severely penalized in the Canadian, North American, or Global labour market in relation to his or her peers in comparable programs in other jurisdictions. CAATs argue also that applied degree programs would enable them to compete for international students on an equal playing field with other jurisdictions.⁷

The universities have expressed the concern that if any CAAT were to award an applied degree this could undermine the reputation of an Ontario university degree. It is difficult to see the basis for this fear. To take an extreme cases, in the United States there are many postsecondary institutions of varying academic prestige which award degrees. The fact that institutions of lesser academic prestige award degrees has not undermined the reputation of Harvard, the University of Illinois, or any other established university. Moreover, there are already many different types of degrees in existence, and the labour market has demonstrated the capacity to sort out the differences among these degrees. As a colleague of mine has pointed out, both Ph.D. and M.D. graduates may call themselves "Doctor", but there is little confusion over which graduate is preferred in a family clinic and which should be employed to teach a philosophy course.

A more serious concern is that allowing a CAAT to offer even a few applied degree programs in fields where no university presently offers a program might be a first step toward many of the CAATs becoming universities, with a consequent duplication of activities. For their part, the CAATs which have expressed interest in offering applied degrees maintain that they have no desire to become universities and envisage applied degrees as never constituting more than a few per cent of their activity. In that connection a key question in deciding on the appropriateness of applied degrees for the CAATs might be whether this would constitute a natural progression toward doing what they presently do at the highest level, represented by a degree; or whether it means becoming something else.⁸ Still, the universities take a longer term view and, noting how non-university postsecondary institutions in other jurisdictions have evolved into universities, worry that this would ultimately happen in Ontario if CAATs get their foot in the door. A

⁷In one case, the Malaysian agency which arranges foreign study for occupations in industrial technology and commerce was impressed with the Engineering Technology Programs in Ontario CAATs but wanted students to be able to obtain a degree. An arrangement was worked out whereby qualified Malaysian students would do six semesters of the Engineering Technology Program in four CAATs followed by one year at Penn State University and obtain a CAAT Diploma and a Penn State Degree. Michael J. Hatton (Ed.). Exemplary Training Models in Industrial Technology. Ottawa: Association of Canadian Community Colleges in association with the Canadian International Development Agency, 1995, 47-50.

⁸This position has been stated forcefully by the President of a community college in Arizona, another jurisdiction in which community colleges and universities are clashing over the applied degree issue. In an interview in The New York Times, Dr. Linda Thor, President of Rio Salado Community College in Tempe, Arizona, stated that, "We don't aspire to be a university; we like who we are What we aspire to is to fully meet the needs of our students in the areas in which we are expert." Peter Applebome, "Community Colleges at the Crossroads: Which Way is Up," The New York Times, August 3, 1997, Section 4A, 24-30. This quotation seems to reflect very well the view of presidents of Ontario CAATs who have commented on applied degrees.

problem with this "foot-in-the-door" argument though is that it implies that the present structure of postsecondary education in the province should be frozen for all time. A more sanguine assumption is that those responsible will have the wisdom to make the right decision when the time comes, and somewhere in the future a CAAT may be given university status if and only if that should be deemed to be warranted, irrespective of whether or not a CAAT is allowed to offer applied degree programs right now.

For those who are sympathetic to the idea of applied degrees for the CAATs, there remain two sticking points. First, assuming that the CAATs have the expertise to offer credible degree worthy courses in the occupation-specific part of the curriculum, there is a question of whether having them also offer degree level courses in complementary areas of general arts and science would be wasteful given the strengths of the universities in arts and science. If so, this would argue for joint applied degree programs. The second issue is whether an institution for which degree programs constitute only a tiny proportion of its total activity would have the expertise to determine degree requirements and oversee degree programs. If not, this would argue for placing the ultimate responsibility for applied degree programs with a university or a provincial agency established for this purpose.

The fact that in some other jurisdictions institutions comparable to the CAATs are offering applied degrees is an example of how the wider national or international sphere may impinge upon what we do in Ontario. In determining whether it is feasible or desirable for us to treat Ontario as a closed system, it is important to consider the implications which developments and practices in postsecondary education elsewhere may have for Ontario.

Ontario and Wider World

For quite some time, graduates of the CAATs have been subsequently completing their degrees at universities outside Ontario, particularly in the United States. For example, in the Vision 2000 survey of CAATs in 1988, one-third of the articulation agreements reported were with universities in the U.S. All such agreements have required Ontario CAAT graduates to leave the province in order to complete their degrees, and there are no data on the number who do so.

One of the most striking developments in the past two years in relation to CAATs and degrees has been the large number of agreements negotiated between the CAATs and universities outside Ontario which would enable graduates to obtain degrees without leaving the province. Under these agreements, the out of province university would offer its degree completion program via electronic distance education and/or by physically offering courses or supervision on the CAAT campus. The out of province universities involved are mostly from other provinces of Canada: British Columbia Institute of Technology, the Open University of British Columbia, Athabasca University, the University of Calgary, and the University of New Brunswick; a few from Australia: Charles Sturt University and the University of Western Sydney; and one U.S. university: Central Michigan University.

It is an interesting question as to why in a province with a relatively large number of its own universities, so many of the public colleges have negotiated degree completion agreements with universities outside the province. There appear to be three reasons: the

out of province universities offer more credit for coursework done in the CAATs; they are said to be more responsive than Ontario universities in negotiating such agreements, as evidenced by the very short times which it has taken to negotiate some of these agreements; and they seem to be more flexible in program delivery, for example with respect to scheduling, location, and curriculum.

All three factors are important, but probably the amount of transfer credit offered is the most important. Typically where the amount of credit is specified in these agreements, the out of province universities award credit on a one-for-one basis or something close to that. This means that a graduate of a three year CAAT program can earn a degree from the out of province institution in the equivalent of one additional year of university study. Ontario universities typically do not provide this level of credit.⁹

How is one to view the discrepancy between the practices of these out of province universities and the Ontario universities? One possible response is to express shock and dismay over the allegedly low standards of the out of province universities, and to lobby the Ontario Government to prohibit CAAT graduates from taking advantage of the opportunities offered by the out of province universities. This is the approach of the Council of Ontario Universities.¹⁰

It may well be that as a group, Ontario universities have higher standards than most other jurisdictions in the world and that there is something suspect about generous provision of transfer credit, as the COU maintains. However, if universities in the rest of Canada and the world take a different view of this matter than do Ontario universities, it will be very difficult, if not impossible, in a world of increasingly permeable borders for Ontario to remain an island of commitment to traditional academic practices in a sea of change.

In this regard, it is noteworthy that several of the out of province universities with which CAATs have recently negotiated agreements are open/distance universities. Since the Open University in the United Kingdom established itself as a credible alternative to traditional universities, open universities around the world have become an established component of postsecondary education systems and have been viewed as a particularly valuable component for increasing accessibility.¹¹ As Ontario has opted not to establish an open university, the only alternatives for Canadians in Ontario who wish to pursue this type of postsecondary education are the open universities in other provinces, e.g. the

⁹A problem in comparing transfer arrangements between Ontario universities and those outside Ontario is that most baccalaureate degrees are three years in Ontario and four years elsewhere. Consider, for example, a new agreement between Fanshawe College and the University of Western Ontario involving the Electronics Engineering Technology Diploma Program at the former and the B.Sc. in Physics at the latter. Under this agreement, students mix attendance at the two institutions and obtain both a Fanshawe Diploma and a Western Degree in four years. In terms of the amount of time to complete a degree, this is as good as it gets with Ontario universities or universities outside Ontario. But it does not provide one-for-one credit if one considers that a student who goes straight through at Western can obtain a B.Sc. in Physics in three years. Still, if arrangements of this type were to become commonplace with Ontario universities, the interest of CAAT students in out of province universities would probably wane considerably!

¹⁰Council of Ontario Universities. Report of the COU Task Force on Ministerial Consents, October, 1998.

¹¹Sir John Daniel, Vice-Chancellor of the Open University, notes that the OU has the lowest expenditure per student of any British university but ranks in the top 20 universities for teaching quality in Britain's nationwide quality assessments. Sir John S. Daniel, "Why Universities Need Technology Strategies," *Change*, Vol. 29, No. 4, July/August, 1997, 10-17.

Open University of B.C. or Athabasca University, credible institutions which have appropriate academic recognition.

Even if the Province wished to prevent its residents from participating in programs of these open universities, it would be next to impossible to do so, at least short of draconian regulation of what people can tune into on their home computers. Ontario residents can take courses from these institutions purely via the Internet, in which case the out of province institutions would have no physical presence in Ontario.

However, being the kinds of student centered institutions which they are, or are endeavoring to become, few CAATs intend to leave it to their graduates to pursue degree completion totally on their own. Most offer a battery of support services intended to help their graduates maximize the opportunity provided by degree completion options with out of province universities, e.g. guidance and counseling, technical and pedagogical support. Offering this support, however, may have perverse consequences. By providing support, the CAAT may be deemed to be a local agent for the out of province university, thus triggering a requirement that the out of province university obtain a Ministerial Consent under the Degree Granting Act. Should the Consent be denied we would have a situation in which those Ontario residents who pursue degree completion by electronic distance education solely on their own are allowed to do so; while those who try to do the same thing with the assistance of a CAAT are prohibited from doing so! Such an anomaly could be avoided if, where Ontario residents receive technical and/or pedagogical support from a CAAT while they pursue degree completion with an out of province university through electronically delivered courses, the Ministry of Education and Training were to rule that provision of such assistance does not trigger the Ministerial Consent requirement under the Degree Granting Act.

Open universities are not the only ones which have responded to the degree completion interests of community college students. Some conventional universities have gotten into degree completion by distance education in a big way. An example which is quite symptomatic of the trends toward higher credentials referred to earlier in this paper is the establishment at the University of Calgary of a Bachelor of Accounting Science for community college graduates across Canada who wish to become Certified General Accountants (CGAs). Until recently, graduates of community college accounting programs could become CGAs, and this was a core career program for many community colleges. Recently the CGAs adopted a requirement for a university degree for certification. In the University of Calgary BAccS for aspiring CGAs, community college students can get transfer credit for up to 60 of the required 90 credit hours, and take the remaining 30 credit hours by electronic distance education. The University of Calgary has also negotiated a degree completion agreement in Nursing with one Ontario CAAT which provides a similar proportion of transfer credit as in the Accounting example.

If institutions of the stature of Calgary, which in the Maclean's Magazine reputational rankings for 1998 was ranked 12th in Canada, or the University of New Brunswick which has also negotiated some recent agreements with Ontario CAATs which give more generous transfer credit than Ontario universities typically do, are willing to provide substantially greater transfer credit for degree completion than Ontario universities (and provide all or most of the coursework in an electronic format which seems to appeal to many CAAT graduates), this creates a considerable dilemma for

Ontario universities and higher education officials. If the issue is differences in opinions about academic standards for a degree, how do Ontario university educators and officials explain to CAAT students, graduates and their parents why practices deemed acceptable in most of the rest of the world are not acceptable in Ontario?

Of course it is possible that the crux of the problem is money rather than standards. Under the corridor funding system for the universities, a university which admits a new cadre of transfer students from the CAATs will not get an increase in its operating grant. It will however receive for each student what the out of province universities receive, tuition fees. It is not clear whether Ontario university tuition fees would cover the incremental costs of serving increased numbers of transfer students. Possibly a greater concern is that if degree completion at Ontario universities became a widely accepted practice, more students would commence their postsecondary studies at a CAAT, with resulting pressure on the universities' cost structure as the ratio of enrolment in upper to lower years increased.

A factor which could conceivably induce a shift of first and second year enrolment away from universities toward CAATs, if degree completion arrangements were improved, is the difference in tuition fee levels between the two sectors. Moreover, as tuition fee levels in universities rise, there is a danger that some qualified individuals may be not be able to afford university. If, however, attending a CAAT was still affordable for them, then there might be some social benefit to having arrangements that would enable more students to take part of their postsecondary education in a CAAT. Further, the effect of a moderate move in this direction on the universities might be positive (i.e. enabling reduction in class size and giving more attention to upper division students) **if they were allowed to maintain existing grant levels.**¹²

It would be helpful if Ontario universities could indicate just how much their reluctance to provide equivalent transfer credit to what many out of provinces provide is based upon a different view of standards, and how much it is based upon concerns about the cost and revenue implications of such a move. Insofar as it is the latter, it may be possible for these concerns to be addressed in the funding system. Insofar as it is the former, only time will tell whether the attempt to adhere to traditional views about transfer credit, however noble such adherence may (or may not) be, will ultimately prove futile against the winds of change.

I have given so much space to the national and international context in this paper for three reasons: first, it is in this context that the core issues in improving access to degrees for CAAT students stand out most sharply; second, I believe that it is the recent spate of negotiation of agreements between CAATs and out of province universities which has brought this whole issue to a head; and third, whatever improvements are made in linkages between CAATs and Ontario universities, out of province universities may continue to be an important resource for CAAT students. Higher education is an inherently international activity, and the pursuit of knowledge should know no bounds. The world has changed considerably since the Degree Granting Act was legislated in

¹²The combined effect of secondary school reform and demographic trends will likely be that there will lots of candidates for first and second year in university even if opportunities for transfer from CAAT to university are greatly enhanced. Another consequence of the secondary school reform may be to bring the relationship between university and college admission requirements in Ontario in line with what it is in other provinces.

1983, and the "Fortress Ontario" mentality which that Act represents may be increasingly dysfunctional in a world where borders are becoming less important. The healthiest situation would be for Ontario residents to avail themselves more of the educational resources of the rest of Canada and the world, and to make the educational resources of Ontario more available to the rest of Canada and the world.

Towards a Vision for Postsecondary Education

The preceding sections have raised some difficult policy questions for postsecondary education in Ontario and suggested that there may be a clear difference of opinion and interest between the CAATs and universities in regard to these questions. So long as these questions are approached from a purely sectoral perspective, i.e., "what is best for my sector?", it is difficult to see how they can be resolved except on the basis of which sector can marshal the most political muscle and the most powerful allies.

An alternative to the sectoral approach is the system approach in which all elements of postsecondary education are treated as components of a whole.¹³ In the system approach, the operative question would be "how can the totality of resources devoted to postsecondary education in Ontario be utilized most effectively to serve the interests of individuals and the Province as a whole?".

The first step in addressing this question would be to attain a consensus as to what the relevant interests of individuals and the Province as a whole are. While anticipating what this consensus might be is well beyond the scope of this paper, a few guidelines can be suggested:

- it would have to take account of Ontario's participation in a global knowledge economy, demands by the workplace for workers with higher levels of technical knowledge and conceptual skills, and the increasing importance of lifelong learning;
- it should reflect the shift toward learning-centered education where abilities as defined by learning outcomes which represent complex role performances replace time spent in the classroom as indicators of learning;
- it should provide for diversity of learning venues and approaches, multiple avenues to achieving explicit learning outcomes, and common credentials for achievement of equivalent levels of learning outcomes;
- it should encourage, support, and reward the attainment of high performance standards.

Within a system which has the above characteristics, determination of appropriate transfer credit is fairly straightforward. Individuals who have attained particular learning outcomes in one venue are empowered to build upon those in seeking to achieve

¹³The sectoral and systems approaches are contrasted in Glen A. Jones, Michael L. Skolnik, and Barbara J. Soren, "Arrangements for co-ordination between university and college sectors in Canadian Provinces: 1990-1996," *Higher Education Policy*, Vol. 11, 1998, 15-27.

subsequent learning outcomes in the next venue. Tedious arguments over credit hour formulae could be a thing of the past. Determination of what educational activities an institution is eligible to perform could be based not upon its ascribed status, but on its demonstrated performance.

Many of the characteristics outlined above are embodied in the Australian Qualifications Framework (AQF), a comprehensive, national framework for awarding consistent credit for various learning activities toward a common set of credentials. The goal of the AQF, which was introduced in 1995 and is intended to be fully phased in by 2000, is to create a seamless post-compulsory education system (AQF Advisory Board Secretariat, 1998). A recent review committee has taken the view that: "If the best use is to be made of the public resources invested in postsecondary education, arrangements must facilitate the development of pathways and study combinations which make the best use of the strengths of different institutions and broaden the range of options for students".¹⁴ The AQF makes use of a variety of types of collaboration between institutions: transfer and articulation between universities and institutes of technical and further education (TAFEs); joint programs; joint ventures; cross-sectoral institutions; cross-sectoral education and training facilities; and strategic alliances (Grimshaw, 1998).

The AQF was developed under the auspices of the Commonwealth Ministerial Council on Education, Employment, Training and Youth Affairs. Since it has been in existence, there has been a great increase in cooperative activity. For example, following the negotiation of a joint activity agreement, Central Queensland Institute of TAFE and Central Queensland University established eight joint programs and each institution appointed officers to promote greater cooperation between the two institutions. In Adelaide, a university and a TAFE are cooperating to establish an Australian Centre for Oral Health in which dental assistants, hygienists, therapists and technicians will train together with dentists, "with the aim of working together as a streamlined high-level team."¹⁵ Of course, the increased cooperation between the two sectors has its perils for the TAFEs. Two universities in Victoria recently took over 11 TAFE campuses.

Options for Enhancing CAAT-University Cooperation and Degree Opportunities for CAAT students

The options in the following list are mutually reinforcing rather than mutually exclusive except where noted.

1. Assign responsibility for leadership to some province level body

If there are lessons for Ontario in the Australian experience, they are that the movement toward substantial cooperation between institutions of different sectors is greatly helped by the articulation of an over-arching vision and the establishment of a jurisdiction-wide framework and mechanisms for effecting cooperation. The linchpin for these advances is the AQF Secretariat which operates under the aegis of the Ministerial

¹⁴West Review of Higher Education Funding and Policy, cited by Warren Grimshaw, Executive Director, Coffs Harbour Education Campus, Southern Cross University, and Chair, AQF Advisory Board, in a speech given at Cross-Sectoral Pathways: Conference of National Tertiary Educators, June 26, 1998.

¹⁵*Ibid.*

Council on Education, Employment, Training and Youth Affairs. Similarly, the provinces of Canada which have made the greatest achievements in coordination between college and university sectors are those which have provincial agencies with this mandate.

If inter-sector cooperation is to be an important public policy objective, then that policy commitment should be embodied in some province level organization which can provide leadership toward this end. At minimum, such an organization can facilitate the articulation of an appropriate vision for inter-sector coordination in Ontario; act as a catalyst and source of ideas and model practices; and monitor progress. Without such a designated locus of responsibility for providing leadership in inter-sector cooperation, it is unlikely that significant progress will be made, as is evidenced by the long history in Ontario of waiting for developments in this area to occur spontaneously.

As for what entity should play this role, there are few candidates among existing bodies. Leaving the job to individual institutions and to sectoral agencies makes it difficult to advance beyond sectoral perspectives and approaches to a provincial vision of the type outlined briefly in the preceding section. The only existing agency which has a scope close to what is required is the College University Consortium Council.

With regard to new agencies which might be established, an obvious possibility is a body which has as its mandate the fostering of cooperation between sectors along the lines of the Councils on Admission and Transfer in British Columbia and Alberta. There are various ways in which the interests of institutions of each sector and other stakeholders could be balanced in the design of such a body. Another option would be to establish a new postsecondary intermediary body which would have jurisdiction over both sectors, or over all tertiary education, like the National Board for Education, Employment and Training in Australia, or the higher education councils in many American states. This does seem to be the trend in governance of postsecondary/tertiary education. At present Ontario has no intermediary body for the university sector and an agency in the CAAT sector which devotes a disproportionate amount of its time to staff relations rather than the kind of policy and planning functions typically played by such agencies. Ontario is the only jurisdiction of comparable size and industrial development which has no system level agency for planning and coordination of its university sector.

In conjunction with the establishment of a single planning and coordinating body for all tertiary education in Ontario, it would be appropriate to replace the present separate sectoral funding mechanisms with a single funding mechanism for the entire postsecondary system. It has become a widely held view recently that the major obstacles to the development of collaborative programs between sectors lie in the funding mechanisms.¹⁶ While it is difficult to prove this assertion, the fact that so many knowledgeable parties apparently believe it to be the case cannot be taken lightly. Moreover, if continued efforts to achieve better cooperation between sectors bring only meager results, there is added reason to conclude that the funding mechanism must be

¹⁶For example, the recent statement of the College of Nurses of Ontario that the baccalaureate in nursing should be a requirement for entry to practice by the year 2005 observes that: "Despite a number of good faith efforts by college university RN programs, the differences in the funding mechanisms for the two types of institutions make the formation of full collaborative relationships difficult to achieve. Consequently a new funding mechanism is required." College of Nurses of Ontario, "RN Entry to Practice Competencies Project Report." December, 1999, p. 11.

tackled. It is plausible that one of the conditions for having a seamless system of postsecondary institutions is having a seamless system of funding them.

2. Develop a vision and framework for inter-sector cooperation to which all or most interested parties subscribe

Under the leadership of the type of body referred in Option 1, it is essential to develop a vision and framework for inter-sector cooperation to which all or most interested parties subscribe. Without preempting this process, I would suggest that the vision outlined in the preceding section and the AQF Framework in Australia would be good starting points for developing such a vision and framework. Like the AQF, the vision and framework of inter-sector cooperation should be a multi-faceted one which encourages variety and experimentation.

It should be acknowledged that it may be difficult to get all CAATs and universities to subscribe to a common vision. Though unanimity is a worthy goal, having a vision with teeth which some institutions opt out of would be preferable to accepting too watered down a vision in order to get everyone on board.

3. Arrange for the function of an open university to be carried out in Ontario

As reported earlier, open universities are a major element in the degree completion arrangements which CAATs have negotiated recently with out of province institutions. All indications are that the open university functions of providing electronic distance education and awarding degrees for appropriate combinations of courses taken in different institutions will be an important component of higher education worldwide in the 21st century.¹⁷ In the absence of any Ontario institution playing this role on a significant scale, CAAT students and graduates - and other Ontario residents - will increasingly turn elsewhere for this type of educational opportunity.

As was recognized in Vision 2000 nearly a decade ago, and subsequently by the Task Force on Advanced Training, an open university can play a vital role in facilitating various types of cross-sectoral programs, particularly those with a professional orientation and in cooperation with industry, many of which might be impossible to develop within existing structures. For these reasons, an open university could make a major contribution to Ontario higher education.

Also as recognized by Vision 2000, this function could be assumed by an existing Ontario university or a new institution (without walls) could be created for the purpose. There is an obvious opportunity here for some Ontario university to grasp. Should one of the universities produce a credible plan for trying to fill this niche, it would be a good social investment for the Ontario Government to provide some start-up assistance - perhaps using the precedent of a differentiation grant. Failing that, the Government might help to establish an institution along the lines of the "fail-safe" recommendation of Vision 2000 (see note 3), or look favourably upon a proposal for a private open university.

¹⁷I have surveyed the literature - pro and con - on these developments in higher education in Michael L. Skolnik, "Higher Education in the 21st Century: Perspectives on an emerging body of literature," *Futures*, vol. 30, no. 7, 1998, 635-650.

4. Develop and disseminate model agreements for degree completion

Probably the thing which could positively impact the postsecondary educational and professional lives of the most people would be a substantial increase in the number and reach of block transfer arrangements for degree completion in which a significant amount of transfer credit is awarded. Unfortunately, I am unable to prescribe a panacea for achieving this objective. However, I can suggest that designating an appropriate agency to provide leadership toward this objective and developing a supportive vision and framework for fostering progress in this direction would provide an essential foundation. Building upon that foundation, information on best practices would be important.

Putting the Ontario Transfer Guide on the worldwide web is a wonderful step toward making information on transfer widely available - not just for students but also for educators. A next step in utilizing this information for policy purposes is to sift through and search for candidates for model agreements in terms of the conditions for transfer provided. Where such agreements can be identified these could be widely disseminated as model agreements and other institutions besides those which are parties to the model agreements could be encouraged to emulate them. For example, the York University - Seneca College Agreement in Arts and Science referred to earlier, or the agreement between the University of Western Ontario and Fanshawe College pertaining to Physics and Engineering Technology, respectively, would seem to be models of what can be achieved.

These agreements seem to be among the best of those formulated in the current credit hour paradigm. However, in line with the comments made earlier in this paper regarding the development of a vision for an integrated system of postsecondary education, it may be desirable to begin to replace the credit hour paradigm with a new paradigm based upon learning outcomes. If learning outcomes could be specified for related diplomas and degrees, then a university and a CAAT could jointly determine which outcomes could be best achieved in each institution. Then they could decide how to apportion learning activities between the two institutions and how to share costs and revenues accordingly. With the establishment of an open university function in Ontario, this framework would facilitate another option for those self-directed students who wished to pursue it - probably a relatively small number. They could make their own choices for how to use the resources of the provincial universities and CAATs (and possibly other institutions) to achieve the specified learning outcomes.

Beyond identification of model agreements, the question arises as to whether it would be helpful to codify in public policy a transfer formula. For example, such a formula - like the one recommended by COU for Ministerial Consents for transfer agreements with out of province universities - could stipulate the ideal proportion or amount of CAAT work for which universities should give credit, and the proportion or amount of the total work required for the degree which should be done in the university. The usefulness of such a formula warrants serious discussion among all parties concerned. Some of the issues which need to be considered in this discussion are: whether the proportions or amounts of transfer credit in the formula should be regarded as maxima or minima; implications for institutional autonomy; and the feasibility of standardization in the face of seemingly varied program situations.

One of the issues which arises in regard to transfer credit is the possible steering effect on the CAATs of ensuring that their courses meet university credit expectations. Concern has sometimes been expressed that this might impact adversely on other CAAT roles. This concern might be serious if the new goal were that all CAAT courses in all programs should qualify for university credit. However, what is more likely is that CAAT programs would fall into three categories: those where all courses have to meet a university standard, e.g., nursing; those where few if any are designed with university completion in mind, e.g., landscaping; and those which have dual streams, one of which is designed for degree completion, e.g., business.

5. On a competitive basis, approve a limited number of applied degree initiatives in selected areas

Going back to Vision 2000, a prima facie case has been made that it would be beneficial for Ontario to have a limited number of applied degree programs in areas in which Ontario universities have not offered degrees. **In addressing this question, it is helpful to separate the idea of establishing such applied degree programs from the question of what types of institutions would offer them.**

An alternative to deciding the latter question a priori on the basis of institutional status would be to invite proposals for applied degree programs from interested parties: universities, CAATs and other institutions (like The Michener Institute, the Ontario College of Art and Design, or private institutions), and joint proposals from combinations of different institutions. The proposals would be expected to provide the justification for the applied degree in terms of economic and social value, and describe how the quality of the program would be assured. It could be assumed that any CAAT proposal which got through this screen would be of requisite quality.

Two questions which would need to be addressed in conjunction with this option are who would judge the proposals, and who would award the degree in the case a proposal from a CAAT were accepted? Again, these questions point to a role for some type of provincial agency. For example, the provincial institute-without-walls recommended by Vision 2000 or the open university referred to in Option 3 above could readily perform this function.

6. Encourage the creation of at least one conglomerate postsecondary institution which incorporates a university and a CAAT under a single governing board

All of the options discussed thus far have in common that they represent attempts to achieve coordination across institutional boundaries (except for one option in which a CAAT could act on its own). We know, however, that achieving coordination between separate organizations, even within the same sector, is very difficult. That is why where coordination of activities of different institutions has been deemed to be of great importance, merger of the institutions has often been the chosen course of action. In this context, it is instructive also that institutional mergers have been one of the multitude of approaches employed in realizing the objectives of the Australian Qualifications Framework.

Thus, along with whatever strategies are adopted to improve coordination between CAATs and universities, it might be worthwhile to encourage and support a merger of one CAAT with one university. The effect of such a merger would be that the programs of each would be under a single governance authority, and hence it should be easier to achieve coordination among different types of programs than where institutional barriers are interposed at every juncture. Having even one such conglomerate institution would facilitate a kind of "natural experiment". If a full merger of a CAAT with a university were deemed too radical, lesser moves toward the same end might be to transfer one campus of a multi-campus CAAT to a university, or to assist a CAAT and a university in establishing a new joint campus which would have both CAAT and university programs.