Does Structure Matter: (Where) Do Questions About Structure Fit on the Higher Education Policy Agenda?

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The primary focus in higher education policy discussions in Canada for the past twenty-five years has been on the topics of funding levels and mechanisms, accountability, accessibility, and quality. To be more precise, the focus has been on these topics in relation to existing postsecondary education institutions as each of them continues to perform within the framework of its existing institutional mission.

The recent focus in higher education policy discussions contrasts with the focus in an earlier era, from the early 1960s to the early 1970s. In that decade, the emphasis was not so much on the individual institution, as on the structure of emerging and developing systems of higher education. By structure, I mean the distribution of postsecondary institutions by size, mission and type, and by geographic location. In that earlier period, across Canada a lot of effort went into the question of what was the optimal, or at least most appropriate, structure for higher education systems. The outcomes of these efforts included some remarkably articulate and cogent visions for provincial higher education systems, such as the Macdonald Report in British Columbia, the Parent Commission in Quebec, and - fittingly, given the host of this conference - the Deutsch Commission in New Brunswick (Dennison, 1997, pp. 36-38; Donald, 1997, pp. 164-167; Brown, 1997, pp. 200-202; Skolnik, 1997, pp. 329-333). Planning and design initiatives like the ones just cited determined the shape of Canadian higher education for several decades to follow.

The question to which I wish to draw attention in this paper is whether three to four decades after the foundations were laid for our present structures, those structures are still the most appropriate for the 21st century, or whether they are in need of significant renovation. At the highest level of generality, we can say that the effectiveness of higher education in meeting societal needs is a function of two distinct factors: (1) how effectively each higher education institution does the job that it has socially contracted to

perform; and (2) how effectively the mix of different types of institutions conforms to what is needed. The preoccupation in recent years with the first of these factors is understandable, especially insofar as policy discussion is driven by the concerns and interests of existing institutions which want simply to be given the resources and freedom to continue doing what they have been doing without interference or competition. However, no matter how well each institution does its job, the net result will be less than optimal if the whole configuration of institutions is inappropriate. Thus, it is sometimes helpful to stand back from the trenches and look at the big picture. In view of changes that have occurred in the environment of higher education over the past few decades, now may be one of those times.

Some of the important changes in the environment of higher education in recent decades that ought to have implications for the appropriate structure of higher education are: the development of a technologically oriented, knowledge society; globalization; commercialization of teaching and research; advances in information technology and virtual education, and changes in skill and knowledge requirements that have increased the educational needs in most occupations. The next section of this paper summarizes some these changes in the environment of higher education. Next I note some aspects of the structure of Canadian higher education that may warrant examination in the context of the changes in the environment identified. The remainder of the paper concentrates on one of these aspects, the relationship between the university and the non-university sectors of higher education.

The Changing Environment of Higher Education

The elements in the environment of higher education that have potentially significant implications for some reshaping of it are many, and their interrelationships are complex. Perhaps, the most important interrelationships are among the phenomena connoted by the terms knowledge economy,

technological change, and globalization. The implication of the first two of these concepts for the university was aptly summarized by David Laidler:

> … the key to securing a rising standard of living at the turn of the millennium lies in the creation and dissemination of knowledge, particularly technological knowledge. The "new economy" is said to be a "knowledge economy", and within it, universities are often presented as having special roles to play as creators of new ideas in their research function and as producers of human capital capable of exploiting those ideas in their teaching function. In this way of looking at things, the output of universities is a vital input into the material progress of the market economy (Laidler, 2002, pp. 708).

The knowledge economy and associated developments in technology take on a different significance for higher education in the context of globalization than would be the case in a closed economy.

Globalization refers to a process in which nations are integrated into a highly competitive international economic system in which the perceived ability of each nation to compete economically in this system becomes the driving force in public policy not only in the economic sphere, but increasingly in the cultural and social spheres as well, including especially postsecondary education.

Globalization has had two major types of impact on post-secondary education. First, it has caused increased emphasis on the economic contribution of education relative to its other objectives. Post-secondary education has always had diverse objectives that can be broadly classified as economic and non-economic. The economic objectives include preparing people to be productive workers in professional and other occupations and research which results in new products, new technologies, and greater economic efficiency. As important as these objectives are, they stand in contrast to the cultural, moral, civic, and broader intellectual purposes of education. There has been a perennial tension between these two sets of

objectives, and arguably a society is best served when there is a healthy balance between the two. Globalization threatens to upset this balance, as governments employ financial and other policy levers in ways to get universities to give the dominant emphasis to the economic objectives of their activities. Even without this steering, the unprecedented opportunities for institutional and individual profit-making that the knowledge society has brought may, as former Harvard University President Derek Bok - and countless other observers of higher education - has warned, lead to the erosion of traditional academic values and the substitution of self-interest and pecuniary gain as dominant motivating forces in academe (Bok, 2003).

The other way in which globalization has impacted post-secondary education is through marketization, and what some refer to as commodification of education. While post-secondary education has in some countries for a long time been, at least in part, a commodity supplied and purchased on the market and subject to normal market forces, this has not been the case in Canada, except for a portion of non-degree vocational training. Rather, university education has been treated as a public good in much the same way that health care in Canada has been, provided by government in a manner determined by public policy. As globalization has proceeded, there has been a shift in the way that post-secondary education is perceived, toward being a commodity for which the conditions of its provision and acquisition are determined by autonomous providers and consumers.

While it is perhaps not necessarily so, marketization of post-secondary education has been accompanied by privatization which has meant that more of the funding of post-secondary education, including research funding, has come from private sources (students and donors), and more of the suppliers of post-secondary education are private, for-profit organizations. Ironically, at the same time as declining government financial support has caused universities to depend more upon tuition fees as a source of revenue, students have felt increased pressure to pay whatever it costs to pursue higher

education in order to have any chance at economic security in an increasingly competitive labour market. Or perhaps this is not ironic at all.

The worldwide growth in demand for more economically linked forms of higher education and the associated commercial opportunities that this has spawned has led increasingly to viewing higher education as an internationally traded commodity. Although restriction on the international exchange of services in higher education has long been a feature of Canadian educational policy, increased mobility of labour, capital, and knowledge stimulated by reduction in trade barriers and advances in electronic technology has made this policy position obsolete. As former president of the University of Michigan, James Duderstadt, has pointed out, whereas in the past most colleges and universities served local populations, increasingly they themselves are operating in a global context (Duderstadt, 2004, forthcoming).

Coinciding with the weakening significance of political borders limiting the movement of higher education, there has also been an associated movement to reduce other kinds of borders affecting the provision of higher education. Recently, the term "borderless education" has been coined to refer to a situation in which those educational and related institutions and organizations that have the desire to provide various types of educational programs are no longer constrained by the traditional boundaries that defined their former sphere of activity. The dimension of borderless education that has attracted the most attention is that in which the lucrative market for career related degree education is invaded new providers of higher education, crossing into what was formerly regarded as the traditional preserve of public and private not-for-profit universities (Cunningham et al., 2000). The so-called new providers include: university programs provided by other educational sectors (like community colleges and technical institutes), corporate universities (including public sector employers), private for-profit universities, media and publishing businesses, educational brokers, regional and international consortia of universities, virtual universities, and other forms of transnational post-secondary education (Middlehurst, 2002).

An indicator of the seriousness with which mainstream universities view these new developments is that the association of universities in the United Kingdom has established an Observatory on Borderless Higher Education (www.obhe.ac.uk). There is, of course, a question of whether the newer forms of higher education described here will operate only on the periphery of higher education or become a substantial force. In response to this question, Middlehurst begins his discussion of these developments with the caution that "Overestimating change in the short term and underestimating it in the long term is a common phenomenon when revolutions are underway" (Middlehurst, p. 1).

Responses by Higher Education Systems

In general, the predominant response by higher education systems to the types of challenges and opportunities described briefly in the preceding paragraphs could be in one of two directions. In one direction, all universities would become substantially more market driven and commercially oriented, and invest in distance, virtual, and other innovative forms of delivery of education. Some institutions might be quite successful financially in adopting such a strategy, but for each winner, there would likely also be losers. The result could be a widening of the resource gap between better and poorer funded institutions, and a lot of duplication of activities and consequent waste of resources.

The other direction in which systems might respond is that of increased institutional differentiation in which some institutions move very aggressively to take advantage of new commercial opportunities, or new institutions are created or existing ones in other fields allowed to cross previously existing borders in order to address new needs. Other institutions might move moderately to respond to new opportunities, but they would retain their essential academic character.

Traditional theories of institutional differentiation in higher education, which are based upon population ecology models, suggest that such differentiation would come about naturally as different institutions seek different niches (Hannan and Freeman, 1977; Birnbaum, 1983). However, more recent literature, which emphasizes the influence of isomorphic forces in producing organizational homogeneity (Dimaggio and Powell, 1983), suggests that institutional differentiation is "largely the product of political competition and state sponsorship" (Rhoades, 1990; see also Huisman, 1988). An implication of these newer theories is that if institutional differentiation is thought to be a desirable property of higher education systems, public policy must be directed toward that end - because that is the only way that it will be achieved.

There have been some recent examples in Canada of provincial governments attempting to make their higher education systems more responsive to the needs of globalization and the knowledge society through increased institutional differentiation. One is in regard to enabling private degree granting institutions to operate. For a long time, private university level institutions were generally not allowed in Canada, except in a very limited way in Alberta through the Private Colleges Accreditation Board which was established in 1984. Recently, governments in British Columbia and Ontario have brought in legislation to enable the establishment of private degree granting institutions, and Alberta has broadened its treatment of private institutions under Bill 43.

The rationale for these moves has been to provide residents greater choice in the realm of degree level postsecondary education. These new frameworks for regulation of degree granting are designed to make it possible for nearly all types of new providers of degree level education in the world of borderless higher education to operate if they meet appropriate quality standards. It is most unlikely that any new private institutions will be large, well endowed, ivy league types that offer traditional academic programs. Rather, most will likely be small, often for-profit, institutions that concentrate on particular areas of career related education, frequently delivered in a way

that makes use of state of the art instructional technology.[1] A newly emerging private degree granting sector that is market driven, commercially focused, and technologically oriented would increase institutional differentiation in Canadian higher education. Adding a private sector would also increase the amount of private funding going into Canadian higher education (Task Force on Competitiveness, 2003, p. 23).

Another recent structural change in Canadian higher education was the opening in Fall, 2003, of the University of Ontario Institute of Technology. The special mission of the UOIT is to provide "career-oriented university programs" that are responsive to "the market-driven needs of employers" (UOIT Act, 2002). Whether the establishment of a public university with a mission this distinct from those of the other universities will divert pressure away from the others to behave in the same market-driven way as is expected of the UOIT remains to be seen. It also remains to be seen whether the UOIT will be better able to keep to its task than Canada's other technical universities.[2] The Technical University of British Columbia, which had a similar mandate to the UOIT, was closed in 2002 only five years after it was established. In the same year that the B.C. university was established, the Technical University of Nova Scotia was closed and some of its programs transferred to Dalhousie University. Also in 2002, the former Ryerson Polytechnical University completed its journey toward becoming a conventional university and removed the word Polytechnical from its name.

The Relationship between the University and Community College Sectors

[1] The other significant category of new private degree granting institutions will likely be religious institutions seeking to offer secular degree programs

[2] A considerable part of the rationale for the establishment of the UOIT was to improve access to university for residents of the rapidly growing Durham region. However, many of the people in this region will probably want the same types of opportunities as residents elsewhere in the province rather than a special niche institution, and this will likely be a constant source of pressure on the UOIT to become more like other Ontario universities. In the language of the literature on institutional differentiation, this would be an example a mimetic isomorphism.

The potentially greatest changes in the structure of Canadian higher education are those that involve altering the relationships between the major sectors of higher education, the universities and the community colleges[3]. Until recently, one of the fundamental defining characteristics of this relationship was that the universities were authorized to award degrees and the colleges were not. In the context of the present discussion, the two primary functions of community colleges may be described as: (a) offering first and second year courses in the same fields as universities for transfer credit; and (b) offering certificate or diploma programs of study of an applied nature in fields where there is no corresponding university program for direct entry into the labour market.

The first substantial alteration in the binary structure of Canadian higher education was in 1989 in British Columbia when initially three (now five) community colleges were converted into university colleges. These hybrid institutions offer programs of both the type traditionally associated with the community college and those associated with the university, including baccalaureate degree programs. In regard to the distinction in the previous paragraph, the original emphasis in the university college was on adding the third and fourth years of university type programs for which the colleges had already been offering the first two years. Later was added the notion of *applied* baccalaureate degrees in fields that had no directly corresponding university program.[4] In 1996, Alberta community colleges also were given the opportunity to offer applied baccalaureate programs, and in 2000, a similar provision was incorporated into the Postsecondary Education Choice and Excellence Act in Ontario, the same piece of legislation that enabled the establishment of private degree granting institutions in that province. As of

[3] What I refer to as the community college sector also includes postsecondary institutions that traditionally have not offered baccalaureate degrees but are known by other names, such as institute of technology, or in Quebec, college d'enseignement general et professionel.
[4] The first four university colleges (Cariboo, Okanagan, Malaspina, and Fraser Valley) were mandated to offer traditional degrees in arts and sciences. Subsequently, in 1995, Kwantlen College became a university college with a mandate to offer applied degrees, not traditional degrees in arts and sciences (Carr, 2001).

2004, about a third of the community colleges in Canada will be able to offer baccalaureate degrees.

A similar movement has been occurring in the United States, but on a relatively smaller scale. Presently, community colleges have been empowered to offer baccalaureate degrees in a handful of states, including Texas and Florida (Floyd, forthcoming, 2004; Walker and McDowell, forthcoming, 2004). In both countries, there have been two distinct models of, or purposes for community college baccalaureate programs. One purpose is to improve access to the types of programs typically offered by universities. This is particularly important for placebound students, but serves also to overcome other economic, cultural, and learning style barriers that may prevent community college students from continuing on to complete a baccalaureate degree at a university.

The idea for the university colleges in British Columbia came from a provincial study of access, and their original and primary purpose was to improve access to the types of programs typically offered by universities. Access has been the primary motivation for the community college baccalaureate in the United States too, but with a twist. One of the first areas that has been targeted for the community college baccalaureate in the United States is teacher education. This responds *both* to limitations on access to university teacher education programs *and* to national concerns about shortages of teachers.

The other purpose of the community college baccalaureate is to provide programs of an applied nature that are designed to meet specific workplace needs. The rationale for this type of degree is that because of changes in technology and advances in knowledge, workers in many of the occupations for which labour market preparation is provided by community colleges now require more advanced education. Though this education has a strong applied focus, the increased level of complexity and sophistication of the curriculum, the argument goes, warrants the awarding of baccalaureate degree. The colleges are still providing training for the same types of jobs that they used

to, it's just that the college programs are changing commensurately with the changes in the knowledge and skill requirements of those jobs.

Except for the university colleges in British Columbia, in Canada the community college baccalaureate has been used exclusively for workforce development. This is the thrust of the applied degree programs in Alberta and Ontario, and apparently will be the case also under new provisions for the other community colleges in British Columbia. A few examples of titles of applied degree programs may help give the reader a sense of the applied nature of these programs: Bachelor of Applied Information Science (Information Systems Security); Bachelor of Applied Technology (Advanced Manufacturing Technologies: Wood and Composite Products); Bachelor of Applied Petroleum Engineering Technology. Some American community colleges are now offering what they call workforce baccalaureate degrees in such areas as manufacturing technology and information technology, but these are a minority of community college baccalaureate degree programs in the United States.

In the first model of the community college baccalaureate degree described above, where the community college offers a complete baccalaureate program in areas where universities offer programs, there is a definite blurring of the traditional boundary between the sectors, and in that regard, an alteration of the structure of the postsecondary education system. It is not clear that the second model, that of the applied baccalaureate degree, constitutes a change in the structure of postsecondary education. Enhancing the curriculum of the former applied diploma programs in community colleges could be viewed as similar to the continual enhancement of university degree programs to take account of advances in knowledge. In principle, the differentiation between the community college's applied degrees and university degrees is of the same type as the differentiation between the former's diplomas and the latter's degrees. In practice, however, the distinction that I have drawn between two types of baccalaureate degrees may be difficult to apply, especially as universities become more market driven and workplace oriented, a point to which I will return later. Also, even if the applied

baccalaureates represent only an intensification of the type of programs that the colleges have been offering, the new degrees could foster a change in the culture and identify of the colleges (Laden, 2004, forthcoming). In any event, it is important to reflect upon how the types of developments described here threaten to change the structure of postsecondary education, and how we think it should change. The next section of the paper deals with one perspective on the latter question.

The Balance between Sectors

Several documents emanating from the Institute for Competitiveness and Prosperity[5] (ICP) in Toronto in the past few years have argued that for the purpose of generating wealth we need to change the present balance between the community college and university sectors (Institute for Competitiveness, 2003; Task Force, 2003; Martin and Millway, 2003; Institute for Competitiveness, 2004). For example, a 2003 Working Paper states that:

> Another key issue we think Ontarians should focus on is the respective roles of colleges and universities in raising the competitiveness and prosperity of Ontarians. We are concerned that Ontarians may be under-investing in the latter relative to the former (Institute for Competitiveness, 2003, p. 43).

The focus of the ICP has been Ontario, but in some places the arguments are generalized to Canada as well. The crux of the ICP argument is that compared to the United States, Ontario invests more in community colleges relative to universities, but since the returns to investment are greater for universities

[5] The Institute for Competitiveness and Prosperity is described in its documents as an independent not-for-profit organization established in 2001 to serve as the research arm of Ontario's Task Force on Competitiveness, Productivity and Economic Progress. The mandate of the Task Force "is to monitor Ontario's competitiveness, productivity, and economic progress compared to other provinces and U.S. states and to report to the public on a regular basis." The Institute is funded by the Government of Ontario through the Ministry of Enterprise, Opportunity & Innovation.

than for community colleges, Ontario's relative overinvestment in community colleges contributes to the prosperity gap between Ontario and the United States.

International comparisons of educational attainment help to put the first part of the ICP argument in context. According to OECD figures for the year 2000, Canada had the highest proportion of working age population (25-65) with a postsecondary credential of any member country, 41% (Education in Canada, 2003, p. 10). The highest level of educational attainment was a university degree for 20% of Canadians of working age, and it was a community college certificate or diploma for 21%. Though highest in total, Canada did not have the highest figure for either sectoral category. In the community college category, Canada was second to Ireland at 22%. In the university category, Canada was fourth, after the United States, 28%; Norway, 26%; and the Netherlands, 21%. The university degree attainment figure for the United States was significantly higher than Canada's.[6]

A more direct way of looking at the comparative structure of postsecondary education is in terms of the number of postsecondary institutions in each sector. The numbers reported by Statistics Canada are 76 universities and 204 community colleges, a ratio of 2.7 of the latter to the former.[7] In the United States, the Carnegie Classification Manual for 2000 (Carnegie Foundation, 2000) shows 1,406 universities and 1,184 community colleges, a ratio of 0.84 community colleges to universities.[8] Even allowing for

[6] Paul Davenport, President of the University of Western Ontario, cites similar OECD figures for 1996, as well as other labour market outcomes, in his critique of a journalist's observation that the Canadian public is beginning to realize that education at a college or vocational school is more valuable than a university degree (Davenport, 2002, pp. 46-49).

[7] These figures are from Orton, 2003, p. 7. This paper, by a senior Statistics Canada official in the area of postsecondary education statistics, discusses the difficulties involved in providing a definitive answer to the question of how many community colleges and universities there are in Canada and presents some alternative ways of answering that question.

[8] For comparability, these figures exclude private, for-profit institutions, of which there were 15 universities and 485 Associate's Colleges in 2000. The Canadian figures given above exclude comparable non-university type institutions. I have also excluded the 46 combination Baccalaureate-Associate's Colleges in the U.S. because of ambiguity about which sectoral category they should be included in, although as of 2000 they were mostly university type institutions. Also excluded are Specialized Institutions like free standing medical schools and Tribal Colleges and Universities.

issues of comparability of definitions, it does seem that there is quite a disparity between Canada and the United States in the relative numbers of the two types of postsecondary institutions.

Consistent with the figures just cited, the ICP cites data on student flows from Grade 9 for Ontario and a group of fourteen states regarded as peers for the sake of economic comparisons. These figures show that of Grade 9 students in 1995, five years later, 28% were enrolled in university and 50% in community college. The comparable figures for the group of American states were 33% for university and 47% for community college (Institute for Competitiveness, 2003, p. 22).

However, when one looks at enrolment figures, one gets quite a different picture. Fall 2000 enrolment in community colleges accounted for 39.3% of total enrolment in institutions of higher education in the United States (derived from Table B, National Centre for Education Statistics, 2002). In Canada the corresponding figure for 1999 was 37.4% (derived from Tables D1.8 and D1.10, Education Indicators in Canada, 2003, Tables). In Ontario, enrolment in community colleges comprised 33.8% of total postsecondary enrolment, whereas the average for the 14 states used in the ICP's studies was 34.1% (derived from Table 48, National Center for Education Statistics, 1998). In terms of relative enrolment, it does not appear that Canada is overemphasizing community colleges relative to the United States or that Ontario is doing so relative to peer states.[9] The difference appears to be that relative to the United States, Canada has fewer and larger universities, and more and smaller community colleges.

[9] It should be noted that the figures given here are for different years for Canada and the United States. The latest figures that the author was able to access when preparing this paper were for 1999 for Canada. However, national figures for the U.S. were available for 1998 or 2000, not for 1999. The latest state level figures for the U.S. were for 1996. While there have been some short term fluctuations, year to year discrepancies have not been sufficient to alter the broad conclusion that enrolment in community colleges as a percentage of total postsecondary enrolment is certainly not higher in Canada than in the United States, and is probably lower. It is also noteworthy that the range in community college enrolment as a percentage of total enrolment in the 14 peer states used in the ICP studies is enormous, from California at nearly 60 per cent to Indiana at about 13 per cent.

The next part of the ICP argument alludes to the "increased productivity from higher levels of education", i.e. from attending university compared to attending community college. The suggestion is that because of the higher productivity of university than community college graduates, Ontario's income per capita relative to the United States would increase if the province had fewer community college and more university graduates. The difference in productivity is inferred from the estimate that on average, for the 14 American states, Ontario, and Quebec, annual earnings are 26% higher for university than for community college graduates (Institute for Competitiveness, 2003, June, p. 20). Of course, on average, the university graduates may have up to two years more of postsecondary education than the community college graduates, and the additional years of schooling could be expected to have an impact on earnings whatever the type of institution. In the United States, Grubb reported that after controlling for other variables, the average increase in earnings *per year* of postsecondary study is about the same for graduates of both types of institutions (Grubb, 1997).

An even more precise way to look at the relative influences of the different educational sectors would be to focus on rates of return to different levels of education rather than just the earnings side of the equation. Until recently, most rate of return studies in Canada concentrated on the university sector, but now we are starting to get more studies that look at both sectors. The comparison of different rate of return studies is a complex undertaking because of differences in definitions, assumptions, methods, and data sources. As rate of return analysis is the subject of another presentation at this conference (Emery), I will make just a few comments about this type of study here.

First, there is likely a big difference in employment outcomes between persons who enter the labour market after completing a career education program and those who complete an academic program and then enter the work force instead of transferring to a university. Research in the U.S. shows that while on average, the rate of return per credit is about the same in

community colleges as in universities (Kane and Rouse, 1996, p. 601), the Academic Associate Degree is not a good investment for students who fail to transfer to university (Grubb, 1997, p. 238; Pascarella, 1999, p. 11). For community college transfer students who don't transfer, the appropriate comparison would be with students who drop out of university after two years rather than with university graduates. I don't know of any studies that provide this type of comparison. Another important gap in the literature is the absence of provincial level data. This is especially important for Ontario, because community colleges there have since their founding had a stronger emphasis on career education than colleges in other provinces (or states), and are unique among North American colleges in offering a wide range of three-year career programs. It is impossible to assess the validity of the ICP's argument without data on earnings and rate of return for graduates of these three-year programs.

Second, while earlier Canadian estimates tended to show moderately to slightly lower rates of return for community colleges than for universities, some recent estimates show the reverse. For example, Vaillancourt's 1996 study showed private rates of 18.4% for community college women compared to 16.1% for university, and for men 16.3% for community college compared to 12.3% for university (cited in Boothby and Rowe, 2002, p. 26). Boothby and Rowe estimated rates of return in the 26 to 27 per cent range for community colleges, and 15 to 16 per cent for universities (p. 26). Of course private rates of return have been relatively higher than total rates in the university than community college sector because of the relatively higher tuition fees. And these are only two studies. Still, it is far from clear that - as the ICP argument requires - rates of return are higher to investment in university than in community college programs.

Implications and Conclusions

Even if the ICP's argument for reallocation of resources from the community college to the university sector is not persuasive - and I don't think

it is, for reasons that I have given above - the changes that are occurring in both sectors make it important to consider the appropriate relationship between these sectors. Even if the enrolment distribution between sectors is about the same on average in Canada as in the United States, one can't help but ask whether the present balance between sectors in Canada is appropriate for a society whose future is intimately tied to the creation, dissemination, and application of knowledge. Intuitively, one senses that anything close to the present balance between sectors makes sense only if the college sector, like the university sector, strives to be on the cutting edge of knowledge. But if colleges do this - as no doubt, all would maintain they have been doing - that could raise another troubling question: in the process of continually making advances in the education they provide, are colleges becoming universities?

This, of course, refers to the issue of academic drift, a process in which institutions strive to become more like institutions at the next rung of a hierarchical system of postsecondary education. Except with respect to the BC university colleges, which are intended to be hybrid institutions, provincial governments have stated explicitly that offering baccalaureate degrees is not a step on the way to becoming a university. The Government of Alberta, for example, has made the following unequivocal statement on this issue:

> Public colleges and technical institutes offering applied degree programs will not become universities, nor will they confer degrees in traditional university programs … The intention of the applied degree demonstration project is to allow public colleges and technical institutes greater flexibility to fulfill their traditional mandate which is providing career and technical education and training to Albertans at the certificate and diploma level. (Government of Alberta, 2003, p. 2)

Anyone who has studied the history of higher education may rightfully be skeptical about the ability of any government to honour such a pledge in the long run, or perhaps even the medium run. A common theme in this history is that of postsecondary institutions that started off as something quite distinct

from universities evolving into universities. A large scale transformation of this type that some believe has relevance to what is now happening in North American community colleges was when the polytechnics in the United Kingdom were converted into universities (Ward, 2001). Prior to that conversion, there had been quite articulate descriptions of the differences between the applied degrees awarded by the polytechnics and the academic degrees awarded by the universities (Matterson, 1981). On the other hand, a big difference between the situation of the UK prior to the conversion of the polytechnics and Canada's today was the exceedingly low university participation rate in the UK, whereas Canada has one of the highest in the world.

Another factor that is important to consider when looking at historical analogies is the knowledge society-technology- globalization context of higher education today, as described briefly earlier in this paper. How qualitatively different is the environment of the university today, and the university's response to it, from anytime in the past? Writing about higher education today is replete with criticisms, like that of Derek Bok's cited earlier, of the extent to which the universities have become economically oriented and market driven, and in the process are failing to perform other important functions properly. James Downey, former President of Waterloo University, recently suggested that universities have become "… too economy-centric in our focus, at the expense of some other values and considerations that go to the heart of our enterprise, notably the qualitative aspects of undergraduate education and the role of universities in a civil society, as distinct from in a knowledge economy" (Downey, 2003, p. 29).

In a similar vein, Fisher and Rubenson have asserted that the increased vocationalism and utilitarianism in the university has contributed to a blurring of the boundary between universities and community colleges (Fisher and Rubenson, 1998, pp. 94-95).[10]

[10] One of the examples that Fisher and Rubenson give is of an advanced wood processing program at the University of British Columbia. A comparison of university and college web sites

Insofar as such a blurring of the boundaries is actually occurring, through the behaviour of institutions in both sectors, I would offer two observations. First, in such a context, not only is the community college a credible institution to offer bachelor's programs of an applied nature in selected areas, but this may be an economically efficient way to help increase the number of baccalaureate graduates. In fact, within the constellation of *new* providers of baccalaureates described earlier, the community college may be the most credible in regard to dedication to academic quality and serving student and community needs. In the context of the ICP argument about the importance economically of producing more baccalaureates, research is needed on the comparative benefits, relative to costs, of additional university and community college baccalaureates.

The second observation is that as community colleges assume more responsibility for higher level technical training, this could allow universities to concentrate more on their unique role in society, a role that observers like Derek Bok and James Downey feel is in danger of being neglected due to universities becoming too economy-centric in their focus. Many of the postsecondary institutions in the non-university sector, such as the CAATs in Ontario, were established for the express purpose addressing the knowledge and skill needs of industry. The more that institutions that were established for this purpose can be enabled to do so in a deeper and wider manner, the more can institutions that have other substantial reasons for being fulfill their promise. Such an allocation of roles would be consistent with Abraham Flexner's advice that universities should not do everything, but rather concentrate on doing "supremely well what they almost alone can do" (Flexner,

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suggests that this program has a lot in common with the applied degree program in advanced technologies for wood and composite products that is offered by Conestoga College in Ontario. For example, the Conestoga program "offers a detailed study and evaluation of the principles, methods and applications needed for making technically sound decisions in manufacturing processes, physical properties of materials, advanced computer applications, a solid foundation in business considerations, and an exposure to liberal arts disciplines" (Conestoga, 2004). The UBC program "teaches state-of-the-art manufacturing processes, as well as the structure of successful businesses. Students learn valuable workplace skills that are important to

1930, p. 27). In this connection, there is more than a little irony in the fact that the period of introduction of applied baccalaureate degrees in many of Canada's community colleges coincides with the period of demise of most of Canada's technical universities. It may well be that in the future, community colleges with the most technically advanced programs will play the role formerly played by technical universities.

What specifically might the developments described in this paper mean for the future of the binary structure of postsecondary education? One implication is that the practice of differentiating between the two sectors on the basis of the ability to award a baccalaureate degree or by the types of programs offered may no longer be viable. Does this mean that the binary idea should be abandoned, as some other jurisdictions have done, or that a different principle should be employed as the basis of differentiation between sectors? Perhaps the key basis of distinction between sectors should be that one is highly regulated by, and responsive to, government, while institutions in the other have considerable autonomy.[11]

I have attempted to describe some of the ways in which both community colleges and universities, but particularly the former, are changing in response to changes in their environment. To a considerable extent, these changes have been the consequence of responses of individual institutions to market forces rather than the result of government planning. That experience suggests that one possible stance for public policy would be to step aside and let market forces reshape our system of higher education. However, the environment in which universities and, more so, colleges operate is only partially market determined; it is still controlled significantly by government regulation. Unless governments are prepared to eliminate most of this regulatory apparatus - for example, let all public and private, provincial and out-of-province institutions compete equally - the structure of higher education must be determined by public policy. The issues pertaining to the structure of higher education that

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employers, and vital for those wanting to successfully start and run their own businesses" (UBC Forestry, 2004).

have been described in this paper seem to me at least as compelling candidates for the higher education policy agenda as the other higher education issues that governments have been addressing in recent years.

[11] I am indebted to my colleague Dan Lang for this observation.

References

Birnbaum, R. (1983). *Maintaining Diversity in Higher Education*. San Francisco: Jossey-Bass.

Bok, D. (2003). *Universities in the Marketplace: The Commercialization of Higher Education*. Princeton, NJ: Princeton University Press.

Boothby, D, and Rowe, G. (2002). "Rate of Return to Education: A Distributional Analysis Using the Life Paths Model," Human Resources Development Canada, Applied Research Branch.

Brown, S.A. (1997). "New Brunswick," in G. A. Jones (Ed.). *Higher Education in Canada: Different Systems, Different Perspectives*. New York: Garland Publishing, Inc., 189-220.

Carnegie Foundation for the Advancement of Teaching. (2000). *The Classification of Institutions of Higher Education, 2000 Edition*. <http://www.carnegiefoundation.org/Classification/CIHE2000>

Carr, B. (2001, Winter). "The University College System in British Columbia, Canada," *CCBA Beacon*, vol. 2, no. 1, 2-7.

Conestoga College. (no date). "About the AMT-WCP Program," <www.conestoga.on.ca/jsp/programs/schoolengit/degree/wood/aboutamt.jsp>

Cunningham, S., Ryan, Y., Stedman, L., Tapsall, S., Bagdon, K., Flew, T., & Coaldrake, P. (2000). *The Business of Borderless Education*. Canberra, ACT: Department of Education, Training, and Youth Affairs.

Davenport, P. (2002). "Universities and the Knowledge Economy," in D. Laidler (Ed.). *Renovating the Ivory Tower: Canadian Universities and the Knowledge Economy*. Toronto: C.D. Howe Institute, 39-59.

Dennison, J. D. (1997). "Higher Education in British Columbia, 1945-1995: Opportunity and Diversity," in G. A. Jones (Ed.). *Higher Education in Canada: Different Systems, Different Perspectives*. New York: Garland Publishing, Inc., 31-58.

DiMaggio, P.J., and Powell, W.W. (1983). "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields," *American Sociological Review*, vol. 48, no. 2, 147-160.

Donald, J. (1997). "Higher Education in Quebec: 1945-1995," in G. A.

Jones (Ed.). *Higher Education in Canada: Different Systems, Different Perspectives*. New York: Garland Publishing, Inc., 161-188.

Downey, J. (2003, December). "The Heart of Our Enterprise," *University Affairs*, 27-30.

Duderstadt, J.J. (2004, forthcoming). "The Future of Higher Education in the Knowledge-Driven, Global Economy of the 21st Century," in G.A. Jones, P. McCarney, and M.L. Skolnik (Eds.). *Creating Knowledge, Strengthening Nations: The Changing Role of Higher Education*.

Education in Canada: Raising the Standard. (2003, March). Ottawa: Statistics Canada. 2001 Census, analysis series.

Education Indicators in Canada: Report of the Pan-Canadian Education Indicators Program 1999. (2003). Ottawa: Statistics Canada and Council of Ministers of Education Canada.

Fisher, D., and Rubenson, K. (1998). "The Changing Political Economy: the Private and Public Lives of Canadian Universities." In J. Currie and J. Newsom (Eds.). *Universities and Globalization: Critical Perspectives*. London: Sage Publications, 77-98.

Flexner, A. (1930). *Universities: American, English, German*. New York: Oxford University Press, 1930.

Floyd, D.L. (2004, forthcoming). "Community College Baccalaureate: Models and Programs in the United States," D.L. Floyd, M.L. Skolnik, and K.P. Walker (Eds.). *The Community College Baccalaureate: Issues of Practice, Policy, and Research*.

Government of Alberta. 2003b. *The Applied Degree - Frequently Asked Questions*. <http://www.learning.gov.ab.ca/college/AppliedDegree/faq.asp>

Grubb, W.N. (1997). "The Returns to the Sub-baccalaureate Labor Market, 1984-1990. *Economics of Education Review*, vol. 16, no. 3, 231-145.

Hannan, M.T., and Freeman, J.H. (1977). "The Population Ecology of Organizations," *American Journal of Sociology*, vol. 82, no. 4, 929-964.

Huisman, J. (1998). "Differentiation and Diversity in Higher Education Systems," in John C. Smart (Ed.). *Higher Education: Handbook of Theory and Research, Vol. 13*. New York: Agathon Press, 75-109.

Institute for Competitiveness and Prosperity. (2003). *Missing*

Opportunities: Ontario's Urban Prosperity Gap. Working Paper No. 3. Toronto.

Institute for Competitiveness and Prosperity. (2004, January). "Partnering for Investment in Canada's Prosperity," Presented at the Annual Meeting, 2004, of the World Economic Forum, Davos, Switzerland.

Kane, T.J., and Rouse, C.E. (1995). "Labor Market Returns to Two- and Four-Year College," *American Economic Review*, vol. 85, no. 3, 600-614.

Laden, B. V. (2004, forthcoming). "The New ABDs: Applied Baccalaureate Degrees in Ontario Colleges," in D.L. Floyd, M.L. Skolnik, and K.P. Walker (Eds.). *The Community College Baccalaureate: Issues of Practice, Policy, and Research*.

Laidler, D. (2002). "Renovating the Ivory Tower: An Introductory Essay," in D. Laidler (Ed.). *Renovating the Ivory Tower: Canadian Universities and the Knowledge Economy*. Toronto: C.D. Howe Institute, 1-38.

Martin, R., and Milway, J. (2003, July 4). "Ontario's Urban Gap," *National Post*, FP 11.

Matterson, A. (1981). *Polytechnics and Colleges*. New York: Longman, Inc.

Middlehurst, R. (2002). "The Developing World of Borderless Higher Education: Markets Providers, Quality Assurance and Qualifications," A Paper Presented at the First Global Forum on International Quality Assurance, Accreditation and the Recognition of Qualifications in Higher Education, UNESCO, Paris, October 17-18.

National Center for Education Statistics. (1998). *State Comparisons of Education Statistics: 1969-70 to 1996-97*. Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement.

National Center for Education Statistics. (2002). *Enrollment in Postsecondary Institutions, Fall 2000 and Financial Statistics, Fiscal Year, 2000*. Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement.

Orton, L. (2003). *A New Understanding of Postsecondary Education in Canada: A Discussion Paper*. Ottawa: Statistics Canada. Catalogue No. 81-595-MIE.

Pascarella, E.T. (1999). "New Studies Track Community College Effects on Students," *Community College Journal*, vol. 69, no. 6, 8-14.

Rhoades, G. (1990). "Political Competition and Differentiation in Higher Education." in J. C. Alexander and P. Colony (Eds.). *Differentiation Theory and Social Change: Comparative and Historical Perspectives*. New York: Columbia

University Press, 187-221.

Skolnik, M.L. (1997). "Putting It All Together: Viewing Canadian Higher Education from a Collection of Jurisdiction-based Perspectives," in G. A. Jones (Ed.). *Higher Education in Canada: Different Systems, Different Perspectives*. New York: Garland Publishing, Inc., 325-341.

Task Force on Competitiveness, Productivity and Economic Progress. (2003). *Investing for Prosperity. Second Annual Report*. Toronto.

UBC Forestry. (no date). "B.Sc. Wood Products Processing," <www.forestry.ubc.ca…ms/undergrad/prospective/WPP-learn.html>

University of Ontario Institute of Technology Act. 2002, S.O. 2002, c. 8 Sched. O.

Vaillancourt, F. (1996). "The Private and Total Returns to Education in Canada, 1990." Centre de rescherche et developpement economique, Universite de Montreal, unpublished.

Walker, K.P., and Zeiss, P.A. (2004, forthcoming). "Reinventing the Community College," in D.L. Floyd, M.L. Skolnik, and K.P. Walker (Eds.). *The Community College Baccalaureate: Issues of Practice, Policy, and Research*.

Ward, C.V.L. (2001). "A Lesson from the British Polytechnics for American Community Colleges," *Community College Review*, vol. 29, no. 2, 151-163.

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