Council of Ministers of Education, Canada

Postsecondary Education Project
Learner Pathways and Transitions

Learner Pathways and Transitions

An Overview of the CMEC Project

Higher education institutions must be viewed as, and must also work within themselves to be a part of and encourage, a seamless system starting with early childhood and primary education and continuing through life.

National and institutional decision-makers should place students and their needs at the centre of their concerns, and should consider them as major partners and responsible stakeholders in the renewal of higher education.

World Declaration on Higher Education for the 21st Century; World Conference on Higher Education, UNESCO. 9 October 1998

Why are some learners more successful than others in making the journey from secondary school to postsecondary education and from there to the labor market or other lifestyle choice? What are the barriers to successful transitions and to completion of the chosen programs of study? What should be done, and by whom, to assist learners to successfully complete their program of study and to make these critical transitions efficiently and effectively?

These are some of the questions that led Ministers of Education[1] to combine forces in a cooperative project on "Learner Pathways and Transitions". This introductory section is a road map to the resource documents and reports on this project.

The methodology for the project is described on this Web site, and the complete set of discussion papers and reports are reproduced for the use of all stakeholders. As the various project papers reveal, the project has produced stimulating and often critical commentaries on how well learners are served by existing policies and practices and what actions would make a difference. While it would be a mistake to try to summarize the outcomes of the three regional roundtables or the "challenge papers" around which much of the discussion of those round tables was focused, one key conclusion stands out. The most important transition is from secondary to postsecondary education; actions to improved this transition for learners require the involvement of many different stakeholders. Unless this transition goes well for students, subsequent transitions and pathways may be compromised.

Ministers have reviewed the Summary Report on this project and have endorsed the

[1]This project was undertaken by nine provinces and the two territories. Quebec opted for observer status. A report on the final sub-component of this project - transitions among postsecondary education institutions will be added to the Web site at a later stage.

need for action. A new CMEC project on post-secondary education accessibility has been launched to add to our understanding of, and portfolio of means to improve, the critical secondary to postsecondary transition. Additionally, each jurisdiction will use the outcomes from this project in the evolution of their policies, practices and programs at the level of the individual province or territory. But responsibility for action does not stop with Ministers and public officials. Educators, learners, employers, and community groups can and should take action. Publication of the various documents on this project (see below) is designed to provide these stakeholders with the information and insights necessary to understand the challenges and to choose effective means of optimizing the returns for learners from our collective investment in postsecondary education.

Project Organization

The project was organized into four sub-projects as described in the following table. Three of those projects are the focus of the current report.

Sub-project	***Focus***	***Key/Priority Question***
1	The transition from compulsory education to first post-secondary experience	What interventions are most effective in ensuring that a student who enters PSE directly from high school has a good chance of success in his or her PSE studies?
2	Progress through a PSE program	What interventions are most effective in ensuring that once a student enters a PSE program he or she completes that program in a productive and timely fashion
3	Transition after completion of a PSE program to self or other employment	What interventions are most effective in helping graduates quickly enter the labour force and earn enough to be self-sufficient?
4	Transitions among PSE institutions	Why do some students move from one PSE program and institution to another before completing the program in which they first enrolled, and what interventions can most usefully be made to minimize the cases where these moves result in a waste of learner time, and learner and taxpayer resources?

Reports and Resource Documents
(click on title to access PDF version of the report)

1. Learner Pathways and Transitions - Summary Report

2. The Background Paper. Norman Henchey

3. The Evolving Information Base for Learner Pathways and Transitions. Statistics Canada

4. Challenge Papers
   - 4.1 About the challenge papers and their authors
   - 4.2 Summary of recommendations by theme
   - 4.3 The initial transition from K-12 to PSE
     - 4.3.1 Tom Collins — An educator's perspective
     - 4.3.2 Kelly Foley — A learner's perspective
     - 4.3.3 Alex Usher — Income-related barriers
   - 4.4 Pathways through PSE
     - 4.4.1 John Blevins — A provincial perspective
     - 4.4.2 Janet Donald — An educator's and researcher's perspective
     - 4.4.3 Kelly Lamrock — A recent learner's perspective
   - 4.5 Initial learning to earning transition
     - 4.5.1 Graham Lowe — A researcher's perspective
     - 4.5.2 Ken Snowdon — A public perspective
   - 4.6 Cross-cutting issues
     - 4.6.1 Roland Chrisjohn — An aboriginal perspective

5. The Roundtables
   - 5.1 The Roundtable Process
   - 5.2 Participants in Regional Roundtables

Council of Ministers of Education, Canada
Postsecondary Expectations Project

Learner Pathways and Transitions

REPORT

January 1999

Introduction

In the spring of 1998, the Council of Ministers of Education, Canada (CMEC), initiated a consultation on public expectations of postsecondary education. As part of this consultation, ministers also approved a number of thematic initiatives in postsecondary education to be conducted as well. One of these thematic initiatives was on learner pathways and transitions, a subject that was also the focus of CMEC's Third National Forum on Education, held in St. John's, Newfoundland, in May 1998.

The learner pathways and transitions project was designed to look at four different sets of transitions for learners: first, between secondary and postsecondary education; second, through postsecondary education; third, from postsecondary education to the labour market; and fourth, between educational institutions, particularly those in different educational sectors (e.g., college-to-university, university-to-college). This project addresses the first three sets of transitions; the fourth set of transitions, which has its own specific data requirements, will be the subject of a separate report by the government of New Brunswick.

The purpose of this report is to provide policy makers and other stakeholders with both an overview of the main issues currently facing learners in transition and a list of suggested policy interventions to improve certain aspects of these transitions. In order to provide the best possible advice to policy makers, this report has attempted to tap a wide variety of talented and informed sources from across the country.

The first step in preparing this report was the commission of a background paper on the general topic of learner transitions and of nine separate "challenge" papers on specific topics within the field of learner transitions. The authors of the challenge papers were selected so as to represent a wide variety of views on the postsecondary sector, including students, recent graduates, public servants, academics, and administrators. While the challenge papers cover nine quite different topics, they were not intended to collectively be a fully comprehensive review of the full range of transition issues. Thus, some areas of concern were inevitably left underdiscussed compared to others.

The second step in preparing this report was the organization of three regional multi-stakeholder roundtable meetings to discuss issues in learner transitions, using the background and challenge papers as a starting point for discussion. Participants in these meetings were chosen because of their knowledge and interest in transition issues, with an eye to maintaining a balance among stakeholders (students, recent graduates, teachers, administrators, the business community, and the K-12 sector) and ensuring adequate regional representation.

This report is thus divided into three sections. The first summarizes the challenge papers and their recommendations. The second section describes the outcome of the three roundtable sessions and makes thematic summaries of the common issues that arose. The third section outlines possible avenues for intervention by policy makers in order to improve learner transitions.

The Challenge Papers

1. The background paper

The background paper, by Norman Henchey, entitled *Learner Pathways and Transitions*, informed the overall debate on transitions by

- providing a theoretical framework for categorizing policy interventions. The background paper notes the differences between individual, environmental, systemic (that is, related to the nature of the education systems), and institutional factors that pose barriers to access;
- providing a review of available literature on transitions in Canada, including statistical data. This review concludes that we know very little about the nature of transitions, and suggests how data gaps might be filled.

Statistics Canada and the Centre for Education Statistics provided useful assistance by preparing a report entitled *The Evolving Information Base for Learner Pathways and Transitions*. While this document does not contain any new statistical data, it presents a useful overview of new initiatives that are being undertaken in order to fill the current data gaps in the field of learner pathways.

The challenge papers

Nine challenge papers were solicited from contributors with expertise in various areas of postsecondary education. The papers dealt with specific aspects of the three transition points. Authors included students, recent graduates, faculty members, administrators, and government officials.

2.1 The transition from secondary to postsecondary education

Three of the challenge papers (those written by Kelly Foley, Tom Collins, and Alex Usher) dealt with various aspects of the initial transition from secondary to postsecondary education.

- Foley argues that student decisions on careers and postsecondary education are taken with insufficient knowledge of career and educational opportunities, and urges better methods for providing secondary students with better and more realistic information on the subject.
- Collins argues that students entering university are lacking in basic literacy skills and that entrance standards have declined over the past twenty-five years. He suggests that secondary schools must improve the teaching of the "fundamentals" and that universities must pay more attention to upgrading skills weaknesses before allowing students to enter into disciplinary studies.

- Usher argues that policy makers should pay more attention to the "net price" of education, and put more emphasis on non-repayable student aid for low-income students. He also argues that a program of US-style conditional "assured access" grants to low-income students in secondary schools may increase the number of such students who go on to postsecondary education.

2.2 The transition through postsecondary education

Three of the challenge papers (those written by John Blevins, Janet Donald, and Kelly Lamrock) deal with the transition through postsecondary education and especially issues relating to retention and academic success. A fourth paper, written by Roland Chrisjohn, dealt with issues in transition that are specific to Aboriginal students.

- Blevins presents the perspective of provincial governments on progress through postsecondary programs. He argues that governments need to find ways to reduce the cost of education using new partnerships and new technologies, while at the same time finding ways to make education more responsive and more flexible in order to meet the needs of students and the labour market.
- Donald makes a variety of suggestions as to how academic programs may be structured in such a way as to improve student success. She argues that the most important interventions are those made closest to the student (i.e., at the course/curriculum level rather than institution-wide). These interventions are designed to ensure that students are more aware of the general skills they are acquiring, and that they are provided with a more supportive learning environment in which they can meet the academic and social challenges that they face on the road to adulthood.
- Lamrock argues that institutions must make a more concerted effort to develop the "whole student." In particular, Lamrock focusses on the need to make sure that students have the necessary time and support to engage in extra-curricular activities that develop many of the "soft" skills, and the need to ensure a close connection between educational programs and the world of work.
- Chrisjohn argues his case on two levels. On the one hand, he suggests that institutions can improve their retention rates of Aboriginal students by introducing a number of social and academic intervention programs. However, he also argues forcefully that for Aboriginals to succeed in postsecondary education, greater efforts must be made to secure Aboriginal control of some postsecondary institutions.

2.3 The transition from postsecondary education to the labour market

Two challenge papers, by Graham Lowe and Ken Snowden, examine the final transition from postsecondary education to the labour market.

- Snowden says there is an urgent need for institutions, governments, and other partners to work to improve students' transition to the work force by providing more support to measures such as co-op, work-study, career services, and mentoring programs. Snowden also suggests that institutions need to be more diligent in integrating the teaching of "employability skills" into the broader curriculum.
- Lowe argues that there are many gaps in our understanding of the transition to the labour market, perhaps too many to allow us to say with precision what measures are needed to improve the situation. He suggests that there may be too little data to draw reliable conclusions in this area and therefore makes few prescriptive comments.

The Roundtables

Three Roundtables (bringing together experts and interested parties from various stakeholder sectors) were held across the country to review the discussion papers and provide additional advice on the nature of the challenges of transitions and possible solutions to these challenges. The three roundtables were held in Halifax (November 7), Calgary (November 14), and Toronto (November 21).

There were several cross-cutting themes that emerged from the roundtables.

First, and perhaps most important, was the broad agreement on the nature of the **education-career nexus**. Participants were broadly in agreement that growing up, gaining an education, and learning how to seek and maintain employment were all interrelated. They were also in agreement that these processes should be continuous and interrelated, rather than sequential (e.g., first school, then work). There was a general feeling that students from secondary school onwards need to be more exposed to the world of work in order to gain an understanding of what work is and what different types of work exist. Only through such exposure can they begin to make realistic choices about their careers, and hence about their educational paths.

Second, participants were almost unanimous in agreeing that **crucial decisions affecting the education-career nexus must be taken by students well before they enter postsecondary education**. They also agreed that secondary **students currently receive little or no preparation to take these decisions**: their understanding of educational options is limited at best and their understanding of the world of work is largely confined to their parents' experience and their own experience in the part-time labour market. Increased exposure to and preparation for postsecondary education were seen as crucial for secondary students, as was increased real-life exposure to different types of work and careers. Interestingly, however, most participants did not see co-op or work placements as the best way to give students this type of exposure. Participants seemed to feel that while single work placements may give a student a good sense of how **an** industry or occupation works, it cannot give students the breadth of exposure they need in order to make good career choices. There was also a consensus that students in secondary school had an imperfect understanding of what the different types of postsecondary education had to offer and how each related to the labour market. Again, it was felt that secondary students could benefit from greater exposure to different types of postsecondary education earlier in their educational careers.

Third, there was a widespread perception that **educational costs are a real and rising challenge to a successful secondary-to-postsecondary transition**. However, while cost and student assistance were regularly identified as a key transition concern, the specific concerns varied considerably; some were concerned about high tuition, others about rising student debt, still others about inadequate needs assessment. Participants commented that since 70 per cent of young people now attend some form of postsecondary institution, student assistance has effectively become a universal social program. However, participants also believed that governments do not share this view, and continue to treat

access to postsecondary education as a nuisance issue rather than a major and central piece of Canadian social policy.

Though few people advocated a general reduction in tuition, there was occasional support for making tuition free in the first and second years of postsecondary education (although generally there was a preference to see the cost made conditional on good academic performance). There also seemed to be a general preference for seeing a shift in the balance of aid from loans to grants. Finally, there was some consistent – though not overwhelming – support for the idea of providing conditional grants (also known in the US as "assured access grants") to low-income secondary students as a means of encouraging higher participation in postsecondary education.

Fourth, there was **concern about the level of academic preparedness for post-secondary education**, and a perception that secondary schools were either unaware of postsecondary standards or simply not teaching to the standards very well. This view was more pronounced among university respondents than among college respondents. There were also some significant regional variations in opinion on this subject. The Toronto roundtable was most vociferous in its complaints about student preparedness at the secondary level. The Calgary and Halifax roundtables noted preparedness as a problem, but were less inclined to put the blame on the secondary system itself and more inclined to note a general difficulty in getting the secondary and postsecondary systems to communicate with one another about standards and expectations.

There were various solutions to the poor communication between authorities in the secondary and postsecondary sectors. The Toronto roundtable made a strong suggestion for the creation of local educational authorities that would be able to bring local representatives of the two sectors together. At the Calgary roundtable, there was a suggestion that governments needed to fund a body that would act as a catalyst to improve transitions and partnerships among many different sectors (the Alberta Council on Admissions and Transfers was suggested as a model). As to the question of academic preparedness, most participants agreed that the secondary curriculum suffers from a lack of focus, and supported a more standardized and rigorous core curriculum, at least in grades 9 to 11.

Fifth, **the gap in teaching styles and learning environments between the secondary and postsecondary environments** is seen as unnecessarily large, and is a contributing factor to dropouts and stopouts. There was a general consensus that while life and learning exist on a continuum, the sharp division in the education system between secondary and postsecondary imposes some unnecessary and harmful compartmentaliza-tions on those continua. There were two very innovative solutions suggested by roundtable participants. First was a suggestion that teachers of final-year secondary classes and first-year postsecondary classes should occasionally switch places for a year in order to provide faculty from both the secondary and postsecondary domains with a better sense of the nature of the divide in teaching styles. Second was a recommendation that secondary schools should provide a more "postsecondary-like" environment in the final

year of study in order to acclimatize students to the learning environment they will face in postsecondary institutions.

Sixth, there was **near-universal support for improved credit transferability and articulation of college and university programs.** In western Canada this notion was greeted with approval but did not elicit much comment, since such practices are already widespread. In Toronto and Halifax, where credit transfers between university and college systems only exist within certain highly localized arrangements, there were significant levels of frustration with the perceived rigidity of the existing system.

Seventh, **participants believed that retention was an important issue, but were adamant that "dropouts" do not necessarily represent failure.** There was general acknowledgement that institutions have hitherto not done a very good job of preventing student dropouts. However, there was also a sense that in some cases dropouts should be seen as successes rather than failures. The problem with dropouts is that they are always calculated from an institutional, rather than a systemic perspective. A student who drops out of one institution only to reappear and successfully complete a program at another is not a "failure," though statistically he or she would be described as one. Moreover, in the absence of proper career-education counselling in the secondary system, a large number of students will likely have to do some "searching" before finding the proper institutional "fit," and many institutions feel it unfair to blame them for this fact of student life. In addition, a number of participants (mainly from the college sector) noted that increasing numbers of students were dropping out halfway through their programs either because they had obtained jobs, or because they obtained whatever skills they needed prior to finishing the program. Many felt that this form of dropout, far from being a failure, was in fact evidence of success.

In short, many participants were uncomfortable with the notion of relying too heavily on crude measures of "dropouts" to determine success. While institutions noted many strategies they could themselves pursue to reduce the dropout rate, several participants suggested that government could play a useful role by introducing some sort of tracking system that would allow better monitoring of students' movements from institution to institution.

Eighth, with respect to improving retention, **there was wide support for altering existing curricula to give greater centrality to student development**. There was a feeling that arts and social science programs in universities in particular do not do a very good job of explaining the relevance of their programs to students, and that many programs suffer from being too focussed on the preferences of faculty rather than the needs of students. Many also said that academic and social support mechanisms need to be more integrated into the curriculum.

However, while most participants were of the view that while these measures need to be taken, few believed it was an appropriate area of action for governments. There was some support for providing financial incentives for institutions that showed leadership and innovation in this area, but generally speaking participants felt that this was an area where

institutions must take the initiative. Government intervention in these matters would, according to most participants, amount to unwelcome micro-management.

Ninth, with respect to labour market transitions, participants believed that **more attention needed to be paid to helping students with their job-searching abilities.** Participants firmly believed that all students graduate with skills that make them employable. However, there was also a sense that they did not always have the skills to *find* work after graduation. The problem was described in three different ways. First, students often do not know what skill sets they possess and therefore cannot explain them to employers. Second, students – especially those in arts and sciences – do not always know the wide range of careers their skills might allow them to pursue, and so the range of students' job searches is often unnecessarily limited. Third, students' job searches seem geared towards large employers rather than small business or self-employment and entrepreneurship, which again limits their range of job possibilities.

Participants suggested several solutions to these problems. First, institutions need to do a better job of developing students' "soft" skills and to take more time to explain to students what skills they are learning and how they might be employed in the work place. Second, ways should be found to encourage entrepreneurship in students, perhaps by establishing centres of entrepreneurship in each institution, each with a mandate to encourage the development of entrepreneurial skills and spirit throughout the institution. Government was seen as a possible catalyst for this intervention. Third, attempts should be made to make students more aware of the opportunities available in the small business sector. This was also seen as an area for possible government intervention, because small businesses on their own are not able to devote the resources necessary to recruit on campuses.

Tenth, there was a feeling that **employers need to do a better job articulating their human resource needs**. One participant noted that employers frequently are of two or even three minds on the issue of employee skills. While CEOs may praise "soft" skills, the companies' human resource professionals – who have more operational control over hiring – may have different views on the necessary balance between "soft" and "hard" skills. Companies' actual recruiting agents may have yet another view (likely more geared to specific "hard" skills) on the matter, thus further complicating the picture. Moreover, many educators believe that some employers have unrealistically high expectations of graduates.

Lastly, there was some unease among participants about the relationship (and potential contradictions) between a "transitions" agenda and a "lifelong learning" agenda. While participants were sensitive to the desire of governments and others to promote "learning efficiencies," there was a perception that this agenda might not amount to much more than pushing students to get in and out of postsecondary institutions as quickly as possible. Many felt that this was inconsistent with the need to promote lifelong learning (which implies multiple short stays in education throughout one's life) and with the realities of student life and the labour market. For instance, is it wrong for students to delay graduation from university or college by working part-time or even full-time while studying, thus lowering their need to borrow, and increasing their labour market

experience? In short, while there was much support for removing transition-related barriers to successful completion of programs, participants seemed to feel that too strong a focus on reducing times-to-completion might cause more harm than good.

Possible Actions

Introduction

This section combines the recommendations of the challenge papers with the feedback of the discussion groups to create a kind of "toolkit" for public policy makers and educators interested in improving student transitions.

It should be noted that participants in all three roundtables believed that the first set of transitions – that is, from secondary to postsecondary education – was the most crucial. If this set of transitions does not go well for students, then it is unlikely that the other two will go well either. Participants were also of the belief that much of the work in this area must be done long before students arrive at postsecondary institutions.

The transition from secondary to postsecondary education

The first obvious place for action is in **creating a greater alignment between secondary and postsecondary educational institutions**. This would address two key concerns expressed at the roundtables and in the challenge papers, namely academic standards of first-year postsecondary students, and the difficult gap in required learning styles at the secondary and postsecondary levels.

There are different ways of creating this kind of communication. One suggestion was to create "local education authorities," made of up of local (or in smaller provinces, provincial) college and university presidents, high school principals, and school board members. Ideally, such a body would also have representation from the business sector and the broader community, in order to allow it to address the work-related aspects of transitions, as well as represent the societal investment in education and young people.

The goal of such a partnership would be to break down the (largely artificial) barriers between different education sectors. Ten years ago in the United States, the American Association for Higher Education created the Education Trust, a non-profit group devoted to improving academic standards at all levels of education. This group, which among other things promotes academic partnerships between high schools, colleges, and communities, has a motto worth following – "College Begins in Kindergarten." The Education Trust's mission of supporting local initiatives to raise academic standards is indeed one possible working model for some kind of local authority.

The second place for action is providing secondary students with **better information on the career-education nexus.** This subject area, dealt with in detail in the challenge paper by Kelly Foley, was unanimously endorsed as an action priority by roundtable participants.

A successful initiative on this front would concentrate on giving three kinds of information to secondary school students and their parents. First, it would provide information about

different kinds of careers and career planning. Second, it would provide information on how different types of education can lead to different kinds of careers, and how students should structure their high school course load to meet their goals. Third, it would provide detailed information on different types of educational opportunities, free of at least some of the bias that exists in the institutional promotional material that now forms students' only source of information about universities and colleges. This type of information should be given to students on a recurrent basis from grade 8 or 9 onwards.

An excellent example of this type of program is the Indiana Career and Postsecondary Advancement Centre (ICPAC). ICPAC provides all 8th grade students with four newsletters a year on careers and education, provides a major career-education guide and career self-assessment test to all 9th and 11th graders, and distributes one of its sixty free publications every two weeks to all 11th and 12th graders. It is also linked to the state's "Twenty-First Century Scholars" program, which is a form of "assured access grant" (see below). This conjunction of student aid and student information appears to have been remarkably effective in encouraging higher postsecondary participation rates in the state of Indiana.

The third action area is student assistance. As government finances permit, **the balance of aid provided in grants and loans should be shifted towards grants**, thus reversing the dominant funding trend this decade. There is also some support for **experimenting with "assured access grants."** These grants offer academically successful low-income secondary students with financial support for postsecondary education. In Indiana for instance (one of over half a dozen US states with such programs), the Twenty-First Century Scholars program offers free tuition at in-state colleges to students who maintain a B average or better through high school and who qualify for the national school lunch program. The program is intended to send a message to low-income students who might not have ambitions for later study that the state is interested in their well-being and will help them succeed provided they make a significant academic effort on their own. Approximately 11 per cent of Indiana ninth-graders currently are enrolled in the program.

The transition through postsecondary education

Participants identified three action areas in improving students' progress through postsecondary education.

The first – and most unambiguous – recommendation is for **improved credit transfer arrangements,** especially between the university and college sectors. In the Toronto and Halifax roundtables, there was great frustration at the inability of students to move freely between institutions.

The second area for action is that **institutions must improve the learning environment for students**, in particular by providing more assistance for the individual learner and clarifying learning outcomes for the learner. In particular, institutions were seen as being too wedded to the single lecturer model – the oldest teaching technique in the world – which was seen as inadequate to help a diverse group of students with varied learning

styles and strategies acquire the numerous "hard" and "soft" skills necessary to function in modern society. A need was also identified for institutions to find ways of helping students to combine school and work and to provide an improved extracurricular atmosphere in order to better develop the "whole student." Governments were seen as having a secondary role in this sphere; they should provide encouragement and perhaps some financial support to institutions that demonstrate excellence in this area.

The third action area is for more attention to **monitoring and tracking students as they progress through and out of postsecondary education**. Institutions said they were simply unable to discover what happened to their students when they left the institution in mid-program. Understanding where dropouts go – whether to the labour market, to a similar program at another institution, to a different program at a different institution – is crucial to understanding the nature of attrition at postsecondary institutions. Government investment in a common student tracking system, it was suggested, would give institutions an excellent tool for addressing attrition.

The transition from postsecondary education to the labour market

The major action area is to **improve students' job-searching abilities and prospects**. In part, this is a curriculum issue for institutions. Students need to be clearer about what skills they are learning and about the range of career options open to them once they possess these skills. In part, however, it is an issue of improving collaborations between business, institutions, and governments to assist students in their job-hunting skills. Most participants saw **improving career employment offices** on campus and **improving the quality and quantity of mentoring opportunities available to students** as the highest priorities. However, these programs require a good deal of community participation in order to function effectively. Though the responsibility for this ultimately lies with institutions, governments could still play a catalyst role in bringing greater community and business involvement in the lives of young people. A special role was also noted for promoting entrepreneurship among students and in encouraging matches between graduates and small businesses (small business often being a sector unknown to students and unable on its own to recruit new graduates owing to time and resource constraints).

The role of partnerships

Underlying many of the priority action areas is a need for **greater cooperation and partnership between institutions, governments, business, and the community**. There are currently very few standing bodies in which these groups can meet to discuss both their expectations of one another and how better use of their common resources can improve the lot of all. In the secondary-postsecondary transition, for instance, greater cooperation across education sectors and the participation of business and the community are necessary to provide students with the knowledge they need to make informed educational and career choices. In the case of credit transfers, governments must join with universities and colleges in order to ensure greater learner flexibility. In the postsecondary to labour market transitions, greater communication is needed between institutions and

business in order to improve the ability of students to learn about the labour market and find good jobs after graduation.

One possible action that governments could take in this area is to set up arms-length bodies (along the lines of the Alberta Council on Admissions and Transfers) to deal simply with problems of transitions, with representation from the various sectors that have some responsibility for or interest in transitions. These bodies could also play a continuing role in monitoring transitions issues, thereby acting as a kind of "early-warning system" should significant transition problems arise.

Follow-up and Next Steps

Recommendation #1 – **Interested jurisdictions should create their own roundtable processes to discuss transition issues, especially the transition from the secondary to postsecondary level.**

One of the remarkable things about the roundtable process that was used in the preparation of this report was the extremely positive reaction it had from participants themselves. At the end of each session, organizers solicited feedback from participants, who virtually unanimously said that they found the experience a positive one. Many said they had never had a chance to discuss these issues outside of their own institutions before, and most said that the multi-stakeholder format allowed them to significantly broaden their perspective on the issue by hearing other stakeholders' points of view. All said they would be prepared to participate in more such meetings. We believe that this demonstrates a tremendous amount of interest and good will among stakeholders on this issue, and governments could benefit from their knowledge and expertise by convening similar groups to work on transition issues specific to their jurisdiction.

At the outset of the discussions, it was not clear that the secondary-to-postsecondary transitions would be viewed overwhelmingly as the most important of the three sets of transitions. Had this been known in advance, greater effort would have been made to ensure a stronger presence from the K-12 sector in each of the roundtables. As it was, the discussions may have suffered from a lack of input from this vital stakeholder sector. Jurisdictions interested in creating their own roundtable process may wish to benefit from our experience in this matter.

Should jurisdictions choose to implement this recommendation, it would be in their mutual interest to also create a mechanism for feedback. Jurisdictions may wish to commit themselves to consulting on this issue for a period of 12 months, and then return to CMEC to share the insights and examples of best practices in transitions in each jurisdiction.

Recommendation #2 – **Further work on the secondary-to-postsecondary transition could be incorporated into future work on accessibility.**

Fundamentally, the issues raised by the challenge papers and roundtables and by roundtable participants on the transition from secondary to postsecondary education are issues of accessibility. They relate to young people's *desire* to attend postsecondary education, their level of *academic preparedness* for postsecondary education, and the *affordability* of postsecondary education. Should ministers choose to follow the advice of the roundtables and target this particular set of issues on a priority basis, it may well be able to do so by incorporating these themes into the upcoming thematic initiative on accessibility.

Council of Ministers of Education, Canada

Postsecondary Expectations Project
Learner Pathways and Transitions

LEARNER PATHWAYS AND TRANSITIONS IN POSTSECONDARY EDUCATION: BACKGROUND TO THE ISSUES

A discussion paper prepared by Norman Henchey

August 1998

CONTENTS

SUMMARY

The Council of Ministers of Education, Canada (CMEC) is undertaking a project on pathways and transitions in postsecondary education. There are three components currently under study: (1) transitions from secondary to postsecondary education, (2) progress through postsecondary programs, and (3) transitions from postsecondary education to working life. A fourth transition - among postsecondary education programs and providers - is being studied separately.

This paper deals with the following issues:

- background of the study and concerns of governments in relation to postsecondary education
- patterns, trends, and perceptions in the environment of postsecondary education, and challenges facing postsecondary institutions and learners
- questions about our assumptions and expectations for postsecondary education and policy implications arising from these questions
- major variables affecting postsecondary pathways and transitions related to individuals, the environment, the system, and institutions, together with examples of the influence of variables and possible interventions to improve success
- the kind of knowledge base we need about the present situation of pathways and transitions, our current knowledge base, and research that may need to be done
- conclusions and possible next steps

Major steps suggested include

1. defining the real and perceived challenges
2. collecting more complete quantitative data
3. collecting samples of best practices
4. sponsoring studies of the differences between successful and unsuccessful students
5. establishing a system for determining the effectiveness of different interventions
6. encouraging pilot projects
7. improving links among institutions and stakeholders
8. making more effective use of information and communications technologies

LEARNER PATHWAYS AND TRANSITIONS IN POSTSECONDARY EDUCATION

INTRODUCTION

The Council of Ministers of Education, Canada (CMEC) is undertaking a project on postsecondary education in Canada, entitled *Learner Pathways and Transitions: Moving from Planning to Implementation*. This is part of CMEC's Postsecondary Expectations Project, and it has as its purpose to improve the effectiveness and efficiency with which students (1) progress in their postsecondary education, (2) meet their personal and professional goals, and (3) get quick access to appropriate and rewarding employment opportunities. (CMEC, 1998a)

This part of the project is concentrating on three key components:

- transition from compulsory education (K-12) to the first postsecondary experience (college, university, or equivalent program)
- progress through a postsecondary program
- transition from a postsecondary program to work

A fourth transition — among postsecondary education programs and providers — is being studied separately.

The project is being undertaken to provide a basis for policy decisions by governments, institutions, and other bodies concerned about the quality and effectiveness of postsecondary education in Canada.

Background

The 1993 CMEC Victoria Declaration outlined a vision of education for Canada. In it, the ministers expressed the need to have the highest quality education based on shared and relevant goals in which students can fulfill their personal and professional development goals and contribute to the social, economic, and cultural development of their community and the country as a whole.

Governments across Canada recognize the social, economic, and academic importance of timely, effective, and efficient transitions through the different stages of learning. Key elements of concern include ensuring that academic requirements do not pressure learners to extend their programs beyond a reasonable time frame, recognition of prior learning and work experience, and the ease of learner movement among educational providers.

From the social perspective, broad societal expectations of lifelong learning opportunities are putting pressure on postsecondary providers to facilitate transitions among different types and stages of learning.

From the economic perspective, learners are selecting their postsecondary education options more carefully, as the cost of postsecondary education rises and the cost to the individual learner increases.

From the academic perspective, universities, colleges, and other postsecondary providers are experiencing more competition for learners and are rethinking the way they deliver educational services and respond to learner needs.

Governments have a responsibility to promote the public interest in education, and every provincial government has sponsored at least one study of postsecondary education. Examples of provincial government policy documents on the Internet are included in the endnotes of this paper. At the outset of this CMEC study, the Government of New Brunswick conducted a survey that asked all jurisdictions to assign priorities to the transitions they felt were the most important and required further exploration. All jurisdictions responded and contributed to selecting the focus of the initial priorities for action. The four highest ranking transitions were

- transitions from K-12 to postsecondary education
- transitions through the PSE program
- transitions from postsecondary education to employment
- transitions between postsecondary institutions/programs.

There are numerous initiatives now under way concerning transitions. However, the focus of this project is the creation of a tangible, useful “deliverable” — a "handbook" that will (1) provide specific examples of interventions that will facilitate transitions, and (2) catalyze action by those bodies concerned about the quality and effectiveness of postsecondary education in Canada.

CONTEXT

The Environment

Size

Postsecondary education has expanded dramatically in recent decades in the quantity and diversity of institutions, programs, student population, and expectations. According to Statistics Canada data, Canada has over 200 community colleges and Cégeps and over 75 universities; there are 400,000 college students and 600,000 university students served by 60,000 instructors and professors. In addition, there are other postsecondary level programs offered by private providers in specialized institutions and by various units in business and industry. About $16 billion is spent on college and university education in Canada. (Statistics Canada 1997)

Patterns and Trends

In recent years, there has been an increase in full-time postsecondary enrolment, a decrease in part-time enrolment, and a significant increase in the rate of participation of young people in postsecondary education.

- 85% of young people now complete secondary school, of whom 40% go to university and 30% to community college.
- Between 1984 and 1994, total postsecondary enrolment increased by 22%; enrolment in colleges increased by 18% and in universities by 25%.
- 80% of the 15-19 age group are full-time students.
- 32% of the 20-24 age group are full-time students.
- Between 1989 and 1996, the proportion of young people 15-24 years of age attending school full time increased by 8.8%, reaching 56% in 1996. The increase during this period for the 20-24 age group was over 10%.
- Between 1990 and 1994, enrolment of full-time students increased 15% in colleges and just under 9% in universities; on the other hand, part-time enrolment declined by 15% in colleges and 7% in universities.
- Women now form 53% of full-time college and university students and 61% of part-time students.
- Part-time employment for students involves an average of 14 hours per week and 30% of students age 20-24 work 20 hours or more a week.

(adapted from *Education in Canada 1996,* Statistics Canada)

Variety

Institutions vary in mission, size, target population, and complexity of structure. Programs vary by level of attainment (postsecondary certificates to doctoral studies), length, cost, relation to specific careers, flexibility, and enrolment. Postsecondary students today are more diverse in background, expectations, and abilities than in the past. There are increasing expectations of what a postsecondary education can and should provide in

terms of personal development, intellectual attainment, and career preparation. It is difficult and often misleading to generalize about postsecondary education because of this diversity.

Success

By many criteria, postsecondary education in Canada is a success story.

- Canada has one of the highest postsecondary participation rates of the 18-21 age group among OECD countries.
- Canada has the second highest university graduation rates after the United States; graduation rate is the ratio of university graduates to population at the theoretical age of graduation.
- Postsecondary graduates have higher employment rates than secondary school graduates.
- Postsecondary graduates have maintained their level of earnings in recent years despite (a) the increasing number of graduates and (b) the general decline in youth income. (See OECD 1996, *The Economist* 1997, and Statistics Canada 1997.)

Perceptions, Realities, Expectations

The successes, limitations, and cost-effectiveness of postsecondary education can be viewed in different ways, depending on the perceptions of different groups: (a) governments, politicians, and policy makers (who must provide major financial support), (b) the institutions (which have their own traditions, structures, and goals), (c) the business community (which hires most of the graduates), (d) the clients (the students and the parents who have their own expectations and demands) and (e) the general public (which is often remote from the realities of postsecondary education and influenced by media images and critiques). Reconciling these different perceptions is a major challenge for policy makers at all levels.

The discussion of the changing role of postsecondary institutions, especially the universities, is taking place in many countries. Despite differences in social, economic, and political context, many of the issues are similar. (See *The Economist* 1997.)

General Climate

Postsecondary education is operating within a general climate marked by these characteristics:

- rapid social and technological change in all areas
- economic restructuring and fragile job market
- reduced public funding as governments attempt to balance budgets
- pressures to align programs more closely with the needs of business and industry
- public skepticism and criticism
- rapid developments in information and communication technologies
- general demand for greater accountability for both the efficiency of operations and the effectiveness of results

Learners recognize that economic security and success are increasingly dependent on a good postsecondary education, and they are acquiring an increasing debt load to pay for this education. The ethnic and age mix of postsecondary education is changing to reflect the demographic trends. Postsecondary expectations of Aboriginal peoples are influencing policy in many jurisdictions especially in the west and the north.

Institutions

Despite differences between universities and colleges, and among institutions within each category, there are a number of patterns and trends that have an impact on issues related to pathways and transitions. Some of these issues are as follows:

Concern about Resources and Costs

- decreased government funding
- high operating costs
- labour-intensive nature of postsecondary education
- need to replace aging facilities and equipment
- search for alternative sources of funding (business grants, endowments, gifts, tuition, user fees, service charges, contracts)
- impact of budget constraints on staffing, instructional services, student services, and the reputation of institutions and programs
- decline in research funds and increasing competition for funding, linked with the growing importance of research grants as an element of faculty promotion and tenure.

Policy Tensions

- tension between the trend towards bureaucracy and corporate management style and collegial decision making
- tension between the value of closer links between institutions and business (research contracts, grants, business arrangements) and the value of the independence of postsecondary institutions (academic freedom, critical role of institutions, pure research, liberal education)
- pressure to give more secondary school graduates (and others) access to postsecondary programs (broadening admission criteria and standards) without compromising standards of quality
- demand for accountability for “results” (productivity in terms of number of graduates, duration of programs, cost-effectiveness of methods, greater relevance of content and skills)

Competition

- increasing competition for students among institutions, between universities and colleges, between traditional postsecondary institutions and other providers (private institutions, industry)
- increasing competition between traditional campus-based programs and Internet-based virtual distance-education resources and services, often provided by major institutions outside Canada

Communication Technologies

- impact of information and communication technologies on postsecondary teaching practices and operating costs (management systems, program structure, delivery systems, research activities, and outreach such as distance education)

Research and Teaching Programs

- concern about the quality, relevance, and cost-effectiveness of institution-based research in relation to government, industrial, or private research units
- concern about the quality and relevance of postsecondary teaching practices in relation to current learning theory, student abilities and needs, cost and technological facilities
- relevance of programs to the needs of students, changing society, and evolving labour market (general knowledge and skills vs. specialized training)
- efficiency of postsecondary programs in terms of curriculum structure, delivery system, success rate, cost effectiveness, resource allocation, accessibility, clarity of outcome, accountability, and competition with other programs and institutions

Many institutions are addressing these challenges; some are attempting to deal with many of them, others are concentrating on a few. Questions arise about the clarity with which the challenges are perceived in different institutions, the nature of the challenge presented, the strategies to deal creatively with the challenge, the pace of change, and even the capacity of some institutions to change enough and quickly enough.

Learners

The learners are the people who actually look for and follow the pathways and who must make the transitions from secondary school to postsecondary education to working life. For a variety of reasons, some learners want to make the transitions and make them successfully. Some learners want to make the transitions but are unsuccessful. Other learners do not want to make the transitions. Some groups of learners (for example women, those from upper socioeconomic categories, some visible minorities) seem more successful than others (for example, many men, the poor, Aboriginal people, the handicapped, other visible minorities).

Some learners move directly from secondary school to a postsecondary program, follow the program on a full-time basis (likely with a part-time job), complete the program in the expected time frame, and move immediately into a career directly related to the field of study. Many policy makers and planners, in institutions and governments, consider this the ideal, the norm for postsecondary efficiency.

But many other students interrupt their studies at one or more points, to work full-time or travel or do something different; many mix part-time study and part-time work; many shift from one program to another as they move through an institution; some change institutions in the midst of their passage through postsecondary education; some complete a program in one institution and go on to a more advanced or parallel program in another institution; some students begin one or more programs but never continue to completion. Many policy makers and planners consider these pathways repetitive, inefficient, and costly to the individual and the society.

SOME QUESTIONS

These issues raise some questions:

Secondary-to-Postsecondary Transitions

1. Do we expect every young person to obtain a secondary school diploma?

2. If so, do we want to (1) lower secondary school graduation requirements or make them more flexible, (2) develop separate programs for those who want to go on to PSE and those who do not, (3) take the steps necessary at the secondary level to ensure that all students qualify for postsecondary studies, (4) use some combination of the above?

3. Do we expect that every secondary school graduate should go on to some form of postsecondary education, and can we afford it?

4. If so, do we want to (1) give everyone a chance by lowering admission requirements and accepting high attrition and failure rates, (2) maintain clear admission criteria but provide special support services to high school graduates who do not yet qualify, (3) expand the range of postsecondary programs, (4) make serious adjustments in postsecondary curriculum and instructional practices.

Passages within Postsecondary Education

5. Do we expect to improve the success rate in postsecondary education programs to approach 100%?

6. If so, do we want to (1) reduce graduation standards, (2) improve support services to students, (3) make program structure more flexible, (4) be more selective in admitting students, (4) improve the quality of learning services provided, (5) follow mastery models with duration of programs a variable, (6) provide more diverse pathways and programs?

7. Do we expect to reduce the average time it takes a student to complete postsecondary studies?

8. If so, do we want to (1) make it difficult to follow part-time studies and part-time work, (2) provide better financial support to students to encourage full-time study and completion on schedule, (3) reduce incidence of moving from one program to another?

9. Are part-time programs better or worse learning experience, more or less costly, better suited to certain clientele than full-time programs, and under what conditions?

10. Are there benefits to a more circuitous progress through postsecondary education?

11. Can more effective use of communication and information technologies and more reliance on independent study reduce costs and improve the effectiveness of postsecondary programs?

12. Is it necessarily a "success" for a student to complete a postsecondary program or a "failure" for a student not to complete a program?

Postsecondary Education to Work

13. How can postsecondary institutions, through their programs and services, prepare students for suitable employment after graduation?

14. Is the employment situation of graduates a better indicator of a postsecondary program's quality for some programs than for others? What other indicators should be kept in mind?

Policy Implications

15. What factors influence students in the choice of programs and pathways, their success in completing programs and their ability to move smoothly to working life?

16. What are relative responsibilities of governments, business, the K-12 education sector, and postsecondary institutions for improving pathways and transitions to, within, and from postsecondary education?

17. What kinds of interventions can make pathways more effective and efficient and ensure better transitions for more students to postsecondary education, work, and adult life?

VARIABLES AFFECTING PATHWAYS AND TRANSITIONS

There are four groups of variables that can be expected to influence the success of transitions and the effectiveness of pathways through postsecondary education:

1. ***Individual variables*** related to the characteristics of the student and to the access the student has to postsecondary education

2. ***Environmental variables*** related to the economic climate, resource allocation to postsecondary education, public attitudes, and links with the community

3. ***System variables*** such as links among levels (especially K-12 and postsecondary education), costs, and information available to candidates

4. ***Institutional variables***, especially admission and assessment policies, programs, instructional services, and learning resources.

In general, educational policy makers have direct influence on system variables and some influence on institutional variables but they have more limited influence on individual and environmental variables. They can provide better information and alter admission policies but they cannot easily change a person's motivation to continue studies or the career opportunities provided by a community, province/territory, or country. These require either more personal interventions (on the part of a teacher, for instance) or more broadly based interventions (for example, encouraging employers to locate in a region). Educators have greatest influence on institutional variables.

It is not easy to say which set of variables is the most important. Postsecondary institutions tend to underline the importance of personal variables (especially ability and prior preparation) and institutional variables (especially admission and assessment policies). Government planners tend to stress the value of environmental variables (for instance variety and competition among providers) and system variables (e.g., links among colleges, universities, private providers, and adult education services).

All sets must function in harmony if transitions are to be smooth and effective. A serious obstacle in one variable (e.g., prior preparation) must be balanced by changes in other variables (e.g., resource allocations, information systems, quality and efficiency of instruction). Changes in one variable (e.g., institutional admission policies and standards) may require changes in other variables (e.g., support services, fee structure, links with community, and motivation).

VARIABLES AFFECTING THE SUCCESS OF TRANSITIONS

1.0 Individual variables

- 1.1 Ability
- 1.2 Expectations and motivation
- 1.3 Prior preparation
- 1.4 Access to learning resources
  - Learning resources available
  - Cost and debt burden
- 1.5 Socioeconomic status
- 1.6 Ethnicity
- 1.7 Gender

2.0 Environmental variables

- 2.1 Perceived and real career opportunities
- 2.2 Resource allocation to PSE
- 2.3 Variety and competition among providers
- 2.4 Links between institution and community
- 2.5 Alternatives to PSE (e.g., jobs)

3.0 System variables

- 3.1 K-12/PSE links (e.g., guidance)
- 3.2 Funding formula and financial aid
- 3.3 Links among types of institutions
- 3.4 Information system
- 3.5 Certification and credit transfer policies
- 3.6 Accreditation policies

4.0 Institutional variables

- 4.1 Admission policies and standards
- 4.2 Institutional costs
- 4.3 Quality, range, and relevance of programs
- 4.4 Quality and efficiency of instruction
- 4.5 Quality and availability of learning resources
- 4.6 Quality of support services
- 4.7 Use of information/communications technologies
- 4.8 Assessment standards and policies

Examples

It is important to identify the variables that seem most directly related to problems of pathways and transitions and the interventions that may alter the effect of the variable. Some possible examples:

Problem 1: ***There is a high failure rate in first-year university programs.***

Major Variables: Prior preparation of students (lack of skill in independent learning)
Resource allocation to PSE
K-12/PSE links
Admission policies and standards
Quality and efficiency of instruction
Quality of support services
Assessment standards and policies

Interventions: Improved K-12/PSE links (stress on learning skills)
Better information system for secondary school students (functional course requirements, expectations)
More precise admission standards in literacy and mathematics (essays, projects, admission tests)
Quality and effectiveness of instruction in first-year university courses (tutoring, discussion groups, feedback, resources)
Closer ties among course goals, content, instruction, and evaluation procedures

Problem 2: ***PSE students are taking longer than anticipated to complete programs.***

Major Variables: Motivation
Cost and debt burden
Variety and competition among providers
Fees and fee structure
Alternatives to postsecondary education (part-time jobs)
Quality, range, and relevance of programs

Interventions: Improved guidance and student support systems
Financial assistance, bursaries, lower tuition
Wider choice among institutions, more institutional flexibility
Penalties for part-time study or prolonged duration
Availability of key courses, improved program sequence

Problem 3: ***Graduates of postsecondary programs have difficulty finding appropriate employment after completion.***

Major Variables: Expectations and motivation
Career opportunities
Links between institutions and community
Information system
Quality, range, and relevance of programs

Interventions: Better career information for students at all levels
Job creation programs
More work-study and internship programs
Links between professional/career programs and employment

Problem 4: ***Aboriginal students are underrepresented in postsecondary programs.***

Major Variables: Expectations and motivation
Prior preparation
Access to learning resources
Career opportunities
Quality of support services

Interventions: Models of successful graduates, career guidance
Stress on study skills and cooperative learning
Stay-in-school programs in high school
Use of communication technology to reach remote areas
Job placement programs for students and graduates
First Nations' centres on campus, special support programs

This process involves

1. defining the problem
2. identifying the key variables related to the problem and its possible solution
3. selecting interventions that should lead to a solution
4. locating responsibility for leadership in these interventions
5. trying the intervention and evaluating the results

WHAT DO WE KNOW (AND NEED TO KNOW) ABOUT PATHWAYS AND TRANSITIONS?

Need for a Knowledge Base

To consider and to monitor the effect of interventions to improve the state of pathways and transitions in postsecondary education, we need good quantitative data on the present situation, especially the transition process between secondary and postsecondary education, the different pathways within and among postsecondary institutions, and the transition from postsecondary education to working life.

Some questions that need to be studied:

Secondary-Postsecondary Transitions

1. What percentage of high school graduates go on to full-time or part-time postsecondary studies, and does this percentage differ according to region, gender, socioeconomic status, or ethnic origin?

2. Are there differences between the characteristics of those who continue to postsecondary education and those who do not (e.g., academic record, attitude toward education, information about PSE)?

3. What are the motivations and expectations of secondary school graduates who continue their studies, and how do these influence their choice of institution and program?

4. What are the relationships among applications to PSE institutions and programs, patterns of acceptance by institutions, and final decision by applicant?

5. What information and information sources on PSE are available to senior secondary school students, and how is this information used?

6. What are the recruitment, information, public relations and outreach policies and practices of PSE institutions?

7. Are there significant trends in application and acceptance patterns in recent years?

8. Are there institutional policies related to the number of candidates accepted in different PSE programs?

9. What is the relationship between the achievement of students at the end of the first year of a PSE program and their achievement at the end of secondary school?

10. What are students' perceptions of the difficulty of the transition to PSE and their views on changes in secondary or postsecondary practices that would facilitate the transition?

Pathways within Postsecondary Education

11. What are the major enrolment patterns and trends in postsecondary education, by type of institution, type of program, duration, and completion rates?

12. What are the patterns of duration, attrition, and completion for different programs and options?

13. Do some student groups have a higher success rate than others, and are there certain variables related to success (gender, ethnicity, socioeconomic status, location, secondary school achievement, type of program, instructional and support program, institutional characteristics)?

14. Why do some students fail programs, abandon programs, or take longer than average to complete programs?

15. Are there certain "high risk" institutions and programs that have high failure and attrition rates?

16. What are the views of recent graduates of universities and colleges on the quality and relevance of their programs?

Transitions from Postsecondary Education to Work

17. How well are PSE graduates and nongraduates making the transition from PSE to work, and are there program or institutional variables associated with a successful transition?

18. Are there differences in work experience between graduates and nongraduates (employment rates, type of job, income)?

19. What are the views of graduates and nongraduates on their PSE experience five years after leaving?

What Do We Know?

We do not seem to have detailed and comprehensive answers to many of these questions at the present time, though many institutions have information on their own programs and students.

These are some general indications:

Duration

PSE graduates indicate that, on average, they took 2.3 years to complete a career/technical program, 4.0 years for a bachelor's degree, 2.8 years for a master's and 5.4 years for a doctorate. These compare to normal program duration of 3 years or less for a career/technical program, 3 - 4 years for an undergraduate degree, 2 years for a master's and 4 years or more for a doctorate. (Human Resources Development Canada and Statistics Canada 1996)

Success Rates

In Quebec universities, the success rate was 63.6% for undergraduates, 58% for master's, and 50% for doctorates. Rates varied from 80% in health sciences and law to about 65% in pure and applied sciences, management, and education, to 59% in humanities, 54% in letters, and under 50% in interdisciplinary programs and arts. (Quebec 1998)

Transition from Postsecondary Education to Work

Our best data on transitions deal with postsecondary graduates and their transition to work. (Human Resources Development Canada and Statistics Canada 1997)

Some highlights:

- Women graduates outnumbered men 59% - 41% at the college level and 56% - 44% at the university level (exceptions were at the master's and doctorate levels).
- Aboriginal people constituted 1% of university graduates and 2% of college graduates; comparable figures were 3% and 5% for disabled persons and 9% and 9% for visible minorities.
- 58% of university graduates and 46% of college graduates pursued additional education after graduation.
- 80% of university graduates and 78% of college graduates were working full-time five years after graduation.
- Over 90% of PSE graduates were working in a job directly or partly related to their education.
- The 1995 unemployment rate for 1990 college graduates was 7% (compared to 10% in 1992) and for university graduates was 6% (compared to 11% in 1992).
- University unemployment rates ranged from 3% in education and health professions to 12% in fine and applied arts.
- Education and health science graduates were the top earners among both college and university graduates of 1990.

CONCLUSION

There are a number of different initiatives under way to deal with the issue of transitions. Jurisdictions agree that more information is needed to discover the proper methods of helping learners flow from one element to another, and that a list of best practices would be helpful in addressing needs at a national, provincial, and regional level. With costs to learners and governments rising, and with significant changes in the needs of the labour market and our communities, it is more important than ever to facilitate learner pathways and transitions, and to try to ensure the most efficient and productive use of financial and human resources.

There is some information on the flow of students from secondary to postsecondary levels but little information on transition rates of different groups, on the process of institution and program selection, on the variables that influence secondary school graduates to go on to further studies, or on the specific attitudes, knowledge, and skills that distinguish those who make a successful transition from those who do not.

We have some Canada-wide data on graduates of postsecondary programs, especially the duration of their studies and their integration into the labour market after graduation, but we have very little information on those who do not complete postsecondary programs and what happens to them.

Some of the factors that affect passages and transitions are outside the control of the education system and educational institutions, notably job opportunities, level of funding for education, remuneration for different kinds of work, and public attitudes towards postsecondary education.

Some groups are clearly underrepresented in postsecondary education, and there is a substantial gap between the numbers of men and women graduates.

More complete and precise information is needed if rational and effective policy interventions in transitions, passages, and cost effectiveness are to be contemplated.

Some Possible Next Steps

1. Define major challenges and problems in pathways and transitions and the perceptions of different stakeholders about the nature of these challenges.

2. Collect more complete quantitative data on pathways and transitions.

3. Collect examples of best practices.

4. Sponsor studies of the differences in attitude and skill sets between those who are successful and those who are unsuccessful in making the secondary-postsecondary transition and in completing postsecondary programs.

5. Establish a system for determining the effectiveness of different interventions to improve pathways and transitions.

6. Encourage pilot projects.

7. Explore ways of improving the links between postsecondary and secondary institutions, among postsecondary institutions, between PSE institutions and governments, and between PSE and the world of work.

8. Explore ways of using information and communications technologies to provide better information to students, increase the flexibility and richness of teaching services, and extend the range of the research and teaching functions of postsecondary institutions.

REFERENCES

Alberta (1995). *University Research in Alberta: A Policy Report*. http://www.aecd.gov.ab.ca/ministry_info/uaresrch/uaresrch.htm#toc

Alberta (1998). *Vision for Change*. http://www.aecd.gov.ab.ca/dept/system_funding/ vision_for_change/vision_for_change.htm

Association of Universities and Colleges of Canada (1995). *A Primer on Performance Indicators* (June 1995 -- Volume 1, No. 2). http://www.aucc.ca/english/publications/ research/jun95.html

British Columbia (1996a). *Charting a New Course*. http://www.est.gov.bc.ca/btp/data/ newcours/toc.htm

British Columbia (1996b). *Aboriginal Post-Secondary Education and Training Policy Framework*. http://www.est.gov.bc.ca/uap/data/framewrk.htm

CMEC (1998a). *Public Expectations of Postsecondary Education in Canada, A Consultation Document*. http://www.cmec.ca/postsec/pseexpect.en.stm

CMEC (1998b). *Postsecondary Education systems in Canada*, Volume I and II. http://www.cmec.ca/cicic/ postsecondary/

CMEC (1998c). *Transitions to and within Postsecondary Education* (Association of Universities and Colleges of Canada). http://www.cmec.ca/nafored/english/aucc.stm

CMEC (1998d). *The Relevance of Education to the World of Work* (Association of Canadian Community Colleges). http://www.cmec.ca/nafored/english/accc.stm

CMEC (1998e). *The World of Work* (Canadian Labour Congress). http://www.cmec.ca/ nafored/english/clc.stm

CMEC (1998f). *Updating Essential Skills for the World of Work* (Human Resources Development Canada). http://www.cmec.ca/nafored/english/hrdc.stm

Human Resources Development Canada and Statistics Canada (1996). *The Class of 90: A Compendium of Findings from the 1992 National Graduates Survey of 1990 Graduates* (Minister of Public Works and Government Services Canada), www.harfdc-drhc.gc.ca

Human Resources Development Canada and Statistics Canada (1997). *The Class of '90 Revisited: Report of the 1995 Follow-up Survey of 1990 Graduates* (Ottawa: Minister of Public Works and Government Services, Canada).

Manitoba (1993). *Post Secondary Education in Manitoba: Doing Things Differently*. http://www.gov.mb.ca/educate/postsec/roblin/roblin.html

Manitoba (1994). *Government Response to Roblin Report*. http://www.gov.mb.ca/ educate/postsec/response/response.html

Maritime Provinces Higher Education Commission (1997) *Accessibility to Post-Secondary Education in the Maritimes*. http://www.mphec.ca/htm/repnstud/access

New Brunswick (1998). Survey of 1996 New Brunswick Community College Graduates http://www.gov.nb.ca/ael/lmab/gfse/indx.htm

Newfoundland and Labrador (1998). *Post-secondary Indicators '98.* http://www.gov.nf.ca/edu/ind97/index.htm

Nova Scotia (1995). *Shared Responsibilities in Higher Education*. http://www.ednet.ns.ca/educ/d_depot/reports/summary.htm

OECD (1996). *Education at a Glance: OECD Indicators*. Paris: Organisation for Economic Co-operation and Development.

Ontario (1996a). *Excellence, Accessibility, Responsibility: Report of the Advisory Panel on Future Directions for Postsecondary Education*. http://www.edu.gov.on.ca/eng/ document/reports/futuree.html

Ontario (1996b). *Ontario Francophone access to and participation in postsecondary education, 1979-1994.* http://www.edu.gov.on.ca/eng/document/reports/franco/summary.html

Ontario (1996c). *Future Goals for Ontario Colleges and Universities*. http://www.edu.gov.on.ca/eng/document/discussi/postdeng.pdf

Ontario (1997). *Framework for a Research Policy for Ontario*. http://www.edu.gov.on.ca/eng/document/discussi/research.html

Québec (1997), MEQ, Direction de l'enseignement et de la recherche universitaire, Service des analyses, *L'obtention d'un diplôme de baccalauréat : situation des cohortes des trimestres d'automne 1998 et 1989, six années après l'entrée au baccalauréat.*

Québec (1998). *L'université devant l'avenir : Perspectives pour une politique gouvernementale à l'égard des universités québécoises, Ministère de l'Éducation du Québec. www.meq.gouv.qc.ca/REFORME/ universi/inter.htm, pp. 25-26.*

Saskatchewan (1996a). *Public Interest and Revitalization of Saskatchewan's Universities*. http://www.sasked.gov.sk.ca/public/index.html

Saskatchewan (1996b). *Report of the Minister's Special Representative, Harold H. MacKay, Q.C.* http://www.sasked.gov.sk.ca/mackay/mackay.html Appendices to the MacKay Report http://www.sasked.gov.sk.ca/mackay/mackapps.html

Saskatchewan (1996c). *Government's Response to the MacKay Report*. http://www.sasked.gov.sk.ca/mackay/response.html

Statistics Canada (1997). *Education in Canada 1996*. Catalogue no. 81-229-XPB

The Economist (1997). The Knowledge Factory; Special Report in the issue of October 4, 1997.

Council of Ministers of Education, Canada

Postsecondary Education Project
Learner Pathways and Transitions

THE EVOLVING INFORMATION BASE

FOR LEARNER PATHWAYS AND TRANSITIONS

A Background Paper prepared for the
Postsecondary Education Expectations Project by

Statistics Canada

The Centre for Education Statistics

The Centre for Education Statistics at Statistics Canada conducts annually a comprehensive program of pan-Canadian education statistics and analysis in order to inform debates on educational policy and program management, and to ensure that accurate and relevant information concerning education is available to the Canadian public and to other educational stakeholders.

Since the mid-1970's, part of the Centre's program each year has been devoted to collecting information about student transitions and learner pathways through the education system. Early investigations concentrated on the transition from the completion of postsecondary education into the labour force. However, as the demand increased for more information related to other transitions and to educational pathways, additional work was undertaken to add these dimensions to the program. At present, the Centre provides information on the transition from secondary school to postsecondary level education; the flow of students through different programs at the same institution; the flow of students between different types of institutions: trade, college, university; the flow between full-time and part-time studies; and the geographical movement of students between jurisdictions; all in addition to transitions into the labour force and back again to school. More recently, the increase in alternative forms of education, such as: distance education through the Internet, specialized private business colleges and trade schools, companies combining the marketing of products with associated education support packages, have added new dimensions to data collection pertaining to transitions and learner pathways and methodologies to address these data gaps are being considered at this time.

Much of the Centre's work on transitions and learner pathways has been, and continues to be, funded by other federal departments, principally Human Resources Development Canada. In this brief introduction to the Centre's program, it has been divided into the efforts devoted to 1. transitions from postsecondary education to the labour force, 2. transitions from high school to postsecondary education, and 3. student flows (pathways) through postsecondary education considering program selection, geographic mobility, mobility between types of institutions, and changing status with respect to intensity of study. For each area, a brief description of past activities and their objectives is provided followed by a description of additional information needs that have been identified by the Centre in consultations with stakeholders and, finally, a description of the Centre's plans to address these data gaps.

1.Transition: Postsecondary Education to the Labour Force

Graduate follow-up surveys were conducted by the Centre as early as 1976 although the earliest iterations of such surveys were only conducted for one or two provinces. The first national survey (NGS) interviewed 1982 graduates two years and five years after their graduation (1984 and 1987). Subsequent cohorts of graduates were chosen in 1986, 1990 and 1995, all of whom were surveyed or will be surveyed with the same elapsed time of two years and five years. The principal objective of these surveys was to explore the relationship between

education program and the resulting labour market outcome but they included many sub-objectives, such as: exploring problems encountered in the transition; determining satisfaction with education program; and investigating determinants of education program selection.

Recent consultations revealed a greater demand for information on transitions than is currently being met by the graduate follow-up surveys. This demand has led to a number of jurisdictions conducting their own graduate surveys on a more frequent basis, often with larger sample sizes for the institutions involved, and with tailoring of the survey content to the particular needs of the jurisdiction. Concerns about duplication of efforts in this area were noted as were concerns about the loss of data utility due to lack of comparability. At the same time, the focus of current surveys solely on graduates was felt to be a limitation, with the surveys providing no information on the significant numbers of students leaving their program prior to completion. A great deal of concern was also expressed about the so called “brain drain” phenomenon, not only with respect to its magnitude and concentration in particular fields of study, but on factors underlying the decision to leave the country.

The need for more information concerning the skills required by employers and the roles of both employers and the education system in skills development was also noted.

To address these information needs, a new Postsecondary Transition Survey has been proposed to replace the NGS (commencing with a survey in 2001 of 1999 graduates and leavers). Features of the new survey would include: increased frequency with a new cohort every two instead of every four or five years; inclusion, in addition to graduates, of those leaving their program prior to completion; the follow-up and interview of students who leave the country; and improved flexibility for institutions and/or jurisdictions to fund sample size augmentations in order to obtain institutional/program specific estimates and flexibility for content additions to respond to particular needs of jurisdictions.

To gain a fuller appreciation of the relationship between education and the labour market, demand side information from employers is needed to complement the supply side information on skills being developed by the education system. Information on the number and qualifications of recent hirings, on the skill sets of those individuals and the remuneration they are receiving, is necessary for a more complete understanding of labour force demand and is planned for inclusion in a Life-skills Survey (not scheduled as yet). In addition, the need was stressed for more clarity concerning responsibility for developing different skill sets. Industry may be better placed to provide certain skills through on-the-job training where others are more suited to development within the education system. The Centre proposes to obtain information from employers on how they feel the division of skill training should be organized.

2. Transition: High School Students to Postsecondary Education Programs

Other than documenting the number of students annually who continue their studies in a postsecondary program immediately following high school completion, work on exploring facets of this important transition phase for young adults did not get underway until the early 1990's and then it was concentrated on those leaving the education system.

A 1991 survey initially interviewed 10,000 young people aged 18 to 20 to document their characteristics and the circumstances of school leavers. Four years later, the 1995 School Leavers Follow-up Survey re-interviewed about two-thirds of the same respondents, by then aged 22 to 24. This survey was designed to examine transitions not as a one-way movement from school into the world of work but as a variety of movements that can occur between education, training and the labour market.

Recent consultation again revealed a demand for outcome information on youths - both high school graduates and school leavers. The need was expressed for information on: educational and labour market pathways and factors influencing those pathways, including the completion or non-completion of high school, interruptions and subsequent return to studies, participation and non-participation in postsecondary education; the contribution of schooling, work experience programs, part-time jobs, and volunteer activities to skill development and transition to the labour market; and attitudes, behaviour and skills required of young people entering the labour market.

To address these information needs a Youth in Transition Survey has been proposed and is under development (initial surveying to commence in 1999). It will be a longitudinal survey designed to follow a sample of youths over a period of years to gain insights on the factors which determine their success, or lack of success, in the labour market and society at large. Plans are for data to be collected every two years, starting with samples of two cohorts of youths aged 14-15 and 18-20. This initiative would build on previous ad hoc experiences with the 1990 School Leavers Survey and the 1995 follow-up survey.

3. Postsecondary Student Flows

Individual student record systems have been maintained by the Centre since 1971 for individuals studying at Canadian universities and since 1980 and 1990 respectively for those studying at colleges and trade schools. These systems provide a cross-sectional view of enrolments each year and, along with demographic information, they contain data elements which identify program of study and prior educational experience. The latter was included to identify whether students had studied at other types of postsecondary institutions or other similar institutions, either in the same province or outside the current province. In the early years, no attempt was made to link these annual records in a longitudinal database but recent attempts have been made to do this with limited success.

The recent consultations pointed to the need to improve the utility of the student record systems to provide more comprehensive information on education pathways and outcomes.

To achieve this, the Centre plans to create a longitudinally linked database of student information that will track students movements between institutions and across jurisdictions, in order to provide the specified information on educational pathways, such as: geographic mobility, institutional and program mobility, retention and completion rates (pilot surveys are being completed in 1998). In addition the resultant database will provide frames for sample surveys of student transitions, avoiding current costs of separate frame construction, while more efficiently targeting groups of most interest, and allowing the development of flexible hybrid data exploiting the comparative strengths of both administrative and sample survey data.

In addition, it has been proposed that a survey be developed to obtain information on students studying in programs provided by relatively new, non-traditional providers (company schools providing education to non-employees/clients, cyber schools outside Canada) that have never been included in the regular enrolment surveys (1999). Objectives would be to show the incidence of training occurring outside the regular public education system and to monitor the degree to which individuals are choosing different pathways to obtain a basic education or to upgrade their skills and knowledge. In addition, the information will be used to profile participants, to describe over-all participation of the population in these activities, to describe the variety and changing structures of programs offered through these activities, to determine accreditation practices and funding sources and to provide information so that participants can be included in sample surveys that monitor youth transitions to and from the labour force and to other types of education.

4. Cost of Education

Through the 1980's and 90's the relative share of university and college revenue made up of government grants and student fees has shifted markedly. A similar trend has occurred with government loan and grant programs. More recently provincial governments have announced deregulation of tuition fees. In combination these changes have and will continue to impact the cost of education to students. Indeed, significant increases in student borrowing and resulting debt-load have been the subject of public discussion. The National Graduate Survey has provided to date information on student borrowing through the Canada Student Loan Programs as well as information on repayment and repayment difficulties. The most recent survey of 1995 graduates will provide information on borrowing from all sources. With the introduction of the Postsecondary Transition Survey borrowing and repayment information will be available for both graduates and non-graduates. This information should contribute to a better understanding of the impact of increased cost to students.

About the Challenge Papers and Their Authors

Terms of Reference for Challenge Papers

The purpose of the challenge papers was to catalyze and focus discussions on each of the sub-projects in the Learner Transitions and Pathways project. The author of each challenge paper was asked to:

- comment on the relevant public expectations and issues identified (where we want to go)
- synthesize and comment on data illuminating how well the expectations are being achieved (what we do and don't know)
- summarize the major factors that affect achievement of expectations (what actions help and/or inhibit?)
- identify selected examples of "good practice" in Canada and internationally (interventions that have worked)
- propose a limited number of priority actions (interventions) that have a high potential to make a difference in Canada. Such interventions may be directed towards any sector, including learners, educators, parents, employers, governments (what we should do).

The Authors

John Blevins

John Blevins has been an educator for 28 years and has a wealth of experience in both the public and private sectors. He has worked closely with Alberta Education and Alberta Advanced Education and Career Development as well as with school systems, schools, and business. In addition, he has worked extensively in the areas of school-to-school and school-to-work transitions, policy development, and policy analysis. He works as a contract consultant through his company Western Research Group, Calgary, Alberta.

Roland Chrisjohn

Roland Chrisjohn is Onyota'a:ka of the Haudenausaunee. He received his Doctorate in Personality and Measurement from the University of Western Ontario in 1981. Over the last 30 years he has work in First Nations education, suicidology, child and family services, corrections, counselling, and research, and has taught courses in history, Native Studies, statistics, and many different areas of psychology at four different universities. He is principal author of The Circle Game: Shadows and Substance in the Indian Residential School Experience in Canada (Theytus Books, December, 1997), and his most recent work, You Have to Be Carefully Taught, concerns special needs and Indian Education.

Tom Collins

Thomas J. Collins, Professor of English at the University of Western Ontario, has had extensive administrative experience, teaches students at all levels, and has published books and articles on the poetry of Robert Browning

Janet Donald

Janet Donald is Full Professor and Director of the Graduate Program in Cognition and Instruction in the Department of Educational and Counselling Psychology at McGill University, and is the former Director of the Centre for University Teaching and Learning. Her research has focused on the quality of postsecondary learning and teaching, particularly fostering higher order learning. She also investigates disciplinary differences in knowledge acquisition and methods of inquiry in higher education. She won the Distinguished Researcher Award of the Canadian Society for the Study of Higher Education in 1994, its Distinguished Member Award in 1998, and the McKeachie Career Award from the American Educational Research Association in 1999.

Kelly Foley

Kelly Foley is a graduate student at the School of Public Administration at Carleton University. Before continuing her education, she was the First Year Student Life Co-ordinator for the University of Waterloo, developing programs to assist students in their transition to university life. During her undergraduate degree, at the same university, she was extensively involved in student government.

Kelly Lamrock

Kelly Lamrock is a lawyer and public affairs consultant based in Fredericton, N.B. He was president of the student unions at both UNB and St. Thomas University and the founding president of the New Brunswick Student Alliance.

Graham Lowe

Graham Lowe is Director of the Work Network at Canadian Policy Research Networks Inc. (www.cprn.org). CPRN is a non-profit organization dedicated to creating new knowledge and leading public debate on social and economic issues important to the well being of Canadians. Dr. Lowe also is a Professor of Sociology at the University of Alberta. He has been visiting professor, lecturer and researcher at numerous universities in Canada, Europe, and Asia. As well, he has extensive consulting experience in the public and non-profit sectors. Dr. Lowe's research examines issues such as school-work transitions, human resource development, new technologies, and employment-related public policy. Oxford University Press will publish his new book, Quality Work, in late 1999.

Ken Snowdon

Ken Snowdon is currently Vice-president (Policy and Analysis) at the Council of Ontario Universities (COU) in Toronto, Ontario. Prior to joining COU he was on secondment from Queen's University to the Universities Branch of the Ontario Ministry of Education and Training. Over the past twenty-five years he held a number of positions at Queen's, most recently as Associate Vice-principal (Planning) responsible for developing the University's fiscal and strategic plans and for the Office of the Registrar and Information Technology Services. He holds an Master of Public Administration from Queen's and is an active member of the Canadian Institutional Research and Planning Association.

Alex Usher

Alex Usher is an independent policy analyst based in Ottawa. He was the first National Director of the Canadian Alliance of Student Associations, and also worked as a Senior Analyst at the Association of Universities and Colleges of Canada. His company, Alex Usher Consulting specializes in consultations and policy analysis in the areas of youth employment, student assistance, and post-secondary education.

Council of Ministers of Education, Canada

Postsecondary Education Project
Learner Pathways and Transitions

INTERVENTIONS THAT MATTER:

A SUMMARY OF THE CHALLENGE PAPER RECOMMENDATIONS

October, 1998

1) Transitions to Post-secondary Education

Environmental Interventions (overall resource allocation, education-community links)	**System Interventions (inter-institutional links, financial matters and communication of educational options)**	**Institutional Interventions**
Expose ideological divisions between mainstream and First Nations' educational practice. (Chrisjohn)	Increase support to First Nations K-12 education (Chrisjohn).	K-12 and PSE institutions should jointly assess the problem of "grade inflation" (Collins).
Develop "Key Opportunities Inventory" (Foley)	Develop "Key Opportunities Inventory" (Foley)	Students should have a more realistic understanding of first-year expectations (Collins).
Focus on grants and net price, rather than tuition, as a policy variable (Usher).	Improve Secondary students' understanding of future learning options (Foley/Alberta)/improve education & carer information for younger students (Usher).	More emphasis on basics, and a consistent curriculum, in K-12 system (Collins).
	Develop Benchmarks to assess learner preparedness in making educational choices (Foley).	All incoming students to be given tests for literacy and numeracy (Collins).
	More continuing liason between secondary and post-secondary levels (Collins).	
	Experiment with "Assured Access Grants" (Usher).	
	Ensure the adequacy of Student aid maximums (Usher).	
	Reduce the net price of education for low-income students through the increased use of grants (Usher).	

2) Transitions Through Post-secondary Education

Environmental Interventions (Overall resource allocation)	System Interventions (inter-institutional links & financial aid)	Institutional Interventions
Develop and fund First Nations post-secondary institutions (Chrisjohn).	Governments, with institutions, should develop standards for credit transfer and prior learning assessment, and examine what changes in institutional and student funding would facilitate more year-rounds schooling (Lamrock/Alberta).	Implement academic retention programs for aboriginal students (Chrisjohn).
Commit to giving First Nations operational and financial control over First Nations educational institutions (Chrisjohn).	Remove financial barriers that lead to part-time or interrupted studies (e.g tuition and debt caps) (Lamrock).	Implement programs to improve the institutional "climate" for aboriginals, including sensitivity training for staff and students, affirmative action hiring, and, in limited circumstances, modification of curriculum (Chrisjohn).
Fund aboriginal curriculum development projects on an ongoing basis (Chrisjohn).	Remove financial barriers by increasing loan limits and allowing longer repayment terms (Alberta)	Develop course-level interventions to improve student integration into learning community, including providing more institutional context for learning and improving instructional planning and evaluation (Donald).
Governments should provide additional funding to institutions with solid track records in developing critical thinking to develop pilot projects in the delivery of post-secondary education (Lamrock).		Develop program-level interventions to improve student integration by improving program planning, establishing and supporting a "community of learners" and ensuring an effective advising system (Donald).

Governments should provide adequate funding for career and academic development programs (Lamrock).

Encourage business/PSE partnerships to establish workplace programs at PSE institutions, and provide tax credits to encourage business to create pse-equivalent training programs (Alberta).

Control program costs to make learning more efficient and cost effective; this includes program rationalization (Alberta).

Develop institution-level interventions to improve student integration by introducing first-year seminars, creating appropriate awards for teaching, and creating teaching and learning centres on campus (Donald)/provide orientation and follow-up to new learners, and provide on-going mentoring programs to all students (Alberta).

Institutions, faculties and student organizations should attempt to enhance student abilities by developing innovative teaching methods to improve critical thinking skills, creating a more creative and academic social atmosphere and designing standardized entry and exit exams to measure critical thinking skills (Lamrock).

Review the appropriateness of degree structures and program length and develop more flexible degree arrangements building on a common "foundation year" of critical thinking development (Lamrock).

Develop programs with content relevant to learners needs as they mover towards the labour market (Alberta).

Develop tracking systems to identify those at risk of not completing their studies on time (Alberta).

2) Transitions Out of Post-secondary Education

Environmental Interventions (Education-community links)

Institutions could educate employers about the range of graduates' skills and collaborate in the design of skill-intensive entry-level jobs (Lowe).

Provide students with better labour-market information (Lowe/Snowden).

Expand work-study opportunities and introduce/expand co-op programs, where appropriate (Snowden).

Establish mentor programs with alumni and private sector (Snowden).

System Interventions (inter-institutional links)

Develop reliable and valid national measures of higher-level skills common to all programs (Lowe).

Institutional Interventions

Put greater emphasis on designing academic programs that develop key employability skills, including teamwork and personal management skills (Snowden).

Introduce students to career services early in the university/college experience and increase the profile of career services on campus (Snowden).

Council of Ministers of Education, Canada

Postsecondary Education Project
Learner Pathways and Transitions
October, 1998

THE HIGH SCHOOL/POST-SECONDARY EDUCATION TRANSITION

Challenge Paper Prepared by

Thomas J. Collins
Professor of English, The University of Western Ontario

September, 1998

I. The Context

Before proceeding to address the subject of the HS/PSE transition, I would like to provide readers with a brief contextual statement. I am a Professor of English, and last academic year I taught first-year English to a lecture class of 130 students; in a third hour tutorial I had 17 students with whom I met one hour a week, whose essays and tests I personally marked, with whom I met one hour a week. I had not taught and marked for a first-year group in over twenty years (and I found the experience shocking) since for 21 years I was a senior university administrator: from 1974-82 as Chair of English, from 1982-86 as Dean of Arts, and from 1986-1995 as Provost and Vice-President Academic, all at this institution. I bring that background to this important subject. However, hesitant to rely solely on my own experience and impressions, I have in preparing this paper consulted with colleagues who have extensive first-year teaching experience in the Departments of Classical Studies, History, Mathematics, Chemistry, and English, and also with the Dean of Education. In addition, I have had access to two relevant documents recently produced at Western: a study by our Office of Institutional Planning and Budgeting (IPB) of the "Grade Drop" (that is, the difference between OAC averages and first-year university grades at Western from 1994-94 to 1996-97 – see Appendix A); and I have also looked at a recent survey by Western's University Student's Council on professorial perceptions of the quality of the writing skills of undergraduate students (see Appendix C). Finally, I have information concerning the results of a standard first-year test (40 questions remaining constant over the period from 1978-96) which has been administered in Chemistry 20 to assess incoming students' knowledge of basic high-school chemistry. While the following comments do not pretend to be based totally on statistical evidence, they do reflect some such analysis (the IPB document) and they also reflect judgments which are firmly held by a wide cross-section of the professoriate, including myself.

II. Public Expectation: Basic Goals of University Education

It is extremely difficult to assess public expectations concerning university education. And, of course, there is no necessary correlation between the expectations of the public and those of elected politicians. Ideally, however, one would hope that the public should expect universities to graduate young women and men who are able to think coherently and logically, and to express themselves verbally, and in writing, clearly and correctly. Such graduands should also possess skills in basic numeracy, and electronic communication. Universities should *not* be expected to provide specific job *training*, except (and then only in part) in those areas designated as "professional" Schools or Faculties. But, particularly in the Arts and Social Sciences, universities do provide job *preparation* in that they offer the means for students to achieve intellectual growth and maturity which, in turn, will enable those students to undertake responsible employment upon completion of their degrees.

III. Identification of Issues

Basically, and briefly put, universities are hard pressed to fulfill these goals because, for the most part, the students entering our first year are ill-prepared to undertake university studies.

Many (a majority, in my view) do not possess rudimentary skills in reading, writing, or thinking, although I am told that those who choose courses in Mathematics are numerate. My personal experience of this past year clearly indicates, however, that one cannot assume even a moderate degree of literacy from those who *elect* to study first-year English, presumably because they think, or have been led to believe, that they are at least proficient in this subject. And universities themselves are either unable or unwilling to address the issues related to the problems of poor high-school preparation. More on the latter two points below.

IV. Factors Affecting the Non-Achievement of the Goals

A. At the Secondary School Level

At the HS level, there seems to be no consistent curriculum from school to school, and the curriculum that is in place is too loose and inconsistently taught, even in the OACs. Most students, consequently, receive poor preparation in the basics (reading, writing, mathematics), they develop poor work habits, and they possess neither powers of critical thinking nor learning skills.

Those who are more familiar with the HS system than I tell me that there are two major factors which contribute to this situation: first, many subjects such as English increasingly are not taught by subject specialists; secondly, there remains in the school system far too much emphasis, at least in Ontario, on catering to the students' sense of self-esteem *a la* the Hall-Denis Report. Finally, there is the matter of grade inflation. As indicated in Appendix A, the "grade drop" of those students who entered Western from 1993 to 1996-97, including 368 schools (all of which sent at least 10 students during that four-year period), with a total of 10,961 students, has been disconcerting to the students, to the high schools, and to the university: these students had a mean OAC average of 79.5%, and a mean first-year grade at Western of 65.3% – for a mean grade first-year grade drop of 14.2%. It is hard to believe that this situation is peculiar to Western, and one should avoid the speculation that this grade differential occurs because university professors make unreasonable demands and/or mark too severely (more on this below).

These inflated HS grades lead students, sadly, in my experience, to have expectations of themselves that they cannot possibly fulfill in their first-year courses. I provide one other piece of evidence in this regard: in the chemistry test mentioned in Part I above, the average mark from 1978 to 1996 – and I remind the reader that this test covers basic HS chemistry, with 40 questions that have remained constant over these years – has dropped from 64% in 1978 to 48% in 1996 (see Appendix B).

B. At the University Level

As the USC document (Appendix B) clearly indicated, there is considerable dissatisfaction among the professoriate with incoming year I students. Fully 91% of the 72 professors who responded to the survey disagree with the statement, "High school prepares students well for essay writing at university." 94% believe that these students do *not* have a strong grasp of the

rules of grammar, and 97% believe that they do *not* have a strong grasp of style. See also the related prose comments in Appendix C.
My experience with my own first-year tutorial students in the 1997-98 academic year is pertinent here. Of the 17 students, only 4 wrote at an acceptable level of literacy – ie. they were able to construct basic sentences and paragraphs. Most of the remaining 13 had severe problems with writing, comprehension (they made the same errors in paper after paper, even though detailed comments were made on all papers), with reading, and also with oral expression. All of these students seemed to me to be hard workers (although not efficient), and they had good attendance records in the tutorial. They were very concerned about their inadequacies, and frustrated and embarrassed by the gap between what they had been led to believe they could achieve (because of the HS grades) and their actual level of accomplishment in my tutorial.

But it is not just the secondary schools which are guilty of grade inflation. If I and my colleagues were to mark these students according to their *actual* abilities, the grade drop would be much higher than it is. But we do not do so, for a complex number of reasons, not the least of which is that Western recently adopted an invidious internal funding system which rewards Faculties and Departments financially for attracting and retaining additional students in post year-one courses. This system has ostensibly been introduced to encourage interdisciplinary teaching and course development (and strangely so, particularly at a time when students have little or no disciplinary knowledge); its actual effect has been to increase grade inflation across the university. I possess no statistical evidence for this observation, but I assure you that the matter has, for example, been openly and fully discussed by those of us who share the teaching of first-year English. The point made in such discussions is simply this: don't mark the students too honestly or we will have few students in upper years, thus losing funds and probably faculty positions. These deliberations, by the way, occur in a context in which our Departmental Honours registration has dropped 36% over the past five years, and in which students in all Faculties, wisely understanding their own deficiencies, avoid courses in which there are any essay or other writing requirements. I expect that some version of this same situation exists in all universities.

Why do not the universities attack the problem of this lack of basic skills in our year I students? The answer, simply, is money. It seems that universities are basically in denial that the problem is as severe as I have indicated. And while Western has recently invested $200,000 in a Writing Certificate Program (an embarrassed gesture which simply restores the $200,000 that I, as Provost, had directed to writing courses, which my successor then cut), the administration seems not to understand that such a program is only a token creation because it will involve so few of our students. Quite frankly, most universities ignore the problem because to solve it would cost huge sums of money which, administrators believe, should be spent on "relevant" areas like communications, technology, and applied science.

There is one other important reason that universities fail to address the issue of ill-prepared students and inflated OAC marks. Universities are in competition with each other for good students (ie. students with superior marks), and for high numbers of student enrolments (because they mean money). Each year, for example, there is a competition in Ontario among University Presidents as to which one will win bragging rights about the highest number of

applicants in the student pool who indicate a preference for a particular institution. In this context, naturally enough, individual universities are extremely cautious about offending their "customers," for fear that they will lose out in this competition for presumed quality, numbers, and dollars (cf. my comments above concerning the internal competition for students at Western).

V. Priority Actions: Remedies

Despite the negative views that I have expressed, I believe that the situation does have remedies, even though I, and many of my colleagues, are rather cynical about the outcome of exercises such as this. But no amelioration will occur at either level (HS or PSE) if governments simply rely on their so-called "reforms" at the HS level, and if universities continue to ignore the most severe educational problem they have. I would, therefore, recommend *all* of the remedies that follow.

1. Grade inflation at both levels must be addressed.
2. Secondary school students must be inculcated with more realistic expectations concerning their potential achievements in first-year courses.
3. There must be much more formal and continuing liaison between the two levels: HS/PSE. Currently such liaison is minimal, and the result is that neither level knows what the other is, or should be, doing, or what the other expects.
4. There must be an increased emphasis on basics, and a consistent curriculum, at the HS level.
5. Finally, and most importantly, *all* potential university students should be given some form of tests for literacy and numeracy. If students fail these tests, university courses should be created to address the problems.

I realize that proposal #5 would be complex and costly, both for the provinces and the universities. I also am aware that this idea has been much and frequently discussed in various jurisdictions, and always, finally, rejected, precisely because of its complexity and cost. But we must face this problem, and solve it, or we will increasingly become a nation of semi-literates, with excellent computer skills, but with nothing to process that is beyond the gibberish that I encountered in the essays of my English 20 tutorial students (see Appendix D).

VII. How to Measure the Remedies

No mechanical or automatic measures are, I believe, possible. The results of implementing the suggestions in Part V will only become evident with the passing of time. But if no *real* remedies are sought, the effect will be easy enough to measure.

VIII. Conclusion

I have purposely kept this paper brief, and relatively simple in its focus and its recommendations concerning remedies. My personal experience in dealing with various

aspects of #5 above, for example, is sufficiently extensive that I could easily enough write 20 pages on that subject alone. But I have chosen to avoid such complexity for a very important reason: a project such as this usually becomes unsuccessfully bogged down because the discussion is so complex that those involved simply give up attempting to reach solutions, or they reach solutions that are so wide-ranging and extensive that they end up in bound volumes that gather dust on bookshelves. I urge those involved in the project *to keep focus and to simplify*. Some very positive results could follow.

The University of Western Ontario

First-Year Grade Drops

First-year students at Ontario universities sometimes express frustration because their first-year university grades are considerably lower than their OAC averages. At Western, we refer to the difference between these two as the "Grade Drop":

Grade Drop = the OAC average at admission **less** the First-Year Average at Western

Thus. if a student has an 80% OAC average, and a first-year average at Western of 65%, the Grade Drop is 15%.

At the request of Western's Provost, the Office of Institutional Planning and Budgeting recently reviewed the experience of OAC students who entered the University from 1993-94 to 1996-97. We restricted our sample to students from those schools which sent us at least 10 students during that four year period. There are 368 such schools, with 10,961 students who entered Western -- an average of 30 students per school. These 10,961 students had a mean OAC average of 79.5%, and a mean first-year grade at Western of 65.3% -- for a mean Grade Drop of 14.2%.

There was, however, considerable variation among schools in the size of the Grade Drop. As the attached table shows, we divided the 368 schools into six groups. Group 1, with 19 schools, had a Grade Drop less than 10%. Group 6, with 41 schools, had a Grade Drop greater than 18%. The other schools were in Groups 2 to 5, with Grade Drops between 10% and 18%.

The table indicates that there is very little variation in the mean OAC average among the six groups of schools, but considerable variation in the mean first-year average at Western. Thus, comparing Group 1 and Group 6, there is no significant difference in the mean OAC average (79.9% vs 79.3%), but a very significant difference of 11.6 points in the first-year average at Western (71.4% vs 59.8%).

For comparison purposes, information for each individual school is shown at the bottom of the table.

A Comparison of OAC Average To First-Year Average by Grade Drop Range

OAC Entrants Between 1993-94 and 1996-97 Inclusive

INCLUDES ONLY THOSE SCHOOLS FROM WHICH A MINIMUM OF 10 STUDENTS REGISTERED AT WESTERN

Group	Grade Drop Range	Number of Schools	Number of Students	Mean OAC Average	Mean First-Year Average	Mean Grade Drop
1	Less than 10.0%	19	841	79.9	71.4	8.5
2	Between 10.0% and 11.9%	49	1,332	78.7	67.5	11.2
3	Between 12.0% and 13.9%	89	2,795	79.5	66.6	12.9
4	Between 14.0% and 15.9%	98	3,349	79.7	64.8	14.9
5	Between 16.0% and 17.9%	72	1,739	79.4	62.7	16.7
6	Greater than 18.0%	41	905	79.3	59.8	19.5
	TOTAL	368	10,961	79.5	65.3	14.2

Notes:

1. Includes only full-time, first-year OAC registrants in direct-entry Faculties between 1993-94 and 1996-97 inclusive.
2. Where possible, OAC final marks have been used. If unavailable, mid-year average was used.
3. First-year averages calculated based on final grades as of July.
4. First-year university grades of 'F' have been assigned a mark of 40%.

Quality of Writing Survey Results

Part One

Questions about the respondent to the survey

Question 1: What subject do you teach? Some participants indicated that they taught in more than one faculty.

English	18	History	11	Spanish	1
Astronomy	1	Journalism	1	Russian	1
Anthropology	6	Philosophy	3	Sociology	3
French	1	Geography	3	Psychology	8
Women's St.	1	Political Science	9	Biology	1
Kinesiology	1	Art History	2	Western Lit.	1

Question 2: What levels do you teach?

Respondents taught at all levels of undergraduate studies.

Question 3: How many essays and how many words per essay do you assign in your classes?

The answers to this question indicated no apparent pattern and were too varied to be included here.

Question 4: Are papers in your class graded by you, by a T. A. or both?

You	49	T. A.	0	Both	11

Seven professors indicated that this was dependent on the size or level of the class. For large classes either the T. A. or both the T. A. and the professor marked papers and essays but for small classes the professor did all of the marking.

Part Two

Rating scale: 1. Strongly disagree...4. Undecided...7. Strongly Agree; N/A

Question 1: High school prepares students well for essay-writing at university.

91% —

1	40%	5	4
2	27	6	0
3	24	7	0
4	4		

Question 2: First-year students have a strong grasp of rules of grammar.

94% —

1	62%	5	3
2	20	6	0
3	12	7	0
4	3		

Question 3: First-year students have a strong grasp of style.

97% —

1	46	5	0
2	34	6	0
3	17	7	0
4	3		

Question 4: First-year students have strong research skills.

1	27	5	5
2	24	6	0
3	29	7	0
4	16		

Question 5: Undergraduate writing improves in upper years.

1	3	5	38
2	10	6	15
3	10	7	10
4	15		

Question 6: Undergraduate research improves in upper years.

1	0	5	40
2	6	6	31
3	4	7	9
4	10		

Question 7: Students write well by graduation.

1	9	5	24
2	19	6	11
3	16	7	0
4	22		

Part Three

For the most part comments from this section have been reproduced word for word however they have not always been reproduced in full in the interest of saving space. Numbers in brackets indicate the number of people who made the same or a very similar comment.

Question 1: Over, how satisfied are you with the quality of undergraduate writing in your courses?

- most students write poorly with a few exceptions who write very well (27)
- not satisfied (25)
- large range in quality of writing with most students in the very low range (2)
- Somewhat satisfied: In general, the quality of writing is considerably lower at Western than at other universities. I lay the blame on high school 'Inglush'. UWO has no vision in terms of composition instruction.
- Public school system should be doing a better job of instilling basic English literary skills. Some of my students still can't write in complete sentences.
- Generally extremely poor. (1)
- High School has not prepared them for even the discussion of grammar.
- Very dissatisfied with about 1/3 of my 200 level students. There are some who are incapable of putting two proper sentences "back to back"
- Not very satisfied: students in both writing and English at all levels display a basic ignorance of grammar and style and logical structure of arguments. More disturbingly, many of them seem unable to improve their writing, even after time has been taken to write detailed comments on essays.
- Student writing is in a crisis. In a first-year English course of 30-40 students there are usually one or two who understand what is required in writing an essay and can accomplish the task successfully and with confidence. The rest react with dread or panic to essay assignments since they are conscious of their inadequate preparation. In an honours course with an enrollment of about 30 there may be five or six who can produce an articulate, coherent essay. As an instructor one of my biggest problems is

to deal honestly and thoroughly with students' writing problems without entirely discouraging the students.

- Overall quality is relatively weak, especially among students whose background in maths and sciences has meant that they have been asked to write very few essays at high school or here at university.
- Dismal. The quality of student writing has declined even in the past two years.
- Most problems due to confused thinking rather than poor writing skills.
- Quite well satisfied.
- Satisfactory, no change in 28 years.
- Generally satisfied, varies from year to year.
- A few are exceptional, a very few are extremely poor, most are adequate.
- Poor in the beginning but usually improves (1)
- ¼ excellent, ½ adequate, ¼ poor
- Satisfactory
- Quality is extremely uneven. Overall better than the 1970's.
- It could be better.
- Not satisfied but not surprised.
- 200's - not satisfied, 400's - reasonably so
- I think it is appalling but not their fault.

Question 2: What elements of undergraduate writing would you most like to see improved?

- all (8)
- grammar (41)
- stylistic convention
- ability to argue with subtlety
- organization of ideas (18)
- vocabulary (10)
- structure (17)
- content
- expository writing skills (1)
- spelling (16)
- research (5)
- critical thinking (7)
- punctuation (11)
- syntax (7)
- conciseness (3)
- clarity (1)
- consistency
- scholarly practice and procedure (3)
- style (11)
- developing a thesis (2)
- consistent argument
- clearly and logically expressing their thoughts (1)
- The basic problems lie at the thinking stage. A student must have understanding and insight into the subject-matter and then be able to organize that insight coherently and logically.
- the ability to properly assess other written materials and to provide their own version of this material, properly referenced
- Less dependence on spell checks. More critical approach, more carefully organized and reasoned arguments
- rewrite and revise (3)
- spell check has proved an insidious trap

Question 3: How much time do you spend instructing your students in essay writing for your class? What do you teach them? How do you teach them?

For this question, because the answers were very instructor specific, I have only included the comments that were most often repeated and those that were most interesting.

- thoroughly correct essays and exams (32)
- offer time during office hours to consult (18)
- provide clear guidelines, give out an outline (13)
- not enough time (1)
- a lot (4)
- no time (1)
- going over the most common mistakes in essay writing in class (6)
- Very little. They do not belong there if they cannot write well. When I taught Freshmen I did spend time in tutorials on writing. I have always been willing to read and mark up essays for students who wish to practice but I will not read essays being prepared for any course. Today there is too much emphasis put on "methods", "creativity", "theory" and far too little placed on logical thought, grammatically expressed in graceful prose. The comparison between honours students here and comparable ones in Ivy League schools or British Universities leaves UWO looking rather poor even though some here are as good as any other places.
- I allow "re-writes" (3)
- I have a submit-resubmit assignment (1)
- My experience has been that when students pay attention to the comments made by professors they improve.
- I teach them to read critically and evaluate arguments, to develop their own contribution to the topic, and to read widely, with special emphasis on journals.
- I expect students to have mastered these skills by the time I see them (1)
- Students are not receptive to being told how to write hence never more than 15 minutes at a time on the subject.
- Suggest students with poor writing take a writing course or take advantage of Effective Writing Program (6)

Question 4: What criteria do you use to grade papers? How does a student get an A? B? C?

This question was extremely instructor specific and I could not find any patterns or common responses whatsoever. All surveys have been retained however, and responses to this question can be viewed.

Question 5: How do you think the university should go about improving students' writing skills?

- mandatory writing course (27)
- entrance exam (21)
- essays mandatory for every class or at least more classes (9)
- lobby government to improve primary and secondary system (7)
- non-credit remedial course (6)
- no time to teach style on top of regular course material; embarrassed that we graduate students without solid writing skills
- These should be quite intensive and include critiques and analysis of samples of the students' writing - we really shouldn't need to do this at all at the university level.
- We need to put pressure on departments of education to teach the teachers these skills. Short of that, we need to have admission tests to university to weed out those who fall below a minimum standard.
- More university - wide attention should be paid to it. TA's themselves need remedial instruction
- Keep up Effective Writing Workshops (2)
- raise admission standards

- stop bleeding funds from the writing programs, acknowledge the importance of writing for science students
- the only way to improve is to write a lot
- it should be something the students pay extra for
- more resources directed to Effective Writing program (8)
- more writing courses for credit
- university wide task force on quality of writing
- test upon graduation (1)
- ban the use of multiple choice exams
- smaller classes increases the likelihood that all courses will have written components (2)
- consistency in policy, early instruction in writing
- Require instructors to assign written projects/exams. Provide more T. A. support for larger courses to assist grading
- Students should receive more instruction by professors at the first year level; courses should be writing intensive in the first two years.
- get some decent teaching at high school level
- Workshops and clinics mandatory in first year.
- Required 'writers handbook' for each discipline for majors in that discipline. Publicize to faculty the extent of plagiarized wording and encourage faculty to reject such work.
- The university greatly needs to expand its support systems through classes, workshops and individual counselling.
- professors need to take more time to improve their students' writing
- A summer pre-entrance program?
- mandatory logic course
- ask professors to give a minimum of 40% of marks to quality of expression in all faculties
- require far more reading and writing
- require a thesis of all honours students
- there should be a standard of writing adequacy established and papers that do not meet such a standard should be returned to the student for re-writing

Question 6: How do you think the University should prioritize this issue?

- High/Top (24)
- Hire more people to teach writing.
- Fund writing courses, which must be kept small.
- Very high - right after computer literacy and math skills. UWO students have to compete in a world in which well-educated Americans, Europeans, Asians and others perform far better than they do when they come in and when they leave.
- High, being able to clearly express oneself is tremendously important to success.
- Very highly, recently the university has increasingly abdicated its responsibilities to uphold standards and send out competent and qualified students. In particular, students are admitted to teachers' colleges such as Althouse without having remedied their writing problems. So how can they be expected to teach their students to write? But the university faces challenges in restoring standards: possible declining enrollments leading to loss of revenue; competition with other universities which set their standards lower (and their grades higher) etc. So 'prioritizing' this issue may be politically unpopular and require great resolve. Most students need an entirely separate on writing to raise their abilities to an undergraduate level.
- Build it into basic curriculum
- Low, those who already have the skills will do well, those who do not will fail out and not much can be done to change that.
- Should recognize teaching in its awarding of tenure and promotion to junior professors rather than focusing all of its attention on research.

Question 7: If you have other comments, please express them here.

- Good job/Good luck (7)
- Western has all but abandoned its responsibility to help students improve as writers. It is yet another example of this university discarding academic principles and standards. Effective Writing Program as is, is not enough.
- True false testing develops no writing skills. Walk in writing labs would be a nice start too.
- Nothing will be done about this. Western and the Ontario system will continue their slide toward the standards of second rate state universities in the USA. We had a chance to be like UM (Ann Arbor) but we will be like MSU (East Lansing). The provost and others congratulate themselves for doing more with less. It is a pity that some believe them.
- This survey is long overdue, and I congratulate the students' council for taking action where the administration has failed to do so. I hope the USC will vigorously follow up the survey by publishing its results and coordinating it with similar surveys elsewhere. Above all let the Ministry of Education know.
- Writing ability is a key factor in separating good from poor students, especially if they want to pursue a post-graduate program. It follows that in Arts and Social Science, this can be a critical factor in the decision whether to admit to grad school. Students should be aware of this. The quality of writing at UWO is no better and probably no worse than most other N. American universities.
- The problem of plagiarism, especially disguised plagiarism, has to be taken seriously, not just as an issue of honesty but as a matter of more effective writing. Such essays are usually dreadful to decipher, as well as dishonest efforts. Students who need the most help don't pay attention to comments.
- This is something that students should work on, on their own.
- make it real, do something more than the token efforts UWO is known for
- We are inheriting a problem from the secondary school system, where students are taught everything but the technical foundations of writing. As a result, students now more than ever resent being given low grades for badly written work. Grading is more time consuming, frustrating and adversarial now than ever. It is the primary cause of instructor burn out, which leads experienced profs to retreat into esoteric scholarship and turn away from teaching.
- By the time students get to university and are convinced that they know what they're doing because of the inflated marks from high school that the task of redressing the ills becomes arduous and frustrating
- I have been teaching at the university level for 37 years - I have seen a steady decline in students' language skills - unfortunately I think it is irreversible
- Our mission as an institution fails if our graduates can not demonstrate rudimentary skills when they leave - funding, recruitment etc. follow quality - presently we are not giving it.
- concerned with extent of plagiarism
- I am not thrilled about the state of undergraduate writing at UWO. A few sessions of 100+ students writing 1st year essays lead the professor to a state of depression. The mentality seems to be; "how little work can I get away with" - or "how much cheating can I get away with". Each year I dread essay time, and carry on only because of the one or two each year that display a spark. They make it worth while. Despite that view, I maintain that good writing skills are among the most important things acquired at university.
- Writing courses currently have an enrollment cap of 22 students. Because of funding cutbacks and the new University formula for distributing per-student funds, these writing classes are being transformed next year into mega classes of 150-200 students. They're hard to teach now; next year, they'll be next to impossible. The USC should be aware that the major source of writing instruction to the undergraduate student population is being effectively made useless.

flesh. Fra Lippo knew that the people could still discover the hopes, fears, sorrows and joy of the realistic paintings.

Living on the streets for eight years also gave Fra Lippo a sense of rebelliousness. Without authority he was able to do what he wanted when he wanted to do it. Joining the monastery ~~did not show~~ a sign of weakness on his part, or ~~a loss~~ of rebellion, he was starving and the monks gave him what he needed. They ~~did~~ try to brainwash him in return telling him to "renounce the world, its pride and greed, palace, farm, villa, shop and banking-house, trash, such as these poor devils of Medici," (98-100), but as one learns at the beginning of the poem it does not work. He is caught by a policeman in the front of a whorehouse, heading for the Medici palace. He also sneaks out of his monastery to attend a festival that takes place in the middle of town.

This rebelliousness transcends into his view of art. As the church and the Prior were stuck in the medieval and traditional way of art, Fra Lippo was changing the course with his realistic paintings of the flesh. Monks and nuns alike praised his work, which encouraged him to continue painting ~~on~~ even though the Prior was breathing down his neck. He even points out the hypocrisy of the Prior and the monastery, stating that, "The value and significance of flesh, I can't unlearn ten minutes afterwards."(268-269) He goes on in his statement by emphasizing it with a simile: "You understand me: I'm a beast, I know. But see, now-why, I see as certainly as that the morning-star's about to shine."(270-272).

Fra lippo's suffering as a child ~~gave way to~~ his rebellious and realistic view of art. Unlike the Prior's, whose childhood is not mentioned, view of art which is more traditional.

Sample essay pages + 2 different papers from Eng 20 tutorial of T. J. Collins, 1997-98

ART FOR ART'S SAKE

As defined, art is a human skill whether in painting, poetry, music or any other artful craft. For centuries people have been capturing what is for them considered a piece of art. It is for this reason that no one has really been able provide a concrete definition of art. In Robert Browning's poem, "Fra Lippi Lippo," the debate continues. Both the monk and the Prior are in a continuous battle as to which of their theories of art is the most correct. Throughout the poem the nature and function of two very opposing sides is expressed through the views of the church one as a means of tradition, the other as a means of freedom of expression.

Lippo, an orphan, struggled through the beginning of his life just trying to get by. So at first for him it was a miracle that he was offered refuge by the Prior. At first a life in the monkhood was a way for Lippo to live without constant fear and depravity but not long after this miracle became a burden. Living on the streets became like a metaphor for Lippo. In exchange for living a comfortable life, he lost the freedom to do what he wanted, his freedom of will. Since Lippo wasn't very good at any of the traditional monk activities such as Latin, he turned to art, something that he wanted to use as a means of expression and something that he was crafted at. He saw everything created by God as beautiful and worthy of painting, thus how it was seen. " The beauty and the wonder and the power, the shapes

- The first ~ or so lines of generalization are not really necessary. Such comments are found to be vague and usually contentious. You could simply begin with line 5: "In etc." [illegible] I cannot find it in para. 1.

Council of Ministers of Education, Canada

Postsecondary Education Project
Learner Pathways and Transitions
October, 1998

THE INITIAL TRANSITION - FROM K-12 TO POST-SECONDARY EDUCATION

Bridging the Gap through Experiential Learning

Challenge Paper Prepared by

Kelly Foley

September, 1998

Imagine that the transition from secondary school to post secondary study is a relay race. If one runner represents the final year of high school passing the baton, or student, to a runner representing the first year of postsecondary education, then at least one out of four times the baton would fall to the ground. The transitional experience is fraught with difficulties for young Canadians as statistical portraits and anecdotal accounts attest.[1] A study conducted at Trent University, estimates that among 13 Canadian universities the average first year attrition rate is 24%.[2] While almost one quarter of our university entrants do not persist through their initial year, survey results from the University of Waterloo revealed that 25.6% of first year students do not feel that high school prepared them for university.[3] Such poor achievement in these indicators, preparation and retention, does not bode well for our system.

The intent of this paper is to challenge this relay paradigm, and specifically to challenge the assumption that learners should be as passive as the baton, shuttled between two levels of education. For the system too escape this paradigm, we must accept three key areas of weakness and the challenge to overcome these through a new approach to transitioning learners. First, many inadequately prepared students enter PSE simply because no other option exists. Their ill preparedness is, at least in part, due to the second challenge, a lack of relevance in the process of transition. Finally, the lack of relevance leads to poor institutional and individual fit. This paper will explore each challenge in turn, then suggest interventions which, through a new educational focus on experiential opportunities, can address these areas of concern.

Currently, upon the completion of their secondary student learners have three options: entering the work force, beginning college or university. In the past, when for most youth the future seemed pre-determined, vocational study easily followed a “start school-stop-start work” path. As the economy and work world fundamentally evolved through structural change, a broader range of professions, and an increase in required education, the choices with which youth are faced increase in number and complexity. Our secondary school system and moreover our postsecondary recruitment system has not evolved concurrently and as such learners do not find themselves adequately prepared to make these very crucial decisions. Learners who are uncertain of their path may feel discouraged from attending PSE. They may also feel compelled to continue their education often attending college or university as a means to discover what they want for their future. The investment both public and personal in obtaining a post-secondary education is inefficiently used in this pursuit.

---

[1] The scope of this paper will be confined to the transition of students directly from secondary school to post secondary school in the traditional age range of 18-24.

[2] Wong, P.T.P., *Student Retention/Attrition at Trent: A preliminary report*. Unpublished report, Trent University, 1994.

[3] Foley, Kelly, *Results of the First Year Transition Survey*. Unpublished report, University of Waterloo, 1998.

This is not to say that learners do not need ample opportunity to discover what path they wish to follow. Exactly the opposite is true. Fundamental to students' development is the definition of goals. Clear goals have been cited in several studies as key to persistence. The University of Guelph, University College Project Advisory Council notes that academic and vocational goals assist in persistence through improved motivation and self-perception.[4] Learners will achieve more and experience a less complicated transition, if they do have clearly articulated goals. A study of Humber College students between 1986 and 1991 indicates that occupational certainty is the second highest factor in determining persistence for students who experience both academic success and failure. Learners might feel less compelled to attend an institution if they are either personally or academically unprepared, if another option existed.

Poor goal development is partly due to a lack of relevance in education. In a consultation document, the Council of Ministers of Education describes the importance of the public expectation of relevance in Post Secondary Education.[5] The significance of relevance is not restricted to PSE nor to the public's expectations. Indeed, it is crucial element in each learner's understanding of his or her own development. Relevance in this case means that students should understand clearly the progression of their curricular study and the manner in which each task, activity or course prepares them for subsequent curricular expectations as well as their vocational future.

Students as young as 13 show an appreciation for the economic realities of their future career endeavours. Students in Ontario's *Aspirations Project* show a willingness to be introduced to future challenges.[6] One student queries why they do not take exams earlier in life, explaining that they would be easier to handle if they were accustomed to them. The willingness of learners to improve their transition should be matched by other educational partners.

Instead, secondary school students are consistently subjected to warnings about university and college instructors. Once in the post-secondary system, students are threatened about the rigors of the work world, and urged to be thankful they are not yet subjected to the "real world". The longer we separate education from the real world, the longer it will take learners to achieve smooth transitions.

The lack of relevance in a learner's transition also plays a role in the second challenge identified previously. Research from the U.S. indicates that individual and institutional fit plays a significant role in attrition.[7] The inability to acquire significant knowledge when making the decision to attend PSE or a specific institution impedes this fit. Students make this choice aided, for the most part, by only second hand information and

---

[4]University College Project Advisory Council, *The First Year Experience: Responding to the Challenge*. University of Guelph, Unpublished Report, 1993.

[5] The Council of Ministers of Education, *Public Expectations of Postsecondary Education in Canada: A Consultation Document*. 1998

[6]Government of Ontario, *Aspirations Project Qualitative Research Report.* The Premier's Council on Health, Well-being and Social Justice, 1993.

[7]Tinto, V. Leaving College: Rethinking the Causes and Cures of Student Attrition. Chicago: University of Chicago Press, 1987.

publications developed within institutional recruitment departments. In fact, a national survey developed by the Canadian Undergraduate Survey Consortium indicates that brochures and pamphlets are second only to campus visits as important sources of information.[8] Since such publications are designed specifically as promotional tools, this suggests that learners' key information source cannot be described as impartial. In his book, College, Ernest Boyer observes that if you believed American recruitment brochures the majority of undergraduate lectures are held out of doors near water.[9] Yet learners, generally have few meaningful opportunities to evaluate their choice. At Centennial and Conestoga Colleges only one third of their entering class had actually spoken to an instructor prior to attending college.[10] Consequently, without direct experiential knowledge of an institution or system of study, learners are more likely to be mismatched to their institution.

The key to overcoming the weaknesses described above is through a shift in the way we approach learner transitions. Human Resource Development Canada suggests two paradigms for learning, traditional and adult workplace or learning to know and learning to do.[11] A third paradigm should be introduced: doing to learn.

One reason our system has failed so greatly in the area of transitions remains that we do not sufficiently equip learners to make decisions and fully comprehend the magnitude and implications of those decisions. The U.S. approach to improving transition to PSE is to treat university and college students as if they were still high school students. However, the process of matriculation is no less a process of maturation than academic and career preparation. If, as a system, we shelter learners from curricular and non-curricular expectations, we simply delay their autonomy and effectively download the responsibility of preparing learners to subsequent stages in their development. Why do we ask students to make crucial decisions about their future at 17, 18 or 19, while we do little to nothing to introduce them to the reality of these decisions at earlier ages? By adopting an experiential learning approach, learners can be introduced to new expectations and can explore their options within their current and familiar framework.

Learners and educators, government and the public must each accept a key responsibility in order to produce effective interventions to facilitate learners' transitions. Educators from secondary schools, colleges and university must work together to provide opportunities for experiential learning and to make these experiences portable and transferable. Government should facilitate the process through increasing learners' accessibility to such opportunities. The public and in particular the work world, which is ultimately a learners' destination, must also participate in offering opportunities. For

---

[8] Walker, James L., *Survey of First-Year University Students: Summary of Major Findings.* Canadian Undergraduate Survey Consortium, 1998.

[9] Boyer, Ernest L., College, The Undergraduate Experience in America. New York: Harper & Row, 1987.

[10] Chapman, Judy, Sid Gilbert, Peter Dietsche, John Gardner, and Paul Grayson, From Best Intentions to Best Practices: The First-year Experience in Canadian Postsecondary Education. National Resource Center for the Freshman Year Experience & Student Transition, University of South Carolina, 1997.

[11] Human Resource Development Canada, *Updating Essential Skills for the Workplace*. Reference document prepared for the Council of Minister of Education, Canada Third National Forum on Education, 1998.

learners, there must be a willingness to explore. Exploration must not be exclusive to one system or area of study.

The system as a whole can offer interventions to assist in learners' transition. In general, several aspects should be considered in any intervention. These should be flexible and allow for as many experiential opportunities as possible. Programs should be offered by both levels of education in partnership to ensure continuity in direction and mission. Additionally, they should be offered through a consortium of institutions and not be regarded as methods to recruit students to specific institutions. Finally, skills acquired through these programs much be applicable to admissions to both college and university programs.

In order to develop new interventions, educators from secondary schools, universities and colleges should in consultation with learners, business, government and other partners develop a *Key Opportunities Inventory*, similar to the skills inventories used in the school to work paradigm. The first task in developing an inventory is to clearly articulate the decisions, and suggested timing, that a learner must make in their transition: whether to go to post-secondary education, whether to study at college or university, whether to study close to home or far from home, and what to study. For each decision, a catalogue of knowledge required to make an informed choice should then be created. From there, this knowledge should be coupled with experiences that would help learners understand the implications of each decision.

The range of experiences should be offered throughout the senior years of secondary school and more importantly through bridging programs. While the process of transition is a joint responsibility of all levels of education, it is critical, in order to be proactive, that any interventions occur before a student has entered the PSE system. Such interventions could include:

University 101 courses - Institutions such as the University of Prince Edward Island and the University of Victoria have begun American style University 101courses. These credit courses covering such curriculum topics as the role of the university, study skills, writing techniques, and stress management appear to improve retention.[12] Again, in terms of these programs it is a question of when to offer them. Does it seem most prudent to teach learners how to be university students once they are already are? Such courses are more appropriately delivered to high school students by both college and university instructors, exploring both levels of education.

Audit courses - Secondary school students should be permitted to take college or university level courses for high school credit on a pass - fail basis. Although the learner would attend regular lectures and laboratories, both high school and PSE instructors would develop assignments and exams. Students would require access to support from both levels to ensure that this advanced study does not become overwhelming. Careful consideration would be necessary to ensure that students of all academic skill levels felt

[12]Fidler, Paul, "Relationship of Freshman Orientation Seminars to Sophomore Return Rates." Journal of the Freshman Year Experience. 3: 7-38, 1991.

comfortable taking such courses. The purpose of which would not be to challenge advanced students, but to allow all students the opportunity to experience university and college lecture styles and learning environments.

Exchanges - The opportunity to travel to another part of our country develops not only perspective but also autonomy and greater maturity within learners. Student exchanges, where volunteer families billet students, can occur according to numerous themes, language bursaries, summer employment, or academic terms.

Co-operative education - The value of applied experience can never be underestimated. Enhancement and enlargement of existing co-operative education programs should include encouraging learners to attempt co-operative placements in areas outside their usual realm of interest. By challenging themselves in this way learners gain a greater understanding of their true weaknesses and strengths.

Mentor study - Students in secondary school should have the opportunity to undertake independent projects or work study under the guidance of college or university instructors or staff. Developing personal ties and mentorship within PSE would assist the learner over come insecurities and dispel misperceptions regarding either college or university.

Bridging Programs - Students who are not ready to attend post secondary school directly after university should be able to remain connected to the educational system during any hiatus from study. That connection could be through any of the above programs or through employment, entrepreneurship and volunteer internships. A pan-Canadian network of opportunities that could be applicable to areas of learners' possible interest should be developed through a partnership of government, business, Secondary and Post-Secondary institutions. These opportunities could involve connections with instructors at either level of education. Learners should be, additionally, provided the option of independent study related to their activity for transferable credit. In this way, learners are afforded some distance from formal education while maintaining a link to facilitate the transition to education once the student is ready to commence post secondary study.

Any programme should not exist purely on its theoretical merits and should always be accompanied by an appropriate evaluation tool. Traditional measures such as retention, persistence, student satisfaction, preparation and academic success offer some evidence of a programme's effectiveness. However, in this context they may not adequately indicate the interventions direct impact on such measures.

A series of benchmarks should then be developed in conjunction with the Key Opportunities Inventory. These benchmarks should evaluate the learners' preparedness to make each choice as outlined in the inventory, including access to opportunities, relevance of opportunities and range of opportunities experienced by individual learners. Acquiring evidence of learners' preparedness would involve some fairly intensive satisfaction surveys that feasibly could be conducted only on a rotational basis.

Provisional proxy measures could be developed between such evaluations through examination of the traditional measures list above.

More generally if such interventions are successful, our system of transition between secondary school and post-secondary education should no longer mimic a relay race. Learners should become active participants in their education. They should at each stage of their development understand how the curriculum relates to the subsequent stage and future stages. Learners should have the opportunity to experience in a structured fashion the rigors and demands of what will be expected of them in the future before they are required to make finite decisions.

To embrace the challenge of creating a transition where learners define their future goals through experience means switching from academic counselling to academic “doing”. It means that our system no longer downloads the responsibility to prepare learners’ to future educators and employers. Instead, learners purposefully choose each stage of their transition arriving prepared and experienced.

-30-

Council of Ministers of Education, Canada

Postsecondary Education Project
Learner Pathways and Transitions
October, 1998

INCOME-RELATED BARRIERS TO POST-SECONDARY EDUCATION

Challenge Paper Prepared by

Alex Usher

Introduction

1.1 Income-related barriers to post-secondary education (PSE), come in two forms: direct and indirect.

1.2 "Direct" barriers are those with which policy-makers are most familiar, since it is they that most student assistance programs are intended to alleviate. This set of barriers is purely financial in nature, and refers to the set of conditions that prevent people who are qualified and motivated enough to attend PSE but cannot due to lack of resources. Direct barriers are in effect barriers of affordability that can be alleviated or exacerbated by government policy.

1.3 "Indirect" barriers are a broad set of conditions, often income-related, which discourage people who are undecided about pursuing PSE from doing so. This set of barriers mainly affects people who, although likely possessing enough talent to pursue PSE, have few role models who have done so and have never received much encouragement at home or at school to pursue their education. Indirect barriers are best thought of as barriers of motivation and inadequate career planning which especially affect people from lower-income backgrounds. While they are not "financial barriers" per se, these barriers are income-related and governments and other educational partners are in a position to alleviate them

1.4 Direct barriers affect people who want to go to PSE; indirect barriers affect people who are undecided about their educational plans but who likely have the capacity to study at the post-secondary level. There is, of course, a third group of people who face an entirely different set of barriers: those who have neither the capacity nor the interest in studying at the post-secondary level. Many of the youth who are considered "at-risk" - often from families mired in chronic poverty or with a history of substance abuse - chose not to pursue their education because they become "divorced" from formal education at a relatively early age. Not only are such people unlikely to enter PSE, but they are also unlikely to finish high school. Their barriers are certainly income-related (at least indirectly), but because the depth of their alienation from the formal education is so great, their problems deserve a completely separate treatment. This paper will concentrate simply on the direct and indirect barriers.

Direct Barriers

2. Direct financial barriers are those sets of financial conditions that prevent qualified, motivated individuals from attending PSE due to inadequate resources. Governments that wish to minimise the number of direct financial barriers to PSE that is, to keep PSE affordable - have to pursue one or a combination of three avenues. First, they may keep prices (in particular, tuition) down; second, they may offset prices through student assistance; or third, they may increase student or family resources through programs designed to increase savings.

2.1 Tuition & Costs

2.1.1 From an economist's point of view, the costs of attending PSE are as follows: the first - and for most students the largest - cost of education is foregone earnings from participation in the labour force. The next largest cost would be tuition, followed by books, etc. Living costs would not be considered a cost of attending PSE, since subsistence (food and shelter) would have to be taken care of regardless of attendance in PSE. Given this cost equation, an economist would say that the "cost" of attending PSE has barely changed over the past decade, even though tuition costs have increased substantially. This is because tuition is still a fairly small component of total cost. One could even argue that the "cost" has decreased in real terms because the increase in tuition has been offset by the decline in forgone income that has accompanied the deterioration of labour market prospects for people with only a high school education.

2.1.2 However, from a student or family's point of view, the cost equation is somewhat different. While the overall cost is a consideration, the primary barrier is simply scraping together the required capital for each year of study. Viewed from this perspective, education has become considerably more expensive over the past few years, the combination of rising tuition and stagnant incomes is the primary culprit.

2.1.3 Rises in tuition are not automatically cause for concern. If student price response to tuition were quite inelastic, then an increase in tuition might not cause a drop in enrolment. Similarly, if incomes were rising or student aid levels rose enough to offset a drop in demand (see below, section 2.2.3), then a rise in tuition would not necessarily create a "higher" barrier to access.

2.1.3 While there is little evidence on price responses of Canadian students, data from the United States shows that the extent of price elasticity for higher education is highly dependent on family income. Students from low-income families are found to be price-sensitive while students from higher income backgrounds are much less so, if at all. The California Post-secondary Education Study (1980) estimated that "lower-income students are approximately twice as price-responsive as middle-income students" and that "high-income students are about two-thirds as responsive as middle-income students".[1] Note though that while the relationship between tuition increases and enrolments is clear, the effects of tuition increases on students already enrolled in PSE institutions is less so. The most recent evidence suggests that changes in tuition have no discernible effect on persistence for university students, but that mid-stream increases in tuition do have significant negative enrolment effects on community college students.

2.1.4 This differentiated response to tuition prices suggests that governments do not have to

[1] It should be noted that most American studies that measure the price effect of tuition hold the rate of private return on education constant as part of their *ceteris paribus* assumptions. An increase in the perceived value of a university or college degree has a positive effect on enrolment, which may wholly or partly counteract the negative enrolment effects of tuition increases. This explains why enrolment may hold steady or even increase in the face of price increases.

keep tuition low (or free) in order to maximise access. In particular, it suggests that in theory introducing price discrimination in favour of students from less affluent backgrounds would allow rises in tuition without discouraging participation from lower-income groups. The "sticker" price of tuition would be the same for all students, but through increased grant aid, students from lower income backgrounds would face a lower net price. Holding tuition constant, such a use of grant-based student financial assistance would have the same effect as a general reduction in tuition but at a lower cost. Conversely, a hike in tuition combined with a significant increase in the amount of grant aid awarded (30% or more of the total value of extra tuition brought in by the increase) would allow institutions to receive more money without worsening access.[2] This strategy[3] is known in the student assistance literature as the high tuition/high aid strategy, and jurisdictions that have implemented it (such as Minnesota) do not appear to have access rates significantly different from jurisdictions which have maintained low tuition strategies.

2.2 Effective student assistance

2.2.1 The first task of student assistance is to make sure that students have enough cash on hand to see their studies through to completion. Arguments about what mix of loans and grants to provide within any student assistance package are purely academic if the total amounts being provided are inadequate to the task at hand.

2.2.2 From the human capital point of view, all student aid at the university level at least could probably be delivered in the form of non-forgivable loans because university graduates are virtually guaranteed lifetime returns on investment that will vastly exceed the amount borrowed. However, high levels of debt in the transition to the workforce can be debilitating and easily lead to defaults and bankruptcies. This suggests that some assistance should be given in the form of non-repayable aid either at the time aid is awarded, or in the post-study period, or both.

2.2.3 However, grants (i.e. non-repayable aid) are useful not just for containing debt but also, as noted above, to offset tuition fees and create a lower "net price" for students with lesser means. Evidence from the United States shows that students do respond positively to grants which offset tuition fees. However, this response declines over time. That is, a grant matters more to access and retention if it is given early in a student's studies. The further they proceed in the studies, the more indifferent students are as to

---

[2] Of course, the amount of the set-aside must increase as tuition increases, since with every increase, the number of students needing some sort of offset will increase. In the US, a number of smaller private institutions with “sticker” tuition rates of $10000 (US) or more, are now spending more than 60% of every marginal tuition dollar in student assistance. National Association of College and University Business Officers 1996 Tuition Discounting Executive Summary

[3] See James C. Hearn and David Longanecker, “Enrollment Effects of Alternative Post-Secondary Pricing Policies” Journal of Higher Education Sept/Oct 1985 pp. 485-508, and James C. Hearn & Melissa Anderson, “The Minnesota Financing Experiment” in Rethinking Tuition and Student Aid Strategies, New Directions in Higher Education no. 89 pp. 5-25

whether or not they receive aid in the form of a loan or a grant, at least from the point of view of retention.

2.2.4 Theory and some practice show that a grants-based discriminatory pricing regime can offset the negative effects of tuition in a cost-effective manner. However, there is reason for some caution in this approach. Net price theory is based on students (and presumably their families as well) having a perfect understanding both of tuition charges and the financial assistance system. However, there is significant evidence to show that students and parents have a far less than perfect understanding of tuition charges and the student assistance system. One recent American study showed that the public overestimates the sticker price of a year's tuition by a factor of two; another showed that low-income parents were least likely to understand the student assistance system and assume that all assistance was merit, rather than need-based.[4] As sticker price (and thus the scope of the investment) increases, it becomes increasingly important to focus on improving not just the student assistance product, but the information about that product as well. In this respect, all Canadian jurisdictions seriously lag behind their American counterparts.

Indirect Barriers

3. All of the direct barriers apply only to people who have already decided to attend post-secondary education and are trying to make financial arrangements in order to allow them to do so; they do not apply to people who never decide to apply to post-secondary education in the first place. For those individuals who effectively take themselves out of the running for PSE at the age of 12 or younger, the availability of loans and grants available at the age of 18 is not very useful.

3.1 If jurisdictions wish to maximise their human resources, then they must increase the level of education of their citizens and encourage more young people to pursue their education into the post-secondary level. In order to do so, more resources must be devoted to encouraging as many people as possible to want to attend post-secondary education in the first place. Not everyone with the ability to attend PSE wants to - or believes they can do so, and this desire is itself indirectly linked to income.

3.2 The characteristic of wanting to attend post-secondary education is most closely linked to parental expectations of educational attainment. Children from families where attending a post-secondary institution is virtually taken for granted are vastly more likely to end up in PSE than children from families where there is no such expectation. In turn, the likelihood of parents bringing such a set of expectations to bear on their children is closely linked to the parents' own highest level of educational attainment. The danger here is that class comes to replicate itself through the generations based on

[4]American Council on Education, “Public Perceptions of College Prices”, http://www.acenet.edu/programs/DGR/ tuitionsurvey.html; Lorayn Olson and Rachel Rosenfeld “Parents and the Process of Gaining Access to Student Financial Aid”, Journal of Higher Education, July/August 1984 pp.455-480.

educational attainment; children of the educated become educated themselves, while children of the less educated find themselves in a sort of quasi-permanent educational underclass.

3.3 There is no easy way to break this cycle and increase rates of continuance (that is, persistence in education from the secondary to the post-secondary level). As noted above and in numerous other studies, financial assistance is of little use since the decision to not pursue an academic career is made long before most people are aware of financial aid - often as young as 12 years old.[5] More active strategies must be used to encourage students to persist in their studies, and these interventions may have to begin as early as primary school. Yet because of the crucial role that family plays in children's decisions regarding education, effective methods of encouraging educational persistence have to target families as well as students, and moreover do so in a manner that does not involve substantial state intrusions into family life.

3.4 One interesting set of experiments in the United States has been "assured access grants". These are voucher-grants given to students attending schools in low-income areas for good grades in secondary school (occasionally, this extends down into primary school as well), redeemable only if they go on to attend post-secondary education.[6] The theory is that these financial incentives will encourage post-secondary attendance not only through the act of providing financial support to children from poorer backgrounds, but also because in doing so such children will over time come to have the expectation that post-secondary education is an appropriate and natural destination. In short, it will make children want to attend PSE because they will know that others expect them to do so, and that others believe in their abilities enough that they will actually give them money to go.

3.5 Another approach that seems to show some promise is to tie improved career information in the secondary system to early and frequent information about educational programs at the post-secondary level and about student financial aid. The example provided by the Indiana Career and Postsecondary Advancement Center (ICPAC) is a good one. Working in tandem with secondary and post-secondary schools, ICPAC provides Indiana students with a extensive career guidance publications in grade 9, which complement the state curriculum and help students in their choice of high school courses. In grade 11, the relationship between post-secondary education and career is brought into the mix with the distribution of another, and information on all state schools is provided to the high school students. From grade 9 onwards, students and their parents begin receiving ICPAC's 80 pamphlets on the benefits of post-secondary education, the costs of doing so, how to save money and how to access student financial assistance, etc., on a regular basis. ICPAC also operated a 24-hour hotline and website to provide assistance In part because of this initiative, the state's

---

[5]See especially the March 1987 Senate Report of Federal Policy on Post Secondary Education (p.48-9)

[6]Another variation on the same theme is to ensure free tuition to low-income students who maintain satisfactory standing throughout high school, as is the case in Indiana.

participation rate among high school graduates went from 41.63% in 1987 to 49.58% in 1991a jump of nearly 20% in four years.[7]

Recommendations:

An overall strategy to increase higher education participation by low-income students should therefore include the following elements:

Information is key -start early. Many students make their choice not to participate in post-secondary education very early in life. A program that encourage early career planning and promotes greater education as the key to greater earnings - along the lines of the program developed in Indiana - should be implemented in all provinces.

Use special encouragement for low-income students. "Assured access grants" for lower-income students demonstrating satisfactory academic progress, provided they start early enough in a child's life, are a promising avenue for policymakers.

Ensure that student aid maximums are sufficient: The first task of student aid systems is to ensure that student have sufficient cash to finish their studies. Student aid maximums should be reviewed much more frequently than is currently the case, in order to minimise the amount of unmet need amongst students.

Reduce the net price of education for low-income students through increased use of grants: Forgivable loans have not proved to be the panacea many thought they would be in the early 1990s. Debt has risen for students, costs have continued to escalate for governments, and for low-income students, the net price of education has increased enormously. Government should once again move to providing targeted "up-front" grants for low-income students.

Don't overestimate the effects of tuition. Allowing tuition for general undergraduate or college programs to rise too is undesirable, because parents will begin thinking education is too expensive and not encourage their children to attend. But the effects of small tuition increases are virtually undetectable. And in any case, spending a lot of money to control tuition is a much poorer policy choice than spending a similar or slightly lesser amount of money on grants to low-income students.

[7]See Don Hossler & Jack Schmidt, “The Indiana Postsecondary-Encouragement Experiment”, in Rethinking Tuition and Student Aid Strategies, New Directions in Higher Education no. 89 pp. 27-39

Council of Ministers of Education, Canada

Post-secondary Education Project
Learner Pathways and Transitions
October, 1998

PROGRESS THROUGH A POST-SECONDARY EDUCATION PROGRAM

Challenge Paper Prepared by

John Blevins, M.Ed.
Policy Consultant and Private Contractor
Western Research Group

September, 1998

The essence of this paper is to provide a provincial perspective on the priority actions (interventions) that will assist learners in completing the pathways through post-secondary education. The intent is to generate a discussion, challenging readers to take into consideration how post-secondary institutions, the government and their stakeholders, can participate together, to ensure that learners have the opportunity to achieve a post-secondary education in an effective and timely manner. The paper is not intended to provide ready-made solutions related to barriers that may impede the achievement of these learners. Also, it should be clarified that references to pathways in this paper relate specifically to ways in which the learner can successfully complete a post-secondary education. Whether the pathways include transfer between programs in the same institution or from one program in one institution to another program in another institution or completing courses in two or more institutions simultaneously, the knowledge and skills that the learner has successfully obtained already should be taken into consideration.

In Canada, the constitutional responsibility for all levels of education rests with individual provinces. As such, each province, through their post-secondary institutions, with input from their stakeholders, decide which programs will be offered and what the entrance requirements and graduation standards will be to enter, and complete, these programs. Albeit that education is a provincial matter, the federal government does provide assistance for education and training programs, as well as programs for retraining and skills upgrading.

In Alberta, for example, the need for a more definitive structure for the development of the province's human resources was recognized at the beginning of the 1990s. The Alberta Government, with the assistance of stakeholder groups, took the lead in establishing the beginnings of a human resources plan in its document *Toward 2000 Together*. This document laid out several directional statements, including, "Albertans will have to determine the priority to be placed on developing the province's human resources through existing and new approaches to education, skills upgrading and training."[1] However, due to certain economic, social and political shifts in thinking in the province, these evolving ideas, although incorporated into some education and training programs, were not introduced as a complete strategy until February 1997. At that time the human resource strategy for the province was unveiled in a document entitled *People and Prosperity*. The document is the province's directional statement on human resource development from basic education to post-secondary to business and industry training programs, and even to lifelong learning. *People and Prosperity* established the following specific goals in order to enable

1 *Toward 2000 Together*, p. 10.

Albertans to take advantage of emerging opportunities, regardless of one's station in life.

- ◊ Albertans will have improved access to information on emerging work trends, knowledge and skill requirements, learning opportunities, entrepreneurship and workplace human resource practices.
- ◊ Albertans will have access to high quality, relevant learning opportunities, and be encouraged to take part in continuous learning.
- ◊ Alberta's young people will have access to opportunities that prepare them for successful participation in work.
- ◊ Programs and workplaces will be responsive to people who face barriers to employment, ensuring that all Albertans have opportunities to develop and participate in the work force.
- ◊ Employers, employees and unions will work together to build healthy, productive, innovative workplaces.
- ◊ Albertans will be able to make use of their education and skills in the global economy.[2]

People and Prosperity also outlines certain actions to be undertaken in achieving these goals. Some of the actions are already underway through the collaborative efforts of several human resource development partners, as well as several government departments and agencies. Other actions were started as a result of this new provincial human resource initiative. Even though *People and Prosperity* encourages Albertans to take advantage of learning opportunities, there are still certain variables that may prevent or hinder individuals from attaining their goals.

Individuals trying to navigate effective pathways through the post-secondary system may still encounter and be influenced by individual, environmental, system and institutional variables. These variables may be described in the following manner.

Individual variables related to the characteristics of the learner and the learner's access to post-secondary education.
Environmental variables related to economic climate, resource allocation to post-secondary education, public attitudes and links within the community.
System variables, such as links among educational levels—especially K–12 and post-secondary education—costs, and information available to prospective learners.

[2] *People and Prosperity*, p. 6.

Institutional variables especially admission and assessment policies, programs, instructional services and learning resources.[3]

These variables will have an affect upon the individual with respect to transitions from secondary education or the workplace to post-secondary education, as well as to the selection of effective pathways on the road to success. They relate specifically to all learners, and as such, some learners may encounter difficulties in completing their post-secondary education. It is these at-risk learners that need to be identified by the institutions so that specific, directed interventions may be used to accommodate their needs and thus assist them in achieving the same education as those learners who do not encounter such difficulties. The interventions or priority actions that need to be used by post-secondary institutions should specifically ensure that the pathways taken by these learners are effective and efficient in helping them complete their post-secondary education programs. Some of the institutional interventions may include:

- ◊ providing sound academic and career advice and information
- ◊ developing effective tracking systems to identify those at risk of not completing their programs on time
- ◊ developing programs with content relevant to learner needs as they move toward the marketplace
- ◊ providing orientation and follow-up sessions for new post-secondary entrants
- ◊ providing ongoing mentoring programs for all post-secondary learners
- ◊ encouraging instructors to have a better understanding of, and greater appreciation for, the needs of their learners.

It also has to be said that post-secondary education in an institutional setting is the most common form of learning or training. However, business and industry are beginning to develop roles for themselves, not only as supporters of post-secondary education and training, but also as active participants in the delivery of programs. In the future, business and industry may perceive a need to provide similar interventions to those that may be provided through post-secondary institutions.

However, even with these institutional interventions, the public, as well as other stakeholder groups, are still asking: "What is our education system doing for our youth?" Alternatively, the question that maybe needs to be asked is: "What are the public and specific stakeholder groups doing to ensure we have a well-educated and well-trained work force?" Some sectors of our society need to recognize that learning and training are not exclusive to secondary and post-

[3] *Learner Transitions and Pathways in Post-Secondary Education: Background to the Issues*, p. 11.

secondary institutions alone, but also are provided through programs offered by business and industry. It is imperative that all of the players in the marketplace, and in society as a whole, realize that this is a partnership—a partnership that not only promotes immediate training and learning but a partnership that promotes lifelong learning.

Are the present methods of planning marketplace needs adequate to make informed economic and labour market choices? It would be foolhardy to say that economic forecasters can predict the future 10 times out of 10. If these forecasters were as clairvoyant as this, the types of issues raised in this paper would not need to be, since they would not be issues. Everything would function effectively and efficiently and there would be no need for economic forecasters. The intent here, however, is to be more efficient and effective in planning so that projections, do indeed, become more accurate. These projections, then, will never be perfect, but close, in this case, does count.

Are too many learners attending post-secondary institutions without the necessary preparation or prerequisites? Are entrance requirements not stringent enough so that anyone who applies can enter a post-secondary program? On the other hand, are these requirements too rigid that promising applicants do not qualify? Is adequate career counselling available to secondary students and post-secondary learners? If so, do these groups of learners actively seek out the career counselling available to them in order to make informed lifestyle and career choices? Should society be trying to accommodate all learners and ensure that they get the post-secondary education and training they need in order to meet their personal and professional goals? Should graduation standards be reduced, increasing the flexibility in programs, offering varied delivery systems on a full- and part-time basis, and so on? These are the types of questions that jurisdictions need to wrestle with in order to meet human resource needs.

With these issues in mind, it is time to examine the government's relationship with post-secondary institutions and their delivery of appropriate education and training programs. The government has a large role to play in providing interventions that will enable learners and the institutions alike to meet their goals. From the government perspective, some possible priority actions (interventions) might be:

- ◊ Formulating public policy to enable providers to establish programs to best meet the needs of learners and the marketplace.
- ◊ Providing adequate public funding to support the development and delivery of post-secondary programs.

- ◊ Providing infrastructure funding to enable post-secondary institutions to maintain high quality, relevant programs.
- ◊ Providing, in conjunction with secondary schools, information for learners directly related to the pathways they will pursue in post-secondary education.
- ◊ Encouraging private sector funding from business and industry to establish workplace programs at post-secondary institutions.
- ◊ Encouraging partnerships between post-secondary institutions and business/industry to develop and fund short- and long-term training programs for the workplace.
- ◊ Reducing financial barriers by providing more low-interest loans that learners would have the responsibility of repaying over a longer period of time after finding employment.
- ◊ Providing learners with the most cost-effective and efficient ways for learning.
- ◊ Developing policies that provide learners with the flexibility to move between and among programs and institutions.
- ◊ Reducing program costs by amalgamating programs into centres of program specialization.
- ◊ Reducing costs by providing more electronic or on-line access to programs rather than having to physically attend institutions.
- ◊ Providing incentives, such as tax credits and tax holidays, for business/industry so that they are able to develop and deliver training programs that would be accepted as equivalent by post-secondary institutions for credit.
- ◊ Continuing to enhance partnerships forged between government and other stakeholders to promote research that leads to productive post-secondary programs that will meet the evolving needs of all stakeholders.
- ◊ Encouraging institutions to develop assessment processes in order to promote the principle of recognizing prior learning.
- ◊ Encouraging further development and improvement of transfer credit systems between and among post-secondary institutions.

If a highly educated and trained work force is necessary to allow Canadians to compete on a global scale, then it is imperative that interventions such as the ones mentioned are seen to be valued. Governments, business, industry, the media and citizens at large seem to be united in their desire to have a highly educated, trained, efficient and effective work force. This being the case, then funding must be made available, public policy must be seen to be enabling, incentives must be made available, opportunities must be more accessible and a greater number of working partnerships must be struck. If all of these elements are put into place, interventions such as these can move each province and territory, and thus the country, forward at a 21st century pace. Relevant education and training are the desired outcomes, the interventions are the drivers and support, enabling policies and partnerships are the keys.

These government interventions may have many far-reaching implications for the types of government and institutional enabling policies that need to be developed and also for the budgeting of public funding dollars. Ultimately, the effectiveness of these interventions becomes the basis of accountability for institutions and government alike. A number of questions related to the costs, benefits and appropriateness of these interventions seem to arise. How will these interventions be measured? What measurement tools will be developed? How will the effectiveness of the results be determined? These are just three of the questions that need to be asked with respect to interventions. There are several others, such as:

- ◊ Should public and/or learner satisfaction surveys be developed?
- ◊ Should the percentage of learners entering a program versus completing a program be examined?
- ◊ Should the number of learners who have gained employment in the area for which they trained be determined as a percentage of the beginning cohort?
- ◊ How are learners who change programs or institutions, and who are not counted in the beginning cohort group, taken into consideration?
- ◊ Should learners be surveyed on their opinions related to how programs may be improved?

A myriad of measurement tools may be used to gauge the success of interventions. These tools range from a variety of surveys, particularly satisfaction surveys, to calculating the percentage of the beginning cohort that graduated or obtained work in their chosen field of study, and so on. Regardless of the measurement tools used, standards related directly to the results need to be developed and followed throughout any analysis. If satisfaction surveys are used, one must ensure that the data collected is evaluated in a meaningful way to generate useful results. If analysis of cohort groups is done, the results also must be obtained through a set of developed standards and procedures. In the final analysis, the measurement tools used and the methodology developed must be sound and trusted to ensure that accurate information is obtained so that effective decisions can be made. Ultimately, the measurement tools —surveys, mathematical analysis or anecdotal information—developed to measure the results of interventions need to demonstrate which interventions were most successful. The analysis of these interventions will afford government and post-secondary institutions the opportunity to make decisions concerning which interventions should and would continue to be supported, and what new interventions need to be developed.

As we move toward the new millennium, all jurisdictions in Canada are striving to establish policies and guidelines to help their citizens become ever more competitive in the global community. The government interventions outlined are intended to assist learners to complete post-secondary education and training programs in order for them to be able to compete successfully in the world marketplace. Business and industry can adopt/adapt a majority of these interventions as well. Society places heavy demands upon its citizenry to be productive. Governments, as a major part of that society, are expected to play a very large supportive role in the productivity of the society they serve. Governments, in the future, will still be required to shoulder a certain amount of the responsibility for the productive nature of the work force in the economy. However, in order to succeed, the brave new world we are embarking upon seems to be right for sharing and forming partnerships. This being the case, it is imperative that we no longer make scapegoats of each other, but rather, that we adopt strategies to enable all those with a vested interest to work together to achieve a sound productive Canadian society.

REFERENCES

Council of Ministers of Education, Canada *Learner Transitions and Pathways in Post-secondary Education: Background to the Issues*, July 21, 1998, Toronto: Canada.

Government of Alberta, *Toward 2000 Together*, 1991. Edmonton: Canada.

Government of Alberta, *People and Prosperity*, 1997. Edmonton: Canada.

Council of Ministers of Education, Canada

Postsecondary Education Project
Learner Pathways and Transitions
October, 1998

PROGRESS THROUGH A POSTSECONDARY PROGRAM

Challenge Paper Prepared by

Janet G. Donald, McGill University

September, 1998

Challenge question

What interventions are most effective in ensuring that once students enter a postsecondary program, they achieve realistic personal expectations and complete that program in a productive and timely fashion?

The areas of concern that have been identified for students' completion of their postsecondary program are (1) whether students receive adequate assistance in personal development, (2) whether learning outcomes are adequately articulated and the learning environment is rich, and (3) what the incentives and disincentives are for timely completion of a program.

Personal development is a broad concept that includes not only academic but psychosocial development. It depends upon the resources that students bring, as well as those that the postsecondary institution can supply. The learning environment is defined by the policies, procedures, facilities and support systems in the institution, but more specifically by the learning outcomes, instructional guidance and feedback, and student advising provided in programs.

There are two major extrinsic incentives for undergraduate program completion: acceptance into a graduate program and the ability to get a job. The first requires resources in undergraduate academic advising, particularly contact with professors. The second requires career placement resources.

Twenty years of research have shown that student characteristics, particularly their entry qualifications and their engagement, involvement, perseverance or effort, have the greatest effect on their progress (Astin, 1993; Pace, 1982; Pascarella & Terenzini, 1991; Tinto, 1998; Willingham, 1985). I will therefore begin by addressing the implications of this research. I will then examine the context or environment of postsecondary education, and the interactions between student characteristics and the learning environment. Although this challenge paper puts forward issues of quality, it should be prefaced with the recognition that Canadian universities and colleges are in many ways providing a good education. The approach taken in this paper is thus one of improvement through the sharing of best practice.

Student characteristics

Change for undergraduate students during the nineties has been as rapid and widespread as in the late sixties. More entering students report experiencing stress; over the last decade, the percentage of students *overwhelmed by everything they have to do' has risen from 16% to 29% (Astin, 1998). The postsecondary population has also changed and diversified (Pascarella & Terenzini, 1998). Students bring an increasing range of knowledge and skills to the learning milieu. As well, their stage of development and the transition many students are making from family life to independent living, mean that their personal environment is larger and less stable than before. The majority of students arrive from an educational setting in which the responsibility for learning has been primarily that of their teachers, who have

expressed considerable concern for them and their learning (White et al, 1995). In postsecondary education, there is a shift in the balance of responsibility for learning from teacher to student for which students may not be prepared.

What are students' expectations for learning? Canadian students agree with other stakeholders in postsecondary education that a commitment to learning, the ability to analyze, synthesize, and think critically, and general academic preparedness are the most important criteria for student quality (Donald & Denison, 1996) (Table 1). Some differences exist among students in different programs: engineering students consider mathematical competency more important, and education students attach greater importance to breadth of life experience and a sense of responsibility. Arts students attach less importance to clarity of educational and career goals, a sense of responsibility, and the ability to get a job, which suggests that they may need different institutional or program resources to help them, for example, become independent learners or make career choices on the way to completing their programs.

More critical to the challenge question, students consider almost all of the criteria for student quality (24/25) to be of greater importance while pursuing a degree than at entry to university, and most criteria (18) are more important upon graduation than while pursuing a degree. Students think of these abilities and attitudes, including academic preparedness, as being developed, more than as resources they bring to their postsecondary education. Students not unexpectedly consider expertise at the end of a program, the ability to get a job, and performance on the job to be extremely important only upon graduation, but they also consider criteria central to their success throughout their studies -- a sense of responsibility and the ability to analyze, synthesize, and think critically -- extremely important only upon graduation.

Our studies of student learning have shown that many postsecondary students do not conceptualize learning in a way that will aid them to develop these abilities (Donald, 1992b, 1994, 1995b). Instead, adopting a consumer orientation, these students think of learning as adding to their store of factual knowledge and therefore requiring a minimal commitment to learning, rather than as searching for meaning. Even when students exhibit a high general commitment to learning, they may lack the necessary strategies to be successful in their studies (Donald, 1995b). The term self-regulated learning has been coined to describe students' active control of learning resources (time, study space, peers and faculty members), motivation, and strategies (Pintrich, 1995).

Students, however, when asked about the strategies they use, place greatest emphasis on relatively mundane strategies such as carrying out assignments or attending class regularly (Donald & McMillan-Davey, 1998) (Table 2). More problematic, although they see the ideal student as seeking opportunities to meet with teachers, they subscribe to this strategy least of all, more disagreeing than agreeing with it as a characteristic of themselves.

These research findings raise several issues. First, students enter postsecondary education with high expectations for their learning and development, but with limited understanding of the challenges they face. Second, they do not consider their preparation for postsecondary education to be as important as what occurs during their

experience and as outcomes of their experience, thus signaling an externalization of responsibility for learning. Third, they distinguish between themselves and the ideal student, and may not adopt strategies that are crucial to their success. In brief, students may need more guidance than has been recognized in preparing for and executing their scholarly lives.

The learning environment

The postsecondary learning context differs substantially from that of education at earlier levels (Donald, 1998). To begin with, the learning environment in postsecondary learning situations is not the classroom but the entire campus. Students may spend as little as 15 hours per week in classrooms, and the classroom setting may vary radically from large lecture hall to seminar room; other venues such as the library, laboratory, cafeteria or the student's own room are part of a diverse environment. In addition, a policy of mass higher education over the past 30 years has led in many postsecondary institutions to large classes and limited attention to individual learners. Institutional size has clear negative effects on student development, satisfaction, and the perception that faculty care about them (Astin, 1993). Finally, administrators, responding to a decade of budget cuts, have had time and attention diverted from program design and improvement.

The need to establish dialogue at course, program and institutional levels on the nature of the learning community is the central issue. On the one hand, the institution needs to communicate to students that the largest contributor to learning gains is the quality of effort they put into their work (Pace, 1982); on the other, interventions are needed at three levels -- within courses, within programs, and across the institution, to help students learn. The primary measurement tool for these practices is a checklist and justification for use or non use.

More specific measures would be ratings of success or frequency of use of each intervention. The closer the intervention to the actual learning situation, the greater the effect on student progress (Pascarella & Terenzini, 1991). We therefore begin by examining practices that help students learn in courses.

Interventions that help students learn in courses

To render the learning context manageable and supportive for students, these strategies for providing intellectual context and for instructional planning and evaluation are directed primarily to professors, but programs also need to engage in dialogue on their implementation (Table 3).

The provision of intellectual context

Understanding the institutional context Students need a sense of the history and organization of their college or university and the program they have elected. Potentially provided in orientation sessions, by word of mouth, or by home pages, students still need to know where they fit in. Undergraduate students, for example, need explanations about how they can actively participate in campus governance.

Involvement and integration into the academic community have major effects on the achievement of students (Pascarella & Terenzini, 1991). Professors are the front line in supplying this context.

Explaining educational goals

In order for students to actively control and organize their learning, they need to see the relationship between understanding their field and gaining credentials in it. One approach is to begin a course by explaining the process of scholarly inquiry, how it governs the lives of academics, and how students can engage in this process. The Encyclopedia of Higher Education (Clark & Neave, 1992) gives a multifaceted introduction to the academic world.

Understanding students

Research on student intellectual development provides help in understanding the struggles that students face as their conception of knowledge changes from one of absolute values to a contextual approach to knowing (Baxter-Magolda, 1992; Perry, 1970, 1981). Research on individual differences explains the varied performance levels in a class, leading to increased empathy for students (Moore, 1994). Recommended strategy is to take into account students' level of intellectual evolution, then promote that evolution so that students become contextual knowers, integrating their own and others' ideas.

Providing the disciplinary context

Disciplines have traditionally provided homes within the larger learning community because they determine the discourse: the domain or parameters of knowledge, the theoretical or conceptual structures and the mode of inquiry that guide learning (Donald, 1995a; 1997).

Learning goals vary across disciplinary areas. For example, physical scientists emphasize facts, principles and problem solving, while in the social sciences and humanities, a critical perspective and communication skills are important (Stark, Shaw & Lowther, 1989). The traditions of a discipline serve as harbors for those who are learning to sail.

Providing a learning community

The learning community embodies a concept of relatedness among learners; it is collaborative and consistent with the fact that the student learning environment is much broader than an individual course. Creating study groups or research teams that allow students to collaborate on specific projects in courses or programs is singularly successful as a learning experience. Regular office hours, email contact, and a required meeting with students early in the term promote the concept that students should know their professors.

Establishing student responsibility for learning

Methods for helping students to become responsible for their learning include providing choice among alternative courses of action, challenge in the form of moderately difficult tasks, and collaboration, which encourages further exploration, provides models, benchmarks or standards for students' learning, and promotes persistence because there is an obligation to peers in the group (Clifford, 1991; Davis & Murrell, 1993; Pintrich & DeGroot, 1990).

Instructional planning and evaluation

The instructional dimension that has the highest correlation with student learning is teacher preparation or course organization (Feldman, 1989; 1996).

Designing effective instruction begins with determining the kind of learning desired. Higher order learning outcomes, that is, course goals that go beyond gaining factual knowledge, include learning fundamental principles, generalizations or theories, learning to apply course material to improve rational thinking, problem solving, and decision making, developing creative capacities, gaining a broader understanding and appreciation of intellectual-cultural activity, developing skill in expressing oneself orally and in writing, and discovering the implications of course material for understanding oneself (Cashin and Downey, 1995).

Representing knowledge

Representing concepts to students in a manner that they can understand so that they can incorporate them into their own cognitive structure is a process of depiction or portrayal. Experiential and image-arousing materials aid learning and retention, hence multiple modes of representation are important. Building a bridge between the teacher's comprehension and that desired for students recognizes the link between instruction and cognitive functioning (Shulman, 1987).

Selecting teaching strategies

Learning outcomes provide direction for the instructional strategy. If the learning outcome is gaining factual knowledge or learning fundamental principles, lectures and reading may be efficient methods to use. If the outcomes are learning to problem solve, or developing skill in expressing oneself orally and in writing, other methods that require students to actively manipulate the concepts or principles are needed (McKeachie et al, 1986). Methods of active learning range from team-building strategies and on the spot learning assessment strategies to modified lectures, class discussions, peer teaching and independent learning. The new media allow students to use a variety of information sources to explore and then build their own conceptual frameworks. The role of faculty then changes from knowledge provider to designer of learning methods and environments.

Adapting to student characteristics

To create a positive learning environment, adaptation at the most fundamental level means ensuring that examples are gender and ethnic inclusive. At a more general

level, flexibility of approach to the variety of learners in a class is critical in order to get students' attention and aid them to become independent learners. Insight into where students are having trouble learning requires specific strategies. One minute papers in which students say what they are most puzzled about, or would like clarification on, or what needs further discussion, are used increasingly to provide this kind of feedback. Tutorials, question periods, and frequent brief tests also supply information about the extent of students' understanding and the opportunity to tailor answers to specific student needs.

Instructing

Literature on instruction, particularly that emphasizing active learning (Silberman, 1995) focuses on methods that enable students to evolve in their intellectual functioning, including providing students with a guiding analogy for learning, then modeling the strategies students need to utilize in order to understand and assess their own thinking. One approach is to use methods that reduce the effect of large class size, since larger classes inhibit learning (Gardiner, 1994). Individualized learning, mastery learning, and cooperative or collaborative learning all contribute to gains in student intellectual development.

Assessing learning

The assessment process in courses and programs has a major effect on the way students approach learning. In its worst guise, it tells students what they do not have to learn, especially if evaluation methods test low level learning outcomes. In its best guise, assessment is the process of evaluating student learning to improve learning, instruction, and program effectiveness (see Angelo and Cross, 1994). Student self assessment is a strategy for developing skills of self reflection, and helping students to build active and meaningful relationships with the material they are studying (Kusniac & Finley, 1993). Students identify questions that emerge for them from previous experience, become conscious of themselves as learners, and then connect more actively with the learning context.

Interventions that help students learn within programs

Benchmark or best practices from Improving the environment for learning (Donald, 1997) provide potential directions for programs to improve student learning.

Program planning

Engage faculty in planning the program, setting reasonable annual goals for program review and integration. Assess students' entry level abilities and attitudes early to provide baseline data and to ensure that students have the prerequisite skills. Develop an abilities-based curriculum. Begin by asking what students should be able to do intellectually in the program, then decide how to best go about facilitating or fostering that development, by determining the learning outcomes of courses in the program and the methods of evaluation employed, and how these promote higher order learning. Where possible, create work-study programs that allow students to integrate their

learning. Examine the effect of individual courses or groups of courses on the development of specific types of cognitive abilities using course grades and other outcome measures. Do follow-up studies of retention and achievement to measure student progress and when changes occur.

Establish and support a community of learners

Include colleagues and students, and provide students at entry to their studies with insight about their discipline and about the nature of learning at university. Co-registration or block scheduling enables students to take classes together; courses connected by an organizing theme provide coherent interdisciplinary or cross-subject learning (Tinto, 1998). Colloquia, in which members of a program talk about their research, and brown bag lunches, in which professors and students debate important issues, provide a dynamic center to learning. Allow individual faculty to set goals within the program framework that are meaningful to them.

Establish student opportunities for development

Aid students to set academic goals and to be self regulated. Make the expected outcomes for the program available to students. Specify requirements clearly. Include estimates of the range of time needed to acquire the knowledge and skills in the program. Provide small group learning experiences -- tutorials, undergraduate research, collaborative learning. Incorporate ongoing self assessment of learning into the program, including annual progress reports from students.

Ensure an advising system that works

Reward faculty for effective advising. Advising with an open door policy, email addresses, and regular office hours lets students know they can approach professors. Specify the expectations for advising, and ensure a means of responding to students' needs for recommendations for graduate school or jobs.

Institutional interventions that help students learn

Policy initiatives Involve the entire community in the process of improving instruction -- administrators, faculty, staff and students; make students and their learning experiences the focal point in university organization, policy and practice. Examine entrenched ideas about learning and teaching and attempt to change attitudes to embrace a philosophy of intellectual development through active learning. Reward programs for paying more attention to students, and for more frequent student-faculty interaction, where mentor relationships are established. Recognize time and other costs for planning, evaluation, and intensive experiential programs.

Campus wide programs to aid student integration and learning

Develop specific courses and programs to introduce students to the university, for example, first year seminars, and gateway programs so that professors teaching first year students have a reference group across disciplines. Engage professors as faculty

fellows who are available to students across the campus as general advisors. Provide development time, resources and inservice preparation for faculty to explore new media and technologies.

Honor teaching and learning

Ensure that administrators know they are responsible for effective teaching practice and begin a dialogue about how teaching practice will be improved. Promotion and tenure criteria and annual reporting mechanisms should require evidence of effective teaching. In orientation sessions for new faculty, include dialogue about teaching and learning. Establish teaching improvement awards to assist faculty in redesigning or designing new courses.

Teaching and learning centers

Resource centers that introduce new developments in postsecondary education to the university require some physical resources but also high level human resources. A collection of articles, books and videotapes enables people to explore literature from one discipline to another. Faculty development workshops provide a cross-disciplinary meeting place for a range of topics such as thinking skills, student responsibility, or the use of multi-media. Establish a program for teacher assistant training that is responsive to the variety of needs across disciplines but that also attends to general issues such as the first class.

Teaching evaluations

The focus of teaching evaluations should be on providing programs with information about standards for practice, whether they are being met, and factors that may affect teaching and learning in courses and in programs. Their administration must be carefully attended to and they must be shown to be valid and useful.

One negative effect of teaching evaluations in the last 20 years has been the increasing assignment of responsibility for student learning to instructors with an accompanying loss of responsibility on the part of students. Teaching questionnaires should include items that ensure students understand their responsibilities as learners. Items may establish student preparation, motivation and self regulating strategies. Formative assessments of teaching are more helpful in providing information about where improvement is needed; examples are diagnostic midterm questionnaires, class directed periodic evaluations, or peer evaluation techniques such as the use of a consulting faculty member who works with students in small groups.

Among all of the interventions discussed in this paper, those with the greatest potential to make a difference are the ones closest to the actual learning situation. Providing intellectual context and instructional planning are primarily the responsibility of professors, but programs also need to engage in dialogue on their implementation.

At the institutional level, definition as a learning community is consistent with the fact that the student learning environment is much broader than an individual course, and

should provide the impetus for collaboration. The greatest gap, however, between the present situation and the optimum, is in program planning. Much more needs to be done to assess students' entry level abilities and attitudes, to develop an abilities-based curriculum that fosters intellectual development, and to determine the learning outcomes of courses and of each program, then to explain to students how their program is organized and what their responsibility for learning is.

References

Angelo, T. A., & Cross, K. P. (1994). Classroom assessment techniques: A handbook for college teachers. San Francisco: Jossey-Bass.

Astin, A. W. (1993). What matters in college? "Four critical years" revisited. San Francisco: Jossey-Bass.

Astin, A. W. (1998). The changing American college student: thirty-year trends, 1966-1996. The Review of Higher Education, 21 (2), 115-135.

Baxter Magolda, M. (1992). Knowing and reasoning in college: Gender related patterns in students' intellectual development. San Francisco: Jossey-Bass.

Cashin, W. E., & Downey, R. G. (1995). Disciplinary differences in what is taught and in students' perceptions of what they learn and how they are taught. In N. Hativa & M. Marincovich (Eds.) Disciplinary differences in teaching: and learning. New directions for teaching and learning, no. 64 (pp. 81-92). San Francisco: Jossey-Bass.

Clark, B. R., & Neave, G. R. (Eds.) (1992).The Encyclopedia of Higher Education. Oxford: Pergamon Press.

Clifford, M. M. (1991). Risk taking: Theoretical, empirical and educational considerations. Educational Psychologist, 26, 263-297.

Davis, T. M. & Murrell, P. H. (1993). Turning teaching into learning: The role of student responsibility in the collegiate experience. ASHE: ERIC Higher Education Report No. 8 Washington DC: The George Washington University, School of Education and Human Development.

Donald, J. G. (1988). Professors' expectations of students' ability to think. Higher Education Research and Development, 17 (1) 19-35.

Donald, J. G. (1992a). The development of thinking processes in postsecondary education: Application of a working model. Higher Education, 24 (4), 413-430.

Donald, J. G. (1992b, August). Learning psychology: Ethnographic studies of professors' and students' perceptions. In Learning, thinking, and problem solving: Issues in teaching and transfer. Symposium conducted at the meeting of the American Psychological Association, Washington, DC.

Donald, J. G. (1994). Science students' learning: Ethnographic studies in three disciplines. In Pintrich, P., Brown, D., & Weinstein, C. (Eds.) Student motivation, cognition and learning. (pp. 79-112). Hillsdale, NJ: Lawrence Erlbaum.

Donald, J. G. (1995a). Disciplinary differences in knowledge validation. In Hativa, N., & Marincovich, M. (Eds.) Disciplinary differences in teaching: and learning. New directions for teaching and learning, no. 64, (pp. 7-17). San Francisco: Jossey-Bass.

Donald, J. G., (1995b). Understanding the task of teaching and learning: Postsecondary students' orientation to learning. In symposium onUnderstanding the task of teaching and learning conducted at the annual meeting of the Canadian Society for the Study of Higher Education, Montreal, QC.

Donald, J. G. (1997). Improving the environment for learning: Academic leaders talk about what works. San Francisco: Jossey-Bass.

Donald, J. G. (1998, in press). The expert pedagogue. In J. Bess, (Education.), Fitting faculty to teaching tasks: Psychological and organizational implications of the contemporary faculty role set. San Francisco: Jossey-Bass.

Donald, J. G., & Denison, D. B. (1996). Assessment criteria for university students: A study of students' perceptions of criteria of student quality. Paper presented at the annual meeting of the Canadian Society for the Study of Higher Education, St. Catherines, ON.

Donald, J. G., & McMillan-Davey, E. (1998, June). Transforming learning: Students' and professors' perceptions of the learning interface in first year seminars. Paper presented at the annual meeting of the Canadian Society for the Study of Higher Education, Ottawa, ON.

Feldman, K. A. (1989). Instructional effectiveness of college teachers judged by teachers themselves, current and former students, colleagues, administrators, and external (neutral) observers. Research in Higher Education, 30, 137-194.

Feldman, K. A. (1996). Identifying exemplary teaching: Using data from course and teacher evaluations. In Svinicki, M. D., & Menges, R. J. (Eds.) Honoring exemplary teaching, New directions for teaching and learning, no. 65 (pp. 41-50). San Francisco: Jossey-Bass.

Gardiner, L. (1994). Redesigning higher education: Producing dramatic gains in student learning. ASHE: ERIC Higher Education Report No. 7. Washington DC: The George Washington University, School of Education and Human Development.

Kusniac, E., & Finley, M. L. (1993). Student self-evaluation: An introduction and rationale. In MacGregor, J. (Ed.) Student self-evaluation: Fostering reflective learning, New directions for teaching and learning, no. 56 (pp. 5-14). San Francisco: Jossey-Bass.

McKeachie, W. J., Pintrich, P., Lin, Y., & Smith, D. (1986). Teaching and learning in the college classroom: a review of the research literature. Ann Arbor: University of Michigan, National Center for Research to Improve Postsecondary Teaching and Learning.

Moore, W. S. (1994). Student and faculty epistemology in the college classroom: The Perry schema of intellectual and ethical development. In Prichard, K. & McLaran Sawyer, R. (Eds.) Handbook of college teaching: Theory and applications. (pp 45-67). Westport, CT: Greenwood Press.

Pace, C. R. (1982). Achievement and the quality of student effort. Washington DC: National Commission on Excellence in Education.

Pascarella, E. T., & Terenzini, P. T. (1991). How college affects students: Findings and insights from twenty years of research. San Francisco: Jossey-Bass.

Pascarella, E. T., & Terenzini, P. T. (1998). Studying college students in the 21st century: Meeting new challenges. The Review of Higher Education, 21 (2), 151-165.

Perry, W. G. (1970). Forms of intellectual and ethical development in the college years: A scheme. Troy, MO: Holt, Rinehart & Winston.

Perry, W. G. (1981). Intellectual and ethical development. In Chickering, A. W. & Assoc. The modern American college: Responding to the new realities of diverse students and a changing society. (pp. 76-116). San Francisco: Jossey-Bass.

Pintrich, P. R. (1995). Understanding self-regulated learning. (Education.) New directions for teaching and learning, no. 63. San Francisco: Jossey-Bass.

Pintrich, P. R., & DeGroot, E. (1990). Motivated and self-regulated learning components of classroom academic performance. Journal of Educational Psychology, 82, 41-50.

Shulman, L. (1987). Knowledge and teaching: Foundations of the new reform. Harvard Educational Review, 57, 1, 1-22.

Silberman, M. (1996). Active learning: 101 Strategies to teach any subject. Boston: Allyn and Bacon.

Stark, J. S., Shaw, K. M., & Lowther, M. A. (1989). Student goals for college and courses. Report No. 6. Washington DC: School of Education and Human Development, The George Washington University.

Tinto, V. (1998). Colleges as communities: Taking research on student persistence seriously. The Review of Higher Education, 21 (2), 151-165.

White, R., Gunstone, R., Elterman, E., Macdonald, I., McKittrick, B., Mills, D., & Mulhall, P. (1995). Students' perceptions of teaching and learning in first year university physics. Research in Science Education, 25 (4), 465-478.

Willingham, W. W. (1985). Success in college: The role of personal qualities and academic ability. New York: College Entrance Examination Board.

Table 1. Ratings given by Canadian students (n=402) to criteria for student quality (from Donald & Denison, 1996)

Criterion	Overall rating'	More important while pursuing a degree	More important upon graduation
General academic preparedness	4.2	*	
Secondary school preparation	3.1		
Preparedness for a specific program	3.7	*	*
Breadth of life experience	3.6	*	*
Basic communication skills	4.0	*	*
Basic mathematical competency	3.5	*	
Intelligence	4.0	*	*
Commitment to learning	4.3	*	
Clarity of student's educational and career goals	3.6	*	*
Competence in second language	3.1	*	*
Sense of responsibility	4.1	*	**
Openness and flexibility	3.9	*	*
Independence in learning	4.1	*	*
Ability to analyze, synthesize, and think critically	4.2	*	**
Ability to interact with others	3.9	*	*
Effective study skills and habits	4.0	*	
Moral and ethical reasoning	3.7	*	*
Personal student development	3.7	*	
Self-confidence	4.1	*	*
Academic performance/achievement in courses	4.0	*	
Completion of program requirements	4.2	*	*
Expertise at end of program	3.9	*	**
Ability to get a job	3.7	*	**
Performance on the job	3.9	*	**
Commitment to lifelong learning	4.0	*	*

' Scale of 1 for not at all important, 2 for somewhat important, 3 for important, 4 for quite important and 5 for extremely important

** = extremely important

Table 2. Learning strategies ascribed to the ideal student and first year students in seminars and in comparison with students in large courses (from Donald & McMillan-Davey, 1998)

	Students in First Year Seminars n=80					Students in Large Courses n=80		
	Ideal Student		Self as Student		Sig of Diff.	Self as Student		Sig of Diff
CHARACTERISTIC	M	SD	M	SD		M	SD	
Completes assignments on time and with high quality of effort	4.68'	.59	4.08	.67	.000	4.13	.77	nsd
Carries out all assignments given by teachers	4.64	.66	4.22	.73	.000	4.26	.85	nsd
* Applies previous learning to new material	4.64	.64	4.01	.75	.000	4.21	.71	.09
* Questions and analyzes studied material	4.63	.62	3.85	.76	.000	3.85	.64	nsd
Persistent with studies.	4.61	.65	3.83	.73	.000	3.96	.68	nsd
Manages stress effectively.	4.60	.70	3.61	1.08	.000	3.38	.94	nsd
Adjusts to the amount of academic work to be done	4.57	.65	3.94	.76	.000	3.82	.71	nsd
Manages time effectively.	4.55	.79	3.43	1.05	.000	3.59	.85	nsd
* Meets the intellectual demands of courses	4.52	.62	3.95	.70	.000	3.86	.72	nsd
* Participates as a constructive and active member of class	4.50	.75	3.68	.95	.000	3.39	.92	.05
Attends class on a regular and punctual basis.	4.49	.83	4.20	.88	.010	4.11	.86	nsd
Does well on tests and assignments.	4.46	.80	3.75	.71	.000	3.86	.61	nsd
Adjusts to the ways in which courses are taught.	4.45	.73	3.91	.75	.000	3.65	.70	.02
Takes good notes in class.	4.44	.78	3.66	.98	.000	3.78	1.01	nsd
Works steadily and systematically.	4.41	.82	3.49	.91	.000	3.65	.87	nsd
Pursues challenging courses as an investment in the future.	4.38	.85	3.83	.92	.000	3.79	.88	nsd
* Differentiates between important and unimportant material.	4.30	.82	3.89	.84	.000	3.87	.69	nsd
Seeks opportunities to meet with teachers outside of class.	4.00	.91	2.91	1.02	.000	2.86	.98	nsd

* active, critical participation
*Likert scale: 1 for strongly disagree, 2 for disagree, 3 for neutral, 4 for agree, and 5 for strongly agree

Table 3. Interventions that help students learn in courses (from Donald, 1998)

Provision of intellectual context	
Understanding the institutional context	Clarify institutional and faculty educational objectives, governance and financing, and the character of the community and culture
Explaining educational goals	Explain educational goals, purposes and values and their epistemological grounds
Understanding students	Obtain information on students' language, culture, motivation, gender, age, ability, interests
Providing the disciplinary context	Provide an overview of the discipline - the way in which the subject matter is organized, and the methods used to validate this knowledge
Providing a learning community	Instill the sense of importance of scholarly learning, provide personal, collaborative contact
Establishing student responsibility for learning	Explain to students that their learning will depend primarily upon the quality of effort they put into their work
Instructional planning and evaluation	
Designing	Critical interpretation of knowledge base, structuring and segmenting of concepts, topics, skills to be learned, organized into learning outcomes
Representing knowledge	Alternative ways to represent concepts and skills in analogies, metaphors, explanations, examples, demonstrations, assignments
Selecting teaching strategies	Organize, manage, arrange learning activities to achieve outcomes
Adapting to student characteristics	Respond to student conceptions, misconceptions, aptitudes, attention, motivation and stage of development
Instructing	Management, presentation, interaction, coaching
Assessing learning	Testing for student understanding and competence during instruction followed by a critical analysis of the instructor's and the students' performance

Council of Ministers of Education, Canada

Postsecondary Education Project
Learner Pathways and Transitions
October, 1998

FINANCING LEARNER PROGRESS THROUGH PROGRAMS OF HIGHER EDUCATION

Challenge Paper Prepared by

Kelly Lamrock, B.A. L.L.B.

September, 1998

Introduction

With every passing generation, the demand for higher education grows. Every year, the need for post-secondary education in the job market becomes greater and greater. Because of these social factors, and government programs aimed at increasing access to higher education, there is now a greater diversity of learners in the system, and a greater diversity of demands upon the system.

The purpose of this paper will be to examine these expectations upon the system, and to place them in a context of the challenges, limitations and potential which define each expectation. Finally, for each contextualized expectation, a set of tangible interventions will be offered, along with the stakeholder group or groups best positioned to implement the recommended change.

Expectations

In the early days of the academe, stakeholder expectations were easy to manage. The student was sent, by generally wealthy families, to a private institution to expand his horizons, to become an educated person. Today, there is an immediacy to many of the demands upon our institutions. The market necessity of a degree sends many students to school with job readiness as a major expectation. The increasing indebtedness of these students upon graduation adds a certain urgency to these expectations. Moreover, the taxpayers who provide the funds to our universities have come to equate the graduate's success in the job market with value for their money, whether they use the system themselves or not. These demands are unlikely to diminish and cannot be ignored.

Even so, it should also be noted that personal development is still a major reason why individuals pursue higher education. Universities are also expected to provide critical thinking and problem solving skills, and to act as a window through which we can introduce the learner to the intellectual growth required of an educated person. These goals are not, necessarily, at odds with more job-oriented goals, but may differ in priorities and timelines.

In short, most post-secondary programs will seek to balance the acquisition of skills; which may be defined as teaching the learner to perform certain tasks, with the enhancement of abilities, which may be defined as enabling the learner to acquire and process additional knowledge in the future. This balance may be said to produce the following expectations upon the system.

Enhancement of Abilities

- ***To expose the learner to a broad and diverse range of new ideas and thoughts.***
- ***To empower the learner to process new ideas and thoughts by providing them with critical thinking and problem solving skills.***
- ***To condition and exercise the learner's mind to embrace new ideas and challenges.***

Acquisition of Skills

- ***To provide the learner with opportunities to put their abilities to work in real-life environments.***
- ***To equip the learner with basic skills which will allow them to use their abilities in the context of likely fields of employment.***

In addition to this, governments and administrators have grown increasingly concerned in recent years with the goal of degree completion. This encompasses both concerns about attrition rates, or if a degree is completed at all, and the need for the timely completion of programs. Therefore we must consider these new demands upon the system, and the expectations they provide.

- ***To make efficient use of the learner's investment of time and money, by ensuring that programs are:***
  - ! *Completed once commenced*
  - ! *Completed in a timely fashion*
  - ! *Completed in a time frame consistent with the benefit to the learner*

Barriers to Achieving Expectations

In dealing with each of the three areas of expectations, there are barriers to success. These barriers are sometimes created by trends of recent vintage, more often, they arise in areas traditionally neglected as a priority.

(A) Enhancement of Abilities

The demand for "job-ready" skills is often seen as a barrier to the development of broader critical thinking skills. It is submitted that this dichotomy is not necessary. The true barrier is how governments and society define a "job-ready" skill.

Today's learner is more likely to be entrepreneurial than past generations. She or he will have a greater need to switch occupations, to continuously upgrade skills and training, and to be skilled in more than one occupation. The ability to do these things, so critical for the job market, is an ability beyond a particular skill. It is an ability which must be developed in the individual.

The professional athlete will jump rope and climb stairs, even though no organized sport requires skipping or stair climbing. However, the conditioning of the body which results from these activities is relevant to any sport. So, too, is the conditioning of the mind to think, to solve, to be curious, relevant to every job and to the likelihood of job market success.

The detachment of job training from intellectual development in the minds of the public and politicians, as well as traditionalists within institutions, is a barrier to achieving either.

A second barrier is the diminishing of critical thinking skills as a result of or predictor of academic success. There is no standard measurement device at the majority of institutions which would allow one to see how participation in a program has transformed the ability to solve novel problems. Academic success is frequently the result of diligent adherence to repetition of material as presented, which can often be done more completely by the learner than embryonic attempts at challenging or providing it. Even worse, at some institutions there is no standard grading structure or other device, making grades a function of judicious course selection. Several student groups have recently expressed concern with the lack of support for professors in developing testing methods which allow a student to show what the results of reflection upon, rather than absorption of, course material.

This emphasis upon absorption over reflection manifests itself in a third barrier, which is the lack of opportunity for the learner to apply theory to a new problem or challenge. At the undergraduate level, there remains minimal avenues for students to put a theory into play for themselves, or to test it against others. Even the clash of theories among thinkers is often measured in the ability to summarize, rather than apply, both. This is attributable in part to large class sizes and time constraints, but also in part to the slow pace of innovation at many institutions.

Fourth and finally, while the rigour of the classroom is well maintained by most institutions, the nature and quality of student life remains an untapped resource. Too often the social and cultural atmosphere of a campus is left to student groups, who in

turn emphasize the “party”aspect of socialization. This is inevitable, even welcome, but the lack of attention to diversity of campus life is striking. Some concern must be expressed about financial strain and the need for part-time work on the part of the learner, but even allowing for this, more could be done in this area.

(B) Acquisition of Skills

Because of the underestimated nature of problem solving as a marketable skill as well as an intellectual ability, some of the same barriers exist in this area. In particular, the lack of opportunity to apply classroom learning to situations existing within the life of the learner is a barrier not only to the acquisition of problem solving skills, but to the ability of the learner to appreciate, prior to graduation, what skills are needed to complement their education.

It must also be frankly stated that at some institutions there is resistance to even considering any demand attributable to the job market. In part, this is of concern because, with the degree of financial investment now required to attend an institution, turning a blind eye to the learner’s life after graduation may be an insidious barrier to universal access. This is also a barrier to the development of skills because it fails to recognize that certain skills, such as computer operation, public speaking, entrepreneurship and even social skills may be a barrier to the future manifestation of, and growth of, the knowledge the learner has obtained.

The past dichotomy between skills and education has also produced faculty which are professional teachers and researchers, and may actually have limited experience in the jobs for which they are training people. This does not have to be a fatal flaw, since it makes the reticence of some faculty to embrace this type of training a boon which allows for extra-curricular personnel and opportunities to provide this service.

Finally, it is very easy to overstate the institution’s responsibility to build skills training into every program. The lack of career counseling and simple information on graduate study and career paths mean that the most efficient way of ensuring skill development is missed. This way is by allowing thoughtful learners to decide for themselves the skills they must acquire, and to simply make these avenues available to them.

(C) Program Completion

With all the changes in the needs of learners and the flexibility required by life and the marketplace, one must begin to ask if a traditional, four-year degree is becoming too blunt an instrument by which we measure learning. It is a common complaint among learners that undergraduate degrees leave them feeling as if they are “spinning their wheels” by the end, repeating the same cognitive tasks in slightly-varied fields, with too little opportunity to use these functions in a manner more meaningful to them.

This format may also discourage returning students from viewing the university as an appropriate place to upgrade skills, because so much time must be taken on survey courses. While some improvements have been made in this area, there remains a dearth of courses which allow for expertise applied to a particular concentration of learning, recognizing the particular area where a graduate may be exceptionally experienced.

A third barrier to the timely completion of degrees is the patchwork of policies which comprise institutional recognition of credits. Many a fifth year is spent replacing credits at one institution which were already completed in virtually the same form at another institution. As well, the failure of institutions to develop means of recognizing life experience in an academic setting adds many fruitless years to many learners' return to academic life.

The lack of qualified career advice made available to learners is also a barrier, in that students are rarely even aware of the many options for graduate studies or career-directed courses towards which they can gear their studies, resulting in lost time. This lack of career advice and guidance can also be applied to high attrition rates, since many a first year has been lost by those who are either in the wrong program or there at the wrong point in their lives.

Social integration into campus life is also linked to attrition rates, due either to poor integration, or excessive integration which interferes with studies. This refers back to the need for increased diversity of social opportunities and campus life. More pointedly, this is one area where financial barriers, whether they force the learner to choose part-time studies, require learners to drop out to earn money, or deny some students the financial wherewithal to integrate socially into campus life, cannot be ignored as the most vital issue to address.

Suggested Interventions

Despite having addressed the barriers in three separate categories, certain trends develop in the barriers to meeting the body of expectations which await higher education providers. In general, these barriers are:

- ***!*** *The failure to recognize problem solving and critical thinking as skills which cross barriers between the academic and the practical.*
- ***!*** *The lack of attention paid to how interventions in the nature of campus life can affect learner attitudes, behaviour, and achievement.*
- ***!*** *The lack of resources outside the classroom, such as career and academic counseling and integrated skills training.*
- ***!*** *The increase in financial strain brought about by higher tuition fees and debt loads.*

- ***!*** *The failure to provide opportunities for and recognition of the application of theoretical knowledge to practical, real-life problems.*
- ***!*** *The lack of co-ordinated efforts on an institutional and provincial level.*

The following, then, is a series of suggested interventions aimed at addressing these barriers.

(A) Enhancement of Abilities

1. Institutions, co-operating provincially where feasible, should design a standardized test to be given to students upon entering and departing a post-secondary program which measures critical thinking and problem solving skills. Individual scores should be given and institutional scores should be made public.

2. Faculty associations and administrations should co-operate to enhance resources available to faculty to develop and innovate teaching methods which enhance the provision and rewarding of critical thinking skills.

3. Institutions should develop academic programs which allow for the integration of theoretical teachings from the first years of a program to be applied by the learner, under supervision, to a volunteer experience, work experience, or practical experience setting of his or her choosing.

4. Institutions, faculty, and student organizations should work together to develop creative social activities on campus which enhance the campus environment in its encouragement of intellectual curiosity, discussion, and integration with the broader community.

5. Governments should implement a system of additional funding to be given to institutions with a proven track record of improving the critical thinking skills of learners to allow for new pilot projects and innovations in the delivery of post-secondary programs.

6. Governments should ensure that student aid programs recognize the real financial cost of education, including the cost of reasonable and necessary social integration into campus life.

(B) Acquisition of Skills

1. Institutions, with adequate funding from government, should provide offices for career and academic development to students.

2. Institutions, with adequate funding from government, should provide increased extra-curricular programs which develop the skills that allow knowledge to manifest itself.

3. Institutions and faculty should develop ways to measure, report and reward learners for development of problem solving and critical thinking skills.

4. Institutions should increase the number of offerings which integrate academic programs with practical programs, or which build in certificate options for applied specializations within an academic program.

(C) Completion of Degrees

1. Institutions and student organizations should co-operate to increase the number of peer counseling and mentoring programs, particularly within campus segments with high attrition rates.

2. Institutions and provincial governments should develop standards for transfers of credits and recognition of life experience as credits toward degree completion.

3. Institutions should co-operate, in conjunction with their faculty associations, on a review of degree structure and length.

4. Institutions and faculty should develop more flexible degree arrangements, offering a foundation year focused upon critical thinking skills in the context of the program, followed by a series of segments which focus on applications of these skills. These later segments should be available as certificate programs for returning learners.

5. Governments should take action to remove financial barriers which lead to part-time or interrupted studies, including tuition fee caps and debt load caps.

6. Governments and institutions should begin to study what changes in funding, scheduling and student aid would facilitate the implementation of year-round schooling.

Measuring Results

One of the structural strengths of the post-secondary system is that it is more resistant than the grade school system to being centrally micromanaged. While goals may be centrally agreed upon, those closest to learners should always be left to achieve those goals.

This is why accountability should never be demanded when transparency will do. And transparency can sometimes be thwarted by the diversity and freedom of our post-secondary structure. What a “B+” in a course at University ‘A’, may have a very different meaning, in terms of content, difficulty, and information, than a similar course at University ‘B’, or another section of the same course at the same institution. Even within institutions, there are internecine disputes about grading standards between departments, let alone faculties.

If diversity is truly the strength that administrators and faculty members claim, then there is little need to fear measurement of what courses, degrees and institutions provide their students. Even if they provide different things, the institution should be comfortable knowing that they only need deliver upon what they promise in order to attract students.

While it is subjective to grade the teaching effectiveness of a professor or the supportiveness of an institution, results can be measured in many instances. Most important to achieving transparency from these efforts is the need to gain data on the transformational effect of the institution. Too often, we fall into the same trap as Maclean's Magazine – measuring an institution by the students it takes in. While a cogent argument can be made that better students mean a better learning environment, if this is true, it will reflect in the answer to the proper question – what abilities and skills does the learner gain during their time at the institution?

While there is a benefit to offering successful programs the resources to innovate through new projects, governments should be wary of tying finances too heavily to results. Each institution makes its mission statement and goals available. By simply making information available, students, parents and the public may judge not only how well an institution fulfils an expectation, but also the importance of achieving that expectation.

(D) Recommendations for Measurement

1. Institutions, aided by government, should co-operate to develop adequate testing methods for critical thinking and problem solving skills. These tests should be administered to students upon entering and upon graduating from a program. The results should be made public sorted by institution and program, and studied to see if these skills bear a correlation to marks received.

2. Academic departments at each institution should develop a standard test to be given to graduates of their program, with results to be used internally for comparing course difficulty and instructor effectiveness.

3. Institutions should publish five year reports on attrition rates, noting in particular sub-groups of learners at risk and develop action plans to reduce that risk.

4. Governments should conduct surveys every five years of post-secondary graduates, to view at various career stages the employment rates, program satisfaction and program relevance among graduates. These results should be made public.

Council of Ministers of Education, Canada

Postsecondary Education Project
Learner Pathways and Transitions
October, 1998

POSTSECONDARY LEARNER TRANSITIONS AND PATHWAYS

Challenge Paper Prepared by

Graham S. Lowe, Professor of Sociology, University of Alberta

September, 1998

In an era of economic globalization that places a premium on knowledge, Canada should be a leader. Indeed, we possess many ingredients of a knowledge-based economy. Canada has the highest post-secondary enrolments of any OECD nation. By the mid-1990s, over four in ten adults (25 - 64 years old) had achieved a post-secondary credential. Compared to many other nations, we have a flexible and open post-secondary system that, in principle, is accessible to any group regardless of age or socio-economic status. And despite the economic turbulence of the 1990s, recent post-secondary graduates have faired relatively well in a competitive job market.

However, this positive image masks other trends within the post-secondary system and among its graduates that, if unchecked, could have negative social and economic consequences. Five issues stand out as posing public policy challenges that demand informed responses:

- developing a more comprehensive perspective on post-graduation transitions and outcomes;
- addressing the negative consequences of rising post-secondary education costs;
- removing barriers to life-long learning;
- encouraging post-secondary institutions to respond effectively to growing demands for 'employability skills'; and
- addressing the underemployment problem among graduates.

A Comprehensive View of Transitions and Outcomes

The key question is whether youth are able to launch over time fulfilling and productive lives as workers, citizens and parents. This requires a more holistic view of transitions from post-secondary education than the present limited focus on labour market outcomes. Researchers studying graduates' transitions increasingly use a "life-course" perspective, which shows how decisions about work, further education and training, living arrangements, family formation, and personal development are linked.

Since the early 1980s, transitions from school to work have become more prolonged, risky and non-linear. We need to think in terms of multiple and sequential transitions, given that more individuals are making several transitions between post-secondary programs and the labour market. In this regard, it is important to note the age variations in the graduating classes from different post-secondary institutions. In 1990, almost 2 in 5 trade and vocational program grads were age 30 or older, compared with about 1 in 4 university grads and 1 in 6 college grads. Future demographic trends suggest that the over-25 age group will become even more important as a source of post-secondary recruitment. These older students face quite different constraints and challenges from their younger counterparts, both in terms of accessing programs and in post-graduation labour market transitions. The labour market success of older graduates partly depends on how effectively their programs built on previous work experiences, a resource younger graduates lack.

To capture the full diversity and complexity of post-secondary transitions, it also is crucial to track students' movements more systematically. We know very little about what happens to students who leave a program prior to completion. This is the gray zone of post-secondary education. Knowing the reasons for not completing, tracking over the long-term whether non-completers in one institution complete a program elsewhere, and documenting the benefits of partially completed programs for individuals would be useful for institutional evaluation and planning. Similarly, the benefits of investing in post-secondary education vary substantially by field of study as well as (and in combination with) a graduate's region of residence and socio-demographic characteristics. Women, aboriginal persons, and persons with disabilities continue to face disadvantages in the labour market. Equity and efficiency would be well served if we had a more complete understanding of the barriers these groups face.

Cost and Accessibility

The rising cost of post-secondary education has generated much public concern. This problem is most visible in the rising debt loads that encumber growing numbers of graduates (for example, 57% of 1994 graduates from Alberta's four universities had student loans and other education-related debts, which averaged $15,293). Nationally, average university tuition has almost doubled since 1989. Students, university administrators and experts are calling for an overhaul of the entire post-secondary student loan system, but there is no consensus on the ideal replacement. So we risk pushing post-secondary education beyond the reach of a growing number of young people from families of average or below-average financial means, as well as adults seeking further education.

The affordability crisis has other consequences for graduates' transitions. Most notable is prolonged dependence on parents, as rising numbers of students live at home to cut costs. This option is not available for young people who live in communities that do not have local post-secondary institutions, thereby creating another barrier to access. Living with one's parents - the so-called 'cluttered nest' phenomenon - is economical, but it delays the transition to adult independence, marriage or co-habitation, and raising a family. More generally, we know little about how education-related debt influences postgraduation decisions about work, further education and personal life.

Life-Long Learning

According to public opinions polls, Canadians have a strong "education ethic", viewing training and education as the best insurance in an uncertain job market. Life-long learning could become a national objective, but we need a clear and measurable definition of exactly what it means. According to the 1995 National Graduate Survey (NGS), more than 1 in 3 university graduates and 1 in 4 college graduates in 1990 obtained another post-secondary credential. An important motivation for this further

study is career advancement. The public policy challenge is to ensure easy and equitable access to such opportunities. This will require concerted joint efforts by post-secondary institutions, employers and governments. Graduates often leave the system for a short period and then return. Most returning adults prefer part-time studies, so why have part-time post-secondary enrolments been declining since 1991/92? How can this trend be reversed, assuming that expanding opportunities for part-time post-secondary study is viewed as a centrepiece of a learning society?

In general terms, life-long learning implies that post-secondary programs and their graduates keep one step ahead of the dramatic transformations in work. To cope with relentless and often unpredictable workplace change, students require a solid base of general analytic, communications, reasoning and personal learning skills (this list is by no means exhaustive). Most vocational training is not designed to provide this. However, if there is a shortage of say computer technicians, then learning institutions and the affected industries should collaborate to design programs to quickly meet such needs. Yet anticipating specific skill shortages has been notoriously difficult. What's more, the best trained computer technician also will need a 'tool kit' of basic knowledge, skills and abilities to take advantage of new opportunities.

Employability Skills

The Conference Board of Canada's 'employability skills profile' has framed the debate about relevant job skills, despite its generality and lack of measurable outcomes. On one hand, employability skills are determined by the context in which they are applied. So perhaps each post-secondary program needs its own definition of employability skills and regular assessments of how it contributes to their development. What enhances a welding apprentice's employability is qualitatively and quantitatively different from the employability contributions of an electrical engineering degree program. On the other hand, more effort must be directed to developing reliable and valid national measures of higher-level skills that are common to all college, vocational institute, or university programs. This would establish a basic framework that specific institutions could customize to meet their unique goals and students' needs.

Programs that are not organized around a specific trade or profession (such as many Arts and Science disciplines) need to show students and prospective employers how subject area knowledge and academic skills and abilities (e.g., communications, analytical and critical thinking, information management, ethical awareness, group skills, etc.) are transferable to a wide range of practical settings - without diluting the program's academic rigour and integrity. Furthermore, it is important to recognize how a post-secondary education enriches the lives of individual graduates and their communities. So far, graduate follow-up surveys have not adequately documented the personal and social contributions of programs.

In fact, assessments of program success have revolved around a small set of labour market outcomes. So it is worth illustrating the need for a wider range of employment

outcome measures designed to assist institutions to improve their programs. One would expect that with declining job opportunities in large organizations, more graduates would be setting their sights on self-employment. However, those who envision a new entrepreneurial culture among youth will be disappointed to learn that self-employment is concentrated among older males. Preliminary 1997 NGS data suggest that less than 7% of 1995 university graduates were self-employed two years after graduating compared to a labour force average of 17%. This is hardly surprising, given the experience, financial resources, business networks, and skills required for successful self-employment. While institutions could do more to provide opportunities for those who are interested to learn the ropes of self-employment, clearly most graduates spend their early careers as employees. More useful, then, would be for post-secondary institutions to inform students about the full range of work options and their advantages and disadvantages. In short, the self-employment rate is neither a mark of success or failure, but rather useful feedback that can help institutions to fine-tune student services.

Underemployment

A sure sign of a knowledge-based, high-skill economy is how well employers recruit and utilize recent graduates, providing opportunities for continual skill and knowledge development. Regardless of how well colleges and universities fulfill their mandate to provide high quality education, the organization of work and prevailing people management practices within firms prevent optimal skill utilization.

Post-secondary graduates' low unemployment and high employment rates - at least in comparison with the labour force as a whole and, in particular, with lesser-educated young people - are often taken as signs that the system is performing well. After several years in the labour market, a large majority of these graduates find their way into full-time and permanent jobs. However, a full-time job does not necessarily make full use of one's education. The 1997 Alberta Graduate Survey of 1994 university graduates in the province found that graduates were doing quite well, having experienced a fairly smooth transition into the labour force. Yet among employed graduates (excluding those who still were students), about two-thirds were in jobs requiring a university degree, and one-quarter reported feeling overqualified for their job given their education, training and experience. Nor was there extensive use of higher-level skills, such as communications, information management, creative thinking and problem solving. Other follow-up surveys of post-secondary graduates, including the NGS, document similar underemployment problems.

These are signs of underutilized human resources that negatively affect economic productivity and diminish graduates' quality of working life. Clearly, employers must assume some responsibility for ensuring the effective integration of each new class of graduates. As a start, post-secondary institutions could educate employers about the range of their graduates' employability skills and collaborate in the design of skill-intensive entry-level jobs.

Conclusion

Five key issues - defining and measuring transitions, cost and accessibility, life-long learning, employability skills, and underemployment - provide an outline for a wide-ranging debate about post-secondary policy objectives and priorities. But this debate would be incomplete if it did not take into account public concerns about the youth jobs crisis. Given that college and university graduates have been getting most of the good jobs opening up in the 1990s (graduates from trade and vocational programs less so), young people with high school or less have been the big losers. In this respect, post-secondary education is contributing to the widening gap between haves and have-nots. Six in ten youth in the labour market have high school or less and their job prospects have worsened over the past two decades. Although the high school drop out problem is not as serious as once thought, approximately 7% of the youth population today is neither in school nor in a job. The needs of these marginalized youth require urgent attention, for they risk being excluded from mainstream social and economic life. So is it more equitable and efficient to spend additional tax dollars to smooth the transition of college and university graduates into good jobs, or to help lesser-educated and marginalized youth improve their job-related education and life skills? What are the implications of not addressing the needs of these distinct groups? Thus it is important to keep this bigger picture in view so that the costs and benefits of all policy interventions can be weighted. A complex equation to be sure, but one that any comprehensive public policy debate must carefully consider.

Council of Ministers of Education, Canada

Postsecondary Education Project
Learner Pathways and Transitions
October, 1998

TRANSITION AFTER COMPLETION OF A PSE PROGRAM TO SELF OR OTHER EMPLOYMENT

Challenge Paper Prepared by

Ken Snowden, Senior University Advisor
Universities Branch, Ministry of Education

I. Introduction

What interventions are most effective in helping graduates quickly enter the labour force and earn enough to be self-sufficient?

This question arises from what appears to be growing concern about unemployment and/or under-employment of PSE graduates and, given concerns about debt loads of graduating students, a growing interest in having students move as quickly as possible into the labour market after graduation.

This "challenge paper" addresses the question by providing an overview of the PSE sector in Ontario and then moving on to review what we know about the current transition of graduates into the labour market with reference to national and provincial information. The final part of the paper then turns to the role of universities and colleges, governments, private sector and students in improving the transition experience.

II. Overview of PSE in Ontario

The PSE sector in Ontario is comprised of Colleges of Applied Arts and Technology (CAAT's) , Universities and private postsecondary education and training facilities of various types. There are seventeen universities, twenty-five CAAT's, agricultural colleges, colleges of health sciences and of art, a military college, privately funded degree-granting institutions, and registered private vocational schools. By far, the largest proportion of students in the PSE sector are in the CAAT's and the universities. College enrolment is approximately 135,000 full-time students and 85,000 part-time students. In Ontario's universities, full-time **undergraduate** enrolment totalled approximately 200,000 with a further 65,000 **undergraduate** students enrolled part-time. Full-time **graduate** enrolment totalled approximately 28,000 with a further 9,500 **graduate** students pursuing part-time studies.

III. Current employment situation

In terms of employment data for recent graduates, there are various sources that provide information about the success of the transition from college or university or private vocational institutions into the labour force. Readers will be familiar with the National Graduate Survey (NGS) conducted by Statistics Canada that provides an overview of employment patterns for graduates from across the PSE spectrum and the country. Surveying specific graduating cohorts (1982, 1986, 1990, and 1995) the NGS provides a survey two years after graduation and a follow-up three years later.

Annually, in Ontario, the Colleges and the Ministry of Education and Training jointly produce *Employment Profile: Graduates of Ontario Colleges of Applied Arts and Technology* providing detailed information about College graduates six months after graduation. Additionally many universities now engage in surveys of graduating students where employment related information may be part of the survey. Some

provinces are now surveying graduates on an annual basis or engaged in the development of surveys that will have an employment experience component. Finally, there are Labour Force surveys that - while not focused on the PSE sector - provide employment information by age-group and other characteristics such as educational attainment.

Based on the Labour Force surveys it is clear there is a strong correlation between the level of educational attainment and likelihood of employment. The NGS suggests that transition into the labour force can take some time but improves considerably with time - that is the unemployment rate for graduates decreases markedly from two to five years after graduation. In Ontario, approximately 90% of the Class of '90 (colleges and universities) were employed within two years from graduation and approximately 95% were employed within five years.[1]

In the case of graduates from the Colleges of Applied Arts and Technology, data from the most recent survey available indicates that

> "Six months after their graduation, 17,566 or **81.7** per cent of the 1995-96 postsecondary college graduates responding to the survey were in the labour force and employed."[2]

The fact is that, as noted elsewhere,

> "By many criteria post-secondary education is success story.
> - Canada has one of the highest postsecondary participation rates if the 18-21 age group among OECD countries
> - Postsecondary graduates have higher employment rates than secondary school graduates
> - Postsecondary graduates have maintained their level of earnings in recent years despite (a) the increasing number of graduates and (b) the general decline in youth income."[3]

IV. Considerations in Evaluating the Transition Experience

Before turning specifically to measures (interventions) for improvement it is important to note five key factors:

---

[1] M. Paju, *"The Class of '90 Revisited: Report of the 1995 Follow-up Survey of 1990 Graduates"*, Education Quarterly Review, 1997, vol.4, No 4. p. 21.

[2] Ontario Ministry of Education, *Employment Profile 1995-96 Graduates of Ontario Colleges of Applied Arts and Technology*, February, 1998. p.7.

[3] CMEC, *Learner Transitions and Pathways in Postsecondary Education: Background to the Issues* (July 21, 1998 Draft p.5.)

✓ many graduates pursue additional education after graduation and thus may have quite different job expectations during the pursuit of those additional studies;

Based on data from the NGS approximately 50% of graduates from all of the PSE sector pursued additional education during the immediate five years after graduation and 30% actually completed an additional degree, diploma or additional qualification in those five years.[4]

The Maritime Provinces Higher Education Commission *Atlantic Canadian University Survey: Class of 1996* indicated that 37% of the graduates **"**returned to school in order to complete a program or take courses for credit**."** In Alberta, again, 37% of graduates had "enrolled in further post-secondary credit programs at some point the following two and one-half years. Most of this further formal education was on a full-time basis, indicating that for many students one degree is a stepping stone to another." [5]

At the College level in Ontario, the CAAT Employment Profile for 1995/96 indicates that six months after graduation approximately 20% of the graduates were engaged in full-time educational pursuits. Clearly, the pursuit of additional educational qualifications is a major factor that needs to be considered when examining the transition from PSE to the labour market.

✓ labour markets are affected by the performance of the economy in terms of job availability, remuneration, part-time/full-time and temporary versus permanent positions;

"Labour market success depends on many factors, including previous work experience, academic achievement, field of study and location. Graduates' labour market success is also affected by the prevailing economic climate and labour market conditions at the time of graduation. If unfavourable, any of these factors and conditions can make the transition from school to work more difficult for graduates and may prolong their entry into the labour force."[6]

✓ Basic demographics will also influence the rate of labour market success - the larger the size of the graduating cohort the more competition in the labour market - even in a buoyant economy. The number of degree/diploma recipients has continued to trend upwards during the 90's.

✓ The transition experience will be influenced by the area speciality with individuals in professional programs likely to have a more direct and defined transition path

---

[4] M. Paju,*"The Class of '90 Revisited: Report of the 1995 Follow-up Survey of 1990 Graduates"*, Education Quarterly Review, 1997, vol.4, No 4. p.14.

[5] H. Krahn and G. Lowe, *The 1997 Alberta Graduate Survey: Labour Market and Educational Experiences of 1994 University Graduates*, Population Research Laboratory, University of Alberta, January 1998, p.23.

[6] M. Paju,*"The Class of '90 Revisited: Report of the 1995 Follow-up Survey of 1990 Graduates"*, Education Quarterly Review, 1997, vol.4, No 4. p.15.

than those in non-professional programs. At the university level, for example, unemployment rates for recent graduates vary by field of study with health and education graduates registering the lowest levels of unemployment and graduates in the humanities and agriculture and biological sciences experiencing the highest rates.[7] However, changing labour markets due to a variety of factors - changing government funding priorities, for example, - can have a significant impact on a particular graduating cohort. For example the previous comment about education graduates was based on data from the National Graduate Survey of 1990 graduates - five years after graduation. The *Atlantic Canadian University Survey: Class of 1996* - one year after graduation - indicated that "Those graduates with the highest rates of unemployment held degrees in Education (21.7%)."[8] Clearly the labour market for education graduates changed dramatically in a relatively short period of time and can vary dramatically by region.

Programs intended to improve the transition from PSE to the labour force need to recognize the preceding realities. Finally,

✓ Despite the activities to date and the apparent increased emphasis on the transition experience there are still many unknowns about the efficacy of specific interventions.[9] Thus, as a matter of importance, additional effort is required to understand the many factors influencing the actual transition experience and the success of existing interventions.

Specific measures that could improve the understanding of the transition experience are:

- expansion of local studies (institutional and/or provincial) regarding employment transition experiences of graduating students and promoting publication of results.

- expansion of the survey sample in the Statistics Canada National Graduate Survey and additional analysis of the variables related to the employment transition experience - a new module added for the 1997 survey of 1995 graduates and likely to be the subject of monographs during 1998/99.
- the inclusion of additional analysis and questions regarding self-employment in institutional , provincial and national surveys

---

[7] M. Paju, *"The Class of '90 Revisited: Report of the 1995 Follow-up Survey of 1990 Graduates"*, Education Quarterly Review, 1997, vol.4, No 4. p.22.

[8] Maritime Provinces Higher Education Commission *Atlantic Canadian University Survey: Class of 1996*, Baseline Research Inc., 1996 p.iii.

[9] For a review of the many unknowns refer to H. Krahn, *School-Work Transitions Changing Patterns and Research Needs*, Discussion Paper, Human Resources Development Canada, March, 1996.

- careful evaluation of labour market oriented tax expenditures aimed at increasing employment (co-op tax credits, graduating student tax credits, job creation tax credits etc.).

V. Improving the Transition Experience

Post-secondary institutions, government, the private sector and students all have roles to play in actually improving the transition from PSE to the labour force.

Universities and colleges have a responsibility to provide a learning experience that equips students with the requisite skills to thrive in the labour force. That learning experience involves:

- encouraging, discussing and reinforcing the many aspects associated with employability skills (academic skills, personal management skills, teamwork skills[10]) both inside and outside the classroom;
- providing information about careers, assistance with career searches, and access to information about employment programs;
- providing opportunities for employment experience during their post-secondary period through work study programs, summer work experience programs, campus employment either directly related to the academic program (teaching assistantships, marking, demonstrating, research assistance) or through support services (library, computing, fund-raising, physical services, residence employment etc.) And through, where appropriate, co-op programs.

Over the past several years, universities and colleges have been active in meeting the labour market requirements of their students. As noted in Anisef's and Axelrod's work in the early 1990's, institutional researchers were endorsing the need for "assessments of baccalaureate graduates and their employers."[11] Establishing program Advisory Boards to receive feed-back from the private sector and public sector about their graduates, expanded work opportunities on campus, establishing mentoring programs with alumni and enhancing career services are examples of measures (interventions) aimed at improving, among other things, the employability of graduates. Many institutions are now actively engaged in surveying their students (graduating students) about their learning experience and in some cases the survey includes reference to employment information and job search activities.

At the same time institutions are beginning to publicize, in a more direct way, the expected outcomes or attributes associated with a university degree. In the case of professional programs - Law, Education, Nursing, Medicine, Engineering to name a few - those attributes tend to be set by or in conjunction with professional accreditation

---

[10]Conference Board of Canada, *Employability Skills Profile*, What Are Employers Looking For?, January 1996.

[11]P. Anisef and P. Axelrod, *Universities, Graduates and the Marketplace: Canadian Patterns and Prospects* in P. Anisef and P. Axelrod, eds., TRANSITIONS: Schooling and Employment in Canada, Thompson Educational Publishing, Inc., Toronto, 1993, p.113.

bodies. In the case of undergraduate programs in the Arts and Sciences there has long been an acknowledged set of attributes associated with those programs but more recently, some institutions have made additional efforts to ensure that students understand the link between the academic program and a set of skills/attributes[12] (Appendix B). Moreover, increasingly institutions are making deliberate efforts to introduce students in first year to the career services on campus and steps are underway to introduce career skills and career planning directly into the curriculum - in some cases as a degree credit course. [13]

The apparent increase in institutional activity in this regard must be seen as a positive development and is consistent with the added emphasis on accountability that has characterized PSE over the past several years. At the same time it is apparent the marked increase in tuition over the same time period has resulted in students taking a more active stance with respect to how tuition revenues are spent.

Governments have the responsibility to contribute to the funding of PSE institutions in a way and at levels that are competitive with other jurisdictions and ensure high levels of access to PSE.
Additionally, governments have long had a role in providing labour market information as part of the employment picture. While human resource planning is fraught with pitfalls, ensuring that timely labour market information is available for counsellors and students, is an important part of improving the transitions infrastructure. At the same time, governments can support pan-Canadian initiatives to develop a better understanding of the transition experience through the support of survey research on a scale that improves the reliability and breadth of the resulting data.

Initiatives such as the Leading Edge Technology Tax Credit and the Ontario Graduate Transitions Tax Credit may help provide an environment conducive to improving the labour market transition for students. Various incentives for job creation and self-employment may help the overall labour market transition but further effort is required to fully determine whether such interventions actually fulfill their objectives in an efficient and effective fashion.

Finally, as a leading employer, governments also have the capacity to expand internship and co-op opportunities that, in turn, would contribute to improving the transition experience for post-secondary graduates.

The **private sector** has a role to play in job creation and increasing opportunities for

---

[12] See, in particular, University of Alberta, *Success By Degrees*, *Preparing our Graduates for Alberta's Second Century*, University of Alberta, May 1997.

[13] Examples of some programs with a career planning or employability skills component range from the inclusion of such modules in a number of 4th year courses at Ryerson, the "Experience Agriculture" workplace skills program built into the degree curriculum at Guelph, a mandatory non-credit career development course in the business program at McMaster, a degree credit 4th year course for Business students at Wilfrid Laurier, and the "Career Portfolio" programme for Arts and Social Science students at Dalhousie. (Examples provided via an e-mail survey conducted by J. Kelly, Director, Career Services, Queen's University)

internships, and co-op programs. There are some stellar examples of private sector contributions and it is clear that in recent years many companies are increasing their efforts to build more inclusive partnerships with the higher education sector- partnerships that involve direct philanthropy, expanded internships and co-op placements, scholarship support, capital gifts-in-kind, and support for faculty and research endeavours.

At the same time it is clear that the private sector will benefit from expanded on the job training for specific industry related skills and thus such skills training must be regarded as an integral part of the private sector responsibility. The private sector also has a role to play in recognizing the contribution of universities and colleges to the development of the "employability skills profile" as articulated by the Conference Board of Canada, and reinforcing the concept with the PSE sector.

Students also have a major responsibility in that they must avail themselves of the opportunities and explore various avenues for employment. Building networks is an important part of the transition. Volunteer work, and part-time employment along with extra-curricular activities contribute to the development of a skill set that will prepare students for careers and improve the transition experience. At the same time students need to be aware of the skill sets they are acquiring throughout their academic careers, develop and refine them and take the initiative to become better informed about career possibilities.

VI. Concluding Comments

To determine whether some specific suggested measures are effective will require the greater utilization of some existing evaluation data such as the National Graduate Survey and publication of that data in a timely fashion. Ultimately the employment rate by age and level of education attainment will remain as a key indicator that needs to be monitored with adequate recognition of other related factors such as the performance of the economy. For each of the major participants - colleges/universities, governments, private sector and students - there are a set of responsibilities that need to be reinforced and/or acted upon and the CMEC project is the first step in that process.

In sum, the current transition experience is reasonably good and needs to be acknowledged and
publicized more widely with prospective and graduating PSE students. To improve the situation there are some specific measures that should be considered to both

A) better understand the transition experience (p.4/5), and
B) to improve the transition experience further (Appendix A).

However, there is no single measure. The recipe for improvement involves universities, colleges, governments, the private sector and students (and their families) and a host of measures - as noted previously - that recognize the role and contributions of each important ingredient.

References

1. P. Anisef and P. Axelrod, eds., TRANSITIONS: Schooling and Employment in Canada, Thompson Educational Publishing, Inc., Toronto, 1993.

2. CMEC Learner Transitions and pathways in Postsecondary Education: Background to the Issues (Unpublished 2nd Draft)

3. Conference Board of Canada, *Employability Skills Profile*, What Are Employers Looking For? January, 1996 http://www2.conferenceboard.ca/nbec/pubs.htm

4. Council Of Ontario Universities, *Ontario Universities - 1997, Resource Document*, March, 1998.

5. H. Krahn and G. Lowe, *The 1997 Alberta Graduate Survey: Labour Market and Educational Experiences of 1994 University Graduates*, Population Research Laboratory, University of Alberta, January 1998.

6. H. Krahn, *School-Work Transitions Changing Patterns and Research Needs*, Discussion Paper, Human Resources Development Canada, March, 1996.

7. Maritime Provinces Higher Education Commission, Atlantic Canadian University Survey: Class of 1996, MPHEC, 1997. http://www.gov.nb.ca/ael/lmab/product.htm for various labour market related publications**.**

8. Ontario Ministry of Education, *Employment Profile 1995-96 Graduates of Ontario Colleges of Applied Arts and Technology*, February, 1998.

9. M. Paju*, "The Class of '90 Revisited: Report of the 1995 Follow-up Survey of 1990 Graduates"*, Statistics Canada, Education Quarterly Review, 1997, vol.4, No.4.

10. Statistics Canada, *Survey of 1995 Graduates*, Information Manual, May-June 1997 http://www.statcan.ca/ for general Statistics Canada material.

11. University of Alberta, *Success By Degrees*, *Preparing our Graduates for Alberta's Second Century*, University of Alberta, May 1997.http://www.ualberta.ca/~senate/SUCCESS.HTM

Appendix A

<u>Specific</u> measures to improve the transition experience:

- greater emphasis in academic program development and delivery on key employability skills - academic skills, teamwork skills, personal management skills (universities and colleges)
- where appropriate, introduce/expand co-op elements into the curriculum (universities, colleges, governments, private sector)
- provide additional work-study opportunities for students (universities, colleges, government and private sector)
- introduce students to career services early in the university/college experience and increase the profile of career services on campus (universities and colleges)
- publicize labour market information (governments)
- establish mentor programs or linkage programs with alumni (universities, colleges, private sector).

Appendix B

Excerpt from University of Alberta, *Success By Degrees*, *Preparing our Graduates for Alberta's Second Century*, University of Alberta, May 1997

"Dr. Rod Fraser, has outlined eleven skill sets which he believes every University of Alberta student should strive to have by the time he or she graduates:

- **Critical thinking** ability
- **Communications skills** (including the ability to work in teams)
- **Independent judgment**, and the self-confidence in that judgment
- Solid, in-depth **knowledge** about at least one area of study
- The ability of **knowing how to learn**, especially concerning the understanding and capacity for carrying out a research project
- A significant **international experience**.
- Familiarity and confidence of use of **information/communications technology**,
  as a byproduct of the learning process
- The unleashing of inherent **creative** and **entrepreneurial** talents
- **Development of the whole person**, in academic study, personal fitness, cultural environment, student involvement on campus and in the broader community
- The self-knowledge and self-confidence that our students will be **citizens and leaders of tomorrow**
- The ability and confidence to **compete successfully** with the world's best.

In the best universities, students develop these universally applicable skills and abilities no matter whether they are learning about anatomy or archaeology, about chemistry or education. These skill sets are extremely useful throughout life, because they are unendingly adaptable and are exactly what today's employers are looking for when they hire."

Council of Ministers of Education, Canada

Postsecondary Education Project
Learner Pathways and Transitions
October, 1998

RETAINING INDIGENOUS STUDENTS IN POST-SECONDARY PROGRAMS:

What Means for Whose Ends?

Challenge Paper Prepared by

Roland D. Chrisjohn, Ph. D.

September, 1998

Several years ago I participated in a "round table" concerning ways of getting 1,000 Aboriginal students enrolled in a particular university by the year 2000. While most people made quite reasonable suggestions as to how this could be brought about, when it came my time to speak I repudiated the question. Instead I argued that if the university was doing something important for our nations and communities, 1,000 students on campus would be woefully inadequate for our needs; however, if what awaited these future students was a continuation of the blatant and subtle marginalization, racism, and irrelevance of the existing institution, one student on campus would be one too many. My point was that our working group's prescribed focus on a purely bureaucratic index (a head count) rather than content was misplaced. The problem was not to lure warm indigenous bodies to our school until there was a more comforting (and less obviously discriminatory) proportion of Aboriginal individuals running about. It was to create a place where Aboriginal individuals could pursue their intellectual interests in an atmosphere constitutive of, not destructive to, Aboriginal ways of life.

Consequently, when set the question: **What interventions are most effective in ensuring that a student who enters post-secondary education directly from high school has a good chance of success in his or her post-secondary studies?**, I find I have to react with similar hesitancy. By success, is "getting through them" meant? And, to what *end* is post-secondary educational success a *means*? And further, why the interest in bringing this about now? The *agenda* standing behind the statement isn't stated at all, and yet (as I shall argue below) it is essential to both recommending and implementing specific courses of action.

And I find I must curb my immediate tendency to reply sarcastically to the question. Retain indigenous students in post-secondary education programs? No problem. Make the programs of study ridiculously easy (with lots of "relating to your Indianness" and feeling good about yourself). Or, bribe the students to do every educational task, starting with the simplest of things like waking up in the mornings, showing up for classes, and doing their homework, and build from there. Or maybe it would be best to accept only ridiculously overqualified prospective students, thus assuring those who enter will exit on schedule. But then again maybe an entirely different tack is needed. Why not do what was done during the residential school era and beat and starve incoming students into compliance with the institutional performance demands? Or perhaps even more effectively, hold parents/families hostage to the favorable behavior (intellectual and otherwise) of the students, and *vice versa* students to parents/families (to ensure smooth operation on reserves and other enclaves of Aboriginal peoples). Well, irony may have its uses, but a foundation must first be laid if it is to function as anything more than wisecracking.

On the other hand, conventional thinking demands conventional answers, and on those terms it is relatively easy to comply with the letter of this Challenge Paper. Many post-secondary educational institutions have implemented and are implementing retention

programs for indigenous peoples, minorities, and disadvantaged groups, and from existing self descriptions and evaluations they all seem to work. UCLA, for example, has RAIN (Retention of American Indians Now!), Northern Arizona University has NAARP (Native American Academic Retention Program), Lake Superior College has STIPP (Services to Indian People Program), and so on, and they all provide similar interventions with a demonstrated capacity to keep North American Indigenous peoples in post-secondary programs:

(1) specialized, culturally-sensitive academic and non-academic counselling (sometimes with actual Indians functioning as counsellors);

(2) peer academic and non-academic counselling;

(3) campus orientation programs, to provide for an easier transition from home to campus;

(4) summer apprenticeship/study or academic orientation programs for high schoolers who are prospective university/college students;

(5) remedial academic short courses (e.g., math, literacy, writing);

(6) short courses in academic skill building (e.g., note taking, library research, time management, exam preparation, etc.);

(7) personal deficiency workshops (e.g., self-esteem building, anger/stress management, interpersonal relationships, etc.);

(8) assessment (vocational and academic) and assessment-based counselling (e.g., vocational counselling);

Some features of the programs are focused less on the characteristics of the “academic student” than on the “student as a human being:”

(1) transportation to and from campus;

(2) daycare facilities;

(3) study areas, kitchen facilities, and informal meeting room provision;

(4) social activity centers;

(5) student advocacy;

(6) emergency loans and financial assistance counselling;

And some program features don't consider the students as the sole locus of the retention "problem" or the retaining intervention:

> (1) sensitivity/race awareness training for institutional faculty, administration, and staff;
>
> (2) sensitivity/race awareness training (often during orientation) for incoming mainstream students;
>
> (3) affirmative action hiring of faculty, administration, and staff, so that indigenous students will encounter other indigenous people in positions of authority and responsibility in the post-secondary setting;
>
> (4) for some campuses, replacement/elimination of stigmatizing Indian mascots and logos;
>
> (5) (very rarely) modification of existing course content and curricula to reflect indigenous viewpoints, knowledge, history, and/or contributions. (This feature must be distinguished from the development and inclusion of "indigenous specific" programs of study, like Native Indian Teacher Education Programs, Native Studies departments, and such like, which are often thought of as being intrinsically attractive to Aboriginal students, even if of marginal academic respectability or intellectual interest/content.)

Frankly, I believe this is the kind of list expected from readers of this Challenge Paper, and, with all honesty, I must admit that these things have worked in the past and will work in the future: initiate as many of these programs as is feasible within a post-secondary setting, and indigenous students will (1) be attracted to those campuses and (2) complete a course of study. If this statement satisfies your need, read no further.

Having said this, however, I must restate my objection, originally raised in response to the "head count" mentality I encountered years ago: these procedures are uniformly averse to the educational objective of creating a place where Aboriginal individuals can pursue their intellectual interests in an atmosphere constitutive of, not destructive to, Aboriginal ways of life. If this is thought a harsh judgement, the reader needs a dose of reality. The most singular, consistent fact about Indian Education is that it has never been concerned with education. Since Confederation, what has been passed off onto us in the name of education has been an admixture of indoctrination (in western civilization, religion, worldview, behavior, etc.) and vocationalism, the combination euphemistically labeled a "policy of assimilation," but in fact constituting a policy of genocide. The relative proportions of this combination of non-educational aims varied with type of institution (e.g., residential schools vs. public schools) and time (blatantly religious indoctrination being phased out with the movement toward public schooling of Indian children). The agenda at the beginning was straightforward: Indians would become "absorbed into the body politic" or would evaporate, so that (except for the tan)

those who hadn't evaporated would be no more recognizable *as* Indians than a Scots or an Welsh is (to be) differentiable from a Britain. And, though concealed in flowery, generous sounding language, the impetus behind the agenda was the elimination of federal obligations (moral and legal) to the Aboriginal owners of Canada and their heirs.

Now, what has changed since the bad old days? As already mentioned, variations of Christianity are less incessantly pounded into the heads of indigenous students (it being merely assumed now, as is the general structure of western ideology). Furthermore, the daily dosage of vocationalism is no longer administered in Total Institutions (to use Goffman's phrase) like residential schools, but instead students are allowed to return home to receive an extended message of modernity from television, movies, sports activities, and similar disguised forums. And finally, rather than having to administer the new lessons with generous helpings of physical and/or emotional abuse, children are allowed to draw their own conclusions from the consistent underlying theme of late 20th century existence: do as you're told and you will live (sometimes even comfortably); get out of line and you will wither and die.

However, while these cosmetic changes might be thought of as "advances" by some, the bottom line is that the agenda and the impetus behind it remains the same. It is from these considerations that I've argued for years that "residential schools" in the most meaningful sense of the phrase never ceased operation; they merely changed their clothes and went back to work.

The unabated persistence of the attitude isn't difficult at all to see. For example, on page 501 of **Gathering Strength**, the third volume of the **Report of the Royal Commission on Aboriginal Peoples**, (RCAP) released in 1996, we read:

> We envisage a world where the representation of Aboriginal people among doctors, engineers, carpenters, entrepreneurs, biotechnologists, scientists, computer specialists, artists, professors, archaeologists and individuals in other careers is comparable to that of any other segment of the population. Aboriginal leaders who signed treaties earlier in our history sought education that would give their children the knowledge and skills to participate as equals in the Canadian economy that was emerging.

The authors (nowhere specified as Aboriginal or non-Aboriginal, or as anything else for that matter) envisage the world aimed at by Duncan Campbell Scott, Jean Chretien in his 1969 **White Paper** policy, Eric Nielsen in his 1985 **Indian and Native Programs** report, the present Reform Party platform on Aboriginal Affairs, and any group which considers the burden of living up to treaties *onerous*, which finds attention to human, economic, civil, political, linguistic, religious, and educational rights of "internal minorities" *burdensome*, and which finds the persistence of justified Aboriginal claims to the lands and resources of what they now call "Canada" *troublesome*. And to insinuate

this agenda, the authors are willing (as in all the documents cited here) to play fast and loose with history. Our ancestors were *not* signing us away to become fodder for industry or cogs in someone else's machine: they deemed education, *real* education and not indoctrination and vocationalism, as the means of securing our survival *as* Aboriginal peoples. They could only pray that Canadians would take these agreements as sacred trusts, and not as licenses to destroy.

What has any of this to do with possible programs of post-secondary retention of indigenous students? Well, existing Canadian colleges and universities (1) unquestioningly assume the ideology of western civilization and (2) enforce adherence to that ideology in both subtle and obvious ways. The delineation of that ideology would take at least an entire book (which I hope to write someday), but to summarize it all too succinctly, it is a belief (formally called *methodological individualism* or MI) that the understanding and explanation of all phenomena must be situated within what individuals think, choose, and do. This is not the place to go into detail, but this belief is simply wrong (the simplest refutation was once given by Joseph Schwartz: "You cannot predict the shape of the Royal Albert Hall by the knowledge that it is made of bricks"). However, like a belief that tulips are a suitable medium of exchange, it is possible to base an entire way of life upon it. By the same token, there is not just *one* way people can live without believing in MI, so there is little point in trying to find something common in all the indigenous forms of life that do not share MI's central presumption.

Go back to the lists of retention interventions I produced earlier and examine them in light of what I've called the central presumption: academic counselling (peer or otherwise), remedial courses, orientation programs, assessment, etc., all presume that the difficulty in getting the indigenous student to finish the program is something that is wrong within those individual students; "human" interventions, such as transportation help, daycare facilities, and financial assistance presume an individual problem with individual problems in living; and even sensitivity training and affirmative action (which will lead to the production of "role models" for the deficient indigenous students) presume a local individual defect in faculty, staff, and students that can be overcome with a bit of fine tuning. This constitutes part of what I mean by saying that existing post-secondary institutions accepting the ideology of western civilization and subtlety and obviously enforcing adherence to it.

The only hint that there may be another world of "interventions" to examine comes from modification of course content and curricula; that is, such an intervention acknowledges slightly that perhaps there is more than one side to a particular story. However, even this is done as an "add-on" or afterthought" to an existing ideological system that, in its own depths of self-criticism, finds itself merely in need of a bit of adjustment rather than a thoroughgoing overhaul and reformulation. Nowhere do these interventions examine the question of whether or not what is happening to Aboriginal students in post-secondary institutions is something that *should* be happening to them. The *end* to which formal education (primary through post-secondary) is a *means* is the assimilation

of Aboriginal individuals into the Canadian mainstream. As I have argued elsewhere, for *assimilation* read *genocide*.

The educational experience of Aboriginal peoples thus comes down to some very stark realizations: (1) regardless of what people say it's doing, formal education of indigenous peoples in Canada has constituted a major part of a relentless attack on Aboriginal forms of life; (2) Aboriginal forms of life retain their viability in great measure because of the *rejection* of formal education by indigenous individuals (as I've written elsewhere, many Indian Nations are strong today *because* many of our parents and grandparents were "dropouts"); (3) nothing in the cultural milieu of educational theory and practice indicates a breakthrough in self-criticism or a reform in the mainstream education of indigenous peoples; if anything, the continued (if subtle) application of models of deficiency, disease, and defect to *us* argues strongly that nothing has changed; and (4) consequently, these "new" initiatives towards retention of Aboriginal students have, *mutatis mutandis*, the cachet of the development of the Gatling Gun.

Nor can we neglect the political economy of what has been done to us and called "education." There's no need to go over the details of how public school systems used federal subsidies to finance capital projects, dropping (figuratively and literally) Indian students once payments had been received; or of how universities and colleges added "Indian" programs in response to federal funding initiatives (that is, program needs as identified by the mainstream politicians and bureaucrats, not by Aboriginal peoples), only to drop them once the initial funding period passed; or of how unilateral federal "interpretations" of treaties have uniformly "found" that obligations are limited and particular, so that non-mainstream institutions receive little or no funding and "unapproved" education is not supported at all; and so on. But, given such a history, am I compelled to believe that the sudden need to "retain" indigenous students in post-secondary institutions is a purely humanitarian act on the part of post-secondary educators? ...or is it easier to assume that possible future initiatives like the projected training of 10,000 "social healers and therapists," as recommended by the **Report of the Royal Commission on Aboriginal Peoples**, has more to do with colleges and universities desiring to attract and retain Aboriginal students? Note, in addition, that I need not impugn the motives of mainstream educators (in fact I can't, since they haven't provided a statement of motives that I can react to): however, even assuming the "best of intentions" behind the interest in retention, I still must question the assumptions of *what* is to be taught to indigenous students by *whom*, and for *whose* purpose. I don't pretend to know the why's and wherefore's of the present initiatives, or whether there are other agendas lurking in the background. It's sufficient for me to know *historically* that what little good that has been done us in the name of education has been more central to someone else's purpose than to ours.

And finally, we can't neglect the political imperatives of control, whether from the perspective of federal and provincial governments or from the perspective of educational institutions and professional organizations themselves. The indigenous

people's reaction to Chretien's **White Paper**, for example, was a rise in the consciousness of the centrality of education to our struggle for survival, a rise that was epitomized in such documents as **Citizens Plus** by the Chiefs of Alberta, **Wahbung: Our Tomorrows** by the Indian Tribes of Manitoba, and **Indian Control of Indian Education** by the National Indian Brotherhood. In 1973, the federal government formally adopted the thrust of these documents as education policy, and then proceeded to eviscerate the initiative by redefining the word "control" to mean "the freedom for Indian Nations to do what we say the way we say to do it." The manner in which this was achieved? Unwavering INAC control over education budgets and funding allocations, enforced by a newly-found (in that it was absent during the residential school era) loyalty to educational "standards," formal "credentials," and similar artifices that sidetracked any serious discussion of alternatives. The Alice-in-Wonderland fallout observable today from separating financial control from educational planning includes such absurdities as First Nations desperately trying to meet the requirements for declaring large segments of their student populations "learning disabled" so that they will be able to secure sufficient operational funds. In the old days, the mainstream called us stupid; today, we do it ourselves.

Control was asserted and continues to be maintained no less by the educational profession itself, and in a manner that speaks not so much of *collusion* (that is, no *conspiracy* is needed to explain how it came about) as it does about the generalized acceptance of an unstated ideology by distinguishable mainstream bureaucracies (government departments and post-secondary institutions). Even with "Indian" control, it was "obvious" (to bureaucrat and educator alike) that those Indians in control (whether it was in a classroom, an accounting office, a physical plant, or whatever) would have to be *qualified*, wouldn't they? And where would they *get* those qualifications? Why, at mainstream post-secondary institutions, of course. And how would those qualifications be judged? Why, obviously, by the graduation candidate's adherence to the unstated and unexamined ideology of the mainstream, as reflected in his or her course work, writing, and other forms of academic discharge.

In all this it struck no one as remarkable that the mainstream that was supposedly giving up "control" would still hold the purse strings and decide who was and was not a suitable functionary within the "new" Indian education to be brought about, just as it's not supposed to be remarkable that the legal and judicial system that countenanced residential schooling for more than 100 years is now supposed to be able to judge the damages the program did to individual abuse claimants. It was *taken for granted* that Indian control would have to accommodate itself to budgetary supervision, and it was *taken for granted* that it would have to accept the intellectual authority of someone else, just as the universities and professional organizations (e.g., educators, psychologists doing educational testing) could take for granted the government would enforce adherence to their particular competence criteria. The upshot of maintenance of control by both the governmental and the educational institutions is that today, Indian

control of Indian education is empty rhetoric. Not even a dream deferred, it is a penciled-in sketch that never left the drawing board.

Again, given this history, what is to be made of the desire to retain indigenous students "to term" in post-secondary programs? If the culmination of the initiative is anything other than a desire to increase the number of nominally indigenous individuals who are willing to accept the cultural, intellectual, and pragmatic domination of the mainstream, I fail to see any indication of it. And I find it dubious that such a program could meet the condition I consider essential (that education create a place for Aboriginal individuals where they can pursue their intellectual interests in an atmosphere constitutive of, not destructive to, Aboriginal ways of life).

I must believe that the kind of position I'm taking is unfamiliar to many of the people reading this essay. If so, I hope I have been clear: education has, wittingly and/or unwittingly, continually been used as a weapon of assimilation against the Aboriginal peoples of Canada, and there's every reason to believe the concern about retention is more of the same. However, If you can accept that (1) a sizable proportion of indigenous peoples don't wish to be assimilated, (2) indigenous groups have the human rights to their cultures, languages, religious convictions, etc., (and see the United Nations **Declaration of the Rights of Persons Belonging to National or Ethnic, Religious, and Linguistic Minorities** for that standard supposedly adhered to by "civilized" countries), and (3) that education is a means of securing those rights, then I feel compelled to be presumptuous one more time: there are steps that can be taken that will be effective in graduating indigenous students from post-secondary programs, and those steps would be constitutive of, not destructive to, Aboriginal ways of life. I provide these in the belief that my ancestors were perspicacious in understanding that true education was indispensable to the continued existence of our Nations, that people in positions of authority in the mainstream can make differences if they choose to, and that, divested of latent ideologies, there are no fundamental conflicts between *education* and *Indian education*.

> (1) heal thyself. The ideological division between the mainstream and various indigenous nations is not rhetorical blathering on my part, but the source of friction that all too often develops as Aboriginal students make their way further into formal education. The mainstream educators, philosophers of education, education policy makers, and so on, must understand their ideology, *that it is* an ideology, and that it infests theory in practice to the extent that education has become all too irrelevant to all too many people, Indian and otherwise. Once the influence and extension of this ideology is made clear, the mainstream (if it so chooses) can continue on with it, while treating ideological alternatives as the business of this group or that group. After all, political differences in Canada are still settled by elections, and religious conflicts (though

sometimes heated), no longer lead to internecine war, exclusion, or burning at the stake.

(2) increase support for First Nations schools. If you want a better graduate student, make a better undergraduate student, a better secondary student, a better primary student, and so on. Students entering college or university with a sound educational foundation, secure in themselves, with a well-founded belief that the system she/he is entering has much to teach while not attacking the core of who she/he is, must have a better chance of carrying through than someone without such security. First Nations schools are better positioned than any other to bring these conditions about, if provided with the support needed.

(3) fund indigenous organizations in curriculum development programs. There are virtually no funds available (except on an case-by-case basis for individual university-based researchers) for curriculum development, any yet without a thorough commitment to this activity neither (1), the critical examination of the ideological presumptions of mainstream education, nor (2), the improvement of education in First Nations schools, can take place.

(4) fund First Nations post-secondary institutions. Rather than treating First Nations post-secondary institutions as some sort of "rivals" of mainstream institutions, or as respectable only to the extent they accept the administrative and intellectual domination of non-Aboriginal colleges and universities, they should be created as viable on-going educational concerns. This means proper buildings, libraries, faculty, support staff, and so on. Not only would this development contribute to each of the initiatives already mentioned (for example, curriculum development for Aboriginal primary schools would doubtless be a part of the activities a stable First Nations college would engage in), it would assist in bringing about the intellectual climate necessary for indigenous peoples of all ages to appreciate the value of true education.

(5) control means control. In fact, most of what I've mentioned thus far would be an organic unfolding of something the government already pretends to be doing: turning over control of Indian education to Indians. What is necessary is not the appearance of control I've already criticized, but control that does not divorce financial planning from educational program planning (or from economic, or health, or social service planning, for all that matter), control that recognizes as a sovereign right the prerogative to decide who is competent and who not. First Nations initiatives like FNAHEC (First Nations Adult and Higher Education Consortium), which is creating an internal, self-critical accreditation and certification process for higher education programs within First Nations,

> are important strides toward real control, and it is within the power of existing mainstream institutions to demonstrate their commitment to control by supporting these ventures.

Finally, go back to the list I provided at the beginning of this essay. If you truly want Aboriginal students to complete their projected courses of post-secondary studies, undertake the five initiatives mentioned above *and* all the initiatives listed earlier. For it is not the *activities themselves* that are destructive to Aboriginal ways of life, but the *context in which they occur*. If the context celebrates our forms of life, if the information offered therein is allowed to become the natural extension of the intellectual interests of the student, and if the student sees his/her intellectual efforts contributing to that chain of being that is his/her people, then those programs will be accepted in the spirit given, as sincere efforts to ease the labors of a truly daunting task. Without that context, however, those initiatives must come to be seen as something else, something sinister: the cheese in the trap; lip-service to tolerance; the hypocrisy of a hidden agenda.

Is the relation between indigenous forms of life and the Canadian mainstream necessarily adversarial? Must education be deformed into one more instrument of an ongoing campaign of assimilating indigenous peoples? Are Aboriginal Peoples fated to become a nostalgic footnote in the dustbin of history? No, to all of these, or I would not have bothered to write this essay. None of what I suggest can or will happen overnight, but to overthrow an injustice it is not enough to simply identify it, nor merely to understand it, nor even to know what must be done. If the historic and continuing abuses done indigenous peoples in the name of education is to stop, it requires we act.

Learner Pathways and Transitions
Guidelines - the Roundtable Process

The Roundtables

The purpose of the consultation process was to get active and constructive feedback from a diverse group of practitioners, policymakers and other stakeholders on the issues raised in the Background and Challenge papers, thereby providing the basis for a synthesis report to senior officials.

Each of three consultations took the form of a day-long roundtable involving a mix of stakeholders designed to cover the topics from a diversity of perspectives.

Some of the issues that were considered in development of the Roundtable participation are outlined below in the event that other jurisdictions and stakeholders wish to employ a comparable consultation process.

Roundtable Size and Composition

Size. Roundtables were designed to include a reasonable mix of people from different "stakeholder" groups while at the same time remaining small enough to allow for a truly interactive and productive exchange if ideas.

Composition. There were seven different "groups" targeted for participation in each of the roundtables:

- Current students (1-2)
- Recent graduates (1-2)
- K-12 sector representatives (either school-level administrators or counsellors) (1)
- PSE academic staff (1-2)
- PSE administrators (1-2)
- Government policy makers (1-3 depending on number of interested jurisdictions)
- Interested external members of the Community.

In each case, efforts were made to ensure that the participants from the post-secondary field included both the university and community college sectors.

"Interested External Members of the Community" was intended to cover a broad range of people, including employers (for a perspective from the workplace), prominent members of the community at large with an interest in education, individuals from policy think tanks and citizen's groups, academics with a research interest in transitions. Participants were not seen as "representatives" of their respective stakeholder groups, but are invited to provide their personal input.

Roundtable: Scope and Location

Process: It was decided that having each group discuss all of the three sub-themes together would provide for a more comprehensive and wide-ranging discussion. A professional facilitator was used to ensure that each of the three themes received critical attention over the course of a day-long roundtable.

Participants in Roundtable Discussions

Halifax 7 November 1998

Shawn Rouse	St. Thomas University and ITI (recent graduate)
Kelly McKnight	Nova Scotia Community College
Margaret Layden-Oreto	Government of New Brunswick
Eric McKee	Dalhousie University
John Crossley	University of Prince Edward Island
Carrie Ricker	St. Thomas University
Ann Petley-Jones	Nova Scotia Power
Marilyn Luscombe	College of the North Atlantic
Judith Potter	University of New Brunswick
Annette Albert	Government of New Brunswick (Observer)

Calgary 14 November 1998

Charlotte French	Simon Fraser University
Donald J. Rogers	University of Manitoba
Robert Devrome	Consultant
Dale Dorn	Vancouver Community College
Betty Donaldson	University of Calgary
Karen Schiltroth	University of Alberta (recent graduate)
Kara Vatne	Southern Alberta Institute of Technology
Wayne Thomas	William Aberhardt High School
Harry Reding	Reding Instruments Ltd.
Murray Baker	Consultant

Toronto 21 November 1998

Bonnie Patterson	Trent University
Diana Royce	HEAL Net
Laurel Hartwick	Centennial College
Gerry Fedchun	Automotive Parts Manufacturers Association
Susan Desjardins	Nortel
Jim Barrett	Royal Military College
Sam Johnston	McGill University
Eric Hoffstein	University of Windsor
Terry Dance	Sir Sandford Fleming College
Frank Marsh	Cambrian College

Resource Persons present in some or all of the Roundtables

Alex Usher	Alex Usher Consulting
John Butcher	Facilitator
Robert Patry	Co-ordinator, Postsecondary education, CMEC
Janet Halliwell	JEH Associates Inc.