The History of Post-Secondary Finance in Alberta - An Analysis

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Abstract

Post-secondary systems throughout Canada and the United States have struggled with funding issues during most of the last decade of the 20th Century, and the new millennium did not open with great enthusiasm for change. This article examines the impact of post-secondary education funding changes in Alberta, Canada, by tracing the historical development of funding initiatives. Historically, the province has relied extensively upon federal financial support to maintain programs of higher education, but that support has diminished as the federal government reduced transfer payments for social programs to all provinces. The decrease in federal funding coincided with the Alberta Government's initiative to reduce the provincial fiscal deficit. Concomitantly, the provincial government sought to impose performance-based funding, and emphasized a business-planning model upon public colleges and universities. The nature of the government actions is analyzed in relation to the concepts of efficiency of teaching, goodness of fit, and value-for-money.

Introduction

Canada is a federalist nation and is made up of 10 provinces and 3 territories, of which Alberta is the 4th largest province. The British North American Act of 1867 became the constitutional document that determined federal and provincial government areas of responsibility and gave the provinces jurisdiction for the administration of education. Historically and presently, the federal government has channeled money to post-secondary programs, but the administration of higher education has remained the responsibility of the provinces. Because of the constitutional division of powers that have maintained the right of the provinces to control education, Canada remains one of the few countries in the world that does not have a national office of education.

Emergence of Federal Involvement in Funding Post-secondary Education

In the early years of confederation, the level of federal government involvement in post-secondary education was minimal. Funding for post-secondary education was not a national priority. Each of the initial four provinces had a university within its jurisdictional boundaries, either affiliated with a religion, or were "land grant" universities for which the federal government provided land that could be sold to finance the institution. The level of federal government interest and involvement in post-secondary education remained minimal until after W.W. I, when increased funds were provided to encourage technical and vocational training. Subsequently, in 1945, the federal government provided per capita grants to institutions enrolling veterans through the Veterans Rehabilitation Act.

Six years later (1951-52), recommendations from the Massey Commission led to legislation in which the federal government provided grants directly to Canadian post-secondary institutes at a rate of fifty cents per capita (Cameron, 1997). The process of direct funding bypassed provincial administrative hierarchies, and some provinces, most notably Quebec, disagreed with funds flowing directly to institutions that were under provincial control. In response to the issue about autonomy, the federal government's direct grants for operating expenses shifted to a cost sharing of operating expenses in the 1960s. Transfer and cash payments were channeled through respective provinces, which allowed the federal government to maintain a presence in post-secondary education (Sale, 1992).

Decline of Federal Funding for Post-secondary Education

Federal funds continued to flow at the fifty percent rate until 1972. At that time, the government placed limitations on the amount of money transferred from federal coffers through cash payments and tax concessions. Also, the level of contributions from the federal government was capped to not exceed a 15% increase of the money transferred during the previous year (Savage & Bellaire, 1981). The restricted funding remained in effect until 1977, when the federal government created the Established Programs Financing (EPF) arrangements. The purpose was to deal with health and education money transferred from the federal government to the provincial governments. Those arrangements were designed to allow the federal government to withdraw from the cost-shared aspect of several social programs, including higher education. The result was annual lump-sum monetary transfers to provinces for supporting higher education and social programs, but now federal transfer monies could be used at the discretion of the provincial governments.

Although less federal money went to the provinces, the EDF allowed greater discretion on how to spend funds, often creating difficult choices for provincial governments to decide among health, education, and social programs. At the same time, the EDF set the stage for a major shift in funding levels, as the federal government began to reduce its responsibility for paying for half of all post-secondary expenditures in Canada (Perrins, 1998). The EPF also changed the format for transfer payments, resorting to a federal formula for the transfer of funds through personal and corporate tax benefits, rather than cash. With a spirit of federalism, the government wanted to ensure a minimal level of funding for higher education. Federalists believed funds provided for post-secondary programs were an "investment that would pay high economic returns in contributing to an ever-expanding gross national product that would more fully permit the meeting of economic and social goals" (Graham, 1981, p. 85). By supporting tax breaks for higher education, the federal government elevated its profile while actually decreasing its investment.

Table 1: Post-secondary expenditures (P.S.E.) per capita and federal CHST cash transfer per capita. Alberta (CIAU as cited in Robinson. 2001)

	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99
Provincial P.S.E. expenditures per capita	715	680	660	680	640	580	550	400	300	N/A
Federal CEIST cash transfers for P.S.E. (millions)	490	440	430	440	440	380	340	320	340	246

In 1982, the federal government simplified the transfer formula, and unilaterally set limits for transfer payments; this made it easier to reduce the federal level of contributions. Three years later, in 1985, the formula changed again resulting in a further decline from the federal coffers. Transfers to provinces continued to be reduced, and between 1995 and 1997, the decrement amounted to 37% (Cameron, 1997). In 1997, the Canada Health and Social Transfer (CHST) program replaced the Established Programs Financing (EPF) system of transfer payments for post-secondary education in Canada. Since the introduction of the CHST, cash transfers to the provinces were reduced by another 31 per cent (Canadian Association of University Teachers, 2001).

By way of illustration, the reduction in federal payments for higher education, in per capita terms for the province of Alberta dropped from \$490 per capita in 1989-90 to \$340 in 1997-98, a 36% decrease. Concurrently, there was a corresponding drop in per capita post-secondary funding from the Alberta government, from \$715 in 1989-1990 to \$300 in 1997-1998. This amounted to a 41.9 % decrease (Robinson, 2001).

Table 2: Canadian Provincial Operating Grants to Universities (CIAU, 2000) Per Capita

	92/93	94/95	96/97	98/99	99/00	% Change
						92/93 - 99/00
Canada	203	188	163	153	152	-25.1%
Newfoundland	233	22	200	189	201	-13.7%
Prince Edward	210	184	178	161	158	-24.8%
Island						
Nova Scotia	216	199	177	178	182	-15.7%
New Brunswick	196	197	194	186	186	-5.1%
Quebec	255	253	216	186	184	-27.8%
Ontario	180	159	129	126	125	-30.6%

Manitoba	195	178	177	176	175	-10.3%
Saskatchewan	177	158	154	153	158	-10.7%
Alberta	204	176	155	150	147	-27.9%
British Columbia	167	161	149	148	149	-10.8%

The continued decline in funding from provincial and federal sources created a great deal of pressure on post-secondary institutions because they had developed momentum to accommodate larger numbers of students, more diversity in terms of students and a general expansion in programs to better reflect mission statements. The continued erosion in funding was a brutal and unanticipated barrier to meeting goals and complying with mission statements. In response, the Canadian Association of University Teachers (CAUT) publicly called for restoration of funding to prior levels, and to reverse the 44% decline in higher education support throughout Canada between 1992 and 1999 (CAUT, 1999). Immediate action was called for to address the critical issues of qualified and sufficient faculty members, assessing reasonable student costs to encourage Canadians to continue pursuing higher education, the crowded classes, and the newly recognized need to curtail courses and impose limits on enrollments in classes, programs of instruction, and institutions.

Alberta Higher Education Funding

The provincial government of Alberta provides monetary support to 26 post-secondary institutions, which includes four universities, two technical institutes, 15 public colleges, four private university colleges¹, and the Banff Center for Continuing Education. Historically, the Alberta Government provided the funding through the Advanced Education Department, which had sole responsibility for higher education in the province. But in 2000, the Provincial government combined K-12 and higher education into one department named Alberta Learning, creating a K-16 model.

Alberta Learning provides the majority of funding for financing provincial post-secondary education. Institutions raise other funds by providing services on a fee basis, generating tuition and other student fees, and offering non-credit and off-campus credit programming. Additional

monies come from donations, sponsored research funding from provincial and federal agencies and private industry, and investments.

Concomitant with the decrease in federal support, the Alberta Provincial Government contributions to operating expenses of post-secondary institutions decreased from 9% of total provincial government expenditures in 1994 to 6.2% of total expenditures in 2000. On the national level, the province of Alberta moved from 1st in per capita funding for post-secondary education in 1984 to 9th in 2000, out of 10 provinces (Confederation of Alberta Faculty Associations, 2000). Juxtaposing the cuts from both the federal and provincial governments created a severe funding problem for Alberta post-secondary institutions. It was a situation exacerbated by national and global economic circumstances and led to striking tuition increases and institutional contractions.

Alberta Post-secondary Funding 1960 – 1990

Funding for Alberta post-secondary education before the 1960s was predominately from federal sources, and there was no focused provincial effort. In 1966, the province of Alberta began providing operating grants on the basis of a formula that considered full-time enrollments and weighting by program, thus allowing capital intensive initiatives for research equipment or apprenticeship programs to receive additional support. In 1972, the Department of Advanced education was established and the following year (1973) the provincial government discontinued the formula mechanism in favor of a base grant system that was established on a three-year projection of operating costs (Andrews, Holdaway, & Mowat, 1997). That process permitted greater centralization and the projections were subjected to the scrutiny of the Department of Advanced Education, thus allowing for a greater level of control over post-secondary funds.

In 1976, the Alberta Government incorporated a block grant using the previous year's base grant and the rate of inflation to determine funding. The provincial government also made adjustments to the funding to include new programs and facilities approved by the government. The process was formalized during 1981-1982 with the introduction of a Supplementary Enrollment Fund, which factored in enrollment increases.

In 1987, a study entitled, *Post-secondary operating grants in Alberta: An equity study* (Dupre, 1987), led to a re-evaluation of provincial funding processes, and a focus on equity. The report focused on a historical perspective, noting that funding was based primarily on an enrollment-driven formula, which was not equitable for all institutions. Some academic and vocational programs were more expensive to operate than others.

The equity study led to the Alberta Government again changing its means for supporting higher education by providing a base operating grant plus supplemental funding for enrollment increases and a separate grant for capital renewal. Those initiatives allowed more funds to flow to instructional programs and also provided for selected capital projects. During that period of time, the provincial government continued shifting methods for funding post-secondary institutions. The changes resulted in an unstable environment and further reinforced the government's control over higher education institutions. Issues over funding would continue to plague post-secondary education in Alberta, with the greatest changes to come during the 1990s.

Alberta Post-secondary Funding 1990 – 2000

That decade saw the introduction of funding caps and ended with a sharp reduction in overall support for post-secondary programs. It was part of the province's deficit reduction strategy. In 1991-92, the provincial government introduced a funding cap on post-secondary spending. Until then, capital grants were based on a formula relative to facility size, replacement value and the life cycle of the assets. In 1990-1991, the government discontinued the capital grant program. In its place were funding levels for capital expenditures set at those used in 1986-87 (Adult Learning Division, Alberta Education, 2000b), and it established the funding levels for capital expenditures at those used in the 1986-1987 year (Adult Learning Division, Alberta Education, 2000b).

For the fiscal year 1993-1994, the provincial government rolled all capital renewal funding into the institutional operating grants. Concurrently, the Alberta government created a tuition fee policy allowing institutions to raise student tuition levels to a maximum of 30% of an institution's operating costs. The intent of maximizing tuition income was to place more of the

burden for financing of post-secondary education on the students. It was a blatant departure from the federalist posture but considered a necessity in the face of a mounting provincial fiscal crisis. During that time, the only area to experience an increase in higher education financial support was the Access Fund, which was designed to finance innovative programs meeting predetermined government criteria. Some pointed out the government's obvious influence on higher education and the less than covert pressure to accelerate some areas of study while treating others apparently with benign neglect. Even with those combined funds, the base operating grants for post-secondary education were reduced by 21% during the next three years (Alberta Learning, 2000b).

Curtailed support

At the same time as funds were reduced, performance-driven funding was introduced to channel funds to specific areas. In response to the decreased support from the Alberta Government, post-secondary institutions sought to maintain quality programming by increasing student fees, reducing employees' wages, and by eliminating faculty positions. Caught in the vortex of the fiscal storm were current and prospective students.

Actions by two of Alberta's universities illustrated strategies employed to cope with the monetary losses. The University of Alberta reduced wages by 5%, cut 200 faculty positions, and over a three-year period, raised tuition fees from \$1600 to \$3000 annually (Bercuson, Bothwell, & Granatstein, 1997). Using a calculation of constant 1995 Canadian dollars, annual tuition fees for the University of Calgary students rose from \$1326 in 1989 to \$3837 in 1999 (Barnetson, 1999, based on information cited by the University of Calgary Student Union). The obvious implication was higher education was being priced beyond the reach of many potential students and was imposing monumental and unanticipated burdens upon many existing students. Instead of encouraging education for all citizens, circumstances were creating a situation bordering on becoming untenable; it was becoming an opportunity increasingly limited to the financial elite.

Increased full load equivalent (FLE)

From 1994 to 2000, the post-secondary system was hit with drastic budget cutbacks, yet it was a time of increased student enrollment. From the 1994-95 to 1998-1999, the Full Load Equivalent enrollment of students rose from 106,057,000 to 115,331,100. At the same time, funding fell correspondingly from \$800,292,205 to \$800,079,418 (Alberta Learning, 2000a). Along with the initial budget cuts of 1994, the government introduced a funding system that consisted of base operations grants, and targeted funding in the form of envelopes. The targeted funding was designed to meet government determined program needs in specific areas and came from three departments: Advanced Education, Infrastructure, and Innovation and Science.

In 1994, the government also came forward with a working document titled *An Agenda for Change* (Alberta Advanced Education and Career Development, 1994a). Responses to this working document led to the publication of *New Directions in Adult Learning in Alberta* (Alberta Advanced Education and Career Development 1994b), a document that would guide government policy on post-secondary issues into the new millennium. This was the first time that the four major goals were introduced: increased accountability, increased access, improved responsiveness, and greater affordability. These goals would become the foundation for systemic change in Alberta's post-secondary system. The goals formed the basis for increased levels of accountability and, coupled with the initiative to use a business-plan model, post-secondary funding would be drastically changed. Provincial contributions to operating grants between 1994-95 and 1999-00, as a percentage of net operating expenditures at post-secondary institutions, decreased from 72.5% to 61.1%. At the institutional level, in order to cop, with the decrease in provincial government funding, tuition and other student fees increased from 17.5% in 1994-95 to 27.6% in 1999-00 of total net institutional operating expenditures (Alberta Learning, 2002b).

In government documents, there was discussion of 'new' funding initiatives that the government put in place in 1994-1995, but these were for targeted programs based on performance-driven envelopes. There was no increase in funding, as all the 'new' money was actually provided from funds already allotted; the funds were redistributed according to the new government mandate. Institutions that had enrollment increases, in order to respond and maintain fiscal solvency, had to increase tuition or other fees, and/or apply to the Access Fund for support. Each of the

envelopes or performance funds represented a maximum of 2% of total system funding provided by the government.

Two other government initiatives in the mid 1990s, the Government Accountability Act and the Three-Year Business Plan process, created a new paradigm for all government departments that would impact the funding of post-secondary institutions from a philosophical level. The Government Accountability Act, which was passed in 1995, was a piece of legislation that shifted the focus of government from providing services to taxpayers to focusing on the elimination of the provincial deficit that the government had created in previous years. The focus of the deficit reduction was to be through expenditure reductions, while not increasing taxation levels. In conjunction with this Act, the government also moved to a Three-Year Business Plan model. This focus shifted government departments to operating on a business level in which goals and objectives were more clearly the drivers of government actions, and the focus on the bottom line became more predominate than any other consideration.

In 1994-1995, restructuring of funding mechanisms for the institutions included Base Operating Grants, a Performance Envelope, an Infrastructure Renewal Envelope, a Research Excellence Envelope, and an Innovation and Science Research Investments Program (ISRIP). The government's role was to provide a "stable funding base of primarily unconditional grants to post-secondary institutions," the base operating grants (Alberta Learning, 2000a, 14). By 2000, these ongoing grants were designed to provide funding for program delivery, administration and general capital maintenance needs of institutions. The funding envelopes were designed to meet what the government considered current and emerging needs of its post-secondary system in addition to being an a reward for meeting the government's objectives.

For these funding mechanisms, accountability is maintained through guidelines and performance monitoring of post-secondary institutions to ensure appropriate use of public funds. Allocations from each funding envelope are completed on an independent basis using criteria specific to that envelope. The Access Fund was designed for institutions to expand access to credit programs that respond to student needs, market demands or government priorities. Funding from this envelope is approved by the government, and is focused on what the government determines as

viable or needed programs. Institutions may also access this fund for one-time purchases of equipment, construction or renovation of facilities, and/or curriculum development. The Performance Envelope has two components, the system award and a progress award. These awards are added to an institution's base operations grant in subsequent years. The progress award is based on a set of Key Performance Indicators (KPIs) that are used to assess and reward the progress an institution is making toward meeting Ministry goals. The KPIs include enrollment, graduate employment rates, graduate satisfaction, administration expenditures, and enterprise revenue. Research performance indicators were also designed for the campus-based universities. The Research Excellence Envelope is designed to encourage research excellence, and is based on the university's success in gaining national granting council awards, and the ratio of these awards to government operating grants. The Innovation and Science Research Investments Program (ISRIP) was provided from the Ministry of Innovation and Science to support "selected science and research initiatives of strategic importance to Alberta" (Alberta Learning, 200b, 7).

Capital funding has been impacted by a recent shift in the allocations of government responsibilities and the creation of the Department of Infrastructure, which is currently responsible for all infrastructure in the province of Alberta. Post-secondary institutions receive facility renewal funding through the Infrastructure Renewal Envelope, which is presently administered by Alberta Infrastructure, and institutions may build new facilities if they meet cabinet-approved criteria. The government believes that new projects should be funded by relatively equal contributions from the private sector, the institution and the government. The MLA Post-secondary Funding Review Committee submitted a report to the Minister of Learning in the fall of 2000. The focus of this report was clearly outlined in the executive summary: "The committee's work was to focus on potential methods of distributing existing resources rather then the adequacy of funding the system. Any proposed changes in the method of funding were to be accommodated within the government's existing post-secondary budget. No institutions were to lose existing resources; however, new funding could be allocated differently" (Alberta Learning, 2000b, 1). The committee recommended that adjustments to base grants be made to create greater equity, and that the base grant system be reviewed on a periodic basis. Faculty attraction and retention was an issue, as the salaries of instructors had fallen

greatly over the years; the average university faculty member in Alberta fell 7.8% between 1986/87 and 1996/97 (Confederation of Faculty Associations, 2000). Further clarification of the role of the Access Fund to offset enrollment increases and the mandates for the Performance Envelope was proposed. The report proposed that the indirect costs of research should be funded and that government look at interdepartmental efficiencies. The Tuition Fee Policy guidelines that had been established until the year 2000 needed to be reviewed. As a result of this report, in January 2002, the government delivered a report entitled *Alberta's Post-Secondary Education System: Developing a Blueprint for Change* (2002a), a document that operated in conjunction with *Profile of Alberta's Adult Learning System: A Context for Discussion* (2002b). These two documents were designed to navigate the future of post-secondary education in Alberta. The documents continued to focus on the four goals introduced in 1994, and reinforced the need for continued use of performance indicators and funding envelopes in order to bring about government compliance.

Analysis

Conceptions of Quality

There is no doubt that funding mechanisms in any province or state are multifaceted; constant shifting of public policies and government agendas compounds the complexity and makes it difficult to sort through the facts. Changing department names and portfolio descriptions obfuscate the data, and some information is not easily traced. The presentation of historical information has the greatest value when it is placed in context within, a suitable theoretical framework to help give meaning to the events and actions. A framework for the analysis of the economic trends in Alberta requires the use of models of finance in higher education and an analysis of values demonstrated by the government.

The provincial government had as a goal to provide quality post-secondary learning experiences to the citizens of Alberta. In the document *New Directions for Adult Learning in Alberta*, the government set several goals and stated, "Quality is a priority" (The Department of Advanced Education, 1994b). However, "Quality is relative to the user of the term and the circumstances in

which it is involved. It means different things to different people; indeed the same person may adopt different conceptualizations at different moments. This raises the issue of whose quality?" (Harvey and Green, 1993, 10). Harvey and Green (1993) discuss the relationship between quality and excellence and offer several views on conceptions of quality. Although models are never all encompassing and specific to every case, two of their models seem to have a high level of application to the funding of post-secondary education in Alberta. One conception is the 'fitnessof-purpose" approach in which quality only has meaning in relation to the purpose of the service. This highlights the problematic nature of the changes that have taken place in Alberta in regard to purpose and fitness. Questions about post-secondary education would receive different responses from a government official, a university president, a student or a taxpayer. The fitnessof-purpose model that the government uses is one that focuses on the role of the government to monitor funds, and meet bottom line expectations, within the confines of a business-model. The fitness-of-purpose model also needs a definition of who is the customer. In the past, postsecondary institutes have viewed the student as the customer, but the shift in government policy in the last decade has made the government the customer. The government supplies the funds and sets the purpose and expectations in order to achieve mandated results. Historically, institutions and the meeting of their missions and goals fulfilled the fitness-of-purpose; now, if the institution does not meet the government-imposed expectations, operating funds will be curtailed at the institutional level. Although individual institutions in Alberta can continue to set their own goals and missions, these are viewed as parochial, and are superceded by the goals and expectations set by the government, as the funding is tied to the government outcomes.

The actions of the Alberta government also fit with the view of quality as money (Harvey and Green, 1993). At the heart of the value-for-money approach is the concept of accountability (Kogan, 1986). Within this context, the taxpayers, through the government, need to monitor all public funds to ensure that there is value-for-money, which will ensure quality or vice versa. The emergence of performance indicators fits with the acknowledgment that all public money needs to be monitored, and hence, money should be used to control institutions.

Both of these conceptions of quality—value-for-money and goodness of fit—create a problem for higher education. The difficulty is that these models were developed for application to

production in factory-based models that produce a product; additionally, the raw materials are a known variable. When dealing with people, the raw material is unknown and there are too many uncontrolled variables. The measurement of quality is attained from quantitative data, as this information is easily gathered; however, when education is a qualitative endeavor, this is an area that is more time-intensive to measure. In the goodness-of-fit and value-for-money models of quality, there is no accounting for the "value added" measure of education that included personal growth, enriched experiences, and enhanced skills and abilities. There is no doubt that quality is a reflection of philosophical differences, and these models point to an explanation of influence of government policy in Alberta.

Related to the issue of quality is the question of the role or purpose of post-secondary education. Barnett (1994) discusses four contemporary conceptions of higher education: 1) The production of highly qualified manpower, where graduates need training as a product in order to participate in a career; 2) when higher education is focused on a research career, the focus is on the output of staff and students; 3) the efficient management of teaching, where the indicators are completion rates, unit cost, student staff ratio and other financial data; 4) the idea of extending life chances, which is focused on participation in higher education from under-represented backgrounds. The government of Alberta, although it uses specific terms to describe quality, focuses on fiscal restraint, limited expenditures, and the training of technical people, all which fit the efficient management of teaching conception purposed by Barnett. This concept of higher education is highly congruent with the focus on 'fitness-of-purpose and 'value-for-money' and is incongruent with the valued-added nature of higher education.

The reductions in expenditures over the last decade by the Alberta government were focused on the efficient management of teaching and the value-for-money paradigms. In 1991-1992, the provincial government provided \$851,987,000 to service a Full-Load Equivalent Enrollment (FLE) of 112,847 students. In 1994/95, the province provided \$800,292,205 in operating grants for 106,057 students, and in 1998-1999, the funding was \$800,079,418 for 115,331.1 FLE. The figures sited here do not account for inflation, so the actual decrease in funding is higher than these representative numbers. The government's stated purpose of the funding reductions was to reduce the deficit and to reduce expenditures on higher education. The reduction of post-

secondary expenditures was an initiative that coincided with a general trend throughout North America. It was a trend that saw a shift "for paying for higher education from taxpayers at all levels of government to students and their families" (Mortenson, 1994, 1).

In Alberta, the decrease in funding of post-secondary programs was a part of the government's deficit reduction plan. Deficit reduction can be achieved by three means: expenditure reductions, revenue increases or a combination of the two. The Alberta government chose a "single track approach: i.e., deficit reduction through expenditure cuts alone" (McMillian and Warwick, 1995, 158). Although the government portrayed the deficit reduction as its main focus, part of the reason for this approach may have been because the deficit crisis "provided a convenient rationale for reorganizing the economic and social landscape. Or put more bluntly, the "Klein revolution" [was] about transferring wealth from the have-nots to the haves - a reverse Robin Hood story if you will" (Cooper & Neu, 1995, 176). Drugge (1995) provides evidence that the deficit issue and the rhetoric about increased government spending was manufactured, as the deficit had not increased significantly since 1986.

The history of financial trends in Alberta correspond with those highlighted in the model proposed by Caruthers and Marks (1994) that traces the funding objectives from Adequacy in the 1950s, Growth in the 1960s, Equity in the 1970s, Stability /Quality in the 1980s, and Stability /Accountability/Reform in the 1990s. These time divisions parallel the phases of Elitism, Reconstructionism, Reductionism and Entrepreneurialism suggested by Michael and Holdaway (1992). The government of Alberta has taken the direction of emphasizing Stability /Accountability/Reform and entrepreneurialism in policy statements and actions in the 1990s. The Alberta government's decrease in expenditures for post-secondary education coincided with the introduction and development of performance indicators. The emergence of performance-based funding and the stated need for addressing financial issues in the mid-1990s coincides with a trend throughout North America (Hines, 1996). It was precisely at this time that performance indicators emerged in Alberta, as a response to deficit reduction that saw a reduction of 21% of government funds over three years for post-secondary education. The reduction in funding and the move to performance indicators helps legislators with their political agenda in that they "press colleges and universities for better performance as cover for diminished state support.

These initiatives leave the impression with taxpayers that public higher education does not deserve budget increases until it improves performance" (Burke & Minassians, 2001, 3). Performance indicators also meet the perceived desire of the taxpayer to have "closer public monitoring of institutions, even at the price of reduced academic autonomy from government" (Zumeta 2000, 58). Performance indicators provide policy makers a mechanism to reduce funding, while minimizing any controversy associated with allocations (Burke and Minassians, 2001).

Researchers have highlighted many variations in the use of performance indicators in addition to the level of accountability that is the focus of system. Burke and Minassians (2001) have administered an annual survey to track performance-based funding and provide two categories of the use of performance indicators: performance funding and performance budgeting:

- Performance funding ties specified state funding directly and tightly to the performance of public campuses on individual indicators. Performance funding focuses on the distribution phase of the budget process.
- Performance budgeting allows governors, legislators, and coordinating or system boards to consider campus achievement on performance indicators as one factor in determining campus allocations. Performance budgeting concentrates on budget preparation and presentation, and often neglects, or even ignores, the distribution phase of budgeting.

In performance funding, the relationship between funding and performance is tight, automatic, and formulaic. If a campus achieves a prescribed target or an improvement level on defined indicators, it receives a designated amount or percent of state funding. In performance budgeting, the possibility of additional funding due to good or improved performance depends solely on the judgment and discretion of state, coordinating, or system officials. Performance funding ties state funding directly and tightly to performance, while performance budgeting links state budgets indirectly and loosely to results. The advantages and disadvantages of each is the reverse of the other. Performance budgeting is flexible but uncertain. Performance funding is certain but inflexible (2001, p. 4).

Ewell & Jones (1994) posit four approaches to measuring accountability that are commonly used:

Inputs, processes and outcomes – this is a production process model were output is measured in three ways - entering student numbers, per student instructional expenditures, and exiting student numbers.

Resource efficiency and effectiveness – centers on fiscal information and the measuring resource information to measure efficiency. Measures include the distribution of human and physical resources, and patterns of utilization.

State need and return on investment – as a strategic investment how does higher education provide for economic and manpower development and functional citizenry. Measures include current and future work force needs and the match between this and higher education.

Customer need and return on investment – this model is one of information, consumer choice, and the right for the public to know. How are individual needs met? Measures include degree completion rates, job mobility and employment in chosen field of study.

Ewell and Jones (1994) indicate that these four approaches to measuring accountability are not mutually exclusive of each other, and as there is overlap between the approaches, they suggest the specific methodology may not be as important, as is the fact the methodology serves as a guide for policy framework. As Layzell (1998) notes, "The policy goals and objectives should drive the selection and performance indicators, not the other way around" (p.104).

Alberta's performance measures seem to be most closely tied with the broad 'performance-funding' model proposed by Burke and Minassians (2001). The performance-funding model is more specifically associated with the models of 'return-on-investment', and on 'resource efficiency' (Etwell and Jones, 1993). The fact that performance indictors coincided with the deficit reduction strategy provides evidence the Alberta government was not letting performance indicators drive the policy.

The performance indicator model used in Alberta is a version of performance budgeting and ties closely with notions of quality as illustrated by the 'efficiency-of-teaching model' (Barnett, 1994). The 'fitness-of-purpose' and the 'value-for-money' models (Harvey and Green, 1993) also provide a framework for understanding the Alberta government's policy initiatives. These models in combination have a strong business focus. For the remainder of this article the

combination of these models will be referred to as the 'business factors' aspects, and serve as a model to understand the Alberta government's policy initiatives over the last decade.

The Alberta government's focus on these issues is illustrated by the use of performance indicators and the government setting four goals for Alberta's Adult Learning System in 1994. The four goals were:

Accessibility - the system will increase access for motivated Albertans to a diverse range of quality learning opportunities.

Responsiveness - The system will increase its responsiveness to the needs of the individual learner and to the social, economic and cultural needs of the province.

Affordability - The system will provide quality-learning opportunities to the greatest number at the least possible cost.

Accountability - The system will increase its accountability to Albertans for the results of publicly funded learning opportunities. (Alberta Advanced Education and Career Development, 1994b, p. 7)

The efforts of the government have been to increase the "quality" of the educational system in the province of Alberta through greater accountability, access, affordability and responsiveness. However, the government has defined these goals from their own terms of reference. Rather then increase quality, the government has increased accountability and the level of government control, which has resulted in decreased institutional autonomy.

The performance-based funding measures that were initiated in 1994 had been developed into 76 indicators by 1997. The performance measures centered on the four stated goals, and funding flowed from the government through a Performance-based Funding Mechanism that focused on nine outcomes. The funds from performance-based measures were added to the base grants of the institutions. In 1997, the government provided \$15 million for the performance envelope, and by 1999-2000, it rose to \$17.3 million. The awards to institutions are based on a set of Key Performance Indicators (KPIs) that were used to assess and reward the progress an institution is making toward meeting Ministry goals. KPIs include enrollment, graduate employment rate,

graduate satisfaction, administration expenditures, and enterprise revenue. All these are heavily based on the business-factors model. These goals have remained a constant in the various government departments responsible for higher education, and appear in the recently released *Profile of Alberta's Adult Learning System: A Context for Discussion* (2002b).

The inconsistency between government rhetoric and actions becomes clear when analyzed against the backdrop of theory about performance indictors and quality. The government provides citizens with four goals that are the focus of higher education, with accountability being the last. A cursory review of some of the data would indicate that the other goals are open to interpretation. Much like Harvey and Green (1993) in their discussion of how different parties view goodness-of-fit, there are varying interpretations of how these four goals are being met.

Some straightforward measures of accessibility on the basis of enrollment numbers would show that more students accessed post-secondary education in the last decade, as Full Load Equivalent enrollment in the province increased from 105,809.7 in 1994/95 to 113,905.5 in 1998/99. Although enrollment increased, at the same time the per capita funding per enrolled student was reduced from \$7442.74 in 1994/95 to \$6943.92 per student in 1998/99 (Alberta Learning 2000a). This is from the high of \$7549.93 in the 1991/92 school year (Alberta Advanced Education and Career Development, 1992). From 1986/87 to 1997/97, the student to faculty ratios at the universities increased from 1:14.0 to 1:21.4 (Confederation of Alberta Faculty Associations, 2000).

The measurement of responsiveness is based on the development of new programs and the expansion of existing programs. Funding for these initiatives is through the Access Fund, and subject to government approval. The government control of programs has led to expansion in the physical sciences, engineering and information technology and similarly, the funds for social sciences and the performing arts have been lowered (Robinson, 2002). This has resulted in a greater level of technical programming, which would indicate the government is focused on jobs and manpower rather then education. Although the level of responsiveness goal includes cultural and social needs, there are no measures of these qualitative areas (Barnetson, 1999).

In measuring the level of affordability, the government is measuring their expenditures, not the costs to students. Student costs for tuition have increased drastically; between 1990/91 and 2000/01, tuition fees in Alberta rose 208.8%, compared to a national average of 125.8%. In actual dollars this represented an increase from \$1240 to \$3841 (The Daily, 2001). At the same time, the government has reduced the level of expenditure, decreasing the operating grants to post-secondary institutions from 75.9% of institutional funding in 1993/94, to 66.7 % of institutional funding in 1997/98 (Robinson, 2001).

Accountability has been the major thrust of the Alberta government's initiatives, and the use of performance indicators and their relationship to quality was previously discussed. The government has increased the level of accountability, but the measures are of a quantitative nature, and this has had little impact on the qualitative delivery of instruction. (For a detailed discussion about the effectiveness of performance indicators in Alberta see, Barnetson, 1997, Barnetson, 1999, and Michael, 1995.) The government of Alberta has used performance indicators to direct institutional goals, shifting the responsibility for quality to the institutions from the government. This was done by imposing a market model on post-secondary institutions and by maintaining control of money for institutions (Barnetson, 1997).

Conclusion

The Alberta government's deficit reduction plan and the decision to base funding on performance indicators removed autonomy, as post-secondary institutions had to comply to maintain programs. Restructuring of higher education under the guise of deficit reduction, and a focus on a business plan model gave rise to performance budgeting through increased institutional accountability. The actions of the Alberta government fit with the concepts of efficiency-of-teaching, fitness-of-purpose and the value-for-money models. These models, in conjunction with the government approaches to planning, have created a 'business-factors' approach to higher education and a new paradigm, in which the government has shifted a greater level of cost to the students, and minimized government contribution levels. The province is faced with the issue of providing post-secondary experiences for students, with a continued reduction in resources. The narrow accountability measures linked to monetary rewards have

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been detrimental; overall, the impact of government decisions has been to increase the cost and reduce the quality of post-secondary education in Alberta.

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Notes

1. A historical agreement entitles four private religious colleges to receive funding for operating expenses. At a rate of 75% of public funded institutions. No capital funds are allocated

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