

*Ministry of
Advanced Education*

**2005/06
Annual Service Plan Report**



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Message from the Minister and Accountability Statement

It is my pleasure to present the Ministry of Advanced Education
2005/06 – 2007/08 Annual Service Plan Report.

Making sure all British Columbians have access to advanced education is one of the most important things our Ministry can do in this era of transformative change. As our economy grows and develops, we need more skilled people to fill the record number of new jobs being created.

Those skilled people earn more, and contribute more tax revenues that provide for services such as health care and public infrastructure. Post-secondary education also provides students with knowledge and perspective that enrich the social fabric of our province.

Those are some of the reasons we have focused on opening the doors of advanced education to more British Columbians. We promised to create 25,000 student spaces by 2010, and as of 2005/06 we have already funded over 7,400 of them. We have established university campuses in Kelowna and Kamloops. We have also committed more than a billion dollars to improve and expand our campuses across the province.

As the Ministry Responsible for Research and Technology, the Ministry of Advanced Education is making new research investments in areas such as life sciences and natural resources. Research, technology and innovation create wealth, solve problems, and enhance our social, cultural and physical well-being. In the months and years ahead, the Ministry will work with stakeholders in the post-secondary system and the research and technology sector to promote further growth and improvement.

I am proud of British Columbia's role as a national leader and innovator in education. Our Ministry supports the government's five great goals for the next 10 years, and is working with other ministries and our system partners to fulfill British Columbia's rich potential.

A great deal has been accomplished, but there is still much to do. The Ministry is exploring a range of strategies to increase literacy in the province as part of government's goal of making British Columbia the most literate jurisdiction on the continent by 2016. We will continue to increase opportunities for students to train in high demand fields such as nursing, allied health care, medicine, and skilled trades. And we will persist in our efforts to expand the education choices available to students across the province. The completion of the final phase of BCcampus will help in this endeavour.

The Ministry of Advanced Education *2005/06 Annual Service Plan Report* compares the actual results to the expected results identified in the Ministry's *2005/06 – 2007/08 Service Plan Update* published in September 2005. I am accountable for those results as reported.

A handwritten signature in black ink that reads "Murray Coell". The signature is written in a cursive, flowing style.

Honourable Murray Coell
Minister of Advanced Education and
Minister Responsible for Research and Technology

June 30, 2006

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Highlights of the Year

The following is an overview of major developments and achievements in British Columbia's post-secondary system in 2005/06:

- Increased overall funding for the Ministry by \$70.5 million in 2005/06, for a total of almost \$1.9 billion in operating funding.
- Improved student access by adding 4,200 new spaces for 2005/06. Together with the 3,217 new spaces provided in 2004/05, this marks progress of 7,417 new spaces towards the Strategic Investment Plan goal of 25,000 new spaces by 2010. Since 2001, a total of 13,274 new seats have been funded.
- Increased student spaces, in targeted programs; including 825 new seats for computer science and electrical and computer engineering, 508 new seats for nursing and other health education, and 96 medical school spaces.
- Continued to bolster research capacity at B.C. public post-secondary institutions by awarding \$33.6 million in funding for research infrastructure under the British Columbia Knowledge Development Fund. This funding will leverage \$65.2 million from the federal government and other non-government sources. Total investment in research infrastructure in the province in 2005/06 was \$98.8 million.
- Provided:
 - \$45 million to Genome British Columbia to support genome-related research in the province.
 - \$15 million to the Pacific Alzheimer Research Foundation.
 - \$4 million to the Canadian Cancer Society, B.C. and Yukon Division to establish a research chair in primary cancer prevention.
 - \$1 million for an endowed National Chair on Aboriginal Economic Development.
- Forgave \$67.2 million under the B.C. Student Loan Reduction Program, in conjunction with the Canada Millennium Scholarship Foundation, helping almost 28,000 students who invested in their post-secondary education last year to prepare for successful futures.
- Provided \$223 million in new funding for capital projects on campuses throughout B.C. this year.
- Increased funding to \$1.8 million for 36 new projects that will help Aboriginal students across B.C. pursue their post-secondary education and career goals.
- Improved opportunities for students to study in their home communities by expanding on-line learning. The final major development phase of BCcampus was completed, and \$1.4 million will help develop new on-line learning resources and improve access.
- Helped students manage the cost of post-secondary education by limiting 2005/06 tuition fee increases to two per cent, based on the 2004 B.C. Consumer Price Index.
- Approved 31 new degree programs at B.C. public post-secondary institutions and ten new degree programs at private post-secondary institutions.

- Provided \$1.4 million for community adult literacy projects and worked with the Ministry of Education on developing the provincial literacy strategy and on other initiatives involving libraries, family literacy and the Literacy Now community work plans as part of the Premier's strategy to make British Columbia the most literate jurisdiction on the continent by 2016 and beyond.
- Began work to help post-secondary institutions to increase international education activity, including attracting more foreign students.

Purpose, Vision, Mission and Values

Purpose

Post-secondary education and research and innovation produce a range of public benefits for British Columbians. The post-secondary education system provides students with the knowledge, skills and training that communities, employers and entrepreneurs need, as well as the confidence and initiative to play an increased role in all aspects of society. Research and innovation helps British Columbians overcome social and economic barriers and expand their potential through discovery and the creation of knowledge.

Leading, coordinating and supporting this work is the role of the Ministry of Advanced Education. The Ministry provides leadership and direction, establishes policy, and provides funding to public post-secondary institutions through operating grants and contributions toward capital projects, and to students through financial assistance programs. The Ministry also provides leadership and oversight for organizations that are involved in the research and innovation sector. The Ministry provides accountability for public funds by measuring and reporting on progress against desired outcomes.

Vision, Mission and Values

Vision

Enabling British Columbians to prosper through education, training, research and innovation.

Mission

To provide leadership in delivering excellent, accessible post-secondary education for learners and enable an integrated and dynamic approach to research and innovation.

Values

The following values guide the Ministry in its work:

1. A student-centred post-secondary education system.
2. Excellence, innovation, creativity and continuous improvement.
3. Relevance and responsiveness of the post-secondary education system.
4. Recognition of the key roles post-secondary education, research and development play in a successful economy.
5. Life-long learning opportunities for all British Columbians.
6. A positive and supportive working environment.
7. Open, transparent and consultative processes to facilitate effective working partnerships.
8. Greater equity and equality for British Columbians.
9. Results-based accountability.
10. Fiscal responsibility.

Strategic Context

This section of the Service Plan Report provides an overview of the environment within which both post-secondary education, and research and innovation, function in the province. Specific strategic context pieces are provided in each Ministry objective section.

Strong economic growth, low labour force participation and growing demographic pressures have presented, and will continue to present, challenges and opportunities for the post-secondary system, and research and innovation in B.C. over the next several years. As such, the performance results should be considered in the context of these factors.

Demographic Pressures

British Columbia is experiencing demographic pressures related to population growth and aging. Population growth is driven by natural increases, and international and inter-provincial migration. In particular, positive net migration remained the key driver of provincial population growth in 2005, accounting for an estimated 75 per cent of total growth. By the year 2023, net migration is projected to be the sole driver of population growth in B.C. due to declining birth rates.

As the provincial population ages due to the long-term decline in fertility rates, there have been changes to the age structure of the population. Reflecting the shift in the age structure, the prime post-secondary cohort (18–29 year-olds) grew by 2 per cent over the past year. The cohort will continue to grow at a modest pace, driven by growth in the 25–29 year age group. The demand for post-secondary education is expected to increase due to overall growth in the size of the provincial population and the trend towards lifelong learning. The Ministry will need to work with post-secondary institutions to ensure that barriers to learning do not impede post-secondary participation of various age groups.

The Aboriginal population represents an increasingly important segment of the provincial population. The Aboriginal population grew by 22 per cent between 1996 and 2001, and represented five per cent of the total provincial population. As it is expected that the Aboriginal population will continue on an upward trend, post-secondary programming will need to be responsive to the cultural and education needs of their student population.

Shifts in the age structure and composition of B.C.'s population will present challenges for the Ministry in ensuring barriers to learning do not impede post-secondary participation of various population groups. In particular, post-secondary programming and student assistance policies and programs will need to be responsive to the evolving needs of an older and more diverse population.

Strong Economic Growth

British Columbia's real GDP grew by 3.5 per cent in 2005, slightly faster than the 3.4 per cent growth rate forecast in the *September Budget Update*. Strong consumer spending and investment helped make B.C.'s growth second in the country, behind Alberta's 4.5 per cent expansion. B.C.'s economic growth was accompanied by a marked drop in the unemployment rate and strong labour income growth, supporting consumer spending and residential construction growth.

To support sustained economic growth, the Ministry will need to continue to develop policies and programs that raise the education and skill qualifications of the working age population, increase the number of graduates in targeted program areas, and stimulate efficiency and quality in research and innovation.

Growing Labour Market Pressures

The provincial economy generated 68,000 new jobs over the past year due to the rapid pace of economic growth. The provincial unemployment rate, at 5.9 per cent, was at its lowest level in 30 years.

With high employment demand and low unemployment rates, skill shortages were more prevalent in construction, health care, and high technology industries.

Improved labour market conditions have an impact on the participation rates for post-secondary education. As demand for labour increases, potential students may choose to postpone or leave post-secondary education to take advantage of improved labour market conditions.

Low Labour Force Participation

The size of B.C.'s labour force grew by 41,500 over the year, exceeding the level of growth in 2004 (31,200). An estimated 66 per cent of the working age population participated in the labour market in 2005, which was virtually unchanged from 2004 (65.6 per cent). B.C.'s participation rate was lower than Alberta's (72.7 per cent), and tied Quebec for sixth place overall among the provinces. The low rate of labour force participation provides an indication that there was still a significant segment of the population who were unemployed and not looking for work, an indication that some may not meet the increasing skills and education requirements of employment.

Employers are increasingly seeking highly educated and skilled workers due to the higher knowledge and technology requirements of the workplace. It is projected that in the next 10 years, 70 per cent of job opportunities will require some post-secondary education. The Ministry will need to work with institutions to remove barriers to post-secondary education by continuing to design proactive approaches that meet the challenges of addressing skills shortages, and support increased labour force participation of lesser skilled individuals.

Ministry Support for Government's Five Great Goals

The Government of British Columbia has identified Five Great Goals for the years ahead. These goals guide activities and focus efforts across all ministries and government organizations. The Five Great Goals are listed below, each followed by a short description of how the Ministry's work supports the goal.

1. Make British Columbia the best-educated, most literate jurisdiction on the continent.

This goal is the cornerstone of all activities of the Ministry of Advanced Education. The Ministry's contribution to reaching this goal is primarily made through increasing opportunities for post-secondary students. Ongoing activities include:

- expanding the public post-secondary system, by adding 25,000 student spaces by 2010;
- devoting some of the 25,000 spaces to programs linked to government's key economic and social priorities, such as health care, oil and gas, research and innovation, and the 2010 Olympic and Paralympic Winter Games;
- developing strategies to increase graduate student enrolment and research;
- reducing barriers to post-secondary education by expanding student financial assistance programs, including debt reduction, interest relief and loan forgiveness programs;
- broadening efforts to improve post-secondary participation and success of Aboriginal learners;
- enhancing existing programs designed to improve adult literacy and basic skills;
- supporting on-line learning in British Columbia by expanding cross-institutional connections and student services via BCCampus;
- support partnerships between post-secondary institutions and local industry for building regional innovation capacity; and
- encouraging internationalization of our post-secondary institutions by promoting British Columbia as a destination for international students and supporting study abroad by domestic students.

2. Lead the way in North America in healthy living and physical fitness.

The Ministry's contribution to reaching this goal is primarily through increasing training in health care professions. The Ministry dedicates funds to increase the number of student spaces in selected health care programs, and to provide student financial aid incentives for students in health care. The Ministry also provides incentives to graduates of these programs to practice in underserved regions of the province. In 2005/06, funding was provided for a research leadership chair in Aboriginal environmental health and for projects on childhood diabetes and cognitive impairment.

3. Build the best system of support in Canada for persons with disabilities, those with special needs, children at risk, and seniors.

The Ministry's contribution to reaching this goal includes providing student financial assistance and Adult Special Education programs and services that help people with

disabilities participate in post-secondary education. The Ministry also supports public post-secondary institutions' efforts to offer a variety of programs that prepare students for positions in child protection, mental health services, hospitals, schools, youth correction agencies, infant development programs and other related areas. The Ministry funds capital construction in public post-secondary education institutions that are designed to be accessible to students with physical disabilities.

4. Lead the world in sustainable environmental management, with the best air and water quality, and the best fisheries management, bar none.

The Ministry's contribution to reaching this goal is made by supporting researchers at public post-secondary institutions in their efforts to develop clean energy options, fuel cell technology and improve environmental management and conservation practices. University research is supported through general operating grants provided to the universities, and all public post-secondary institutions are eligible to apply for research infrastructure funding from the British Columbia Knowledge Development Fund. The Ministry has also established the Leading Edge Endowment Fund to create endowed research chairs at public post-secondary institutions.

5. Create more jobs per capita than anywhere else in Canada.

The Ministry's contribution to reaching this goal is made by supporting partnerships between post-secondary institutions and industry, and by ensuring post-secondary education is responsive to the needs of the economy. The Ministry analyzes labour supply data and research to develop relevant training and education strategies. Specific ongoing activities include:

- developing strategies to increase graduate student programs at post-secondary institutions, such as scholarships to support university-industry linkages and research;
- exploring options for building regional innovation capacity to support partnerships between post-secondary institutions and local industry;
- supporting programs and efforts at post-secondary institutions to train students in high-demand fields, such as health care professions, and to impart the knowledge, skills and training that entrepreneurs need to open businesses and create jobs; and
- supporting consortia linking industry, government and post-secondary institutions to meet the training needs of key areas such as oil and gas, hospitality and tourism, and aerospace. Respectively, the consortia are: a partnership to develop a comprehensive and coordinated approach to B.C.'s training strategy for oil and gas; a group to provide overall strategic direction and facilitate communication and planning among all parties to ensure the education and training requirements of tourism and hospitality are met; and an advisory body to government on aerospace training issues.

Cross Ministry Initiatives

The Ministry of Advanced Education cooperates with other ministries and government organizations to achieve outcomes and meet government priorities in areas of overlapping responsibility. Our top priorities in these areas are identified below.

First Nations / Aboriginal People

The Ministry worked with the Ministry of Aboriginal Relations and Reconciliation to achieve the goal of closing the social and economic gap for Aboriginal people, including development of a proposed Aboriginal Post-Secondary Education Strategy to improve participation and success for Aboriginal learners. The Ministry along with the Ministry of Education collaborated on a project to link data about students in the province's public post-secondary education system, including Aboriginal students, with information from the K-12 education system. As well, financial and project management support was provided to the Ministry of Education on Aboriginal teacher training initiatives.

Literacy

The Ministry works with the Ministry of Education and other ministries to help make British Columbia the most literate jurisdiction on the continent. Our activities include supporting programs to improve adult literacy, including community-based literacy, adult basic education, adult special education and English as a second language training.

Trades Training

Responsibility, including funding, for working with the Industry Training Authority (ITA) has been transferred to the Ministry of Economic Development. However, the Ministry of Advanced Education maintains an active interest in trades training, as the majority of training in B.C. is delivered through public post-secondary institutions. AVED remains responsible for capital funding for public post-secondary institutions, and works with the ITA and the Ministry of Economic Development on capital requests for trades as well as on other industry training related issues.

Asia-Pacific Strategy

The Ministry began working with the Ministries of Economic Development; Education; Tourism, Sport and the Arts; and Attorney General, building partnerships and linkages to the Asia-Pacific region and beyond. The Ministry is working to increase the profile of B.C. as a study destination through promotional activities to potential students and working on immigration issues, as well as developing coordinated approaches to building linkages with the Asia-Pacific region.

2010 Olympic and Paralympic Winter Games

The Ministry is working with the Ministry of Tourism, Sport and the Arts, and other ministries to showcase British Columbia through the 2010 Olympic and Paralympic Winter Games. Our activities include supporting the British Columbia Hospitality and Tourism

Education and Training Consortium in its efforts to address education and training needs in British Columbia's hospitality and tourism industries. The 2010 Olympics are profiled in the Ministry's presentation material to foreign delegations discussing international education.

ActNow

The Ministry works with the Ministry of Health and other ministries to examine and promote health and wellness activities. The Ministry provides leadership within the post-secondary education sector to advance the goals, objectives and initiatives of ActNow. Related to another aspect of health, the Ministry provides funding and support to public post-secondary institutions to increase student spaces in programs to train health care professionals.

Children's Agenda

The Ministry works with the Ministries of Education, and Children and Family Development to improve outcomes for British Columbia's children. Our activities include expanding British Columbia's public post-secondary system so institutions can respond to student and community demand for relevant programming, such as early childhood education and social work. The Ministry also improves access to education through student financial assistance programs, supporting family literacy projects in communities across the province, and working with the Ministry of Education on strategies to promote transition from K-12 to post-secondary education.

Mountain Pine Beetle

Through public post-secondary institutions, the Ministry funded genomic research on the Mountain Pine Beetle developing new research tools that may assist in control and prevention.

Service Delivery and Core Business Areas

Service Delivery

The Ministry provides leadership and direction, establishes policy, and provides funding to the post-secondary and research and innovation sectors.

The majority of public services for which the Ministry is responsible are delivered by institutions and organizations within the post-secondary system and research and technology sector. As these are partially or completely independent from government, various mechanisms are in place, such as legislation, funding agreements and reporting requirements, to ensure accountability for public funds.

Public post-secondary institutions in British Columbia, like those in other provinces, have a significant and appropriate degree of autonomy from government in many areas. This autonomy affords institutions the necessary independence to determine how to meet the needs of their students, their communities and the province most effectively. These institutions develop and deliver programs and courses, provide education and training to students, undertake research, and serve the educational needs of their communities.

The balance between institutional autonomy and the need for government to address post-secondary priorities is maintained through the Public Post-Secondary Accountability Framework, which supports funding agreements and reporting requirements that emphasize outcomes-oriented service delivery targets. The Ministry consults with representatives from public institutions to ensure that targets are reasonable while reflecting government's priorities. These are communicated to institutions in annual budget and accountability letters outlining service delivery and outcomes targets and the funding the Ministry will provide. Public institutions allocate Ministry funding as they deem necessary to meet their targets, and provide the Ministry with information needed to ensure accountability for outcomes and public funding. Institutions also issue annual three-year service plans to inform the public of their goals, objectives, measures and targets, and annual reports to inform the public of the outcomes achieved.

The internal and external governance and accountability structures for most public post-secondary institutions are set out in legislation: the *University Act*, the *College and Institute Act*, the *Royal Roads University Act*, and the *Thompson Rivers University Act*. Each act provides for a board of governors with responsibility for operational and financial matters. Statutes also outline academic governance structures with responsibility for decisions concerning academic matters, including credentials, curriculum and standards. See Appendix 1 for a list of legislation administered by the Ministry.

In addition to public post-secondary institutions, British Columbia also has a diverse private post-secondary sector that offers a range of education and training programs. Unlike their public counterparts, private post-secondary institutions are not directly funded by the Ministry. However, private degree granting and career training institutions are subject to

legislative and regulatory frameworks including the *Degree Authorization Act* (DAA) and the *Private Career Training Institutions Act* (PCTIA). There are currently 548 private institutions registered under the PCTIA and six private and out-of-province public institutions with consent under the DAA.¹

Part of the Ministry's expanded mandate for research, innovation, and technology includes funding and liaising the activities of the British Columbia Innovation Council (BCIC). BCIC supports the transfer of leading-edge research into industry and accelerates commercialization of world-class technology-based products for the economic benefit of British Columbia.

As a Crown Agency, BCIC conducts its affairs at arms length from Government. Under the *Budget Transparency and Accountability Act*, BCIC provides a service plan and service plan report to the Ministry. This service plan and service plan report requirement aligns BCIC with the performance expectations and objectives of the Government.

The Ministry provides direct service to the public through the British Columbia Student Financial Assistance Program (BCSAP), which provides loans and grants to eligible students for education and living costs. The BCSAP is a needs-based, publicly-funded program created to help eligible students with the costs of post-secondary studies while enrolled at public and designated private institutions. The Ministry also administers student loan and grant programs on behalf of the federal government, the Canada Millennium Scholarship Foundation and other ministries and agencies.

Core Business Areas Overview

The Ministry's core business areas are:

Core Business Area: Educational Institutions and Organizations

The Ministry provides funding to British Columbia's public universities, university colleges, community colleges, institutes, and other organizations that support the province's public post-secondary education system and research and innovation.

Core Business Area: Research and Innovation

The Ministry is also the Ministry Responsible for Research and Technology in the province, with the goal of providing both social and economic benefits. This includes funding and liaison support for the activities of the British Columbia Innovation Council and the Premier's Technology Council. These include a mandate to fund provincial post-secondary institutions that conduct basic and applied research, to fund the province's major research infrastructure program, the British Columbia Knowledge Development Fund, and to liaise with the Leading Edge Endowment Fund, which funds research chairs.

¹ Under the DAA, a private or out-of-province institution may be granted consent by the Minister of Advanced Education to offer a degree program or to use the word "university".

Core Business Area: Student Financial Assistance

Student financial assistance is provided to make post-secondary education and the associated personal and societal benefits accessible to all students, irrespective of financial circumstances. It is available to eligible students at the post-secondary level attending public and designated private institutions. It combines repayable loans, non-repayable assistance, merit-based awards, and debt reduction measures. In addition, the Ministry manages student aid programs on behalf of the federal government, the Canada Millennium Scholarship Foundation, and other British Columbia ministries and agencies.

Core Business Area: Debt Service Costs and Amortization of Prepaid Capital Advances

The Ministry provides funding to public post-secondary institutions to finance capital projects, including upgrades, renovations, replacements, expansions, and new facilities and equipment. The Ministry services the debt associated with these projects and amortizes the resulting assets over their economic lives.

Core Business Area: Executive and Support Services

The Ministry provides leadership, establishes policy, and administers accountability and planning processes for British Columbia's public post-secondary education system. The Ministry also establishes policy and legislative frameworks for private post-secondary institutions, and supports the Degree Quality Assessment Board, which administers a quality assessment process for new degree programs at public and private post-secondary institutions. Support to the Ministry in the areas of human resources, information systems, records management, financial management, and information privacy² is provided by the Management Services Division, whose budget is reported by the Ministry of Education.

² Research using student information may be done in conjunction with other ministries and post-secondary institutions. To exercise due diligence regarding this type of personal information, information sharing agreements between the government and institutions are developed in accordance with privacy protection provisions of the *Freedom of Information and Protection of Privacy Act*.

Report on Performance

This section presents the results achieved in 2005/06 for each measure identified in the *2005/06–2007/08 Service Plan Update*, demonstrating linkages to the Ministry goals and objectives.

At the most fundamental level, all work undertaken by the Ministry and our system partners is done to fulfill the following two goals:

Goal 1: Excellent public and private post-secondary education that meets the needs and aspirations of British Columbians

Goal 2: Excellent research and innovation that supports economic and social development.

Each goal has several objectives that reflect dimensions of the goal. Progress toward the Ministry's goals and objectives is tracked with a set of performance measures. The table on the following page highlights the connections between the Ministry's goals and objectives and relevant performance measures.

For each measure, baseline data are provided along with the target for 2005/06 and the actual results achieved based on the most current data available.

The measures and targets were developed through collaboration between the Ministry and system partners. The aim of this collaboration was to identify a small number of critical aspects of post-secondary education that could provide accurate and reliable information about system performance. In identifying these measures, it was recognized that the diversity and complexity of post-secondary education in B.C. may produce anomalies in a given year. Therefore, historical data and trend projection were also considered. The institutions submit data on a number of the measures and surveys are used to collect information from students.

It must be noted that measuring the performance of British Columbia's diverse post-secondary education system and research and technology sector is a complex and long-term enterprise. The performance measures identified here represent the collaborative efforts of Ministry and system representatives to identify the few critical aspects of performance. No single measure taken in isolation can reveal enough information to provide a reliable and accurate evaluation of performance. All measures should be considered together when assessing progress toward goals and objectives.

Institutions also report on their performance with a set of measures that are included in the Public Post-Secondary Accountability Framework. For the most part, these are rolled up into the Ministry Service Plan measures, but a few exist only in the institutional portion of the Accountability Framework. For more information on these measures, and the latest results in these areas, please see Appendix 2.

Further information on all performance measures — such as the rationale and context for the measure, the data on which it is based and the source of the data, and methodological considerations regarding the measure — may be found in the Standards Manual for Performance Measures (see: <http://www.aved.gov.bc.ca/accountability>).

Performance Plan Summary Table

Five Great Goals	Ministry Mission			
	To provide leadership in delivering excellent, accessible post-secondary education for learners and enable an integrated and dynamic approach to research and innovation.			
	Ministry Goals	Ministry Objectives	Performance Measures	
<p>Make British Columbia the best-educated, most literate jurisdiction on the continent.</p> <p>Lead the way in North America in healthy living and physical fitness.</p> <p>Build the best system of support in Canada for persons with disabilities, those with special needs, children at risk, and seniors.</p> <p>Lead the world in sustainable environmental management, with the best air and water quality, and the best fisheries management, bar none.</p> <p>Create more jobs per capita than anywhere else in Canada.</p>	<p>1. Excellent public and private post-secondary education that meets the needs and aspirations of British Columbians.</p>	<p>← • Capacity</p>	<p>← Total student spaces in B.C. public post-secondary institutions (Page 22).</p> <p>← Total number of degrees, diplomas and certificates awarded (Page 24).</p> <p>← B.C. public post-secondary graduate rate (Page 26).</p> <p>← University admissions GPA cut-off (Page 27).</p>	
		<p>← • Access</p>	<p>← B.C. public post-secondary participation rate for population aged 18–29 (Page 30).</p> <p>← Number and per cent of public post-secondary students that are Aboriginal (Page 31).</p> <p>← Student spaces in developmental programs (Page 33).</p>	
		<p>← • Efficiency</p>	<p>← Degree completion rate (Page 35).</p> <p>← Student satisfaction with transfer (Page 36).</p> <p>← Student aid application turnaround time (Page 38).</p>	
		<p>← • Quality</p>	<p>← Student outcomes — skill gain (Page 40).</p> <p>← Student satisfaction with education (Page 42).</p>	
		<p>← • Relevance</p>	<p>← Number of student spaces in identified strategic skill programs (Page 45):</p> <p>← i. Computer science, electrical and computer engineering programs.</p> <p>← ii. Social work and child protection worker programs.</p> <p>← iii. RNs, LPNs and RCAs and other allied health programs.</p> <p>← iv. Medical school programs.</p> <p>← Student assessment of usefulness of knowledge and skills in performing job (Page 49).</p> <p>← Student outcomes — unemployment rate (Page 51).</p>	
	<p>2. Excellent research and innovation that supports economic and social development.</p>	<p>← • Capacity</p>	<p>← Funding support for research (Page 54):</p> <p>← i. Sponsored research funding from all sources</p> <p>← ii. B.C. proportion of federal awards.</p>	
		<p>← • Relevance</p>	<p>← Number of licences, patents, start-up companies (Page 56):</p> <p>← i. Licence/option agreements</p> <p>← ii. U.S. patents issued</p> <p>← iii. Start-up companies</p> <p>← iv. Licence income received</p>	
		<p>← • Quality and Efficiency</p>	<p>← Under development (Page 58).</p>	

Goals, Objectives, Strategies and Performance Measures

Ministry Goal 1

Excellent public and private post-secondary education that meets the needs and aspirations of British Columbians

Core business areas responsible for this goal are: Educational Institutions and Organizations; Student Financial Assistance; Debt Service Costs and Amortization of Prepaid Capital Advances; and Executive and Support Services.

Underlying this goal is a desire to ensure students have affordable opportunities to pursue a wide range of high-quality post-secondary education and training programs. Furthermore, programs will be delivered in an efficient and integrated manner, fostering knowledge and skills relevant to the social and economic needs of the province.

Objective 1: Capacity

Achieving this objective will ensure that there is enough space to accommodate students who wish to pursue post-secondary education, in line with the government's goal of making British Columbia the most literate, best educated jurisdiction on the continent.

Strategic Context

The post-secondary system is facing pressures due to trends toward higher levels of education as system capacity issues affect the potential for qualified students to pursue post-secondary education in local communities.

Demand for post-secondary education and training is increasing in B.C. due to population growth, labour market demand for skilled workers and the trend towards lifelong learning. Capacity challenges are more prevalent in urbanized areas due to their larger and more diverse populations, and competitive labour markets.

To maintain or increase post-secondary participation rates, the capacity of the post-secondary system will need to grow to allow for higher enrolments and expanded opportunities for students to pursue education and training.

Strategies

Increasing capacity in the public post-secondary system is a Ministry priority and the Ministry devotes substantial efforts and resources to increasing system capacity.

- **Strategic Investment Plan.** Increasing the number of funded student spaces is an important way to increase capacity. 2005/06 marks year two of the original Strategic Investment Plan to add 25,000 additional student spaces by 2010. The Plan is designed to increase the public post-secondary participation rate which will support key economic and social priorities of the province. During the year, 4,200 new spaces were added across

the province (a 2.6 per cent increase in total spaces) to support the estimated increase of more than 10,000 individuals in the 18-29 cohort population (a 1.5 per cent increase in the cohort) and respond to labour market needs. Government provided more than \$1.4 billion in operating funding to public post-secondary institutions in 2005/06.

- **Ensure campus facilities meet growth requirements.** In order to accommodate the additional students, new or expanded facilities may be needed. Prepaid capital advances are funds provided to public post-secondary institutions for approved capital costs of new buildings, renovations, improvements, equipment and capital leases. Key capital investments³ for 2005/06 included:
 - British Columbia Institute of Technology — Sea Island Expansion - \$10,310,500
 - Kwantlen University College — Cloverdale Trades Training - \$18,765,512
 - Langara College — New Library/Classroom - \$15,175,786
 - Simon Fraser University — Surrey Central City Campus - \$13,885,000
 - University of British Columbia — Renew Phase 1 — Chemistry North - \$10,021,250
 - University of British Columbia — Okanagan — Okanagan Arts and Science Addition - \$15,272,219
 - University of Northern British Columbia — Teaching and Learning Centre - \$12,124,149
 - University of Victoria — Engineering and Computer Science Building - \$13,819,048

In 2005/06, the Ministry provided public post-secondary institutions with \$88,100,000 for annual capital allowances.

Performance Measures

Four performance measures are used to monitor progress toward the objective of capacity.

1. Total student spaces in B.C. public post-secondary institutions
2. Number of degrees, diplomas and certificates awarded
3. B.C. public post-secondary graduate rate
4. University admissions GPA cut-off

Performance Measure 1: Total student spaces in B.C. public post-secondary institutions

This measure reports the spaces added to the system in 2005/06 and the progress toward the target of 25,000 additional spaces (Full Time Equivalents or FTEs⁴) by 2010. The utilization calculation indicates the extent that the B.C. public post-secondary institutions were able to meet the FTE targets outlined in their 2005/06 budget and accountability letters.

Note: A substantial number of students enrolled in private post-secondary institutions are not captured by this measure.

³ Ministry expenditures for fiscal year 2005/06.

⁴ An FTE represents a student studying with a full-time course load.

Results

Performance Measure	2001/02 Baseline Target ¹	2002/03 Result	2003/04 Result	2004/05 Result	2005/06 Target	2005/06 Result ²	Variance	Target Assessment
Total student spaces in B.C. public post-secondary institutions (FTEs) ³	154,991	160,466	161,484	161,681	168,265	165,739 98.5% utilization ⁴	-2,526	Target not achieved

¹ 2001/02 baseline data represent targeted, not actual, FTEs.

² 2005/06 was the first year of a revised student FTE reporting method for the 21 institutions that report through the Post-secondary Central Data Warehouse (all institutions except five universities). As a result, FTE figures in this report will be subject to review and amendments will be published if required.

³ This measure is reported as a total count of actual FTEs delivered in a fiscal year (except 2001/02 Baseline), including Entry Level Trades Training, but excluding Apprenticeship spaces.

⁴ The utilization rate is a ratio of actual to targeted FTEs.

Variance Explanation

The planned addition of 25,000 student spaces by 2009/10 reflects both growth in the 18-29 year-old population and strong labour market demand for post-secondary education and training. An expansion of this magnitude requires significant effort and planning over the next few years to ensure sufficient facilities, faculty, programming and student services are put in place. The Province and institutions are working together to manage this expansion in an effective and efficient manner.

2005/06 is the second year of the plan, with a target of 168,265 student FTEs. The results indicate that institutions delivered 165,739 total FTEs, 98.5 per cent of the target. There was a year over year increase of 4,058 actual FTEs from 2004/05 to 2005/06, compared to the targeted increase of 4,200 FTEs.

During the first two years of the plan, much of the growth was targeted at the university sector to address immediate challenges relating to higher-than-average student admission grade point average (GPA) requirements. Progress has been made in addressing this challenge at the majority of universities.

A risk with this measure is that a number of factors influencing student demand and student retention affect the results. Some of these are beyond the ability of post-secondary institutions to control, such as local economic conditions, employment opportunities and demographic shifts. Some are more within institutional control, such as time needed to implement new programs, delivery models, and facilities; institution enrolment management policies and procedures; and institutional restructuring.

To mitigate the risk, the Ministry monitors and assesses utilization rates under the Strategic Investment Plan on a regular basis to identify any long-term challenges associated with the six year FTE targets. Minor adjustments to targets were made in 2006/07 based on softening enrolment in some areas of the province due primarily to improved economic conditions and higher than anticipated demand in other areas.

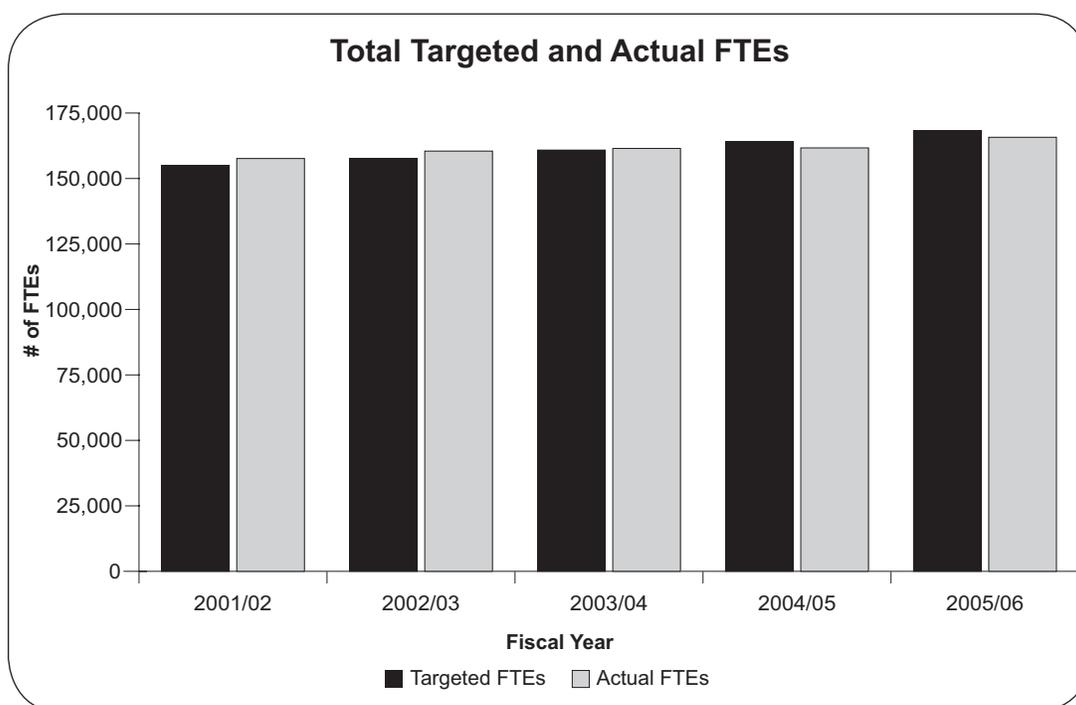
Data Sources and Issues

The data are calculated using end-of-fiscal-year audited enrolment reports submitted to the Ministry by public post-secondary institutions, and are expressed as a total count of actual FTEs delivered and a ratio of actual to funded FTEs, also known as a utilization rate.

The change in Audited FTE Report deadlines (from June 30th to May 15th), to accommodate Service Plan Report deadlines, means that a small amount of student activity may no longer be reported. Institutions run on an academic year and the May 15th reporting date may not fully capture all activity. It is estimated that the May 15th report undercounts by approximately 1.5%–2%.

Changes to the Measure

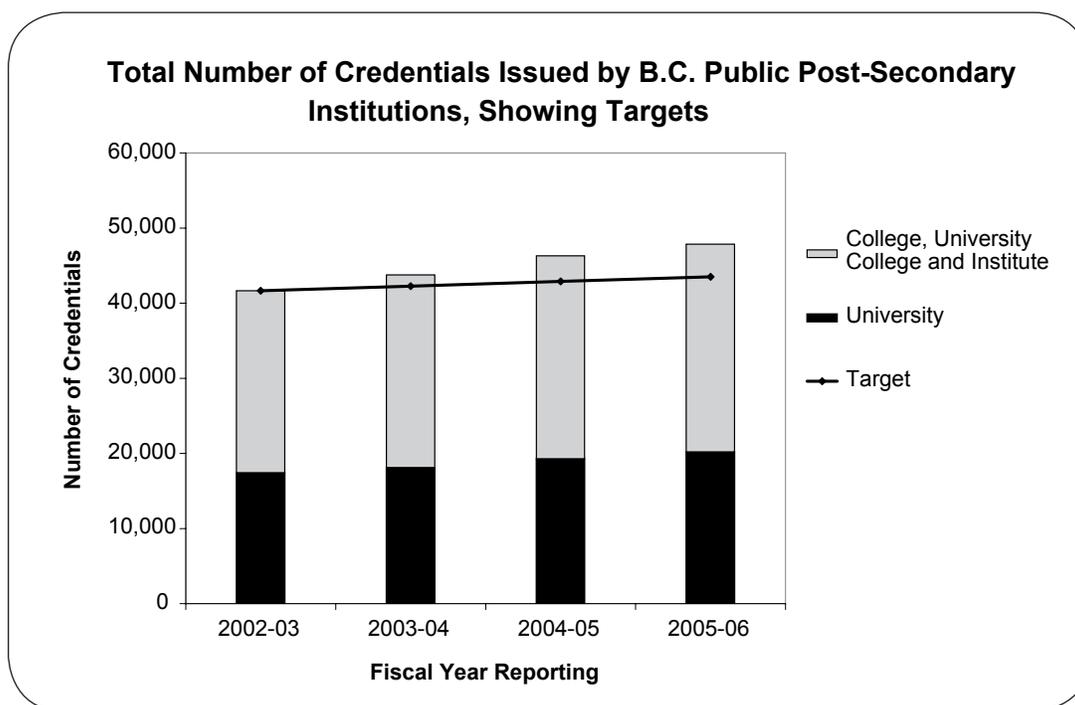
Beginning in the 2006/07–2008/09 Service Plan, the method for calculating FTEs was changed. (See Appendix 3.) All figures in the table above are based on the previous methodology for consistency with the presentation in the 2005/06–2007/08 Service Plan Update.



Performance Measure 2: Number of degrees, diplomas and certificates awarded

All students who fulfil program requirements at public post-secondary institutions are entitled to a formal qualification — either a degree, diploma, or certificate. Counting these credentials provides an understandable and recognizable indication of the system’s capacity to meet student demand and to ensure sufficient numbers of graduates. This information provides a perspective on whether public post-secondary institutions have the capacity to meet the demand of B.C. students to complete their post-secondary programs.

Performance Measure	2002/03 Baseline	2003/04 Result	2004/05 Result	2005/06 Target	2005/06 Result	Variance	Target Assessment
Number of degrees, diplomas and certificates awarded ¹	41,643	43,769	46,189	47,205	47,737	532	Target achieved
<p>¹ Annual performance is measured using a rolling three year average of the most recent academic years, e.g., the 2005/06 results are a three year average of the 2002/03, 2003/04 and 2004/05 academic years. Academic years start in September of one year and end in August of the next year.</p>							
<p>Variance Explanation The results indicate that the target for the total credentials awarded was achieved.</p>							
<p>Data Sources and Issues The measure counts the number of credentials awarded or issued by public post-secondary institutions to students who complete programs and apply to receive a credential. Universities report annual credential data through The University Presidents' Council of British Columbia (TUPC). College, university college and institute data are derived from the Post-secondary Central Data Warehouse.</p> <p>Baseline and annual performance data for this measure are three year averages to account for variations caused by institutional enrolment management policies and procedures. To provide a complete picture of the post-secondary system, all credentials that fit the credential definition (i.e., credentials awarded for all programs that lead to a formal qualification, as opposed to a certificate of attendance) are included regardless of whether they are related to base funded (Ministry funded) or non-base funded (contract or cost-recovery funded) educational activity (e.g., credentials issued to international students are included, though they are not counted in Performance Measures 1 and 5).</p> <p>This measure does not indicate how many students who start programs ultimately complete them, nor how long it takes for program completion. Some of the factors that may affect these results include: historical and current institution capacity (based on physical capacity and the level of funding available); personal, social and economic factors that directly affect students' participation in and completion of programs; and institution business practices and enrolment management policies and procedures.</p>							
<p>Changes to the Measure The measure was adjusted in the <i>2005/06–2007/08 Service Plan Update</i> to exclude credentials awarded by the Industry Training Authority (ITA), as responsibility for the ITA has been transferred to the Ministry of Economic Development. The reductions reflect three types of industry training credentials that have been removed: certificates of apprenticeship, certificates of qualification and Red Seal certifications. The ITA results are reported in Appendix 4.</p> <p>A new method for setting credential targets that incorporates institution FTE growth was adopted by the Ministry for the <i>2005/06–2007/08 Service Plan Update</i>. This affected calculation of the targets, but does not affect the results.</p>							



Performance Measure 3: B.C. public post-secondary graduate rate

This measure is the number of credentials awarded by public institutions per 1,000 people living in B.C. aged 18–29 (see footnote 1 in table below). It provides context for the number of credentials awarded (see performance measure 2). The rate compares credential data to the B.C. population aged 18–29 years, which was selected as the most appropriate representation of the age of post-secondary students in British Columbia.

Performance Measure	2002/03 Baseline	2003/04 Result	2004/05 Result	2005/06 Target	2005/06 Result	Variance	Target Assessment
B.C. public post-secondary graduate rate (credentials per 1,000) ¹	63.1	65.4	67.8	Maintain or increase rate by up to 1% over previous year	69.5	+1.7	Target achieved

¹ Annual credential performance is measured using a rolling three year average of the most recent academic years, e.g., the 2005/06 results are a three year average of the 2002/03, 2003/04 and 2004/05 academic years. Academic years start in September of one year and end in August of the next year.

Variance Explanation

The graduate rate target was achieved.

Data Sources and Issues

Data is provided by institutions through the Post-secondary Central Data Warehouse and The University Presidents' Council of British Columbia (TUPC).

Population estimates are as of July 1st of the academic year (September to August). For example, the population estimated at July 1, 2005 is used for the 2004/05 academic year.

To provide a complete picture of the post-secondary system, all credentials that fit the credential definition (i.e., credentials awarded for all programs that lead to a formal qualification, as opposed to a certificate of attendance, are included regardless of whether they are related to base funded (Ministry funded) or non-base funded (contract or cost-recovery funded) educational activity (e.g., credentials issued to international students are included).

Changes to the Measure

The measure was adjusted in the *2005/06–2007/08 Service Plan Update* to exclude credentials awarded by the Industry Training Authority (ITA), as responsibility for the ITA has been transferred to the Ministry of Economic Development. The reductions reflect three types of industry training credentials that have been removed: certificates of apprenticeship, certificates of qualification and Red Seal certifications. The ITA results are reported in Appendix 4.

Data have been revised to reflect the annual three year average credential output in line with Performance Measure 2, and to reflect the most recent population estimates. Historical data have been restated.

This measure is not included in the *2006/07–2008/09 Service Plan* due to guideline requirements to reduce the number of measures, and the Participation Rate and Total Credentials Awarded measures were seen as effectively addressing the issue.

Performance Measure 4: University admissions GPA cut-off

This measure was developed in 2005/06 to track university admissions Grade Point Average (GPA) to Arts and Science programs for both direct entry and transfer students to address challenges relating to higher than average student admission GPA requirements. The target is to reach a public university direct entry GPA of 75 per cent, and a transfer admissions GPA of 2.0 by 2010.

Performance Measure	2003/04 Baseline	2004/05 Result	2005/06 Target	2005/06 Result	Variance	Target Assessment
University admissions GPA (Grade Point Average) cut-off for Arts and Science programs: ¹	Fall 2003	Fall 2004		Fall 2005		
Direct entry ²	83.4% ⁴	81.8% ⁴	Reduce to 75% by 2010	81.4%	-0.4% lower than 2004/05 result	Contributed to achieving 2010 targets
Transfer ³	2.8 points ⁴	2.7 points ⁴	Reduce to 2.0 points by 2010	2.5 points	-0.2% lower than 2004/05 result	

¹ This measure reflects the weighted average admissions GPA cut-offs at British Columbia's three largest public universities (University of British Columbia (UBC), Simon Fraser University (SFU), and the University of Victoria (UVic)).

² Direct entry GPA cut-off is expressed as a percentage.

³ University transfer GPA cut-off is expressed on a 4.33 grade scale.

⁴ The 2003/04 and 2004/05 numbers have been restated to align with data provided by The University Presidents' Council of British Columbia (TUPC) for 2005/06.

<p>Variance Explanation</p> <p>The results indicate that the GPA cut-off for direct entry to university has decreased by 0.4 percentage points since 2004/05. As well, the GPA cut-off for students who transfer from other institutions has decreased by 0.2 points. This indicates progress towards the 2010 target.</p>
<p>Data Sources and Issues</p> <p>Data for this measure is provided by the universities through The University Presidents' Council of British Columbia (TUPC). UBC numbers reflect the admissions quotas, while SFU and UVic report actual registrations.</p>
<p>Changes to the Measure</p> <p>The Ministry will continue to monitor GPA cut-offs and report on progress in the Service Plan Report, but starting with the <i>2006/07–2008/09 Service Plan</i>, this will no longer be a formal performance measure in keeping with Service Plan guidelines to reduce the number of formal measures.</p>

Objective 2: Access

Achieving this objective will ensure that there are equitable opportunities available for all students to have access to post-secondary education.

Strategic Context

Emerging shifts in the composition of B.C.'s population will continue to present challenges for the Ministry in ensuring barriers to learning do not impede post-secondary participation of various population groups.

Positive net migration remained the key driver of B.C.'s population growth. The increasing number of people migrating to B.C. includes a significant proportion of new immigrants who possess at least a baccalaureate level of education. These also include many whose first language is not English. This trend towards an increasingly diverse population will likely increase demand for English as a Second Language programs.

The Aboriginal population is an increasing proportion of B.C.'s population. The Aboriginal population grew by 22 per cent between 1996 and 2001, and represented five per cent of the total provincial population. As it is expected that growth in the Aboriginal population will continue its upward trend, there will be increased demand for culturally sensitive programming that supports increased participation in post-secondary education.

Strategies

- Provide student financial aid, including funds for targeted populations.** To ensure finances are not a barrier to pursuing post-secondary education, the Ministry provides assistance directly to eligible students so they can manage the costs associated with education. During the 2005/06 fiscal year⁵ approximately 58,000 students who could demonstrate need received assistance to continue their post-secondary education. Total assistance for these students, including grant funding, was \$634 million. This amount includes the \$67.2 million Student Loan Reduction Program. Students

⁵ Figure for the 2005/06 program year (August 2005 to July 2006) is not yet available, and will be slightly different due to the different time period.

attending private and public institutions, as well as students with dependants, are eligible for student financial assistance. An additional \$30 million was available through targeted programs, such as scholarships and bursaries. A total of \$4.3 million was provided to an estimated 7,800 students (final figure not yet available) to assist them with the costs associated with developmental programs.

- **Provide programs for Aboriginal students.** The Ministry and our post-secondary partners devote considerable effort and resources to improving participation of Aboriginal people. For example, over the past five years the Ministry has contributed \$7.8 million through the Aboriginal Special Projects Fund to support projects that help ensure relevant, high quality education programs for Aboriginal learners in a wide range of areas. In addition, most public post-secondary institutions employ Aboriginal Coordinators who work with Aboriginal students, providing cultural and academic support. In 2005/06, the Ministry provided \$1.8 million to fund 36 projects, through Aboriginal Special Projects Funding. This funding assisted public post-secondary institutions in promoting relevant, quality educational programs and support activities to help increase participation among Aboriginal learners. In March 2005, the Province signed an Aboriginal Post-Secondary Memorandum of Understanding with British Columbia's post-secondary institutions, the federal government and key Aboriginal organizations. This agreement is intended to improve levels of participation and success for Aboriginal learners in the post-secondary system. In April 2005, the Ministry provided \$90,000 to the First Nations Education Steering Committee, an organization representing First Nation K-12 interests, to develop and implement strategies to improve success for Aboriginal post-secondary learners in British Columbia. In June 2005, the Ministry completed a review of Aboriginal post-secondary education programs and services and the Aboriginal Special Projects Funding. The recommendations are being reviewed and will be considered in ongoing policy development for Aboriginal programming. Consultations with key stakeholders continued regarding a proposed Aboriginal post-secondary education strategy. The goal of the strategy is to ensure that Aboriginal learners in the public post-secondary system have the appropriate and necessary tools to participate successfully and complete their studies on a level comparable to non-Aboriginal learners.
- **Fund developmental programs for targeted populations.** Maintaining access to developmental programs like Adult Basic Education (ABE), English as a Second Language (ESL) and Adult Special Education (ASE) is a priority for the Ministry. Many adult learners, for a variety of reasons, have not achieved the level of education they need or want in order to build the future they desire for themselves and their families. Some of these learners are disadvantaged; others are newcomers to Canada. Developmental programs offer them the opportunity to gain the skills necessary to participate fully in the B.C. economy and society. Some learners enroll in order to gain their Adult Graduation Diploma. Others enroll in advanced (grade 11) and provincial (grade 12) level ABE programs to improve their grades or complete pre-requisites for post-secondary study. The Ministry has also established a survey cycle of developmental programs offered in the post-secondary education system. These surveys provide information for government and institutions for purposes of policy decision-making, accountability reporting and program development and evaluation. Data from the ABE student cohort from July 1, 2003 to June 30, 2004 was collected early in 2005 and the final report of the 2005 ABE Student

Outcomes Survey was released in March 2006. An ASE cohort study is currently underway. The Ministry is collaborating with the Ministry of Education on an overall provincial literacy strategy and is developing an Adult Literacy Strategy to fit into that framework. In 2005/06, the Ministry funded 50 community literacy programs through the Adult Literacy Cost-Shared Program (now called the Community Adult Literacy Program). As well, the Ministry has been working closely with Literacy Now to identify potential opportunities for partnership. Literacy Now agreed to provide funding in 2005/06 for regional literacy coordination, allowing the Ministry to free resources to fund additional community-based programs. Work was ongoing throughout the year in preparation for a pan-Canadian adult literacy forum organized by the Ministry and held in Prince George in June 2006.

- **Maintain affordable post-secondary education through fair tuition policy.** When B.C.'s tuition fees increased to a level comparable to those in other provinces, government acted to limit future tuition fee increases to the rate of inflation. For 2005/06, tuition fee increases were limited to two per cent, the rate of the 2004 B.C. Consumer Price Index.

Performance Measures

Three performance measures are used to monitor progress toward the objective of access.

5. B.C. public post-secondary participation rate for population aged 18–29
6. Number and per cent of public post-secondary students that are Aboriginal
7. Student spaces in developmental programs

Performance Measure 5: B.C. public post-secondary participation rate for population age 18–29

The Ministry works with public institutions to increase capacity and improve access to post-secondary education. At the same time, the population of 18–29 year-olds — the age group considered most representative of post-secondary students in B.C. — is increasing, placing additional demands on the post-secondary system.

This measure shows the enrolment in the public post-secondary system as a proportion of the B.C. population aged 18–29. It provides context for efforts to increase capacity and improve access at a pace that exceeds population growth for 18–29 year-olds. The measure was intended to provide an indication of the level of demand for post-secondary education in B.C. and whether the system has been successful in meeting that demand.

Performance Measure	2004/05 Baseline	2005/06 Target	2005/06 Result	Variance	Target Assessment
B.C. public post-secondary participation rate for population 18–29 ¹	53.2 ^{2,3}	Increase by up to 1% over previous year	52.3 ³	-0.9	Target not achieved
<p>¹ This measure has been operationally redefined from previous years. It is now based on enrolment data from the Post-secondary Central Data Warehouse and The University Presidents' Council of British Columbia (TUPC). Consequently, its results will not be comparable with previous years.</p> <p>² This baseline has been adjusted from 43.9 to 53.2 to include a wider range of educational activity in the post-secondary system, in line with the new FTE reporting methodology (see Appendix 3). Data has also been recalculated to exclude international students from the enrolment figures.</p> <p>³ Baseline result for the 2004/05 fiscal year represent data from the 2003/04 academic year (September 2003 to August 2004), and result for the 2005/06 fiscal year represent data from the 2004/05 academic year (September 2004 to August 2005).</p>					
<p>Variance Explanation</p> <p>The decline in the participation rate is related in part to the continued growth in the 18–29 population and to an exceptionally robust provincial economy, reflected in the low unemployment rate.</p> <p>Total enrolments in the post-secondary system have grown at a rate below the 18–29 population growth rate since 2002/03.</p> <p>The current low unemployment rate in British Columbia can also have an impact on the participation rates for post-secondary education. Potential students may have chosen to postpone or leave post-secondary education to take advantage of improved labour market conditions.</p>					
<p>Data Sources and Issues</p> <p>Enrolment data is obtained from B.C. public post-secondary institutions and population estimates from BC Stats, providing current and historical participation within B.C. Data for the fiscal years shown in the columns above are from the previous academic years, e.g., 2005/06 fiscal year data are based on the 2004/05 academic year, which covers September 2004 to August 2005.</p>					
<p>Changes to the Measure</p> <p>This measure originally was to be used to provide an inter-provincial comparison of post-secondary participation in Canada. Due to difficulty obtaining current national enrolment data from Statistics Canada, the measure was re-defined in 2004/05. Thus, inter-provincial comparison of post-secondary participation is not possible.</p> <p>The baseline has been adjusted since the <i>2005/06–2007/08 Service Plan Update</i> was published and reflects university data (excluding international student enrolment) and college sector data (based on continuous enrolment for academic year, excluding international students). Data have also been revised to include a wider range of educational activity in post-secondary institutions in line with the updated FTE reporting methodology for the college sector (see Appendix 3).</p>					

Performance Measure 6: Number and per cent of public post-secondary students that are Aboriginal

Increasing post-secondary participation and success rates among Aboriginal people is a priority for the Ministry and public post-secondary institutions. This measure indicates the level of Aboriginal student participation in public post-secondary education, both in total number and per cent of all public post-secondary students.

Performance Measure	2003/04 Baseline	2004/05 Result	2005/06 Target	2005/06 Result	Variance	Target Assessment
Number and per cent of public post-secondary students that are Aboriginal:						
Number	14,859 ^{1, 2, 3}	16,119 ^{2, 3}	Maintain or increase over previous year	16,473 ³	354	Targets achieved
Per cent	4.0 ^{1, 2, 3}	4.3 ^{2, 3}		4.4 ³	+0.1 percentage points	
<p>¹ Does not include data from Royal Roads University.</p> <p>² The baseline and 2004/05 results have been adjusted to reflect more current data.</p> <p>³ Fiscal year results represent data from the previous academic year, e.g., 2005/06 fiscal year represent data from the 2004/05 academic year, which started September 2004 and ended August 2005.</p>						
<p>Variance Explanation</p> <p>The results suggest that there has been an overall increase and a minor proportional increase in Aboriginal student participation in post-secondary education.</p> <p>It is important to interpret these results in context of the overall Aboriginal population growth. Statistics Canada data reveal that from 1951 to 2001, while the Canadian population doubled, the Aboriginal ancestry population grew sevenfold. In B.C., from 1996 to 2001 the overall youth population aged 15-24 grew 6.3 per cent but the Aboriginal population of the same age grew 15.9 per cent.</p> <p>Interestingly, the fast growing Aboriginal population is only partly due to demographic change. Another important factor is the increasing tendency of people to identify as Aboriginal. This raises the question of whether changes in Aboriginal population are explained by a true demographic change or by an increase in reporting or identification of Aboriginal identity. Both factors may have contributed to the increases in Aboriginal post-secondary participation. As data quality improves, the Ministry will continue to develop measures of educational outcomes for Aboriginal students.</p>						
<p>Data Sources and Issues</p> <p>Data are obtained from information contained in public post-secondary institution registration and administration systems, and the Ministry of Education student database.</p> <p>Results for this measure must be interpreted with an awareness of the data limitations. When registering in a post-secondary program, students have the opportunity to self-identify as persons of Aboriginal ancestry. For many reasons, however, not all Aboriginal students choose to do so. Further, there are no standards for how questions about Aboriginal ancestry are phrased on student application forms, or standards for how such questions are recorded in student registration systems at institutions. As a result, public post-secondary institution registration data under-represents the actual number of Aboriginal learners enrolled. To compensate for this limitation, counts from the administrative records of post-secondary institutions are enhanced by adding those students who were identified in K-12 administrative records as being of Aboriginal ancestry (to ensure student privacy, <i>Freedom of Information and Protection of Privacy Act</i> guidelines are carefully observed). This method does not provide an entirely complete picture of Aboriginal student participation in post-secondary education, but it represents best efforts under current data limitations.</p>						
<p>Changes to the Measure</p> <p>The calculation of the percentage component of the measure has been modified to exclude international students from the base population, and all numbers were revised to reflect that.</p>						

Performance Measure 7: Student spaces in developmental programs

This measure indicates whether the post-secondary system was able to meet the FTE target for developmental programs (ABE, ESL, ASE). Some adult learners who wish to participate in post-secondary education may first need preparatory work. Others access developmental programs to gain basic literacy and/or workplace essential skills. This measure shows whether public post-secondary institutions in British Columbia were able to meet the student FTE targets for developmental programs outlined in their 2005/06 budget and accountability letters.

Performance Measure	2003/04 Baseline Actual ¹	2004/05 Result	2005/06 Target	2005/06 Result ²	Variance	Target Assessment
Student spaces in developmental programs ^{3,4}	13,197	12,711	Maintain or increase over previous year ⁵	13,362 100.7% utilization ⁶	87	Target achieved

¹ 2003/04 baseline data represent actual, not targeted, FTEs.

² 2005/06 was the first year of a revised student FTE reporting method for the 21 institutions that report through the Post-secondary Central Data Warehouse (all institutions except five universities). As a result, FTE figures in this report will be subject to review and amendments will be published if required.

³ Developmental programs are: Adult Basic Education (ABE), English as a Second Language (ESL), and Adult Special Education (ASE).

⁴ This measure is reported as a total count of actual FTEs delivered in developmental programs in a fiscal year (except 2001/02).

⁵ Utilization rate and variance for 2005/06 were calculated using a figure of 13,275, which represents the number of funded developmental student spaces.

⁶ The utilization rate is a ratio of actual to targeted FTEs.

Variance Explanation

The target for developmental programs was achieved. Overall, student enrolment in developmental programs rose in the province in 2005/06. Institutions in the public post-secondary system are finding innovative ways to recruit and retain students in these subject areas, including developing creative outreach programs and instituting more flexible program delivery methods.

Among the factors that may positively or negatively affect results for this measure are student demand and student retention. These are affected by changes in high school completion rates, the economy or changes in the policies of other ministries and governments. Results may also be affected by institutional enrolment management policies and procedures and institutional restructuring.

Data Sources and Issues

Data were obtained from end-of-fiscal-year audited enrolment reports submitted to the Ministry by public post-secondary institutions.

Changes to the Measure

Beginning in the *2006/07–2008/09 Service Plan*, the method for calculating FTEs was changed. (See Appendix 3.) All figures in the table above are based on the previous methodology for consistency with the presentation in the *2005/06–2007/08 Service Plan Update*.

Objective 3: Efficiency

Achieving this objective will ensure students are able to progress through the post-secondary system and complete courses and programs in a reasonable amount of time. Achieving this objective also ensures that Student Financial Assistance, a service that the Ministry provides directly, is provided efficiently.

Strategic Context:

Approximately 65 per cent of B.C.'s population possess some post-secondary education. Societal, economic and labour market conditions affect and are affected by educational attainment levels of B.C.'s population. Factors such as society's high value on education and lifelong learning, the emergence of the knowledge-based economy, and high growth in the demand for post-secondary credentials in the labour market increase the need for more choice and flexibility in the range of education and student financial aid programs available to British Columbians.

Reducing geographic and financial barriers to the efficient functioning of the post-secondary education system would enhance the ability of learners to complete education and training. Greater coordination in the inter-institutional credit transfer system through enhanced cooperation among institutions, and expansion of student financial assistance programs helps increase student choice and reduce barriers to post-secondary completion.

Strategies:

- **Facilitate transfer into and between post-secondary institutions.** The Ministry provides funding and support to the B.C. Council on Admissions and Transfer (BCCAT). The Council works with post-secondary institutions to facilitate transfer arrangements among public and private institutions. This allows students to receive credit for courses or programs taken previously at one or more institutions when pursuing further studies at other institutions. As well, the Ministry continues to support Prior Learning Assessment. Institutions offer this service which allows a student to earn credit toward courses or programs if the student can demonstrate knowledge or skills equivalent to what would normally be acquired through conventional studies.
- **Undertake efficiency improvements in Student Financial Assistance.** The introduction and expansion of a new on-line application greatly assisted in reducing application turnaround time. The on-line application eliminated data entry requirements, thereby reducing the time required to process an application. It also eliminated missing information, reducing requests for missing information. Recent efforts focused on expanding the on-line application process to students of the larger private post-secondary institutions in B.C., and students of some public out-of-province post-secondary institutions.

Performance Measures:

Three performance measures are used to monitor progress toward the objective of efficiency.

8. Degree completion rate
9. Student satisfaction with transfer
10. Student aid application turnaround time

Performance Measure 8: Degree completion rate

This measure was developed as a program completion measure, intended to indicate the ability of B.C. public universities to deliver degree programs to students in an efficient and timely manner.

It is a two-part measure focused on students admitted to the University of British Columbia, Simon Fraser University, University of Victoria and University of Northern British Columbia. One component of the measure is the proportion of direct-entry students who complete their baccalaureate degree within seven years; the second component is the proportion of university transfer students who complete their baccalaureate degree within five years of admission to university. This is a measure of whether or not students complete their educational programs in a reasonable amount of time; it is not a measure of how long it takes students to complete their programs.

Performance Measure	2004/05 Baseline	2005/06 Target	2005/06 Result	Variance	Target Assessment
Degree completion rate:					
Direct entry ¹	72% within 7 years	Maintain or increase over previous year	74%	+2 percentage points	Targets achieved
Transfer students ²	65% within 5 years		66%	+1 percentage point	

¹ Data for the fiscal years shown in the columns above are from the previous academic year for baccalaureate degree students, e.g., 2005/06 fiscal year data are from the 2004/05 academic year, which covers September 2004 to August 2005.

² Transfer student rate is a combined rate (2nd and 3rd year transfer reported as one total).

Variance Explanation

The results for this measure show an improvement in the degree completion rate for both direct entry and transfer students.

Data Sources and Issues

Data for this measure is provided by the universities through The University Presidents' Council of British Columbia (TUPC).

Measuring program completion at seven years for direct entry students (five years for transfer students) is based on a general consensus that the vast majority of direct entry students who are going to complete their baccalaureate program will do so within seven years (five years for transfer students). Attempting to measure program completion at an earlier point in time (e.g., five years for direct entry students and three years for transfer students) would ignore the significant number of students who complete their programs over a longer period of time due to personal choice, stop-outs for employment purposes, and other factors.

Performance Measure 9: Student satisfaction with transfer

This measure indicates how well the transfer system has integrated post-secondary education in British Columbia. It is based on evaluation by students of their experience with the transfer system, and is obtained through the B.C. College and Institute Student Outcomes Survey.

Performance Measure	2002/03 Baseline	2003/04 Result	2004/05 Result	2005/06 Target	2005/06 Result	Variance	Target Assessment
Student satisfaction with transfer ¹	87.8% (2002 survey)	85.5% (2003 survey)	86.6% (2004 survey)	Maintain high level of satisfaction — benchmark of 90% ² — OR demonstrate performance improvement over time ³	84.4% (2005 survey)	Benchmark not achieved Trend line not statistically significant ⁴	Target not achieved

¹ For most measures that use student outcomes survey data, the margins of error are less than 1% at the 95% confidence level.

² The benchmark is based on analysis of historic performance and on the understanding that a benchmark should signify a challenging level of excellence.

³ The target will be met if annual performance (plus margin of error) is above or equal to the benchmark, or if successive annual performance demonstrates overall improvement (based on a trend line calculated from annual performance plus/minus margin of error).

⁴ No statistically conclusive trend can be drawn from the data.

Variance Explanation

The target for this measure was either to meet the benchmark or to show improvement over time. This year, the benchmark was not achieved, and the trend line was not statistically significant. Therefore, the target was not achieved.

Given that these data are obtained from student surveys, this measure might unintentionally reflect student satisfaction with aspects of their educational experience other than their transfer experience, such as institutional capacity and availability of programs and courses. Nonetheless, as a measure of how well the transfer system works for students, this may be the most effective method of obtaining direct information for evaluative purposes.

The Ministry is discussing the issue with BCCAT with a view to developing options to address the result.

Data Sources and Issues

Data are obtained from the B.C. College and Institute Student Outcomes Surveys, and are from former students who transferred and expected to transfer credits and who were very satisfied or satisfied with their transfer experience.

The measure is calculated as the percentage of former students who transferred to a B.C. public post-secondary institution, who expected to transfer credit, and who indicated via survey that they were either satisfied or very satisfied with their overall transfer experience. When interpreting results, note that while the measure reflects the experience of students who successfully transferred credits, it does not provide information on students who were unsuccessful in their attempts to transfer credits.

For more information on the surveys used to collect this data, please see Appendix 5.

Changes to the Measure

Starting with the *2006/07–2008/09 Service Plan*, this will no longer be a formal performance measure in line with guideline requirements to reduce the number of performance measures, and because degree completion will be used to measure efficiency. The Ministry will continue to monitor progress, and institutions will continue to report on this measure through the Institutional Service Plan Reports.

A Note on the B.C. Transfer System

The B.C. transfer system enables students to receive credit for courses and programs completed at B.C. institutions (both public and private) when pursuing further education at other B.C. institutions. The effectiveness of the transfer system provides one indication of the overall efficiency and integration of the post-secondary education system. The Ministry knows the transfer system is working because:

Students Have the Opportunity to Transfer

There are currently 55,656 course and 759 block transfer agreements. The opportunity to transfer is expanding, as in 2004 the British Columbia Council on Admissions and Transfer (BCCAT) consulted with institutions in the B.C. transfer system about allowing private institutions that have obtained ministerial consent to offer degree programs in the province under the *Degree Authorization Act* to be eligible to request articulation within the transfer system. The consultation resulted in a set of policies and procedures regarding articulation with private institutions, thereby further increasing transfer opportunities in B.C. Work continues on exploring how to facilitate articulation between public and non-degree private institutions, with further consultation planned for the upcoming year.

Students Do Transfer

Recent research jointly undertaken by BCCAT, public institutions, and the Ministry indicated that 4,006 students who were enrolled in B.C.'s public colleges, university colleges and institutes in 2003 transferred to one of B.C.'s four largest public universities in 2004.

Students Who Transfer Are Satisfied with Their Transfer Experience

As indicated in the results for performance measure 9, in each of the past four years, over 84 per cent of former students who used the transfer system were either very satisfied or satisfied with their transfer experience.

Performance Measure 10: Student aid application turnaround time

The British Columbia Student Assistance Program (BCSAP) improves access to post-secondary education by helping eligible students manage the costs associated with their education. A BCSAP application is a one-stop process for students to apply for financial assistance through a variety of loans and grants made available by the provincial and federal governments and the Canada Millennium Scholarship Foundation. In the 2005/06 fiscal year, approximately 70,000 BCSAP applications were processed.

This measure reflects the results of Ministry efforts to improve efficiency by reducing application turnaround time.

Performance Measure	2002/03 Result	2003/04 Result	2004/05 Result	2005/06 Target	2005/06 Result	Variance	Target Assessment
Student aid application turnaround time (working days)	17	15	10	Maintain at 10	9	Improvement of 1 day	Target achieved

Variance Explanation

The results indicate that the time required to process complete applications has continued to drop slightly, suggesting greater efficiency in one aspect of Ministry business practices. Some applications exceeded the 9 working day processing time during the summer peak period, but the large majority of applications were processed within 9 days.

Data Sources and Issues

Data is obtained by extrapolating an estimate from in-house status reports. Figures are the number of working days required to process complete student loan applications. Delays due to incomplete information are not included.

Changes to the Measure

This measure will no longer be a formal performance measure starting with the *2006/07–2008/09 Service Plan*, in accordance with the service plan guidelines to not include operational level measures. However, student financial aid turnaround time will continue to be monitored internally to ensure continued improvements.

Objective 4: Quality

Achieving this objective will ensure that the education and training post-secondary students receive in British Columbia will exhibit a standard of excellence that is comparable or superior to that available anywhere in the world.

Strategic Context:

Advanced education is recognized as a critical factor affecting the economic and social well-being of British Columbians. Education and training are an important means to developing an individual's skills, abilities and competencies.

Employment has been increasing at a faster rate for those with some post-secondary education and training compared to those with a high school education or less. By 2013, approximately 70 per cent of job opportunities will require post-secondary education or training. This trend towards an increased value of post-secondary education in the labour market, and in society in general, illustrates the rising importance of the post-secondary education system. A quality post-secondary education system is vital in ensuring that learners achieve positive outcomes, and that education and training programs are competitive and relevant.

Strategies:

- **Collect and provide quality monitoring and improvement information.** Institutions are responsible for developing, evaluating and revising the content of their instructional programs. The Ministry provides funding for annual system-wide outcomes surveys on the perspectives of former students on aspects of their education experience, as well as for other studies, to provide input into these processes. In addition to the annual outcomes surveys, institutions also use a variety of methods to obtain student feedback and engage students in program development and evaluation. Examples include student participation on program development committees, student membership on institutions' governing boards, senates and education councils, and information obtained through student feedback forms.
- **Provide oversight and input into quality review processes.** The Degree Quality Assessment Board scrutinizes new degree proposals according to assessment criteria before recommending whether programs should be approved. As well, the Private Career Training Institutions Agency provides quality assurance mechanisms for accredited private non-degree training institutions.

Performance Measures:

Two performance measures are used to monitor progress toward the objective of quality.

11. Student outcomes — skill gain
12. Student satisfaction with education

Performance Measure 11: Student outcomes — skill gain

This measure indicates one aspect of quality in education delivery at B.C. public post-secondary institutions: the level of skills students gained through their educational experience. It is based on students' evaluation of their skill gain.

Performance Measure	2002/03 Baseline	2003/04 Result	2004/05 Result	2005/06 Target	2005/06 Result	Variance	Target Assessment
Student outcomes — average skill gain: ¹							
Former college, university college and institute students whose program prepared them very well or well	77.9% (2001 survey)	78.4% (2003 survey)	79.2% (2004 survey)	Maintain high level of satisfaction — benchmark 85% ³ — OR demonstrate performance improvement over time ⁴	79.5% (2005 survey)	Benchmark not achieved Statistically significant positive trend line	Target achieved
University baccalaureate graduates who indicated that university helped them develop skills to a very high or high extent	83.0% (2002 survey)	n/a ²	83.5% (2004 survey)		84.5% (2005 survey)	Benchmark achieved within margin of error	Target achieved ⁵

¹ Some of the difference between the university results and the college, university college and institute results may be accounted for by the different wording of questions and the different response scales used in each survey.

² Data from the 2003 B.C. University Baccalaureate Graduate Survey is not applicable because it was based on graduates' responses five years after graduation rather than two years after graduation.

³ The benchmark is based on analysis of historic performance and on the understanding that a benchmark should signify a challenging level of excellence.

⁴ The target will be met if annual performance (plus margin of error) is above or equal to the benchmark, or if successive annual performance demonstrates overall improvement (based on a trend line calculated from annual performance plus/minus margin of error).

⁵ The margin of error for this measure for the universities is 1.1% at the 95% confidence level.

Variance Explanation

The target was achieved for college, university college and institute student outcomes, as there was a statistically significant trend line, showing that satisfaction is going up over time. The university sector target was achieved within the margin of error.

Institutions will use these data as a key input into their internal program evaluation and improvement processes, and the Ministry will continue to monitor progress in this area.

Data Sources and Issues

Data are obtained from the B.C. Baccalaureate Graduate Survey and B.C. College and Institute Student Outcomes Survey. The measure is calculated as the percentage of former students who, when surveyed, indicated that their education helped them develop specific, generic skills commonly regarded as necessary to lead a productive life and that are similar to the types of skills deemed necessary for successful employment by the business community and the Conference Board of Canada.

Comparison of results between surveys is not valid due to different wording of questions and different response scales used in each survey. For more information on the surveys used to collect this data, please see Appendix 5.

It is important to note that although skill gain is an outcome of education, it is difficult to quantify because there are no mechanisms to measure a student's skill level prior to admission. Therefore, although students' assessment of the amount their skill level increased through education is an accepted indicator of education quality, this measure is not without limitations that must be considered when evaluating results. These include the limitations inherent to subjective surveying and to any attempt to measure a broad range of skills that may receive differing emphasis based on the particular program of study.

Changes to the Measure

The *2005/06 – 2007/08 Service Plan* is the first Plan where performance targets for this measure are based on the average for all skill types. Historical results by each skill type can be found below.

Starting with the *2006/07 – 2008/09 Service Plan*, the target for this measure will be the benchmark (percentage) only.

The following table shows the historical results for the different types of skills that make up the average.

Historical Data

Skill Type	Colleges, University Colleges and Institutes				Universities	
	Survey Year				Survey Year	
	2002	2003	2004	2005	2004	2005
Written Communication	72.5%	73.3%	74.4%	75.8%	84.0%	80.2%
Oral Communication	71.4%	71.8%	73.7%	74.6%	80.8%	80.8%
Group Collaboration	82.6%	83.3%	83.7%	83.5%	77.3%	81.5%
Problem Resolution	n/a	73.9%	75.8%	75.4%	75.4%	77.4%
Critical Analysis	n/a	83.0%	83.6%	83.4%	90.3%	92.2%
Reading and Comprehension	82.2%	81.9%	82.2%	82.7%	86.8%	88.0%
Learn on your own	79.7%	81.8%	81.3%	81.2%	89.7%	91.4%
Average	77.7%	78.4%	79.2%	79.5%	83.5%	84.5%

Performance Measure 12: Student satisfaction with education

As the recipients of post-secondary education, former students are well-suited to comment on it. As such, students' assessment of how satisfied they were with their education experience is an understood and accepted measure of quality.

This is a measure of the percentage of former public post-secondary students who, when surveyed, indicated that they were very satisfied or satisfied with their post-secondary education. It is based on data obtained from annual student outcomes surveys.

Performance Measure	Baseline	2002/03 Result	2003/04 Result	2004/05 Result	2005/06 Target	2005/06 Result	Variance	Target Assessment
Student satisfaction with education: ^{1, 2}								
Former college, university college and institute students very satisfied or satisfied with studies	n/a ³	n/a ³	n/a ³	95.7% (2004 survey)	Maintain high level of satisfaction — benchmark of 90% ⁵ — OR	95.4% (2005 survey)	Benchmark achieved	Target Achieved
University baccalaureate graduates very satisfied or satisfied with education	93.9% (2000 survey)	95.7% (2002 survey)	n/a ⁴	96.5% (2004 survey)	demonstrate performance improvement over time ⁶	95.8% (2005 survey)	Benchmark achieved	Target achieved
<p>¹ For most measures that use student outcomes survey data, the margins of error are less than 1% at the 95% confidence level.</p> <p>² Some of the difference between the university results and the college, university college and institute results may be accounted for by different methodology.</p> <p>³ As of 2004, a new question was used for the B.C. Colleges and Institutes Student Outcomes Survey that better mirrors that of the B.C. University Baccalaureate Graduate Survey. Therefore, there is no historical data for comparison.</p> <p>⁴ Data from the 2003 B.C. University Baccalaureate Graduate Survey is not applicable because it was based on graduates' responses five years after graduation rather than two years after graduation.</p> <p>⁵ The benchmark is based on analysis of historic performance and on the understanding that a benchmark should signify a challenging level of excellence.</p> <p>⁶ The target will be met if annual performance (plus margin of error) is above or equal to the benchmark, or if successive annual performance demonstrates overall improvement (based on a trend line calculated from annual performance plus/minus margin of error).</p>								
<p>Variance Explanation</p> <p>The target for both former college students and university baccalaureate graduates was achieved.</p>								

Data Sources and Issues

Data were obtained from the B.C. University Baccalaureate Graduate Survey and B.C. College and Institute Student Outcomes Survey. This is a measure of the percentage of former public post-secondary students who, when surveyed, indicated that they were very satisfied or satisfied with their post-secondary education. Caution should be taken when comparing results between surveys due to different questions and methodologies. For more information on the surveys used to collect these data, please see Appendix 5.

There are, of course, a number of factors beyond the control of post-secondary institutions that may affect student satisfaction, but it is expected that these factors are fairly distributed across the group of student respondents in any given year, and are relatively consistent over time. Therefore, the unique characteristics of the group of student respondents are believed to be less of a factor in their satisfaction assessment than the quality of education they received.

Changes to the Measure

The Ministry, in partnership with post-secondary institutions, has implemented a new question on the B.C. College and Institute Student Outcomes Survey that better mirrors that of the B.C. University Baccalaureate Graduate Survey. Therefore, there is no historical data for comparison for former college, university college and institute students.

Starting with the *2006/07–2008/09 Service Plan*, the target for this measure will be the benchmark (percentage) only.

Objective 5: Relevance

Achieving this objective will ensure that education and training offered through the post-secondary system are relevant to the knowledge, skills and abilities needed in the labour market.

Strategic Context:

British Columbia is experiencing robust economic and employment growth. The provincial economy expanded by 3.5 per cent in 2005, and this strong performance is expected to continue in the medium-term. The provincial unemployment rate has declined to its lowest rate in 30 years.

With low unemployment rates, skill shortages are becoming prevalent in construction, health care, high technology, and other highly skilled occupations, particularly in rural and northern areas of the province. To ensure sustained economic growth, post-secondary education and training must provide learners with skills and knowledge relevant to local labour markets.

Strategies:

- **Build linkages between the post-secondary system and industry.** The Ministry supports initiatives to ensure that up-to-date knowledge and skills needed by employers and entrepreneurs in a modern economy are provided by public post-secondary institutions. Consortia are being used to develop strategies and to ensure that current and long-term training needs in the aerospace, oil and gas, and hospitality and tourism industries are met. Institutions are responsible for developing, evaluating and revising the content of

their instructional programs. As a part of these processes, institutions maintain ongoing links to industry and employers in order to ensure that, where appropriate, programs foster knowledge and skills relevant to employers and entrepreneurs in a modern economy.

- **Conduct research and analysis of labour market and socio-economic trends.**

The Ministry conducts research and analysis of labour market and socio-economic trends in order to have current information on the state of shortages.

- **Target spaces to meet strategic skill needs.** To address shortages of skilled people in some occupations, student spaces continued to be specifically targeted to strategic skill areas. New student spaces were dedicated to programs in health care, including expansion of undergraduate medical education, computer science, electrical and computer engineering, social work and child protection, and oil and gas. Providing additional graduates trained in these occupations is a government priority, one that will enhance our health care system and stimulate economic growth. To meet growing student and labour market demand, the Ministry worked collaboratively with institutions on strategies to increase student spaces in these programs substantially. In 2005/06, this included the development of new, combined major programs for some computer science, electrical and computer engineering programs under the Double the Opportunity initiative, and the introduction of the Nurse Practitioner program at the University of Northern British Columbia and British Columbia Institute of Technology. Members of particular health care occupations were encouraged to practice in underserved areas of B.C.

The Ministry continued with the Medical Expansion Program, in collaboration with the Ministry of Health, to increase undergraduate medical education spaces. The number of medical school spaces almost doubled from 128 first year student spaces in 2003/04 to 224 in 2005/06. The Ministry worked with the University of British Columbia, University of Victoria, University of Northern British Columbia and health authorities in order to meet future health care demands.

- **Monitor student labour market outcomes.** The Ministry works with public post-secondary institutions to monitor the labour market outcomes for former students and graduates to provide valuable progress, program evaluation, and program improvement information.

Performance Measures:

Three performance measures are used to monitor progress toward the objective of relevance.

13. Number of student spaces in identified strategic skill programs:
 - i. Computer science, electrical and computer engineering programs
 - ii. Social work and child protection worker programs
 - iii. RNs, LPNs, and RCAs⁶ and other allied health programs
 - iv. Medical school programs
14. Student assessment of usefulness of knowledge and skills in performing job
15. Student outcomes — unemployment rate

⁶ Registered Nurses (RNs), Licensed Practical Nurses (LPNs) and Resident Care Aides (RCAs).

Performance Measure 13: Number of student spaces in identified strategic skills programs

This measure indicates whether public post-secondary institutions in British Columbia were able to meet the FTE targets outlined in their 2005/06 budget and accountability letters in fields with projected workforce shortages: 1) computer science, electrical and computer engineering; 2) social work and child protection worker; 3) registered nursing, licensed practical nursing, resident care aide and other allied health occupations; and 4) medicine.

Performance Measure	2001/02 Baseline Target ¹	2002/03 Result	2003/04 Result	2004/05 Result	2005/06 Target	2005/06 Result ²	Variance	Target Assessment
Number of student spaces in strategic skill programs ³ —								
i. Computer science, electrical and computer engineering programs	4,624	5,510	6,206	6,331	7,934	6,168 77.7% Util ⁶	- 1,766	Target not achieved
ii. Social work and child protection worker programs	976	1,022	1,040	1,149	1,050	1,076 102.4% Util ⁶	26	Target achieved
iii. RNs, LPNs, and RCAs and other allied health programs ^{4,5}	8,417	9,320	9,926	10,526	11,053	11,653 105.4% Util ⁶	600	Target achieved
iv. Medical school programs	488	494	500	586	680	698 102.6% Util ⁶	18	Target achieved

¹ 2001/02 baseline data represent targeted, not actual, FTEs.

² 2005/06 was the first year of a revised student FTE reporting method for the 21 institutions that report through the Post-secondary Central Data Warehouse (all institutions except five universities). As a result, FTE figures in this report will be subject to review and amendments will be published if required.

³ This measure is reported as a total count of actual FTEs delivered in a fiscal year (except 2001/02 Baseline).

⁴ Registered Nurses (RNs), Licensed Practical Nurses (LPNs) and Resident Care Aides (RCAs). Allied health professions include pharmacy, dentistry, medical lab technology, medical imaging, physiotherapy and occupational therapy, speech language pathology, among other professions.

⁵ The baseline and target for this measure were revised to reflect the mix of programs targeted for funding in 2003/04 and adjustments to individual institutional targets required to accommodate changes in labour market demand. As a result, previous years' actuals have been restated.

⁶ The utilization rate is a ratio of actual to targeted FTEs.

Variance Explanation

The results for each component of this measure are described individually below followed by graphs showing their historical results.

Results for this measure may be affected by changing labour market and student demand conditions, over which institutions have limited influence. These fluctuations may create challenges for institutions to meet their targets in some program areas. The Ministry consults with institutions on a regular basis to proactively address labour market trends and their impacts on student spaces.

i. Computer science, electrical and computer engineering programs

Government's strategy to double (over five years beginning in 2002/03) the number of B.C. degree graduates in computer science, electrical and computer engineering will address expected labour market demand in these areas. The targets were established on the basis of a joint proposal from The University Presidents' Council of British Columbia (TUPC) and the British Columbia Technology Industries Association, and subsequent discussions with TUPC, British Columbia Institute of Technology and individual university colleges. A total of 3,410 student FTEs are required to double the number of graduates (compared to 2001/02) in the targeted academic programs.

Results this year suggest that institutions continue to face challenges meeting targets, with a lower than expected overall utilization rate of 77.7% (1,766 FTEs below the target of 7,934). The technology sector has experienced labour market fluctuations in recent years, a contributing factor to the lower utilization rate. British Columbia is expected to see growth in the industry in the coming years, which may lead to increased utilization rates in the future.

The baseline and targets for this measure were revised in the Ministry's *2005/06 – 2007/08 Service Plan Update* to reflect improved methods of defining and tracking students in these program areas.

ii. Social work and child protection worker programs

The results indicate that the target for social work and child protection programs was achieved.

iii. RNs, LPNs, RCAs and other allied health programs

Targets were set based on what institutions could accommodate given availability of facilities, clinical placements, faculty and budgets. Results show that the overall target was achieved (600 FTE's above the target of 11,053), although utilization varied by program area.

Most nursing programs experienced high utilization rates due to favourable labour market conditions and resulting high student demand. Allied health programs did not meet their targets due to low student demand, attrition or a particular program being new and still expanding to its full capacity.

Utilization was lower than expected for resident care aide/home support worker (RCA/HSW) programs; however, there appears to be an encouraging upward trend in utilization rates as labour market conditions improve.

The Ministry monitors trends in programs where targets were not reached and continues to develop strategies to assist institutions in meeting employer needs.

iv. Medical school programs

The results indicate that the target for medical school programs was achieved reflecting a high demand for medical training.

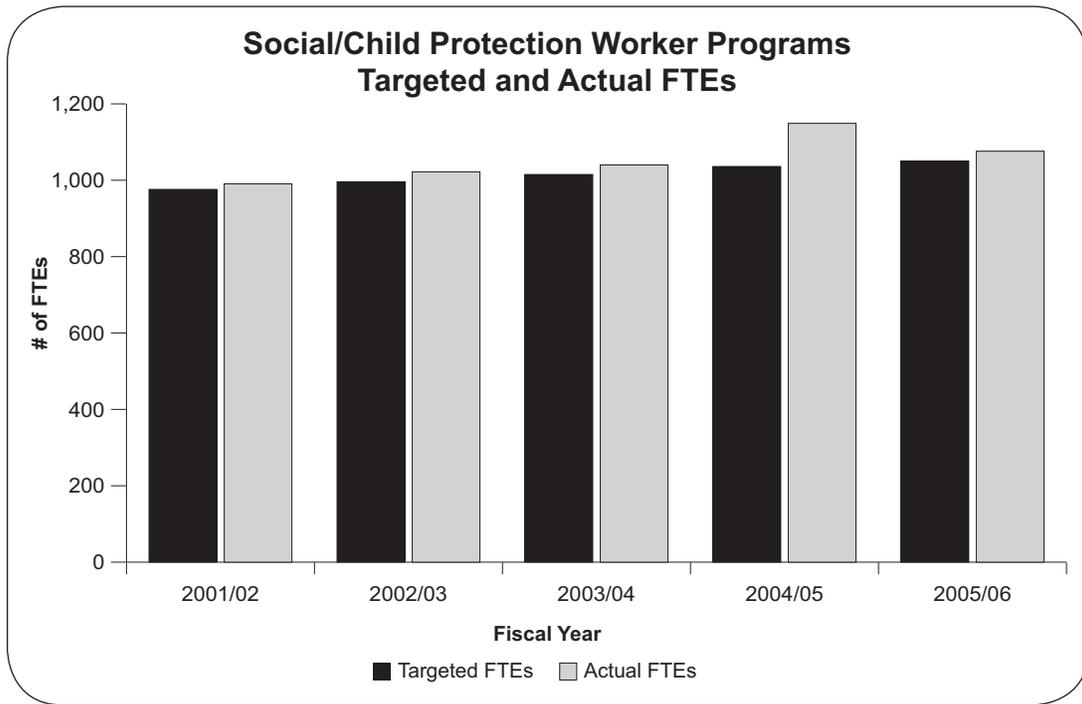
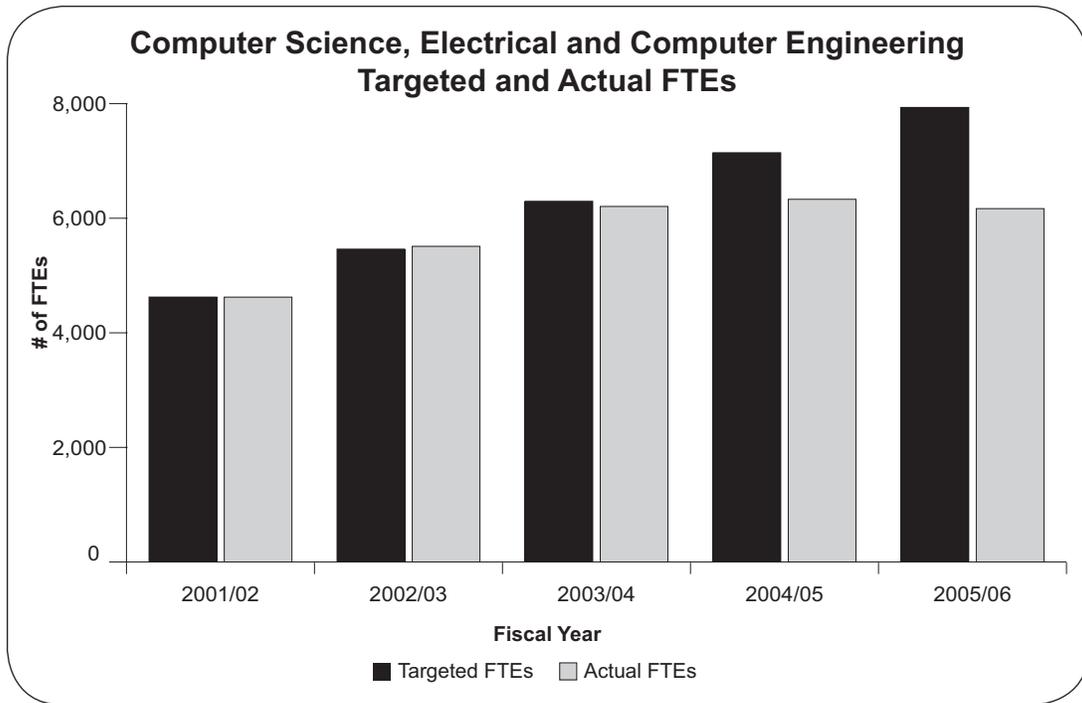
Data Sources and Issues

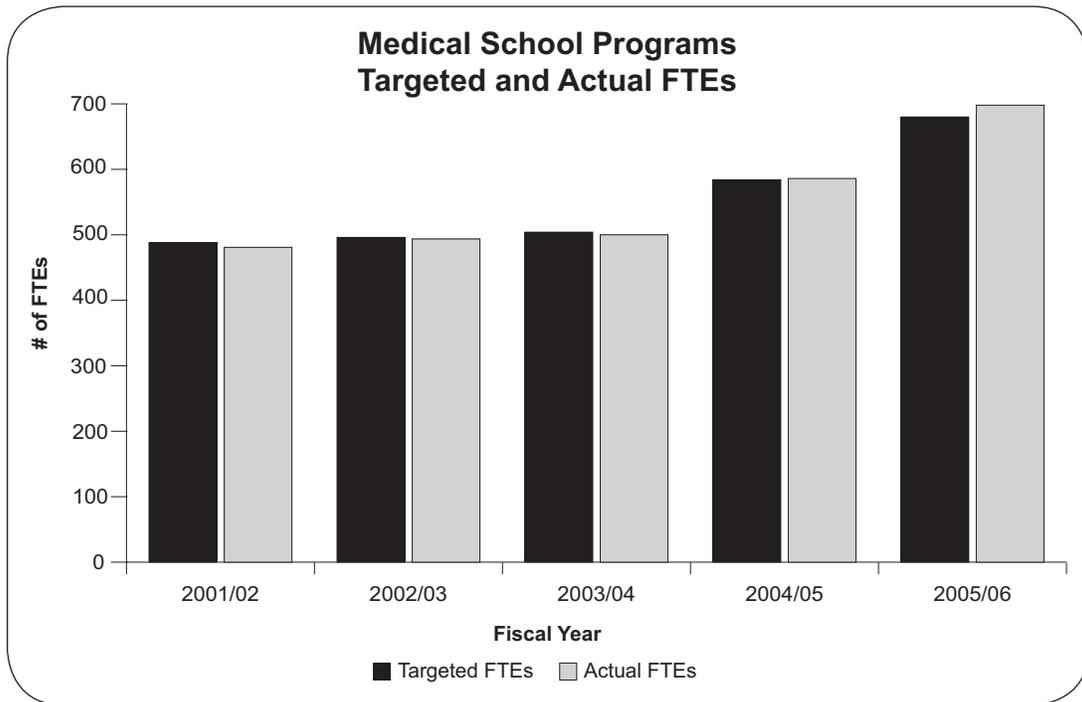
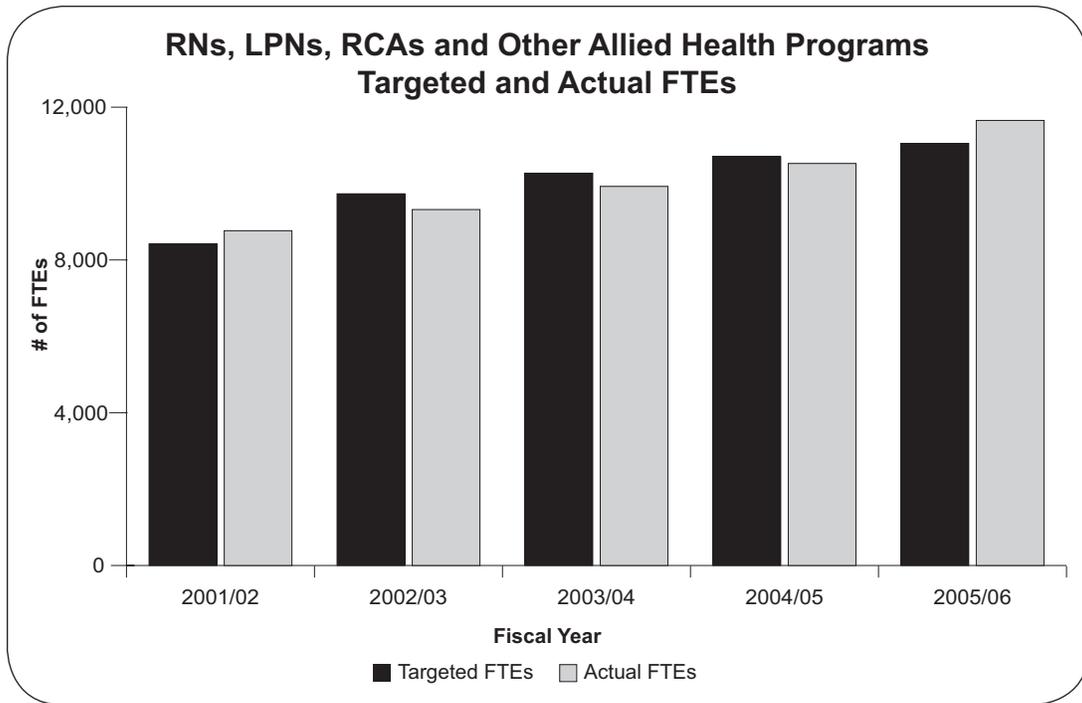
Data were obtained from end-of-fiscal-year audited enrolment reports submitted to the Ministry by public post-secondary institutions.

Changes to the Measure

Beginning in the *2006/07–2008/09 Service Plan*, the social work and child protection worker component of this measure was not included.

Beginning in the *2006/07–2008/09 Service Plan*, the method for calculating FTEs was changed. (See Appendix 3.) All figures in the table above are based on the previous methodology for consistency with the presentation in the *2005/06–2007/08 Service Plan Update*.





Performance Measure 14: Student assessment of usefulness of knowledge and skills in performing job

For many people, a primary reason for pursuing post-secondary education is to enhance their employability with the hope that it will lead to a fulfilling career. It is, therefore, important for the Ministry and post-secondary institutions to ensure that education programs are relevant, imparting knowledge and skills that students will need once they enter the labour market.

This measure provides an indication of the relevance of the public post-secondary system to the labour market from the perspective of former students. As the recipients of post-secondary education, former students are well-suited to comment on its relevance to their employment. This measure is the percentage of former students who, when surveyed, indicated that the knowledge and skills they acquired through their education was very useful or somewhat useful in performing their jobs.

Performance Measure	2002/03 Baseline	2003/04 Result	2004/05 Result	2005/06 Target	2005/06 Result	Variance	Target Assessment
Student assessment of usefulness of knowledge and skills in performing job (very or somewhat useful):							
Former college, university college and institute students	77.2% (2002 survey)	75.4% (2003 survey)	76.5% (2004 survey)	Maintain a high level of student assessment — benchmark = 90% ² — OR demonstrate performance improvement over time ³	75.6% (2005 survey)	Benchmark not achieved Trend line not statistically significant ⁴	Target not achieved
University baccalaureate graduates	88.0% (2002 survey)	n/a ¹	86.3% (2004 survey)		81.6% (2005 survey)	Benchmark not achieved Trend line not statistically significant ⁴	Target not achieved

¹ Data from the 2003 B.C. University Baccalaureate Graduate Survey is not applicable because it was based on graduates' responses five years after graduation rather than two years after graduation.

² The benchmark is based on analysis of historic performance and on the understanding that a benchmark should signify a challenging level of excellence.

³ The target will be met if annual performance (plus margin of error) is above or equal to the benchmark, or if successive annual performance demonstrates overall improvement (based on a trend line calculated from annual performance plus/minus margin of error).

⁴ No statistically conclusive trend can be drawn from the data.

Variance Explanation

The target for this measure was either to reach the benchmark or to show improvement over time. This year, the benchmark (90%) was not achieved, and the trend line is not statistically significant. Therefore, the target was not achieved.

The relationship between perceptions of usefulness and whether a job is related to the field of study is an important consideration when interpreting the results. This measure represents all students who were employed at the time of study, regardless of whether they were in jobs related to their fields of study. Former students employed in occupations unrelated to their fields of study indicated that their education was not as directly useful compared to those employed in related occupations. For instance, in the last two B.C. University Baccalaureate Graduate Survey two-year-out surveys, those students who indicated that they were in a job that was very related to their program reported 96.5% (2002 survey) and 96.7% (2004 survey) satisfaction with the usefulness of their training, while those whose jobs were not at all related to their training reported 59.2% usefulness (2002 survey) and 58.8% usefulness (2004 survey). There was no significant change once relation of job to the field of study was factored in, suggesting that the decrease in performance for the university sector reflects a decrease in the number of graduates employed in occupations directly related to their education at time of survey. While there is no data for 2005 to support analysis, there was a decrease in the percentage of respondents who were in related occupations of about four per cent between 2002 and 2004.

The same relationship between job usefulness and whether a job is related to the field of study can be found at the colleges, university colleges and institutes. For instance, in the last four B.C. College and Institute Student Outcomes Surveys, former students who indicated that they were in jobs that were very related to their training consistently reported more than 98% satisfaction with the usefulness of their training, while former students whose jobs were not at all related to their training reported less than 36% usefulness for all four years. As only 65% of former students were employed in 'very' or 'somewhat' training-related jobs, this will have a substantial impact on the overall findings for usefulness.

The Ministry has targeted particular skill areas where there are projected workforce shortages, e.g., nursing programs. By making more seats available to students in programs that are in demand in the labour market, it is more likely that those students will find work related to their programs and see a high level of usefulness of their knowledge and skills in performing their jobs.

Data Sources and Issues

Data were obtained from the B.C. University Baccalaureate Graduate Survey and B.C. College and Institute Student Outcomes Survey. Results for this measure include responses from all who were employed when surveyed regardless of whether their employment was related to their education. Responses from those not employed, however, were excluded. For more information on the surveys used to collect this data, please see Appendix 5.

Caution should be taken when comparing results between surveys due to different survey methodologies.

Changes to the Measure

Starting with the *2006/07–2008/09 Service Plan*, this will no longer be a formal performance measure in line with guideline requirements to reduce the number of performance measures, and because measures of student satisfaction with education and skill development were seen as effectively addressing the topic. However, the Ministry will continue to monitor progress, and the measure will be included in Institutional Service Plans and Reports.

Performance Measure 15: Student outcomes — unemployment rate

As discussed in the text for performance measure #14, many people pursue post-secondary education to enhance their employability with the hope that it will lead to a fulfilling career, so it is important that the education students receive is relevant to the labour market.

This measure provides some indication of how successful former students were in making the transition from post-secondary education to employment. It reflects, to some extent, the relevance of their education to the needs of the economy. It compares the percentage of university graduates and former college, university college and institute students who were unemployed when surveyed to the unemployment rate for British Columbians with high school credentials or less. It is based on data obtained through annual student outcomes surveys and the Statistics Canada Labour Force Survey (LFS).

Performance Measure	2003/04 Result	2004/05 Result	2005/06 Target	2005/06 Result	Variance	Target Assessment
Student outcomes — unemployment rate:						
Former college, university college and institute students	9.1% (2003 survey)	8.7% (2004 survey)	Maintain unemployment rate for former post-secondary students below rate for persons with high school credentials or less (2005: 9.6%) ²	7.3% (2005 survey)	2.3% below comparison group	Target achieved
University baccalaureate graduates	5.8% (2002 survey) ¹	5.3% (2004 survey)		5.5% (2005 survey)	4.1% below comparison group	Target achieved
<p>¹ The 2003 B.C. University Baccalaureate Graduate Survey data were based on students who graduated in 1998. It is inappropriate to compare employment outcomes of students who graduated two years ago with students who graduated five years ago, and so the 2002 two-year-out survey is used.</p> <p>² The 2005 unemployment rate for the general population aged 18–29 was obtained through the Statistics Canada Labour Force Survey (LFS) Annual Average.</p>						
<p>Variance Explanation</p> <p>The unemployment rate in 2005 for the B.C. population aged 18–29 with high school credentials or less was 9.6 per cent, indicating that university graduates and former college, university college and institute students continue to have lower unemployment rates than persons with only high school credentials or less.</p>						

Data Sources and Issues

Data were obtained from the B.C. University Baccalaureate Graduate Survey and B.C. College and Institute Student Outcomes Survey. Results for this measure are for the percentages of students who were unemployed at the time of the surveys. General population data representing the 18–29 age group were obtained through the Statistics Canada Labour Force Survey (LFS) Annual Average. For more information on the surveys used to collect this data, please see Appendix 5.

Due to differences in the questions used to ascertain labour force status between the two outcomes surveys, comparisons should not be made between the two sectors.

Results for this measure are at least as likely to be influenced by general economic conditions as they are by the relevance or quality of education former students received. Other factors that affect this measure include geography (regional variations in employment), demographics (characteristics of student), and type of education program taken. Nonetheless, it is widely accepted that post-secondary education influences, to some extent, a person's ability to obtain and maintain employment. Statistics Canada Labour Force Survey data clearly show that unemployment rates for people with post-secondary education are significantly lower than for people without post-secondary education. In addition, research suggests that while individuals with post-secondary education are susceptible to changes in general economic conditions, they may experience the effects of such changes differently than individuals without post-secondary education.

Unemployment Rates

Baseline	2002 Survey (%)	2003 Survey (%)	2004 Survey (%)	2005 Survey (%)
B.C. Population (18–29 years, LFS)	11.3	11.0	9.3	7.3
B.C. Population with High School or less (18–29 years, LFS)	15.0	14.8	12.2	9.6
College, University College, and Institute Former Students	9.0	9.1	8.7	7.3
University Baccalaureate Graduates	5.8	n/a ¹	5.3	5.5

¹ The 2003 B.C. University Baccalaureate Graduate Survey data were based on students who graduated in 1998. It is inappropriate to compare employment outcomes of students who graduated two years ago with students who graduated five years ago.

Ministry Goal 2

Excellent research and innovation that supports economic and social development

Core business areas responsible for this goal are: Research and Innovation; Educational Institutions and Organizations; Debt Service Costs and Amortization of Prepaid Capital Advances; and Executive and Support Services

The Ministry is also the Ministry Responsible for Research and Technology in the province and, by working with other ministries, industry, research agencies and the federal government, has started defining and implementing responsibilities under that mandate, including the development of a strategic plan and priorities for research and innovation in the province. Achievement of this goal will enhance British Columbia's reputation as a world-class centre for research and innovation in a diverse range of fields and disciplines. The discoveries, innovations and knowledge created through research will create social and economic benefits throughout the province.

Objective 1: Capacity

Achieving this objective will ensure that researchers in British Columbia have the personnel, resources and facilities necessary to fulfill the Ministry's research goal.

Strategic Context

Research undertaken at post-secondary institutions has a direct impact on the province's economic and social development. It generates industrial growth and improves the quality of life for British Columbians. Investing in research strengthens British Columbia's capacity for innovation, attracts highly skilled research personnel to the province, supports training for jobs in the knowledge economy, promotes networking and collaboration among researchers, and ensures the optimal use of our existing research infrastructure.

Competitiveness in the area of research and innovation requires access to human resources, funding and infrastructure to achieve maximum impact. Government support and funding of research infrastructure strengthens the capacity of the post-secondary sector and other research organizations.

Examples of research undertaken at public post-secondary institutions include genomic research on the Mountain Pine Beetle, developing new research tools that may assist in control and prevention; international participation to build the world's largest telescope that will probe the deepest reaches of the universe; and studying the impact of salmon growth hormone on salmon migration.

Strategies

- **Provide administrative and technical infrastructure funding support.** The Ministry supports research through the operating grants it provides the universities. Support was also provided through the British Columbia Knowledge Development Fund (BCKDF) to

public post-secondary institutions that conduct basic and applied research, for a total of over \$33 million. BCKDF funding was instrumental for the Centre for Hip Health, for the Medical Image Analysis laboratory, and for enabling advanced underwater vehicle technology. In addition, the Ministry is providing almost \$6.5 million for the enhancement, expansion and operation of BCNET, the advanced network for research and education in British Columbia, to 2012. BCNET is critical to the operation of advanced research projects such as Western Canada Research Grid (WESTGRID), North-East Pacific Time-series Undersea Network Experiments (NEPTUNE), and the Canadian Light Source. It is also critical to the success of health-related projects in cancer research and genome sciences.

- **Provide research funding support.** The Ministry provided \$45 million to Genome British Columbia, \$15 million for the Pacific Alzheimer Research Foundation, and \$4 million to the Canadian Cancer Society to create a research chair.
- **Support and oversee research organizations.** In addition to support for BCKDF, the Ministry is the provincial liaison for the Leading Edge Endowment Fund (LEEF), which funds research chairs. A number of research chairs were funded in 2005/06 as noted in the Highlights section and Ministry Support for Government's Five Great Goals section.
- **Attract research and innovation activity to the province.** The Ministry continues to work with industry and post-secondary institutions to develop strategies to increase research funding, and to increase British Columbia's capacity for commercialization of research.

The British Columbia Knowledge Development Fund permits public post-secondary institutions, teaching hospitals and affiliated non-profit research agencies to invest in research infrastructure.

Performance Measure:

One performance measure is used to monitor progress toward the objective of capacity.

16. Funding support for research:
- i. Sponsored research funding from all sources
 - ii. British Columbia proportion of federal awards

Performance Measure 16: Funding support for research

This measure reflects the success of public universities and some university colleges in competing for federal research funding and attracting private investment in post-secondary research. In particular, this measure gives an indication of the success of the British Columbia Knowledge Development Fund, which enables institutions to compete for matching funds from the federal government and private industry. This measure also indicates the province's funding support for post-secondary research.

Performance Measure	2003/04 Baseline	2004/05 Result	2005/06 Target	2005/06 Result	Variance	Target Assessment
Funding support for research:						
i. Sponsored research funding from all sources ^{1,2}	Total = \$308 M	Total = \$472 M	Maintain or increase over previous year	Total = \$495 M	+ \$23 M	Target achieved
<i>Federal</i>	<i>\$168 M</i>	<i>\$229 M</i>		<i>\$248 M</i>		
<i>Provincial</i>	<i>\$34 M</i>	<i>\$84 M</i>		<i>\$90 M</i>		
<i>Others</i>	<i>\$107 M</i>	<i>\$159 M</i>		<i>\$157 M</i>		
ii. B.C. proportion of federal awards	10.0% ²	11.8%		10.6%	-1.2 percentage points	Target not achieved

¹ Totals may not add due to rounding.

² Baseline and results reflect revenue reported by public post-secondary institutions to Canadian Association of University Business Officers (CAUBO) for two years previous, e.g., 2003/04 result data reflect 2001/02 actuals.

Variance Explanation

The results indicate that the research funding received by B.C. public post-secondary institutions from all sources increased substantially from last year and from the baseline. The proportion of federal research awards directed to B.C. increased from the baseline; however, it decreased from last year's figure by about one percentage point. B.C.'s proportion of federal awards decreased largely due to a decline in Canadian Foundation for Innovation awards to B.C.'s post-secondary institutions. The Foundation does not follow a fixed-date funding schedule, so awards to provincial post-secondary institutions may vary from province to province, year to year.

Universities have exclusive authority over allocating internal resources to research and developing proposals for external research funding, and they are highly motivated to increase their research capacity as it has a direct effect on their ability to attract world-class faculty and top students. There are, however, other factors that may affect results for this measure, including changes in the criteria for federal research funding programs, the fit between new funding programs and type of research undertaken at universities, the availability of industry support, the cancellation or reduction of federal research funding due to economic decisions, and increased competition from universities in other provinces. In addition, research revenue recorded by the universities does not reflect the entirety of research funding available for university research, as an increasing amount of provincial and federal research funding flows to organizations such as Genome British Columbia and the Michael Smith Foundation for Health Research. While university researchers may have access to this funding it would not appear in the Canadian Association of University Business Officers (CAUBO) report, and would, therefore, not be captured by this measure.

Data Sources and Issues

Data are based on data compiled by Statistics Canada and presented in a report prepared for CAUBO.

Baseline and actuals reflect revenue reported by public post-secondary institutions to CAUBO for the fiscal year two years previous, e.g., 2005/06 actuals reflect revenue reported for the 2003/04 fiscal year (most recent data available).

Objective 2: Relevance

Achieving this objective will ensure that research activity in B.C. produces results with relevant social and economic benefits.

Strategic Context

The adoption of research and innovation are essential for higher economic growth, productivity levels and standard of living. Commercialization and adoption of new technologies requires that research is relevant to the economic and social development needs of government, communities and industry. Government funding and support of post-secondary research reduces barriers and simplifies knowledge transfer and the commercialization of new innovations.

Strategies

- **Contribute funding and support.**

The Ministry funds the British Columbia Innovation Council (BCIC) that, in turn, supports the commercialization of research in all areas of the province through the university-liaison offices, the regional science and technology network, and other programs.

The British Columbia Innovation Council expands innovation by providing a one-stop point of access and support to high technology companies, educational institutions, technology industry awareness groups, federal science and technology agencies and university research labs.

Performance Measure:

One performance measure is used to monitor progress toward the objective of relevance.

17. Number of licences, patents, start-up companies

- i. Licence/option agreements
- ii. U.S. patents issued
- iii. Start-up companies
- iv. Licence income received

Performance Measure 17: Number of licences, patents, start-up companies

As discussed in the accompanying text for performance measure #16, post-secondary research activity provides numerous economic and social benefits for British Columbians. But while performance measure #16 looks at funding support to gauge progress toward expanding public post-secondary research capacity, this measure focuses on the commercialization of this activity and the relationship of research to economic growth. It is a count of licence/option agreements, U.S. patents issued, start-up companies, and total income from licences received by British Columbia's three largest universities: the University of British Columbia, Simon Fraser University and the University of Victoria.

It should be noted that this measure does not reflect the many non-commercial benefits of post-secondary research activity, nor the indirect economic benefits generated by start-up companies. These aspects are as important but are difficult to quantify. The Ministry continues to explore options for measuring these aspects, and when suitable measures are identified, they will be included in future Ministry service plans.

Performance Measure	2003/04 Result	2004/05 Result	2005/06 Target	2005/06 Result	Variance	Target Assessment
Number of licences, patents, start-up companies —	Data for 2001/02 fiscal year	Data for 2002/03 fiscal year	Maintain or increase over previous year	Data for 2003/04 fiscal year		
i. Licence/option agreements						
#	51	50		63	13	Target achieved
Ratio (#/\$M)	0.171	0.110		0.131		
ii. U.S. patents issued						
#	38	27		26	-1	Target not achieved
Ratio (#/\$M)	0.127	0.059		0.054		
iii. Start-up companies						
#	10	17		9	-8	Target not achieved
Ratio (#/\$M)	0.033	0.037		0.019		
iv. Licence income received						
\$	\$12.6 M	\$13.8 M		\$14.6 M	\$0.8 M	Target achieved
Ratio (\$/\$M)	\$42,012	\$30,203		\$30,325		
Variance Explanation						
<p>The results indicate that the number of licence/option agreements was higher than last year, and licence income also increased. The numbers of U.S. patents issued and start-up companies were lower than last year.</p> <p>Several factors may have had an impact on these results. For example, previous years may have been exceptional in terms of patent and start-up companies. With only three universities contributing to this activity, a small fluctuation in activity would result in a large percentage difference. Although start-up companies were down by 47.1 per cent, this only represents a difference of eight start-up companies. The same logic applies to licence/option agreements, which increased by 26 per cent, but only represents 13 additional licence/option agreements. This issue will be addressed in the <i>2007/08–2009/10 Service Plan</i>.</p> <p>The ratios are intended to provide some context for the measure — what the results were by amount of research revenue within the year. Due to the time lag between funding and research outcome, these numbers are only intended to give a very rough estimation. The ratios are further affected by the number used as a denominator. For instance, total research income for the three universities increased by an unusually large percentage (over 50 per cent) in 2002/03, likely due to an increase in the number of approvals of Canada Foundation for Innovation projects and the matching funding provided through the British Columbia Knowledge Development Fund and other sources. Consequently, in the case of licence income, even though the total increased, the ratio declined that year.</p>						
Data Sources and Issues						
Data are from university administrative data, and represent the University of British Columbia, Simon Fraser University and the University of Victoria.						
Changes to Measure						
This measure will be reviewed to address the realities of the research cycle more effectively, including the necessary time lag between funding and commercialization, and fluctuations between years.						

Objectives 3 and 4: Quality and Efficiency

The Ministry continues to work with system and industry partners to develop quality and efficiency performance measures. One measure of research capacity — Highly qualified personnel, has been developed.

Deregulation

Limiting “red tape” and the regulatory burden in B.C. is a government priority. The intended outcome of doing so is to boost efficiency, reduce costs and stimulate innovation.

To contribute to this outcome, the Ministry committed to maintaining a net zero per cent increase in regulatory requirements from 2005/06 to 2007/08.

Government has recently expanded learning opportunities and choice in British Columbia by creating two new public post-secondary institutions: Thompson Rivers University and the University of British Columbia – Okanagan. Legislation required to establish and authorize these two institutions increased the Ministry’s net regulatory count in 2005/06 by 68 regulatory requirements. The Ministry expects to offset this increase through legislative reforms in the next two fiscal years.

Report on Resources

For the fiscal year 2005/06, the Ministry of Advanced Education spent \$3.73 million less than its budget. Savings were primarily due to lower-than-expected interest rates, increased sinking fund earnings and a redesign of the Passport to Education program. Savings enabled the Ministry to provide a one-time \$10.0 million discretionary grant to endow scholarships and to redirect funds to the province's public post-secondary institutions.

The Ministry was also provided with Government contingency access to fund Genome British Columbia (\$45.0 million), Alzheimer Research (\$15.0 million), Tuition Limit Supplemental Funding (\$15.0 million), Extraordinary Mandate for certain collective agreement settlements (\$10.3 million), Cancer Research Chair (\$4.0 million), and a National Chair on Aboriginal Economic Development (\$1.0 million).

Resource Summary Table 2005/06

	Estimated ¹	Other Authorizations ²	Total Estimated	Actual	Variance
Operating Expenses (\$000)					
Educational Institutions and Organizations	1,482,317	26,310	1,508,627	1,552,212	43,585
Student Financial Assistance	135,492		135,492	109,933	(25,559)
Debt Service Costs and Amortization of Prepaid Capital Advances	255,859		255,859	235,241	(20,618)
Research and Technology	5,741	64,000	69,741	69,675	(66)
Executive and Support Services	18,888		18,888	17,816	(1,072)
Total Operating Expenses before Adjustment of Prior Year's Accrual	1,898,297	90,310	1,988,607	1,984,877	(3,730)
Adjustment of Prior Year's Accrual ³				(27,465)	(27,465)
Total Operating Expenses after Adjustment of Prior Year's Accrual	1,898,297	90,310	1,988,607	1,957,412	(31,195)

¹ The "Estimated" amounts correspond to the *Estimates* as presented to the Legislative Assembly on September 14, 2005.

² The Ministry accessed government contingency for \$90.310 million in 2005/06.

³ As in accordance with Generally Accepted Accounting Principles (GAAP), this amount reflects an adjustment of prior year's expense accrual. These dollars are not available for Ministry spending.

	Estimated ¹	Other Authorizations ²	Total Estimated	Actual	Variance
Full time Equivalents (Direct FTEs)					
Executive and Support Services	217		217	206	(11)
Total	217		217	206	(11)
Ministry Capital Expenditures (Consolidated Revenue Fund) (\$000)					
Executive and Support Services:					
Information Systems	1,116		1,116	190	(926)
Furniture and Equipment	100		100	13	(87)
Tenant Improvements	250		250	0	(250)
Total	1,466		1,466	203	(1,263)
Capital Plan (\$000)					
Educational Institutions and Organizations:					
Prepaid Capital Advances	225,700		225,700	223,164	(2,536)
Total	225,700		225,700	223,164	(2,536)
Other Financing Transactions (\$000)					
Student Financial Assistance — BC Student Loan Program:					
Total Receipts	63,072		63,072	47,705	15,367
Total Disbursements	300,800		300,800	214,629	(86,171)
Total Net Cash Source (Requirements)	(237,728)		(237,728)	(166,924)	(70,804)

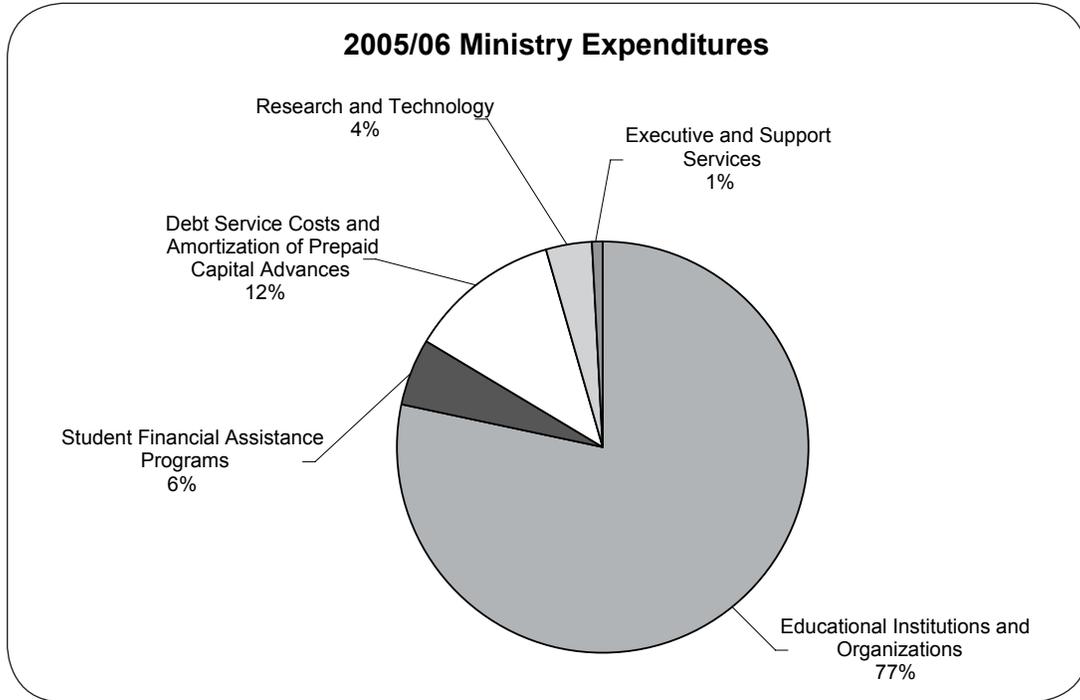
¹ The "Estimated" amounts correspond to the *Estimates* as presented to the Legislative Assembly on September 14, 2005.

² The Ministry accessed government contingency for \$90.310 million in 2005/06.

³ As in accordance with Generally Accepted Accounting Principles (GAAP), this amount reflects an adjustment of prior year's expense accrual. These dollars are not available for Ministry spending.

Ministry Expenditures by Core Business

The following pie chart shows the Ministry's 2005/06 actual expenditures by core business.



SUCH (schools, universities, colleges and health authorities) Sector Income Statement

For the 2005/06 fiscal year, public post-secondary institutions' actual revenues and expenditures exceeded budget projections. Increased revenues were due to greater than projected government contributions, increased investment income and higher than projected revenues from sales of goods and services. The increase in expenses is primarily due to the one-time salary negotiating incentive payments.

Public Post-Secondary Institutions	2005/06 Budget	2005/06 Actual	Variance
Combined Income Statement (\$000)			
Total Revenue	3,728,000	4,015,000	287,000
Total Expense	3,712,000	3,791,000	79,000
Operating Results	16,000	224,000	208,000
Gain (Loss) on sale of Capital Assets (if applicable)	0	0	0
Net Results	16,000	224,000	208,000

Major Capital Projects

Simon Fraser University (SFU) — Surrey Campus at Surrey Central City

Objectives:

The SFU Central City permanent campus will address current capacity shortages and growing demand for post-secondary education in the South Fraser region. This proposal will provide facilities infrastructure to accommodate enrolment growth of up to 2,500 student FTEs, contingent upon economic conditions and educational considerations.

Costs:

Ministry Annual/Projected Expenditures						
Total Project Cost	Ministry Contribution	2003/2004	2004/2005	2005/2006	2006/2007	2007/2008
\$80,500,000	\$69,763,789	\$34,886,586	\$5,415,019	\$13,885,000	\$12,794,000	\$2,783,184

Benefits:

Acquiring the Surrey Central City property will enable SFU to expand access in a region that represents 24 per cent of B.C.'s population and includes some of the fastest growing communities in the province.

Appendices

Appendix 1: List of Legislation Administered by the Ministry

Accountants (Certified General)
Accountants (Chartered)
Accountants (Management)
Applied Science Technologists and Technicians
Architects
Architects (Landscape)
British Columbia Innovation Council
College and Institute
Degree Authorization
Engineers and Geoscientists
Music Teachers (Registered)
Open Learning Agency
Private Career Training Institutions
Public Education Flexibility and Choice Part 1
Royal Roads University
Scholarship
Sea to Sky University
Thompson Rivers University
Trinity Western University Foundation
University
University Foundations
Workers Compensation (s. 3 (6))

Appendix 2: Report on Accountability Framework Measures

Institutions submit data on measures in the Accountability Framework that are not included in the Ministry Service Plan, but that provide additional contextual information:

Annual educational activity occurring between May and August

The Ministry is committed to ensuring public post-secondary institutions maximize the efficient use of existing publicly-funded facilities before additional funds are allocated for capital expansion. One of many possible ways to increase efficiency is to promote the year-round use of facilities for student instruction. For many reasons, the period of May through August has historically been a time of reduced instructional activity at most institutions (although it may also be a period of increases in other types of activity such as research). For those institutions that are able to offer more instructional activity during this period, doing so may ease some of their difficulty meeting student demand during the fall and winter and may result in more efficient use of resources and capacity.

This measure is intended to provide an indication of overall system progress in this regard. It is the percentage of annual instructional activity conducted during the summer academic period compared to the fall and winter academic periods. It is determined using data from public post-secondary institutions. Universities provide data showing equivalent enrolments taught (EETs) through The University Presidents' Council of British Columbia; colleges, university colleges and institutes provide student contact hour data to the Ministry. The rate is calculated by taking the program activity that occurs in the months May to August and dividing it by the total annual activity.

Sector	2001/02 Academic Year	2002/03 Academic Year	2003/04 Academic Year	2004/05 Academic Year
University	15.2%	15.8%	15.9%	15.5%
College	11.5%	13.1%	14.2%	14.2%
System total	13.3%	14.4%	15.0%	14.9%

As can be seen in the table above, the percentage of activity happening during the May – August time period has decreased slightly from the previous academic year, but has increased by 1.6 percentage points since the 2001/02 academic year.

Beginning with the 2005/06 fiscal year, this measure is no longer included in the Ministry Service Plan because the Ministry views overall facilities utilization as a more meaningful measure of efficiency than utilization at one particular time. However, as institutions are required to demonstrate a trend toward greater summer facilities utilization before issuing requests for capital expansion, this measure has been retained as a measure for institutional service plans issued under the Accountability Framework for British Columbia's Public Post-Secondary Education System. The Ministry will continue to explore methods by which institution year-round efficiency in the use of physical capacity can be appropriately and accurately measured.

Quality of Instruction

This measure is the percentage of former public post-secondary students who, when surveyed, rated the quality of instruction in their education program as very good or good. It is based on data obtained from annual student outcomes surveys.

Decisions concerning instructional policies and procedures are made exclusively by institutions. Consequently, beginning with the 2005/06 fiscal year, this measure is no longer included in the Ministry Service Plan, although it has been retained as a measure for institutional service plans issued under the Accountability Framework for British Columbia's Public Post-Secondary Education System.

The latest data show that former students continue to rank quality of instruction very high. Due to differences in the scales, no comparison should be made between the two sectors. Specifically, B.C. College and Institute Student Outcomes Survey respondents were asked to rate their quality of instruction on the following 5 point scale: Very Good, Good, Adequate, Poor, Very Poor. College and institute respondents also had the option to respond "Not Applicable," "Don't Know," and "Refused." On the other hand, B.C. University Baccalaureate Graduate Survey respondents were asked to rate their quality of instruction on the following 4 point scale: Very Good, Good, Poor, Very Poor. These respondents also had the option to respond "Don't Know" and "Refused."

Historical Data¹

	Colleges, University Colleges and Institutes	Universities
Survey Year	%	%
2000	n/a	95.0
2001	80.3	n/a ²
2002	79.3	95.5
2003	81.3	n/a ²
2004	83.5	95.8
2005	83.4	95.4

¹ The margins of error are less than 1% at the 95% confidence level.

² The 2001 and 2003 B.C. University Baccalaureate Graduate Surveys did not ask about quality of instruction.

Appendix 3: Updated Method of Counting Student FTEs for Post-secondary Central Data Warehouse (CDW) Reporting Institutions

For many years, the Ministry used student FTEs as the measurement unit in several performance measures. Beginning in fiscal year 2005/06, an updated method was implemented to calculate FTEs at 21 institutions that submit student data to the Ministry through the B.C. Post-secondary Central Data Warehouse. 2005/06 marks a transition between the previous and updated methods. The *2005/06–2007/08 Service Plan Update* showed targets in the previous counting method. With implementation of the updated method, institutions used the new method to report their 2005/06 actual student FTEs. Therefore, the actual results for 2005/06 were recalculated to be consistent with the original targets.

Drivers for Change

During the past decade, the delivery models for post-secondary education have changed dramatically. On-line and distance learning programs have experienced a significant enrolment increase and lifelong learning has become a reality. Today's campus also delivers a wider range of educational programs such as continuing and cooperative education.

As a result of the changes in post-secondary education, the FTE reporting methodology had become outdated, requiring a new, more appropriate reporting method. The Ministry has developed the updated FTE reporting method in consultation with post-secondary institutions.

Updated Reporting Methodology

The fundamental change to the FTE reporting method is a more comprehensive accounting of instructional delivery at colleges, university colleges and institutes, whereby all educational instruction is included in FTE calculations. In the past, some instruction, such as continuing education programs, was excluded from FTE calculations. An example of this change follows:

Previously, the Hospital Unit Clerk program at one institution was considered “base funded” and counted in that institution's FTEs, but the Hospital Unit Clerk programs at three other institutions were not included.

In addition, the new counting method is more similar to how FTEs are counted in the university sector. Additional changes include new program coding to align with other provincial jurisdictions, measuring learning units in either credits or hours, and the introduction of divisors based on program length. A divisor, therefore, identifies a normal full course load of a program as approved through the institution's educational approval processes, and expressed in learning units. An example of this change follows:

Previously, 36 full-time students in Dental Assisting at one university college generated 42 FTEs, while 18 full-time students in entry level Carpentry at a college generated

16.2 FTEs. In the updated method, a full-time student in a full-time program for an academic year will generate one FTE, so the 36 full-time students in Dental Assisting will be 36 FTEs and the 18 full-time students in entry level Carpentry will be 18 FTEs.

Comparison of Reporting Methods

To ensure openness and transparency of performance information, the FTE measures presented in this service plan report are reproduced in the following tables to reflect both the previous and updated methods.

The updated FTE methodology includes an expansion to the scope, as college sector institutions may now count qualifying continuing education and contract training toward their FTE targets (almost half of the institutions were previously reporting their continuing education and contract training). The 2003/04 baseline has been revised to recognize the increased scope. The Strategic Investment Plan (SIP) growth of 25,000 seats by 2010 has been added to that updated baseline. The calculation of the 2009/10 target under the previous and updated methodologies is shown below.

Method	Previous Method	Updated
2003/04 baseline:	160,848 FTEs	165,846 FTEs
SIP growth:	<u>+ 25,000 FTEs</u>	<u>+ 25,000 FTEs</u>
2009/10 target:	185,848 FTEs	190,846 FTEs

The following table includes FTEs, as calculated under both the previous and updated methodologies for the following:

- 2004/05 actual FTEs
- 2005/06 targets and actual FTEs
- 2005/06 utilization

Impact of Change in FTE Counting Method:

A. On Total FTE Targets

Fiscal Year	Previous Method	Updated Method
2004/05 Actuals	161,681	166,247
2005/06 Target	168,265	173,263
2005/06 Actuals	165,739	169,243
2005/06 Utilization	98.5%	97.7%

B. On Computer Science, Electrical and Computer Engineering Targets

Fiscal Year	Previous Method	Updated Method
2004/05 Actuals	6,331	6,317
2005/06 Target	7,934	7,907
2005/06 Actuals	6,168	6,129
2005/06 Utilization	77.7%	77.5%

C. On Social Work Targets

Fiscal Year	Previous Method	Updated Method
2004/05 Actuals	1,149	1,001
2005/06 Target	1,050	1,039
2005/06 Actuals	1,076	1,068
2005/06 Utilization	102.4%	102.8%

D. On Nursing and Allied Health Targets

Fiscal Year	Previous Method	Updated Method
2004/05 Actuals	10,526	10,111
2005/06 Target	11,053	10,500
2005/06 Actuals	11,653	10,797
2005/06 Utilization	105.4%	102.8%

E. On Developmental Programs

Fiscal Year	Previous Method	Updated Method
2004/05 Actuals	12,711	12,096
2005/06 Target	13,275	12,793
2005/06 Actuals	13,362	12,511
2005/06 Utilization	100.7%	97.8%

Notes:

1. 2005/06 was the first year of a revised student FTE reporting method for the 21 institutions that report through the Post-secondary Central Data Warehouse (all institutions except five universities). As a result, FTE figures in this report will be subject to review and amendments will be published if required.
2. Figures include Entry Level Trades Training FTEs, but not Apprenticeship FTEs.
3. The updated method will result in a decrease in some program areas such as Nursing and Computer Science if students have already done their elective courses before enrolling in the program.
4. Allied Health programs include increased scope resulting from newly identified health programs at some institutions.

Appendix 4: Report on Industry Training Authority Measures

The Industry Training Authority (ITA) now reports to the Ministry of Economic Development, and as of the *2005/06–2007/08 Service Plan Update* published September 2005, is no longer included in the performance measures for the Ministry of Advanced Education. However, the Ministry of Advanced Education has committed to reporting on progress on two measures that were included in the *2005/06–2007/08 Service Plan* published in February 2005.

Number of Trainees in Industry Training

This measure indicates whether the ITA was able to meet a targeted increase in the number of participants in industry training programs. The numbers reflect only registered trainees/apprentices in recognized and accredited industry training programs. Other vocational training in post-secondary institutions has been incorporated into the total student spaces measure.

	2004/05 Results	2005/06 Target	2005/06 Result
Number of Trainees in Industry Training	14,676	24,000	26,525

The ITA achieved its target of 24,000 registered trainees/apprentices in recognized and accredited industry training programs. Year-end results show an increase to 26,525 trainees/apprentices which is 10 per cent above the target.

Student Satisfaction with Education

The Ministry of Advanced Education's *2005/06–2007/08 Service Plan* (February 2005) identified the need to measure student satisfaction with education. Due to the nature of the ITA's programs, the ITA has interpreted this as student satisfaction with technical training, which is the component of training that occurs within educational institutions. On the latest survey of trainees, 91 per cent of respondents were satisfied or very satisfied with their technical training, up from 83 per cent last year.

The Ministry of Advanced Education and the ITA undertook an apprenticeship pilot survey in early 2005, which included all former apprenticeship students who completed their apprenticeship technical training in a B.C. post-secondary institution between July 2003 and June 2004. Twenty-two institutions participated in this pilot project: 13 public and 9 private.

The survey found that 82 per cent of former apprenticeship students were 'completely' or 'mainly' satisfied with their in-school training.

Appendix 5: Student Outcomes Surveys in British Columbia

The following is a brief discussion about student outcomes surveys in British Columbia, the results from which are utilized for several performance measures identified in this report (i.e., performance measures # 9, 11, 12, 14, and 15).

Student outcomes surveys have been undertaken for the university college, college and institute sector since 1988 and for the university sector since 1995. These telephone surveys provide data about a number of things, including various aspects of the former students' post-secondary education experience, further education undertaken, labour market experience (employment outcomes), etc. A sample of former college, university college and institute students are surveyed annually, between nine months and 20 months after completion (or near completion) of their education program. A sample of university baccalaureate graduates are surveyed annually, two years and five years after graduation. Starting in 2005, the baccalaureate survey will provide two-year-out data annually. Prior to this, the B.C. University Baccalaureate Graduate Survey provided two-year-out data only every second year (i.e., the 2004, 2002 and 2000 surveys focused on graduates two years after graduation, whereas the 2003 and 2001 surveys focused on graduates five years after graduation).

By their nature, all surveys are subject to potential error due to sampling, questionnaire design and response bias. The amount of potential error (i.e., margin of error) in any survey result is estimated based on the level of confidence that the sample result accurately reflects what the true result would have been if the entire target population had been surveyed. For most performance measures that utilize student outcomes survey data, the margin of error is less than one per cent at the 95 per cent confidence level; in other words, the Ministry is 95 per cent confident that the results of the sample survey are less than one per cent different from what the true result would have been if the entire target population had been surveyed. Consequently, the Ministry believes the results of the student outcomes surveys are a reliable basis for performance measurement.

For some of the performance measures that utilize student outcomes survey data, the baselines identified in this report are different from the baselines identified in the *2004/05–2006/07 Service Plan*. These baseline revisions, which were first identified in the *2005/06–2007/08 Service Plan*, were made to facilitate the trend line analysis required for determining whether the targets were achieved, and to improve consistency with other measures, many of which have the 2001/02 (fiscal or academic) year as their baseline. The general principle for the revisions was to establish the baselines using the most recent survey data available in the 2001/02 year. For the surveys of former college, university college and institute students, the baselines were revised to reflect results of the 2001 survey (or the 2002 survey, if there was no result from the 2001 survey). For the surveys of university baccalaureate graduates, the baselines were revised to reflect results of the 2000 survey (or the 2002 survey, if there was no result from the 2000 survey).

For most of the performance measures that utilize student outcomes survey data, the 2005/06 target was to “maintain high level of satisfaction or student assessment (benchmark level of 85 or 90 per cent), or demonstrate performance improvement over time.” Demonstrated performance improvement over time is based on a trend line calculated from annual performance (plus or minus a margin of error) over the period between the baseline and the most recent year.

