## 7. Integrated Results Analysis

## Deputy Minister's Message

Over the past one hundred years, Alberta has proven to be a vibrant and thriving province. The educational opportunities provided to our youth from Kindergarten to Grade 12 have been key to the success of students, schools, jurisdictions and the Ministry.

In 2004/2005, Alberta Education, through its leadership and work with stakeholders and partners, invested significantly in students in our K-12 education system. The Renewed Funding Framework, implemented in September 2004, provides equitable and substantial funding to school boards and balances increased flexibility with increased accountability.

The Ministry's results reflect ongoing improvement. Satisfaction with the overall quality of basic education remains consistently high, with public satisfaction at $72 \%$, a result that exceeded the target. A very high proportion of high school students (91\%) are satisfied with the education they are receiving in the core subjects of language arts, mathematics, science, and social studies.

These high levels of satisfaction with education delivery go hand-in-hand with high levels of student achievement. More and more students have committed to continuing and completing their high school education, and a higher proportion of students have qualified for Rutherford Scholarships than in prior years.

Alberta Education is committed to maintaining solid relationships with partners, stakeholders and communities, which share our interest in $\mathrm{K}-12$ education. This commitment is reflected in feedback from cross-ministry partners and stakeholders, a large proportion of whom find Alberta Education staff collaborative, responsive and flexible. For example, the

Ministry is working closely with First Nations, Métis and Inuit communities and other Alberta ministries such as Aboriginal Affairs and Northern Development to develop programs and provide services that have a real and positive impact on students from these communities.

The Ministry of Education is also dedicated to being a good steward of resources. For example, the Ministry saved the education system millions of dollars through a systemwide technology initiative, which freed up substantial amounts for jurisdictions to direct to other priority areas. Through initiatives such as this, we have been able to enhance education for Alberta students.

As Alberta's knowledge-based economy rests on the foundation of our basic education system, our provincial government remains committed to nurturing young minds and ensuring that we continue to have one of the best education systems in the world.

By working together, we will continue to achieve exceptional results and ensure young Albertans have the skills and knowledge they need to contribute to a prosperous Alberta in the future.

## [Original Signed by]

Keray Henke
Deputy Minister
Alberta Education

## Report of the Auditor General on the Results of Applying Specified Auditing Procedures to Performance Measures

To the Members of the Legislative Assembly
In connection with the Ministry of Education's performance measures included in the 2004-2005 Annual Report of the Ministry of Education as presented on pages 16 to 40, and pages 48 to 58, I have:

1. Agreed information from an external organization to reports from the organization.
2. Agreed information from reports that originated from organizations included in the consolidated financial statements of the Ministry to source reports. In addition, I tested the procedures used to compile the underlying data into the source reports. For the following measures I tested the procedures used to compile the underlying data for the most recent and immediately preceding year, and reviewed earlier results for reasonableness:

- Annual Dropout Rates of Students Aged 14-18
- Percentages of Grade 12 Students Eligible for a Rutherford Scholarship
- High School Completion Rates
- High School to Post-Secondary Transition Rates

3. Checked that the presentation of results is consistent with the stated methodology.
4. Checked that the results presented are comparable to stated targets, and information presented in prior years.
5. Checked that the performance measures, as well as targets, agree to and include results for all of the measures presented in Budget 2004.

As a result of applying the above procedures, I found no exceptions. These procedures, however, do not constitute an audit and therefore I express no opinion on the performance measures included in the 2004-2005 Annual Report of the Ministry of Education.
[Original Signed by]
Fred J. Dunn, FCA
Auditor General
Edmonton, Alberta
September 16, 2005

## Core Business 1 - Support High Quality Learning Opportunities in the Education System

## Goal One: High Quality Learning Opportunities for All

Outcomes: The education system meets the needs of all learners, society and the economy. Children at risk have their needs addressed through effective programs and supports. Schools are safe and caring.

## In support of this core business and goal in 2004/05, the Ministry of Education:

- Provided $\$ 3.44$ billion in support for the education system, a funding increase of nearly $7 \%$ over 2003/04. This amount represents $85 \%$ of total spending and included:
- $\$ 2.75$ billion in operating grants to public and separate school jurisdictions, a funding increase of $4.3 \%$ over 2003/04;
- an increase of $\$ 11.9$ million for a total of $\$ 122.8$ million in operating grant funding to private schools and private ECS programs, which continues to comprise $3 \%$ of Ministry spending;
- new funding of $\$ 52.3$ million to enable school boards to hire approximately 1,250 additional teachers and reduce average class sizes;
- an investment of nearly $\$ 6$ million for video-conferencing in the K-12 system across the province to support administration, professional development and teaching and to increase access to educational opportunities for rural and remote communities; and
- an allocation of $\$ 1.23$ million to the Alberta Regional Professional Development Consortia, which, along with $\$ 750,000$ allocated in 2003/04 for a total of nearly $\$ 2$ million, supports teacher in-services over three years: 2004/05 to 2006/07, in key areas such as Daily Physical Activity, languages, social studies, mathematics and Knowledge and Employability, which will replace the Integrated Occupational Program.
- Updated curriculum in the areas of French as a second language, social studies and high school sciences, and authorized Grade 4 student and teacher resources in six languages for the Second Languages Initiative.
- Released the Learning and Technology Policy Framework, to ensure technology integration supports objectives of the education system and benefits students.
Rather than relating only to funding for the 2004/05 fiscal year, achievement of results on the seven performance measures reflects the cumulative impact of years of provincial funding and effort on the part of students, parents, teachers, and administrators as well as the Ministry. Targets were met for both measures with targets; the other measures are new, reflecting the change in the focus of the Ministry to K-12 education only. Below are the performance highlights for 2004/05 for this goal.


## Met target

Results from base year for measures without targets or not meeting targets (taking the confidence interval into account):
$=$ No change
$\uparrow$ Improved Performance

## PERFORMANCE HIGHLIGHTS

## Satisfaction with K-12 Education

$\checkmark$ Public Satisfaction $-72 \%$ of the public remained satisfied with the overall quality of $\mathrm{K}-12$ education. The target was met.
$=$ Stakeholder and Public Satisfaction - 84\% of high school students, parents, teachers, school board members and the public were satisfied with the overall quality of education (new).
$=$ Core Subjects $-83 \%$ of students, parents, teachers, school board members and the public were satisfied that students are receiving a solid grounding in core subjects (new).
$=$ Program of Studies - 78\% of students, parents, teachers and school board members were satisfied with
the opportunity of students to receive a broad program of studies (new).

## Employment Rate

$\checkmark$ Employment Rate of Albertans 25-34 - The employment rate of aged 25-34 Albertans whose highest level of education is high school completion remained high at $81 \%$, and met the target.

## Dropout Rate

$\uparrow$ Annual Dropout Rate - The dropout rate of students aged 14-18 decreased to $5.3 \%$ (new).

## Safe and Caring Schools

$=$ Safe and Caring Schools - Overall $92 \%$ of students, parents, teachers and school board members agreed that schools are safe and caring (new).

## Quality of Basic Education

## TARGET:

- The target was met.


## DISCUSSION:

- Over $70 \%$ of the public are satisfied with the overall quality of basic education.
- There has been a gradual increase in public satisfaction since 2001/02, when results declined sharply, likely due to the teacher labour action.
- Over the longer term, public satisfaction has returned to previous levels, indicating a recovery of public confidence in the K-12 education system.


## NEW MEASURE:

- This measure has been expanded in Education's 2005-2008 Business Plan to include the satisfaction of those directly involved in the K-12 education system: students, parents, teachers and school board members. As such, no target was set for 2004/05.
- Differences in the questions asked of the public account for the differences in the two sets of public results presented.
- Results in 2003/04 and 2004/05 are presented to introduce this expanded measure.
- Overall satisfaction for all respondent groups combined was high in both years.
- Satisfaction of students, parents, teachers and school board members remains higher than public satisfaction.

Public Satisfaction with the Overall Quality of Basic Education


Source: Alberta Education: Criterion Research Corp. - 2000, 2001; R.A. Malatest \& Associates - 2002, 2003; Compustat Consultants Inc. - 2004, 2005.

Notes:

- $\quad$ Satisfaction levels are based on a single question about overall satisfaction with education at schools. As such, results in the graph above are not directly comparable to the public results presented in the table below, which combines responses to two questions.
- See Endnote A, pages 48-50, for information on surveys conducted for Alberta Education.

Percentages of Students, Parents, Teachers, School Board Members and the Public Satisfied with the Overall Quality of Basic Education

| (new measure starting in 2005/06) |  |  |  |  |  | 2003/04 | $\mathbf{2 0 0 4 / 0 5}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Respondent Group | $88 \%$ | $91 \%$ |  |  |  |  |  |
| High School Students | $82 \%$ | $83 \%$ |  |  |  |  |  |
| Parents (ECS - 12) | $91 \%$ | $90 \%$ |  |  |  |  |  |
| Teachers | $88 \%$ | $88 \%$ |  |  |  |  |  |
| School Board Members | $66 \%$ | $67 \%$ |  |  |  |  |  |
| Public | $\mathbf{8 3 \%}$ | $\mathbf{8 4 \%}$ |  |  |  |  |  |
| Overall |  |  |  |  |  |  |  |

Source: Alberta Education: Compustat Consultants Inc. - 2004, 2005
Notes:

- In 2003/04, "school board members" included elected trustees and superintendents, while in 2004/05, it included trustees only.
- For students, parents, teachers and school board members, overall satisfaction is a roll-up of satisfaction levels with the following specific aspects of the school system:
- overall satisfaction with education at schools,
- the quality of teaching at schools
- that what is being learned in the core subjects is useful/that students are
learning what they need to know,
- school work is interesting,
- school work is challenging, and
- learning expectations at school are clear.
- For the public, overall satisfaction is a roll-up of responses to the following two questions:
- overall satisfaction with education at schools, and
- students are learning what they need to know.

As such, these results are not directly comparable to the results in the graph at the top of the page, which presents the responses to the overall satisfaction question only.

- See Endnote A, pages 48-50, for information on surveys conducted for Alberta Education.


## Core Subjects

## TARGET:

- New measure in Education's 2005-2008 Business Plan - no target set for 2004/05.


## NEW MEASURE:

- Results for 2003/04 and 2004/05 are presented to introduce the new measure of satisfaction that students are receiving a solid grounding in core subjects.
- Overall satisfaction for all respondent groups was high at $83 \%$ in both 2003/04 and 2004/05.
- Parent, student, teacher and school board member satisfaction is consistently higher than public satisfaction on this measure.

Percentages of Students, Parents, Teachers, School Board Members and the Public Satisfied that Students are Receiving a Solid Grounding in Language Arts, Mathematics, Science and Social Studies (new

| measure starting in 2005/06) |  | $2004 / 05$ |
| :--- | :---: | :---: |
| Respondent Group | $2003 / 04$ | $91 \%$ |
| High School Students | $89 \%$ | $83 \%$ |
| Parents (ECS - 12) | $83 \%$ | $82 \%$ |
| Teachers | $83 \%$ | $85 \%$ |
| School Board Members | $84 \%$ | $74 \%$ |
| Public | $75 \%$ | $\mathbf{8 3 \%}$ |
| Overall | $\mathbf{8 3 \%}$ |  |
| Son |  |  |

Source: Alberta Education: Compustat Consultants Inc. - 2004, 2005. Notes:

- In 2003/04, "school board members" included elected trustees and superintendents, while in 2004/05, it included trustees only.
- For students, the percentages reported are aggregates of agreement levels that "you are getting better at ... reading, writing, mathematics, science, social studies".
- For parents, teachers, trustees and the public, percentages reported are aggregates of satisfaction levels that "the curriculum focuses on what students/your child needs to learn in ... reading, writing, mathematics, science, social studies".
- See Endnote A, pages 48-50, for information on surveys conducted for Alberta Education.


## Program of Studies

## TARGET:

- New measure in Education's 2005-2008 Business Plan - no target set for 2004/05.


## NEW MEASURE

- Results in 2003/04 and 2004/05 are presented to introduce this new measure on satisfaction with breadth of programs for students.
- For all respondent groups, overall satisfaction with students' opportunities to receive a broad program of studies was similar in both years.
- The addition of school board members in the overall satisfaction rate in 2004/05 accounts for most of the difference between the 2003/04 and 2004/05 overall results.

| Percentages of Students, Parents, Teachers and School Board Members Satisfied with the Opportunity of Students to Receive a Broad Program of Studies (new measure starting in 2005/06) |  |  | $\sum_{\text {NEW }}^{M} \leqslant$ |
| :---: | :---: | :---: | :---: |
| Respondent Group | $2003 / 04$ | 2004105 |  |
| High School Students | 81\% | 83\% |  |
| Parents (ECS - 12) | 78\% | 76\% |  |
| Teachers | 80\% | 78\% |  |
| School Board Members | -- | 74\% |  |
| Overall | 80\% | 78\% |  |
| Source: Alberta Education: Compustat Consultants Inc. - 2004, 2005. Notes: |  |  |  |
| - School board members were not asked this question in the 2003/04 surveys. |  |  |  |
| - Percentages reported are aggregates of satisfaction levels that "you/your child/your students/students in your jurisdiction have opportunities to learn about: ... music, drama, art, computers, health, another language" and with "opportunities to participate in physical education." |  |  |  |
| - See Endnote A, pages 48-50, for information on surveys conducte |  |  |  |

## Employment Rate of High School

## Graduates

## TARGET:

- The target was met (the result is within $5 \%$ of the target).


## DISCUSSION:

For Albertans aged 25-34 whose highest level of education is high school completion:

- The employment rate has remained fairly stable over time.
- Results continue to be high and slightly above the Canadian average, which is related to the strength of Alberta's economy.
- In 2004, the unemployment rate (i.e., the percentage of those in the labour force who are not employed) was $5.3 \%$, the lowest unemployment rate in Canada.
- About $85 \%$ of the population are in the labour force (i.e., either employed or looking for work). Those who are not in the labour force/not looking for work (e.g., homemakers, students) constitute about $15 \%$ of the population.

Employment Rate of Albertans Aged 25-34 Whose Highest Level of Education is High School Completion


Source: Statistics Canada Labour Force Survey, special tabulation for Alberta Education.
Note:

- See Endnote C, Employment Rates of Albertans Aged 25-34, page 53.


## Students at Risk

## TARGET:

- New measure in Education's 2005 2008 Business Plan - no target set for 2004/05.


## NEW MEASURE:

- Multi-year results are presented to introduce this new measure.
- The rate at which students between the ages of 14 and 18 dropped out of school has declined over time from about 6\% in earlier years to $5.3 \%$ in 2003/04.
- The improvement in the dropout rate may indicate acknowledgement by students of the importance of completing school, the increase in educational qualifications and skill levels of jobs as well as the efforts of parents, teachers and administrators to encourage students to stay in school.
- Dropping out of school is a temporary interruption of education. Of the students who dropped out in 2002/03, $23 \%$ resumed their education in 2003/04. In addition, many students who do not complete high school in the K -12 education system attain completion status as adults (see the high school completion rate of Albertans aged 25-34, page 31).

Annual Dropout Rates of Students Aged 14-18 (new measure starting 2005/06)


Source: Alberta Education
Notes:

- Students aged 14-18 who are not enrolled in school and have not completed high school in the following year are included in the annual dropout rate. For example, students aged 14-18 in 2002/03 were tracked for one year. Those who were not enrolled and had not completed are included in the 2003/04 dropout rate.
- An estimated attrition adjustment has been applied in calculating the dropout rate.
- $\quad$ See Endnote C, Annual Dropout Rate of Students Aged 14-18, pages 53-54.


## Safe and Caring Schools

## TARGET:

- New measure in Education's 2005 2008 Business Plan - no target set for 2004/05.


## NEW MEASURE:

- Results in 2003/04 and 2004/05 are presented to introduce this new measure on safe and caring schools.
- Overall satisfaction for all respondent groups was very high in both years.


Source: Alberta Education: Compustat Consultants Inc. - 2004, 2005. Notes:

- For all respondent groups, percentages reported are aggregates of agreement levels that:
- students feel safe at school,
- students feel safe on the way to and from school,
- students treat each other well at school,
- teachers care about their students, and
- students are treated fairly by adults at school.
- Overall agreement rates for both 2003/04 and 2004/05 are the average of agreement rates for each respondent group.
- In 2003/04, "school board members" included elected trustees and superintendents, while in 2004/05, it included trustees only.
- See Endnote A, pages 48-50, for information on surveys conducted for Alberta Education


## Core Business 2: Support Learners to Achieve Excellent

 Learning Outcomes
## Goal Two: Excellence in Learner Outcomes

Outcomes: Learners demonstrate high standards.
Learners complete programs.
Learners are well prepared for lifelong learning.
Learners are well prepared for work.
Learners are well prepared for citizenship.
To support this core business and goal in 2004/05, the Ministry of Education:

- Allocated $\$ 588$ million, including:
- over $\$ 68$ million for innovative projects that support student learning as part of the Alberta Initiative for School Improvement (AISI), a 5.5\% increase over 2003/04;
- an increase in special needs-related funding by nearly $\$ 29$ million over 2003/04 to $\$ 204.4$ million to enhance school boards' ability to meet the needs of students with severe disabilities;
- a funding increase for Student Health Services of $21 \%$ over 2003/04 levels, to approximately $\$ 37$ million;
- nearly $\$ 26$ million for English as a Second Language programs, an increase of over $\$ 6$ million since 2003/04;
- additional funding of $\$ 12.4$ million for classroom resources; and
- a funding increase for student transportation of $\$ 11.3$ million for rural and small urban school boards, an increase of $6 \%$ over the previous year.
- Established baseline data on educational attainment of Aboriginal Albertans living off-reserve through the expanded Aboriginal sample for the Labour Force Survey.
- Established policy for Knowledge and Employability courses, which will replace the Integrated Occupational Program (IOP), and expanded field validation of the tests for Grade 9 IOP.
- Improved the AISI Clearinghouse for sharing project information and promising practices.
- Expanded the team of specialists providing special needs assessments and consultations in Grande Prairie, Lethbridge and Red Deer.
- Established a task force and consulted with stakeholders on ways to improve high school completion rates.
Rather than relating solely to funding for the 2004/05 fiscal year, achievement of results for the 11 performance measures for Goal 2 reflects a cumulative impact of provincial funding and effort on the part of students, parents, teachers and administrators as well as the Ministry over a number of years. Four of these measures have targets in 2004/05. Following are the 2004/05 performance highlights for this goal.


## $\checkmark \quad$ Met target

Results from base year for measures without targets or not meeting targets (taking the confidence interval into account):
$=$ No change
$\uparrow$ Improved performance
$\downarrow$ Performance decline

## PERFORMANCE HIGHLIGHTS

## Student Achievement

## Grade 3, 6, 9 Achievement Tests

$=$ Overall results for students who wrote the tests have remained constant at both the acceptable and the excellence levels.
$=$ Overall results for all students in grade have remained stable at the excellence level.

## Diploma Examinations

$\uparrow$ Students met provincial expectations on more diploma examinations in 2004/05 than in 2003/04.
$\uparrow$ Rutherford Scholarship Eligibility - 34\% of Grade 12 students were eligible for a Rutherford scholarship (new).

## Educational Attainment

$\checkmark$ High School Completion - The high school completion rate within five years of entering Grade 10 remained stable at $75 \%$, meeting the target. Three-year high school completion rates have improved substantially over time.

## $\checkmark$ High School Completion of Albertans

 25-34 - The high school completion rate of Albertans aged 25-34 remained high at $90 \%$. The target was met.
## Preparation for Lifelong Learning

$\uparrow$ Early Childhood Services - The percentage of students who participated in Early Childhood Services programs prior to Grade 1 increased slightly in 2002/03 to $96 \%$ and has remained at that high level.
$\uparrow$ Transition to Post-Secondary - 54\% of Alberta's high school students enrolled in a post-secondary program within six years of entering Grade 10 (new).

## Preparation for Employment

$=$ Employer Satisfaction - 86\% of employers of recent high school graduates were satisfied with the skills and quality of the work of the graduates they employed (restated).
$=$ Preparation for Success at Work - Overall $69 \%$ of parents, teachers and the public agreed that students are taught attitudes and behaviours that will make them successful at work when they finish school (new).

## Preparation for Citizenship

$\checkmark$ Preparation for Citizenship - $60 \%$ of public respondents surveyed were satisfied that high school students are well prepared for citizenship, meeting the target.
$=$ Active Citizenship - 83\% of parents, teachers and high school students were satisfied that students model the characteristics of active citizenship (new).

## OPPORTUNITIES FOR IMPROVEMENT

$\downarrow$ Overall results on Provincial Achievement Tests for all students in grade declined slightly at the acceptable level from 2003/04 to 2004/05. Percentages of students writing the tests has declined slightly over time to $89.5 \%$ in 2004/05. Implementation of provincial initiatives such as the Renewed Funding Framework, which includes increased accountability for results, and the Class Size Initiative, which reduced class sizes at all levels, should have a positive impact on student results in future years.

## Achievement Test Results Overall

## TARGET

- The aggregated targets for overall results on provincial achievement tests in grades 3,6 , and 9 at the standard of excellence were not met.
- The aggregated targets at the acceptable standard were not met.


## DISCUSSION:

- Science 9 test results and participation rates are not included in the aggregated results for 2003/04 and 2004/05 since there was no target for that test, which was based on new curriculum that was fully implemented in 2003/04.
- Compared to 2003/04, the overall results based on total enrolment were similar in 2004/05 at the excellence level but declined slightly at the acceptable level.
- The overall results for writers between 2003/04 and 2004/05 remained stable at both excellence and acceptable levels.
- The overall participation rate has decreased over time, to $89.5 \%$ in 2004/05.
- The overall results based on total enrolment, including Science 9 in $2003 / 04$ and $2004 / 05$, were $76.4 \%$ and $76.1 \%$ at the acceptable level and $18.9 \%$ and $18.8 \%$ at the excellence level, and the participation rates were $89.9 \%$ and $89.3 \%$, respectively. The corresponding overall results for writers in 2003/04 and $2004 / 05$ were $84.9 \%$ and $85.1 \%$ at the acceptable level and $20.9 \%$ and $21.0 \%$ at the excellence level (see Overall on pages 26-27).
- Targets for Science 9 results will be set in the 2006-2009 Business Plan.
- 2004/05 is the last year to report results for writers (bottom graph and page 27).

Combined Results (All Grades and Subjects) - Participation Rates and Percentages of Students Who Demonstrated Standards on Provincial Achievement Tests (total enrolment in grade)


Combined Results (All Grades and Subjects) - Percentages of Students Who Wrote and Met Standards on Provincial Achievement Tests


Source: Alberta Education.
Notes:

- The percentages of students achieving the acceptable standard include the students achieving the standard of excellence.
- Aggregated targets are the averages of the targets for each subject and grade for the acceptable standard and the standard of excellence for both methods of calculating results.
- The 2003/04 and 2004/05 aggregated data does not include Science 9 test results and participation rates, since no target was set for that test. No comparison should be made to earlier years' data, which includes Science 9.
- See Endnote C, Provincial Achievement Tests, pages 54-55.


## Achievement Test Results for All

 Students in Grades 3, 6 and 9
## TARGETS:

- Results for all students in grade met or exceeded targets for the standard of excellence in three tests - Grade 6 Social Studies and Science, and Grade 9 Mathematics.
- Results for all students in grade met the target for the acceptable standard in one test - Grade 9 Mathematics.


## DISCUSSION

- Student performance at the acceptable level improved in one of nine tests since 2000/01, and improved in four of ten tests since last year.
- Student performance at the standard of excellence improved in all nine tests since 2000/01, and improved or remained the same in six of ten tests since last year.
- Compared to 2003/04, the first year of the full implementation of the new Science 9 test based on a new curriculum, the 2004/05 Science 9 results improved at both the acceptable and excellence levels.
- Compared to last year, the 2004/05 results for the Grade 9 Language Arts and Mathematics improved at both the acceptable and excellence levels.
- The results at the acceptable level for the Grade 9 Language Arts and Mathematics tests are reported annually by the provincial government as indicators of literacy and numeracy, as adult literacy surveys are not conducted regularly. Students who achieve the acceptable standard in these subjects have developed the foundation skills needed to become literate and numerate adults.

Percentages of Students in Grades 3, 6 and 9 Demonstrating the Standards on Provincial Achievement Tests

| Subject | $\begin{gathered} 2000 / \\ 2001 \end{gathered}$ | $\begin{gathered} 2001 / \\ 2002 \end{gathered}$ | $\begin{gathered} 2002 / \\ 2003 \end{gathered}$ | $\begin{gathered} 2003 / \\ 2004 \end{gathered}$ | $\begin{gathered} 2004 / \\ 2005 \end{gathered}$ | $\begin{gathered} \hline \text { Targets } \\ 2004 / \\ 2005 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grade 3 |  |  |  |  |  |  |
| Language Arts |  |  |  |  |  |  |
| excellence | 16.1 | 14.9 | 15.7 | 15.1 | 16.2 | 18\% |
| acceptable | 82.8 | 81.2 | 82.4 | 81.7 | 82.2 | 83\% |
| Mathematics |  |  |  |  |  |  |
| excellence | 23.8 | 26.7 | 29.8 | 27.4 | 26.1 | 31\% |
| acceptable | 81.8 | 81.2 | 82.3 | 81.8 | 80.3 | 83\% |
| Grade 6 |  |  |  |  |  |  |
| Language Arts |  |  |  |  |  |  |
| excellence | 14.9 | 15.1 | 17.3 | 15.5 | 15.5 | 18\% |
| acceptable | 78.7 | 80.8 | 81.2 | 79.1 | 77.3 | 82\% |
| Mathematics |  |  |  |  |  |  |
| excellence | 17.9 | 18.1 | 17.7 | 21.2 | 18.1 | 19\% |
| acceptable | 79.3 | 78.3 | 78.3 | 78.5 | 78.2 | 80\% |
| Science |  |  |  |  |  |  |
| excellence | 25.3 | 22.6 | 24.1 | 26.2 | 26.0 | 25\% |
| acceptable | 82.0 | 79.5 | 80.0 | 80.6 | 79.8 | 81\% |
| Social Studies |  |  |  |  |  |  |
| excellence | 18.7 | 19.4 | 20.3 | 19.7 | 21.5 | 21\% |
| acceptable | 78.6 | 78.3 | 79.0 | 78.6 | 78.4 | 80\% |
| Grade 9 |  |  |  |  |  |  |
| Language Arts |  |  |  |  |  |  |
| excellence | 13.1 | 14.6 | 13.5 | 12.4 | 14.0 | 15\% |
| acceptable | 78.8 | 78.5 | 78.0 | 77.6 | 77.9 | 80\% |
| Mathematics |  |  |  |  |  |  |
| excellence | 16.3 | 16.7 | 17.6 | 18.9 | 19.7 | 19\% |
| acceptable | 66.5 | 64.5 | 63.5 | 66.1 | 68.0 | 68\% |
| Science |  |  |  |  |  |  |
| excellence | 11.9 | 11.4 | 13.0 | 12.1 | 12.8 | -- |
| acceptable | 71.7 | 71.6 | 71.1 | 66.6 | 67.5 | -- |
| Social Studies |  |  |  |  |  |  |
| excellence | 16.0 | 18.0 | 18.7 | 20.0 | 18.3 | 20\% |
| acceptable | 72.8 | 73.8 | 72.6 | 73.1 | 71.3 | 75\% |
| Overall |  |  |  |  |  |  |
| acceptable |  |  |  |  |  |  |
|  | 17.4 | 17.8 | 18.8 | 18.9 | 18.9 | -- |
|  | 77.3 | 76.8 | 76.8 | 76.4 | 76.1 | -- |

Source: Alberta Education.
Notes:

- The percentages achieving the acceptable standard include the percentages achieving the standard of excellence.
- The 2002/03 Science 9 test results do not include one-third of Grade 9 students who wrote Science 9 Form B, based on the learning outcomes of the new Program of Studies. The 2003/04 and 2004/05 results in Science 9 are not comparable to earlier years' results.
- The new Science 9 program was fully implemented in 2003/04 and no target was set for 2004/05.
- See Endnote C, Provincial Achievement Tests, pages 54-55.


## Participation Rates for Provincial Achievement Tests

(Supplemental Information)

|  |  |  |  |  |  |  |
| :--- | :--- | ---: | :---: | :---: | :---: | :---: |
|  | Grade | Subject | $\mathbf{2 0 0 0 /}$ | $\mathbf{2 0 0 1 /}$ | $\mathbf{2 0 0 2 /}$ | $\mathbf{2 0 0 3 /}$ |
| Grade 3 | Language Arts | $\mathbf{2 0 0 1}$ | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 0 4}$ | $\mathbf{2 0 0 5}$ |
|  | Mathematics | 93.4 | 90.6 | 91.5 | 90.6 | 90.2 |
| Grade 6 | Language Arts | 92.6 | 92.1 | 91.7 | 90.8 |  |
|  | Mathematics | 92.9 | 91.2 | 91.0 | 90.9 | 89.9 |
|  | Science | 93.1 | 91.6 | 91.4 | 91.1 | 90.9 |
|  | Social Studies | 92.8 | 91.2 | 91.4 | 91.2 | 90.6 |
| Grade 9 | Language Arts | 88.3 | 87.5 | 87.4 | 87.3 | 90.0 |
|  | Mathematics | 88.4 | 87.5 | 87.4 | 87.7 | 87.4 |
|  | Science | 89.7 | 88.7 | 85.9 | 88.6 | 88.2 |
|  | Social Studies | 89.3 | 88.7 | 87.7 | 88.6 | 87.8 |
| Overall | All grades |  |  |  |  |  |
|  | and subjects | 91.3 | 90.0 | 89.7 | 89.9 | 89.3 |
| Source: Alberta Education. |  |  |  |  |  |  |
| Note: See Endnote C, Provincial Achievement Tests, pages $54-55$. |  |  |  |  |  |  |

## Achievement Test Results for Test Writers

## TARGETS:

- Results for students who wrote provincial achievement tests met or exceeded the targets for the acceptable standard in three of nine tests.
- Results for students who wrote provincial achievement tests met or exceeded the targets for the standard of excellence in four of nine tests.


## DISCUSSION:

- Student performance at the acceptable standard improved in six of nine tests since 2000/01, and improved in five of ten tests since last year.
- Student performance at the excellence level improved in all nine tests since 2000/01, and improved in six of ten tests since last year.
- Results in Mathematics 9 improved substantially over prior years at both the acceptable and excellence levels.
- There also were noticeable improvements in 2004/05 in student performance at the excellence level for two of the three language arts tests: grades 3 and 9 .
- Student performance in Grade 9 Science improved at both the excellence and acceptable levels, compared to 2003/04.


## Percentages of Students in Grades 3, 6 and 9 Who Wrote and Achieved the Standards on Provincial Achievement Tests

| Subject | $\begin{gathered} 2000 / \\ 2001 \end{gathered}$ | $\begin{gathered} 2001 / \\ 2002 \end{gathered}$ | $\begin{gathered} 2002 / \\ 2003 \end{gathered}$ | $\begin{gathered} 2003 / \\ 2004 \end{gathered}$ | $\begin{aligned} & 2004 / \\ & 2005 \end{aligned}$ | $\begin{gathered} \hline \text { Targets } \\ 2004 / \\ 2005 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grade 3 |  |  |  |  |  |  |
| Language Arts |  |  |  |  |  |  |
| excellence | 17.4 | 16.4 | 17.2 | 16.7 | 18.0 | 19\% |
| acceptable | 89.4 | 89.6 | 90.1 | 90.2 | 91.1 | 91\% |
| Mathematics |  |  |  |  |  |  |
| excellence | 25.4 | 29.2 | 32.4 | 29.9 | 28.8 | 32\% |
| acceptable | 87.6 | 88.7 | 89.3 | 89.2 | 88.5 | 90\% |
| Grade 6 |  |  |  |  |  |  |
| Language Arts |  |  |  |  |  |  |
| excellence | 16.2 | 16.5 | 19.0 | 17.0 | 17.2 | 19\% |
| acceptable | 85.4 | 88.6 | 89.2 | 87.0 | 85.9 | 90\% |
| Mathematics |  |  |  |  |  |  |
| excellence | 19.3 | 19.7 | 19.3 | 23.3 | 20.0 | 20\% |
| acceptable | 85.4 | 85.2 | 85.6 | 86.2 | 86.0 | 87\% |
| Science |  |  |  |  |  |  |
| excellence | 27.2 | 24.6 | 26.5 | 28.8 | 28.6 | 28\% |
| acceptable | 88.0 | 86.7 | 87.9 | 88.3 | 88.0 | 89\% |
| Social Studies |  |  |  |  |  |  |
| excellence | 20.2 | 21.3 | 22.3 | 21.7 | 23.9 | $23 \%$ |
| acceptable | 84.7 | 85.9 | 86.4 | 86.4 | 87.0 | 87\% |
| Grade 9 |  |  |  |  |  |  |
| Language Arts |  |  |  |  |  |  |
| excellence | 14.9 | 16.7 | 15.4 | 14.2 | 16.1 | 17\% |
| acceptable | 89.2 | 89.8 | 89.2 | 88.9 | 89.1 | 91\% |
| Mathematics |  |  |  |  |  |  |
| excellence | 18.4 | 19.1 | 20.1 | 21.5 | 22.5 | 21\% |
| acceptable | 75.2 | 73.7 | 72.6 | 75.4 | 77.7 | 76\% |
| Science |  |  |  |  |  |  |
| excellence | 13.3 | 12.8 | 15.1 | 13.6 | 14.5 | -- |
| acceptable | 79.9 | 80.7 | 82.8 | 75.2 | 76.5 | -- |
| Social Studies |  |  |  |  |  |  |
| excellence | 17.9 | 20.3 | 21.3 | 22.6 | 20.8 | 22\% |
| acceptable | 81.5 | 83.2 | 82.8 | 82.6 | 81.1 | 84\% |
| Overall |  |  |  |  |  |  |
| excellence | 19.0 | 19.7 | 20.9 | 20.9 | 21.0 | -- |
| acceptable | 84.6 | 85.2 | 85.6 | 84.9 | 85.1 | -- |

Source: Alberta Education.
Notes:

- The percentages achieving the acceptable standard include the percentages achieving the standard of excellence.
- The 2002/03 Science 9 test results do not include one-third of Grade 9 students who wrote Science 9 Form B, based on the learning outcomes from the new Program of Studies.
- Starting in 2003/04, the new Science 9 program was fully implemented and no target was set for 2004/05. Science 9 results in 2003/04 and 2004/05 are not comparable to earlier years.
- See Endnote C, Provincial Achievement Tests, pages 54-55.


## Diploma Examination Results

## TARGET:

- No targets were set for 2004/05. Targets will be set in future years, since a method for equating diploma examinations is being phased in to enable direct comparison of results over time.


## DISCUSSION:

- In 2004/05, provincial expectations continued to be achieved for most of diploma examinations at the excellence and acceptable levels. Students met or exceeded provincial expectations in more exams in 2004/05 than in 2003/04: specifically in all but one exam at the excellence level, and in eight of 11 exams at the acceptable level.
- As test equating was implemented in 2003/04 for Social Studies 30 and 33, the results for 2003/04 and 2004/05 for these two exams can be directly compared. Equating was extended to Pure Mathematics 30, Chemistry 30 and Physics 30 in 2004/05, enabling direct comparison of the 2004/05 results for these three exams to results in future years.


## Participation in Diploma Exam Courses (Supplemental Information)

- Completing an English and a Social Studies diploma examination course is required for high school graduation.
- The percentage of students in their third year of high school who completed a Social Studies diploma course was $86 \%$ in 2004/05. This participation rate increased in 2002/03 and has remained fairly stable.
- The percentages of students completing an English diploma course rose from $81 \%$ last year to $85 \%$ in 2004/05.
- The participation rates for Pure Mathematics 30 and Chemistry 30 increased since last year, while the participation rates for all other diploma courses remained the same.

Percentages of Students Writing Diploma Examinations who Achieved Standards

| Course | Standard | $\begin{gathered} 2000 / \\ 2001 \end{gathered}$ | $\begin{aligned} & 2001 / \\ & 2002 \end{aligned}$ | $\begin{gathered} 2002 / \\ 2003 \end{gathered}$ | $\begin{gathered} 2003 / \\ 2004 \end{gathered}$ | $\begin{gathered} 2004 / \\ 2005 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| English 30-1 | excellence | -- | -- | -- | 19 | 18 |
|  | acceptable | -- | -- | -- | 92 | 89 |
| English 30-2 | excellence | -- | -- | -- | 7 | 10 |
|  | acceptable | -- | -- | -- | 85 | 89 |
| French Language Arts 30 | excellence | -- | -- | 15 | 17 | 19 |
|  | acceptable | -- | -- | 95 | 95 | 95 |
| Social Studies 30 | excellence | 19 | 21 | 22 | 24 | 24 |
|  | acceptable | 85 | 86 | 87 | 86 | 85 |
| Social Studies 33 | excellence | 13 | 12 | 13 | 15 | 18 |
|  | acceptable | 81 | 81 | 82 | 83 | 85 |
| Pure Mathematics 30 | excellence | 20 | 28 | 27 | 32 | 26 |
|  | acceptable | 77 | 82 | 85 | 84 | 81 |
| Applied Mathematics 30 | excellence | -- | -- | 14 | 14 | 22 |
|  | acceptable | -- | -- | 85 | 86 | 88 |
| Biology 30 | excellence | 27 | 26 | 22 | 27 | 27 |
|  | acceptable | 81 | 84 | 81 | 82 | 82 |
| Chemistry 30 | excellence | 22 | 24 | 25 | 28 | 33 |
|  | acceptable | 79 | 82 | 85 | 86 | 88 |
| Physics 30 | excellence | 24 | 33 | 25 | 30 | 28 |
|  | acceptable | 79 | 84 | 82 | 87 | 84 |
| Science 30 | excellence | 14 | 12 | 20 | 17 | 22 |
|  | acceptable | 83 | 82 | 88 | 84 | 88 |

Source: Alberta Education.
Notes:

- $85 \%$ of students are expected to achieve the acceptable standard and $15 \%$ are expected to achieve the standard of excellence. These provincial expectations are reference points used in the basic learning system to interpret results, not targets in the 2004-2007 business plan.
- The percentages of students achieving the acceptable standard include the percentages of students achieving the standard of excellence.
- 2004/05 was the second year of full implementation of English 30-1 and 30-2, which reflect the new Program of Studies. English 30 and 33, based on the old program, are being phased out.
- Starting in 2002/03 for the social studies exams and in 2003/04 for all math/science exams, the written and multiple choice portions are administered in separate sittings.

| Subject | $\begin{aligned} & 2000 / \\ & 2001 \end{aligned}$ | $\begin{aligned} & 2001 / \\ & 2002 \end{aligned}$ | $\begin{aligned} & 2002 / \\ & 2003 \end{aligned}$ | $\begin{gathered} 2003 / \\ 2004 \end{gathered}$ | $\begin{aligned} & 2004 / \\ & 2005 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| English 30-1 | - | - | - | 56 | 59 |
| English 30-2 | - | - | - | 25 | 26 |
| French Language Arts 30 | - | - | 3 | 3 | 3 |
| Social Studies 30 | 49 | 51 | 53 | 53 | 54 |
| Social Studies 33 | 34 | 33 | 33 | 34 | 32 |
| Pure Math 30 | 33 | 42 | 44 | 44 | 46 |
| Applied Math 30 | - | - | 22 | 22 | 22 |
| Biology 30 | 39 | 41 | 43 | 43 | 43 |
| Chemistry 30 | 35 | 36 | 38 | 38 | 39 |
| Physics 30 | 22 | 23 | 24 | 24 | 24 |
| Science 30 | 7 | 7 | 7 | 8 | 8 |
| Source: Alberta <br> Notes: <br> - Students can ch requirements; <br> - $\quad$ See Endnote C | ation. <br> among <br> part of the <br> loma Ex | es to con de 12 cl ations, p | e high sc rites eac 55-56. | and meet oma exa | -second |

## GOAL 2 PERFORMANCE MEASURES

## Rutherford Scholarships

## TARGET:

- New measure in Education's 2005 2008 Business Plan - no target set for 2004/05.


## NEW MEASURE:

- Multi-year results are presented to introduce the new performance measure.
- Nearly $34 \%$ of Grade 12 students in 2003/04 had marks during high school that met the requirements for a Rutherford Scholarship.
- The proportion of Grade 12 students eligible for a Rutherford Scholarship has increased steadily over time, from $27 \%$ in 1999/2000 to $34 \%$ in 2003/04.
- Results indicate that a greater proportion of Alberta's high school students are achieving academic excellence.

Percentages of Grade 12 Students Eligible for a Rutherford Scholarship (new measure starting 2005/06)


Source: Alberta Education.
Notes:

- Students need marks of $80 \%$ or higher in certain courses in grades 10,11 , and/or 12 to qualify for a Rutherford Scholarship.
- The measure reports the percentages of Grade 12 students whose marks in specific courses in grades 10,11 , and 12 meet the criteria for a Rutherford Scholarship, not the percentages who received the scholarship.
- In order to receive a Rutherford Scholarship, students must enroll in a post-secondary program.
- See Endnote C, Rutherford Scholarship Eligibility Rate of Grade 12 Students, page 56.


## High School Completion

## TARGET:

- The target was met.


## DISCUSSION:

- The high school completion rate within five years of entering Grade 10 (the core measure) increased to $75 \%$ in 2001/02 and has remained at that level. In the fifth year, over $3 \%$ of students are still in high school and may complete in a subsequent year.
- The four-year high school completion rate has increased gradually from $69 \%$ in 1998/99 to $73 \%$ in 2003/04.
- The three-year high school completion rate has increased steadily and substantially from $62 \%$ in 1997/98 to 69\% in 2003/04.
- These increases reflect increased attention to high school completion in recent years and the recognition that high school completion is needed for future success.
- Of the students included in the fiveyear rate, most (over 85\%) complete in three years. This makes the three-year rate a reliable predictor of the fourand five-year rates in future years. Projections indicate the four- and fiveyear rates are likely to increase slightly in future years.
- Substantial portions of students who do not complete high school in the basic education system attain high school completion status as adults (see Educational Attainment, page 31).

High School Completion Rates


Source: Alberta Education
Notes:

- Projections indicate results likely to be achieved given the three-year completion rates for these groups of Grade 10 students and completion rates in prior years. The projection for 2005/06 also considers the projected 5-year rate for 2004/05.
- Included in the calculation of high school completion rates is an estimated attrition adjustment
- Prior years' rates have been restated, using an established Grade 10 cohort for each school year.
- $\quad$ See Endnote C, High School Completion Rates, page 56.


## Educational Attainment

## TARGET:

- The target was met.


## DISCUSSION:

- The percentages of Albertans aged 25-34 with at least high school completion are stable on a year-to-year basis.
- Alberta's results remain high and similar to the national average.


## Percentages of Albertans Aged 25-34 who Completed High School



Source: Statistics Canada Labour Force Survey, special tabulation for Alberta Education.

## Notes:

- Since respondents were asked about their highest level of education, those who indicated they have participated in or completed some postsecondary studies are considered to have completed high school.
- See Endnote B, pages 51-52 on the use of confidence intervals for survey measures to interpret results and on assessment of results over time.
- $\quad$ See Endnote C, Educational Attainment of Albertans Aged 25-34, page 57 .


## Preparation of Children for School

## TARGET:

- No target for 2004/05 was set for this proxy measure of readiness to learn.


## DISCUSSION:

- The percentage of children who participated in Early Childhood Services (ECS) programs before entering Grade 1 increased slightly in 2002/03 and has remained very high over time.
- Most parents choose to enroll their children in ECS programs even though ECS attendance is not mandatory.
- ECS programming is designed to prepare children for entry into Grade 1 and to provide a foundation for success in school.

Percentages of Grade 1 Students who Attended Early Childhood Services (ECS) Programs


Source: Alberta Education.
Notes:

- Includes children enrolled in Early Childhood Services (ECS) or ungraded programs prior to Grade 1.
- $\quad$ See Endnote C, Participation in Early Childhood Services Programs, page 57.
- See Endnote B, pages 51-52, for information on assessment of results over time.


## Transition to Post-Secondary

## TARGET:

- New measure under development in the Ministry's 2004-2007 Business Plan - no target set.


## DISCUSSION:

- The high school to post-secondary transition rate reports the proportion of students who have enrolled in a postsecondary program within four and six years of entering Grade 10 .
- The percentage of Alberta's high school students who have entered a post-secondary program has risen slightly over time.
- The results show that a substantial proportion of Alberta's young people delay their entry to post-secondary programs after high school. About one-third are attending a postsecondary program four years after starting Grade 10 while more than half are attending six years after Grade 10.

High School to Post-Secondary Transition Rates


Source: Alberta Education.
Notes:

- Students are considered to be attending post-secondary if they are enrolled in a public or private post-secondary institution in Alberta or registered in an apprenticeship program in Alberta. Adjustments for attrition and attending post-secondary out of province are based on estimates.
- Starting with 2003/04, information on post-secondary enrolment comes from a different data source, which may account for the difference from prior years' results.
- Prior years' results have been restated, using an established Grade 10 cohort for each school year.
- $\quad$ See endnote C, High School to Post-Secondary Transition Rates, pages 57-58.


## Preparation for Employment <br> TARGET:

- No target for 2004/05 - biennial survey.


## DISCUSSION:

- Following the creation of Alberta Education and Advanced Education from the former Ministry of Learning, the employer satisfaction measure was restated to focus on outcomes for the K-12 system.
- Employer satisfaction with the skills and quality of work of high school graduates remained high and stable over time.


## NEW MEASURE:

- A new measure was introduced in Education's 2005-2008 Business Plan on students' preparation for employment. As such, no target was set for 2004/05.
- Overall agreement (all respondent groups combined) was stable at $69 \%$ in both 2003/04 and 2004/05.
- While agreement levels were consistent within the three respondent groups (parents, teachers and the public) from 2003/04 to 2004/05, agreement levels among respondent groups varied substantially in both years.

Employer Satisfaction with the Skills and Quality of Work of High School Graduates (restated)


Source: Alberta Education: Environics West - 2002, Environics Research Group - 2004.
Notes:

- Employer surveys are conducted every other year.
- See Endnote A, pages 48-50 for information on surveys conducted for Alberta Education.

Parent, Teacher and Public Agreement that Students are Taught Attitudes and Behaviors that Will Make Them Successful at Work When They Finish School (new measure starting in 2005/06)

| Respondent Group | $2003 / 04$ | $2004 / 05$ |
| :--- | :---: | :---: |
| Parents (ECS - 12) | $75 \%$ | $74 \%$ |
| Teachers | $85 \%$ | $86 \%$ |
| Public | $47 \%$ | $48 \%$ |
| Overall | $\mathbf{6 9 \%}$ | $\mathbf{6 9 \%}$ |

Source: Alberta Education: Compustat Consultants Inc. - 2004, 2005.
Notes:

- Overall agreement rates for both 2003/04 and 2004/05 are the average of agreement rates for each respondent group.
- See Endnote A, pages 48-50, for information on surveys conducted for Alberta Education.


## Preparation for Citizenship

## TARGET:

- The target was met.


## DISCUSSION:

- Public satisfaction that high school graduates are well prepared for citizenship has been stable the last four years, following a significant increase in 2001/02.
- The survey question was clarified starting in 2001/02, which may account for the difference between results in recent years and those in 2000/01.


## NEW MEASURE:

- A replacement citizenship measure was introduced in Education's 20052008 Business Plan. As such, no target was set for 2004/05.
- This new measure asks high school students, parents and teachers a more specific set of questions to probe citizenship in greater depth.
- Overall results for all respondent groups combined and for each respondent group were fairly high in both 2003/04 and 2004/05.
- Teacher agreement levels have been consistently higher than those of parents and students.

Public Satisfaction that High School Graduates are Well Prepared for Citizenship


Sources: Alberta Education: Criterion Research Corp.- 2001; R.A. Malatest \& Associates - 2002, 2003; Compustat Consultants Inc. - 2004. 2005.
Notes:

- The survey question was revised in the 2001/02 survey as a result of field testing and asks the public to indicate how satisfied they are that recent Alberta high school graduates are well prepared for citizenship.
- In prior years, the public was asked to indicate if they agreed that high school graduates in Alberta were being taught the rights and responsibilities of citizenship.
- See Endnote A, pages $48-50$, for other information on surveys conducted for Alberta Education.

Student, Parent and Teacher Satisfaction that Students Model the Characteristics of Active Citizenship (new measure starting in 2005/06)

| Respondent Group | 2003/04 | $2004 / 05$ |
| :--- | :---: | :---: |
| High School Students | $76 \%$ | $78 \%$ |
| Parents (ECS - 12) | $79 \%$ | $81 \%$ |
| Teachers | $90 \%$ | $90 \%$ |
| Overall | $\mathbf{8 2 \%}$ | $\mathbf{8 3 \%}$ |
| Source: Albase |  |  |

Source: Alberta Education: Compustat Consultants Inc. - 2004, 2005.
Notes:

- For all respondent groups, percentages reported are aggregates of agreement levels that:
- students help each other,
- students respect each other,
- students are encouraged to get involved in activities that help people in the community,
- students are encouraged to try their best, and
- students follow the rules.
- Overall agreement rates for both 2003/04 and 2004/05 are the average of agreement rates for each respondent group.
- See Endnote A, pages 48 - 50 , for information on surveys conducted for Alberta Education.


## Core Business 3: Support the Continuous Improvement of the

## Ministry and Education System

## Goal Three: Highly Responsive and Responsible Ministry

Outcomes: Improved results through effective working relationships with partners and stakeholders. The Ministry demonstrates leadership and continuous improvement.
To carry out this core business and to support the goal in 2004/05:

- Over $\$ 16$ million, representing $0.4 \%$ of Ministry expenses, was spent on Ministry Support Services, reflecting responsibilities such as governance, planning, policy coordination, information systems and financial management.
- Alberta Education's governance and support services for 2004/05 included:
- implementing the Funding Pillar of the Renewed Funding Framework, including a new system to support allocations to school jurisdictions based on the new formulas;
- initiating online surveys of teachers and of students in grades 4, 7 and 10 in support of the Accountability Pillar of the Renewed Funding Framework;
- developing and implementing a web-based application for school jurisdictions to report average class sizes;
- launching a new teacher registry system and a new stakeholder registry system;
- pursuing an agreement with British Columbia to enable schools in that province to purchase learning resources from Alberta's Learning Resources Centre, thereby lowering the cost of learning resources for schools in both provinces through economies of scale;
- contributing to four Cross-Ministry Initiatives: Alberta Children and Youth; Aboriginal Policy; Health Renewal and Wellness; and Leading in Learning and Skilled Workforce; and
- staff development, with 74.4\% of Alberta Education employees participating in training and development as part of implementing the strategy in the Ministry's Human Resource Plan to ensure staff have the necessary skills, knowledge and capacity.
Results achieved are a reflection of cumulative effort and funding over a number of years, rather than relating solely to funding for the 2004/05 fiscal year. Of the five Ministry performance measures to assess achievement of the outcomes for Goal 3, three are new and two are reframed to focus only on the K-12 system. The following are the 2004/05 performance highlights for this goal.

[^0]
## PERFORMANCE HIGHLIGHTS

## Partner and Stakeholder Satisfaction

N Collaboration - 84\% of partners and stakeholders agreed that Alberta Education staff are collaborative (reframed).
$=$ Parental Involvement $-84 \%$ of parents, teachers and school board members were satisfied with parental involvement in decisions about their child's education (new).
N Responsiveness and Flexibility - $82 \%$ of partners and stakeholders agreed that Ministry staff are responsive and flexible (reframed).

## Leadership and Improvement

N System Improvement - 66\% of parents, teachers and school board members indicated that the K-12 system has improved or stayed the same in the last three years (new).

## OPPORTUNITIES FOR IMPROVEMENT

N Provincial Leadership - 60\% of parents, teachers, school board members and stakeholders were satisfied that the leadership at the provincial level effectively supports and facilitates teaching and learning (new).

Note: A methodology to evaluate achievement and improvement on core measure results is under development.

## Working Relationships

## TARGET

- The targets for cross-ministry partner and learning system stakeholder perceptions of Alberta Learning staff in the 2004-2007 Business Plan ( $90 \%$ for collaborative, and $90 \%$ for responsive and flexible) are not applicable to Alberta Education.


## DISCUSSION:

- Following the creation of Alberta Education and Advanced Education from the former Ministry of Learning, the cross-ministry partner and learning system stakeholder perception measure was reframed to focus on Alberta Education staff.
- In 2004/05, partner and stakeholder agreement that Alberta Education staff are collaborative was high at $84 \%$, as was their agreement that Alberta Education staff are responsive and flexible (82\%).


Source: Alberta Education: Hargroup Management Consultants Inc. - 2005. Note:

- For the purpose of these surveys, partners are representatives of other ministries that are involved in Cross-Ministry Initiatives with Alberta Education, and stakeholders are representatives of K-12 education system stakeholder organizations, such as the Alberta School Boards Associations, the College of Alberta School Superintendents and the Alberta Home and School Councils' Association.
- $\quad$ See Endnote A, pages 48-50, for information on surveys conducted for Alberta Education.


## Parental Involvement

## TARGET

- New measure in Education's 2005-2008 Business Plan - no target set for 2004/05.


## NEW MEASURE:

- Results in 2003/04 and 2004/05 for parents, teachers and school board members are presented to introduce this new measure on parental involvement in education.
- Overall satisfaction for all respondent groups was high at $84 \%$ in both 2003/04 and 2004/05.
- In both years, satisfaction was somewhat lower among parents than among teachers and school board members.

| Percentages of Parents, Teachers and School Board Members <br> Satisfied with Parental Involvement in Decisions about Their <br> Child's Education (new measure for 2005/06) |  |  |
| :--- | :---: | :---: |
| Respondent Group |  | $2003 / 04$ |
| Parents (ECS - 12) | $2004 / 05$ |  |
| Teachers | $77 \%$ | $77 \%$ |
| School Board Members | $88 \%$ | $86 \%$ |
| Overall | $87 \%$ | $88 \%$ |

Source: Alberta Education: Compustat Consultants Inc. - 2004, 2005.
Notes:

- For all respondent groups, percentages reported are aggregates of: - satisfaction with the opportunity for parental involvement in decisions about their child's education,
- satisfaction with the opportunity for parental involvement in decisions at their child's school,
- satisfaction that input into decisions at their child's school is considered,
- the percentage of respondents who reported that parents are involved "A

Lot" or "Some" with decisions about their child's education, and

- the percentage of respondents who reported that parents are involved "A Lot" or "Some" in decisions at their child's school.
- Overall satisfaction rates are the average of satisfaction rates for each respondent group.
- In 2003/04, "school board members" included elected trustees and superintendents, while in 2004/05, it included trustees only.
- See Endnote A, pages 48-50, for information on surveys conducted for Alberta Education.


## Provincial Leadership

## TARGET:

- New measure in Education's 2005-2008 Business Plan - no target set for 2004/05.


## NEW MEASURE:

- Questions on leadership were asked of stakeholders, parents, teachers and school board trustees in the 2004/05 surveys for the first time. Results for 2004/05 for these groups are presented to introduce this new measure.
- The overall result in 2004/05 for all respondent groups was $60 \%$.
- Results were higher for stakeholders and trustees than for parents and teachers.


Sources: Alberta Education: Compustat Consultants Inc. for parent, teacher and school board member (trustee) results. Hargroup Management Consultants Inc. for stakeholder results.
Notes:

- The overall result is the average of the rates for each respondent group.
- See Endnote A, pages 48-50, for information on surveys conducted for Alberta Education.


## K-12 System Improvement

## TARGET:

- New measure in Education's 2005-2008 Business Plan - no target set for 2004/05.


## NEW MEASURE:

- Parents, teachers and school board trustees were asked for the first time in the 2004/05 surveys whether Alberta's education system has improved, stayed the same or declined. Results in 2004/05 for these groups are presented to introduce this new measure.
- Overall, 66\% of respondents (across all groups) indicated that Alberta's education system had improved or stayed the same.
- Results were higher among trustees than for parents and teachers.
- About $10 \%$ of all parents and teachers surveyed answered "Don't Know", "Not Applicable" or did not respond, compared to only $5 \%$ of trustees.
- When asked a similar question focused on education in their own school (parents and teachers) or jurisdiction (trustees), rather than about the education system in general, opinions were more positive overall at $74 \%$, as well as for each respondent group.

Percentages of Parents, Teachers and School Board Members Indicating that the Alberta K-12 Education System has Improved or Stayed the Same in the Last Three Years (new measure starting in 2005/06)



Source: Alberta Education: Compustat Consultants Inc. - 2005.
Notes:

- The overall rate is the average of rates for each respondent group.
- $\quad$ See Endnote A, pages 48-50, for information on surveys conducted for Alberta Education


## Financial Results and Performance

## Overview

The Ministry of Education financial statements represent the financial position of both the Department of Education and Alberta School Foundation Fund. These financial results are for the year ended March 31, 2005. Detailed Financial Statements can be found on pages 59-117.

On November 24, 2004, the government announced that the Ministry of Learning would be reorganized to form the Ministry of Education and the Ministry of Advanced Education. The reorganization allows Alberta Education to focus solely on the needs of all students in the Kindergarten to Grade 12 education system. All financial transactions from the former Ministry of Learning have been restated as if the Ministry of Education and Ministry of Advanced Education had existed separately in the past.

The following chart explains the distribution of the total Ministry expenses by their function.

| Functional Representation of Expenses (in thousands) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2004/05 Budget |  | 2004/05 Actuals |  | 2003/04 Actuals |  |
| Education | \$ | 3,943,616 | \$ | 4,038,677 | \$ | 3,764,132 |
| Debt Servicing Costs |  | 3,562 |  | 2,827 |  | 3,096 |
| Total Ministry Expense | \$ | 3,947,178 | \$ | 4,041,504 | \$ | 3,767,228 |

## REVENUES

## 2004/05 Revenues by Source



Total revenue for the Ministry of Education for 2004/05 was $\$ 1.346$ billion, representing a $\$ 34$ million increase over 2003/04 revenue. This increase is primarily due to revenues generated by the school property tax, an increase of $\$ 69$ million, offset by lower Lottery Fund transfers of $\$ 25$ million and lower learning and teaching resource sales of $\$ 9$ million. Although school property tax rates dropped by $2.3 \%$ in 2004 and $5 \%$ in 2005 , increasing property values resulted in an increase in the amount collected. Lottery Funding for school technology upgrading and online curriculum repository totaling approximately $\$ 20.4$ million in 2003/04 was discontinued in the current fiscal year. The remaining decrease in Lottery Funding was attributed to less funding for high speed networking in 2004/05. The one-time Resources for Classroom Funding allocation in 2003/04 resulted in the reduction in the sales of learning and teaching resources to school jurisdictions and private schools in 2004/05.

## EXPENSES BY CORE BUSINESS

| Comparison of 2004/05 Expenses by Core Business (in thousands) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2004/05 <br> Budget |  | 2004/05 <br> Actuals |  | 2003/04 Actuals |  |
| Core Business |  |  |  |  |  |  |
| 1. Support High Quality Learning Opportunities in the Education System | \$ | 3,333,338 | \$ | 3,436,711 | \$ | 3,209,665 |
| 2. Support Learners to Achieve Excellent Learning Outcomes |  | 597,401 |  | 588,027 |  | 541,496 |
| 3. Support the Continuous Improvement of the Ministry and Education System |  | 16,439 |  | 16,766 |  | 16,067 |
| Total Ministry Expense | \$ | 3,947,178 | \$ | 4,041,504 | \$ | 3,767,228 |

## 2004/05 Expenses By Core Business



## Core Business 1 - Support High Quality Learning Opportunities in the Education System

Programs associated with this core business include the operations of public and private schools, teachers' pension and other basic education programs. In response to the class size recommendation in Alberta's Commission on Learning report, the class size initiative program was added.

## Comparison of 2004/05 Actual Expenses to Original Budget

Funding for this core business was approximately $\$ 103$ million higher than budget in 2004/05. This is primarily related to $\$ 52.3$ million spent to respond to Alberta's Commission on Learning recommendation to reduce class sizes. The supplementary $\$ 52.3$ million resulted in the hiring of an additional 1,250 teachers. Through savings realized in other areas of the Renewed Funding Framework, an additional $\$ 19$ million was spent in operating support to public and separate schools. The Teachers' Pension Plan expense increased $\$ 36.7$ million primarily due to an actuarial valuation in August 2004 that reflected an increase in teacher benefits over the Teacher Pension Plan's assets. Also, an addition $\$ 1.5$ million was spent on Accredited Private Schools Support.

Sales of learning and teaching resources decreased by approximately $\$ 6$ million in 2004/05 in comparison to budget. In 2003/04, school jurisdictions and private schools took advantage of a one-time Resources for Classroom grant of $\$ 20$ million, which resulted in their spending less on classroom resources in 2004/05. Expenses associated with the purchase and distribution of learning and teaching resources also decreased by approximately $\$ 6$ million, consistent with the reduction of sales in this dedicated revenue initiative in the current fiscal year.

## Comparison of 2004/05 Actual Expenses to 2003/04 Actual Expenses

Expenses for Core Business 1 were approximately $\$ 227$ million higher in 2004/05 compared to 2003/04.

Operating support to public and separate schools accounted for $\$ 113$ million of the increase. Increases of 2\% in the overall grant rates accounted for $\$ 67$ million. To address the implementation of the Renewed Funding Framework in 2004/05, $\$ 27$ million in Stabilization Funding was provided to school jurisdictions. Also, $\$ 19$ million was spent to complete the additional school year funding announced in November 2003 that addressed the unfunded cost pressures identified by Alberta's Commission on Learning, and the $\$ 6$ million investment in video-conferencing in the K-12 system to provide greater access to educational opportunities for rural and remote communities.

To reduce class sizes, $\$ 52.3$ million was spent in 2004/05 for the Class Size Initiative, and resulted in the hiring of an additional 1,250 teachers. Teachers' Pension Plan expense was approximately $\$ 58$ million more in 2004/05 compared to 2003/04 representing increased contributions and an increase in the liability where the value of teacher's benefits exceed the value of pension plan assets. Funding to Accredited Private Schools increased by $\$ 12$ million, primarily due to a $2 \%$ grant increase and adjustments resulting from the Renewed Funding Framework. Accredited Private Schools funding is based on $60 \%$ of the Base Instruction funding rate for school jurisdictions and charter schools, which increased due to the Renewed Funding Framework. Expenses related to Other Basic Education Programs decreased by approximately $\$ 8$ million primarily due to the reduction in the purchase and distribution of learning and teaching resources, consistent with the reduction in sales of this dedicated revenue initiative between 2004/05 and 2003/04.

## Core Business 2 - Support Learners to Achieve Excellent Learning Outcomes

This core business is comprised of supports for students such as transportation, severe disability funding, school food services and English as a Second Language programs, which are funded as part of the Operating Support to Public and Separate Schools. Other provincial initiatives such as the Alberta Initiative for School Improvement, High Speed Networking, Student Health Services and grants for learning and teaching resources also support learners in achieving excellent learning outcomes.

## Comparison of 2004/05 Actual Expenses to Original Budget

Funding in support of this core business was approximately $\$ 9$ million lower than budget 2004/05. A reduction in spending of $\$ 4.5$ million related to High Speed Networking was due to slower than anticipated progress on the SuperNet project. In addition, expenses related to Students with Severe Disabilities and English as a Second Language programs were $\$ 14$ million below budget because of lower than anticipated enrolments. In 2004/05, the Learning Resources Credit Allocation was under budget by $\$ 2$ million due to the reduction in sales of learning and teaching resources. Also, Transportation, and Institutional Support were $\$ 1.5$ million less than budget. At the same time, Alberta Education provided additional one-time funding of $\$ 13$ million to the school jurisdictions and private schools to purchase textbooks and other classroom resources, which was not anticipated during the budget process.

## Comparison of 2004/05 Actual Expenses to 2003/04 Actual Expenses

Compared to 2003/04, expenses in Core Business 2 have increased by $\$ 46$ million. Funding for Student Health Services increased by $\$ 6$ million to a total of $\$ 37$ million to improve access to and enhance the provision of integrated health and related support services for school children with special health needs. Transportation funding increased in 2004/05 by $\$ 11$ million due to grant rate increases, special needs enrolment, and the rural/urban transportation reviews which changed transportation density grids in rural areas and adjusted urban population thresholds. Funding for students with Severe Disabilities increased by $\$ 29$ million because of an approximate $8 \%$ rate increase along with a $7 \%$ growth increase. English as a Second Language funding increased by $\$ 6$ million due to rate increases. Funding for Alberta Initiative for School Improvement increased by approximately $\$ 4$ million. Alberta Education also provided additional one-time funding of $\$ 12$ million to the school jurisdictions and private schools for classroom resources.

These expenditures were offset by one-time Resources for the Classroom Funding of approximately $\$ 20$ million provided in 2003/04, which was provided to school jurisdictions and private schools for textbook purchases. Also, due to reduced sales of learning and teaching resources, the expense associated with Learning Resource Credit Allocation decreased by $\$ 2$ million.

## Core Business 3 - Support the Continuous Improvement of the Ministry and Education System

Ministry Support Services represents those divisions that provide services focusing on Ministry-wide operations and that facilitate integration and accountability across all divisions and the learning system.

Spending on Ministry Support Services is comparable between years and within budget, representing $0.4 \%$ of the total Ministry of Education's expenses.

## Looking Ahead: Opportunities and Challenges for Alberta's Education System

Education is recognized as a key determinant of economic growth, a high standard of living and a healthy and prosperous population. Sustaining a healthy and economically secure population in Alberta requires a continued emphasis on ensuring that children and youth gain a solid basic educational foundation in their formative years. Collaborative work with partners and stakeholders is needed to create the necessary supports to ensure every child learns and every child succeeds. It is most important that children are ready to learn when they start school and that students are supported so that they can be successful in school and complete high school. High school completion represents student acquisition of the confidence, knowledge, skills and attitudes to succeed in work or further study, as well as to participate fully as citizens in a democratic society.

Alberta is recognized nationally and internationally for its excellent education system. Alberta's students consistently rank at the top in national and international tests. To sustain this excellence and continue to improve, Alberta Education, its partners and stakeholders must continue to ensure that the education system anticipates and responds to key changes in the environment in which the system operates as well as to analyze and address key system results.

## Providing a Strong Foundation for Children and Youth

Ensuring that children are ready to learn when they start school is crucial for their success and is a shared responsibility of the education system and parents. Children develop at different rates in their first few years of life, but their ability to learn and take full advantage of the education provided depends on their readiness to learn. The education system performs best when it is flexible enough to build on and benefit from the influence of children's diverse backgrounds and when children are provided with the necessary supports to succeed at school. A good start in school provides lasting benefits for every child.

While acquiring a basic education, today's students also need to learn to adapt their skill sets to succeed in the rapidly changing and internationally competitive labour market. As well, students need to acquire the ability and motivation to learn how to learn, learn continuously throughout life, seek new ideas and information, collaborate with others, understand other cultures, speak and read other languages, and know how to apply their knowledge and skills.

Key opportunities and challenges in providing a strong education foundation for children and youth include:

- Teaching - Effective teaching is key to student learning and development. While results on national and international tests suggest that Alberta students benefit from excellent teaching in their schools, effort is needed to ensure students are learning what they need to know and to make smoother transitions between grades and subjects. When teachers work together in professional learning communities, there is better integration across the curriculum, which enhances student learning. Moreover, to meet the challenges of the future, teachers must continue to keep their knowledge and skills up to date and instill a love of learning in their students. The education system must enhance opportunities for teachers to work together and for teacher growth and development.
- Primary programs - Ensuring students get a solid grounding in basic skills in the early years of their education is critically important, as it is the foundation for further learning. The education system must

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sharpen its focus to ensure all students can read, write and perform basic mathematics by the end of Grade 3 . The education system needs to ensure a positive social and integrative environment in schools in order to best support the development of early literacy and numeracy skills.

- Changing composition of the student population - Given that Aboriginal children, immigrant children and children with special needs account for a growing share of the student population, their learning needs and styles must continue to be assessed and addressed effectively so that all students can develop literacy and numeracy skills in early elementary grades and a love of learning to sustain them through school. Appropriate programming must be provided to maximize student learning. The education system must also demonstrate cultural sensitivity and accommodate the cultural backgrounds of all students.
- Students' health - Recognizing the growing concern with childhood obesity and related health issues, which are approaching epidemic proportions in Canada, the education system must provide more opportunities for physical activity for students in school. In addition, the Ministry must continue to emphasize the importance of health and fitness in its work with other ministries, parents and stakeholders to encourage physical activity among school-aged children and to ensure that education and health programs are coordinated to address students' health and fitness needs.
- High school completion - Completing high school remains a priority for Alberta's education system as jobs require increasing levels of education and training. Completing high school is a key step in preparing for work and further study, and Alberta's high school completion rate needs improvement. Alberta Education will continue to provide leadership and work with partners and stakeholders to ensure that students achieve this important milestone as part of their preparation for adult life.


## Sustaining a High Quality Education System

Education has long been a priority for the provincial government, reflecting public expectations and contributing to Alberta's education system being among the best in the world. Albertans are committed to ensuring that students have the best learning opportunities. Alberta's 2004 It's Your Future survey, in which almost 300,000 Albertans participated, identified education as one of the top priorities for the province. This commitment cannot be taken for granted and must be sustained so that a high quality education can continue to be provided to Alberta's children and youth into the province's second century. The education system also must take into account changing ideas of what constitutes a strong foundation, including the new demands of a knowledge-based economy and a technologically driven, rapidly changing and increasingly globalized society.

The opportunities and challenges in sustaining Alberta's high quality K-12 education system include:

- Curriculum and teaching standards - What students need to know is not the same today as it was in the past or will be in the future. Alberta Education must continuously review and keep its leading edge curriculum up to date. Work will continue with Faculties of Education of Alberta's post-secondary institutions on the content of teacher preparation programs so that new teachers come into the classroom ready to help students develop the knowledge, skills and attitudes necessary to take full advantage of opportunities to participate in the rapidly changing economy and society.
- Equitable access - The education system must ensure students have equitable access to education.
- Learning needs of special populations - Effective programs must continue to be provided to support the learning capabilities of the growing number of Aboriginal students, immigrant students and students with special needs. Alberta Education must continue to invest in programs for special populations of students and work with stakeholders to ensure appropriate programming for these students, to measure and report on their achievement, and use results to make informed program decisions.
- Small schools and remote locations - Students must be able to receive a quality education regardless of where they live and attend school in the province. Recognizing that larger schools and larger communities can provide a greater range of programming, Alberta Education must continue to ensure that all schools can provide a solid basic program and that technology is used effectively to enhance programs provided to students in small schools and remote areas.
- Information and Communication Technology - The ability to use information and communication technology is essential for success in the workplace today and in the future. Advancements in these technologies are rapid, which challenges the education system to keep current. Alberta Education will continue to work with partners and stakeholders to ensure that students have opportunities to learn to use information and communication technologies in effective, efficient, ethical and safe ways so they acquire the skills they will need in the future. As technologies evolve, it will be important to demonstrate the benefits for student learning of government's significant investment in technology.
- Infrastructure - Schools must be kept in good repair, be accessible to students and be upgraded as needed to support the curriculum, teaching and learning. Recognizing that school facilities are the responsibility of a different ministry and there are competing demands for capital funding, Alberta Education will continue to work with school boards and Alberta Infrastructure and Transportation to ensure school facilities meet student and program needs.
- Inter-governmental and corporate relationships - Alberta Education has a long history of leading interprovincial work in many areas of curriculum and test development. This contributes to the high standards maintained for education within the province and across Canada, as well to the respect Alberta's education system enjoys within Canada and around the world. This work must continue in the future to help sustain the reputation of Alberta's education system. More recently, relationships with other governments and industry have resulted in agreements that realize on-going cost savings for Alberta school boards and in a review of federal funding for band schools. The Ministry must continue to pursue such strategic alliances for the benefit of Alberta students.
- Public awareness and support - As the population ages and school enrolments decline, school-aged children are a decreasing proportion of the population, which results in increased competition for resources. To sustain Albertans' commitment to education, investments in education must have demonstrable results and shortfalls in performance must be addressed efficiently and effectively through a comprehensive accountability system. The strengths of the system, improvements in student learning and the benefits to society of a high quality K-12 education system needs to be communicated to the public clearly and regularly. All stakeholders must continue to work together to ensure the quality of the system is maintained and communicated and to ensure all students learn and succeed.

Alberta Education's Business Plan for 2005-2008 contains strategies that will be pursued over the next few years to address these opportunities and challenges through ongoing work with the Ministry's partners and stakeholders.

## Endnote A: Notes on Surveys

## Public/Client Surveys

Alberta Education regularly commissions telephone surveys of random samples of the Alberta public and key client groups. The purpose of these surveys is to obtain perceptions of how the basic education system is performing in meeting learners' and society's needs and expectations. Professional survey research firms are contracted to conduct the surveys, using trained interviewers and the ComputerAssisted Telephone Interviewing (CATI) system. Survey results are compiled by the survey research firms and provided to the Ministry. Surveys of the public and of parents, high school students, teachers and school board members are conducted annually. The employer survey is conducted every second year.
The following table provides sampling information about the surveys of Albertans conducted for the Ministry in recent years that are reported in this 2004/05 Annual Report. The information includes the respondent groups surveyed, sample sizes and the confidence intervals for results from each survey. Results are considered accurate within the confidence interval 19 times out of 20 (i.e., at a confidence level of $95 \%$ ). Sampling variation can account for observed differences in results from year to year. See discussion on the use of confidence intervals for interpreting survey results, starting on the next page.

Alberta Education Public/Client Surveys: Sample Sizes and Confidence Intervals

| Survey |  | $\mathbf{2 0 0 0 / 0 1}$ | $\mathbf{2 0 0 1 / 0 2}$ | $\mathbf{2 0 0 2 / 0 3}$ | $\mathbf{2 0 0 3 / 0 4}$ | $\mathbf{2 0 0 4 / 0 5}$ |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: |
| Public $^{1}$ | Sample | 2,154 | 1,171 | 2,012 | 2,003 | 3,000 |
|  | Confidence interval | $\pm 2.2 \%$ | $\pm 2.9 \%$ | $\pm 2.2 \%$ | $\pm 2.2 \%$ | $\pm 1.8 \%$ |
| Parents $^{2}$ | Sample | 800 | 800 | 818 | 800 | 800 |
|  | Confidence interval | $\pm 3.5 \%$ | $\pm 3.5 \%$ | $\pm 3.5 \%$ | $\pm 3.5 \%$ | $\pm 3.5 \%$ |
| High School Students (Grades <br> $10-12)^{2}$ | Sample | 800 | 800 | 800 | 800 | 800 |
|  | Confidence interval | $\pm 3.5 \%$ | $\pm 3.5 \%$ | $\pm 3.5 \%$ | $\pm 3.5 \%$ | $\pm 3.5 \%$ |
| Teachers $^{3}$ | Sample | -- | -- | -- | 801 | 806 |
|  | Confidence interval | -- | -- | -- | $\pm 3.5 \%$ | $\pm 3.5 \%$ |
| School Board Members ${ }^{3,4}$ | Sample | -- | -- | -- | 487 | 350 |
|  | Confidence interval | -- | -- | -- | $\pm 2.2 \%$ | $\pm 3.2 \%$ |
| Employers | Sample | -- | 2,003 | -- | 2,000 | -- |
|  | Confidence interval | -- | $\pm 2.2 \%$ | -- | $\pm 2.2 \%$ | -- |

Notes:

1. The sample size for the general public was smaller in 2001/02 because of the teachers' labour action. In 2004/05, the public survey sample size was increased from about 2,000 a year to 3,000 to generate more reliable data (i.e., with smaller confidence intervals) for subgroups of respondents.
2. Although parents and high school students have been surveyed for several years, use of results from these surveys for performance measures reporting began with the 2003/04 results.
3. The surveys of teachers and school board members started in 2003/04. In that first year, "School Board Members" included school board trustees and superintendents, while in 2004/05, only trustees were included.
4. Confidence intervals for these samples take into account the small populations from which the samples are selected (i.e., 646 school board trustees and superintendents in 2003/04, and 560 school board trustees in 2004/05).

The survey instruments for these surveys use four-point response scales ("Very satisfied/Satisfied/ Dissatisfied/Very dissatisfied" or "Strongly Agree/Agree/Disagree/Strongly Disagree"), depending on the question. Although not asked, "Don't Know" responses and refusals are recorded as well. Results presented
are the combined percentages of respondents who were "very satisfied/satisfied" or who "strongly agreed/agreed". The survey results are available online at http://www.education.gov.ab.ca/pubstats/research.asp.

## Surveys of Partners and Stakeholders

Alberta Education commissioned a telephone survey of its partners and stakeholders early in 2005. For the purpose of these surveys, partners are representatives of other Alberta government ministries that have worked with Alberta Education on specific projects during the last 12 months, and stakeholders are representatives of K-12 education system stakeholder organizations (e.g., Alberta School Boards Association, the College of Alberta School Superintendents and the Alberta Home and School Councils’ Association). Some of these organizations are specifically established by legislation, and all have as their mandate a broad and dedicated interest in the K-12 education system.
These surveys use judgment sampling (a type of non-probability sampling method, for which confidence intervals are not applicable) and are conducted with partner and stakeholder representatives to obtain perceptions about their working relationships with Alberta Education staff. The partner and stakeholder surveys capture all major projects in which partners in other ministries worked with Alberta Education staff and all major stakeholder organizations that have an on-going relationship with the Ministry. Respondents are selected with extensive input from senior Ministry staff who have the greatest contact with senior staff in partner and stakeholder organizations. Stakeholder selection identifies individuals in senior positions in their organizations who have a broad understanding of the learning system and are in the best position to provide meaningful responses. Samples include representatives of the largest school jurisdictions in the province because of their impact on significant numbers of students. The table below indicates the number of partner and stakeholder representatives that were surveyed in 2004/05.

## Partner and Stakeholder Surveys: Sample Sizes

| Year | Partners | Stakeholders | Total |
| :---: | :---: | :---: | :---: |
| $2004 / 05$ | 38 | 23 | 61 |

These surveys use four-point scales with no neutral midpoint (e.g., Strongly Agree, Agree, Disagree, Strongly Disagree). Results shown are the percentages of all respondents (both partner and stakeholder representatives) who "strongly agreed/agreed" to the survey questions (i.e., the weighted average). The small samples for these surveys contribute to variation in survey results from year to year. To illustrate the effect of sample size, each respondent in a survey sample of 100 accounts for one percent $(1.0 \%)$ of the overall result, whereas each respondent in a survey of 1,000 respondents accounts for only one-tenth of one percent $(0.1 \%)$ of the overall result.

## Use of Confidence Intervals for Interpreting Survey Results

When a result is obtained by surveying a random sample of the target population (e.g., the public, parents, teachers), there is a confidence interval associated with the result, which is expressed as a percentage above and below the obtained result. A confidence interval indicates how much variation one might expect from the obtained survey result, as a consequence of sampling and diversity among respondents.

Difference in survey results over time or among respondent groups on the same survey question are reported at the ". 05 level of confidence" (i.e., the same results would be obtained in repeated surveys 19 times out of 20).

In Alberta Education's Annual Report, confidence intervals are used to determine:

- whether differences in survey results over time are likely the result of sampling variations, or represent actual change, and
- whether differences among respondent groups to the same question are likely the result of sampling variations or represent actual differences.
When comparing results of survey questions over time or among respondent groups, there is an actual difference between two survey results, 19 times out of 20 , if there is no overlap between the confidence intervals of the two observed values. When this is the case, it is acknowledged in the related text that there is an increase, change, or significant difference in survey results over time or among groups. When the confidence intervals of the two observed values do overlap, the observed difference will be due to sampling variation 19 times out of 20 , and we cannot conclude that the difference is real (i.e., "significant"). In such cases, the related text indicates that results are similar or stable over time or among groups.
The following hypothetical examples illustrate:
a) two survey results where the confidence intervals overlap and, consequently, it is concluded that there is no real difference between the two survey results, and
b) two survey results where the confidence intervals do not overlap and, consequently, it is concluded that there is a real difference between the two survey results.
a) Where two survey results are $76 \%$ and $80 \%$, both with a confidence interval of $2.5 \%$, then the upper limit of the confidence interval for the " $76 \%$ " result is $78.5 \%$, and the lower limit of the confidence interval of the " $80 \%$ " result is $77.5 \%$. Since the confidence intervals "overlap", it cannot be concluded that there is a real difference between the two survey results, as the observed difference could be due to sampling variation.
b) If the two survey results are $74 \%$ (with a confidence interval of $2.5 \%$ ) and $80 \%$ (also with a confidence interval of $2.5 \%$ ), the upper limit of the confidence interval for the " $74 \%$ " result is $76.5 \%$, and the lower limit of the confidence interval of the " $80 \%$ " result is $77.5 \%$. Since the confidence intervals "do not overlap," it can be concluded that there is a real difference between the two survey results, as sampling variation alone does not account for the observed difference. In such cases, the related text indicates that there is a significant difference over time (i.e., an increase or decrease) or between groups.


## Endnote B: Technical Note on Targets and Trend Lines

Assessing Results Over Time

Changes in results are assessed over time in the discussion of each measure. A change (increase or decrease) is considered slight if it differs 1-2 percentage points from results of the comparison year(s). As the confidence interval is taken into account in assessing results on survey measures that use a probability sampling method (see Endnote A), the change is considered slight for those measures when the result is 1-2 percentage points different from the comparison year(s) above or below the confidence interval.

## Assessing Targets

Performance targets set expectations for results and are the basis for planning improvements and assessing results. They are an important way to gauge whether the organization is improving or falling behind in obtaining desired results in key areas. Targets clearly establish desired levels of performance to be attained by a certain time. Targets are quantifiable and expressed in numerical terms, such as percentages or ratios. They are used as a key tool to drive, measure, improve and control performance.

Performance on a measure is considered to have met the target if the result is at or above $95 \%$ of the target value. For example, if the result is $77 \%$ on a measure with a target of $80 \%$, then the target has been met since the performance ( $77 \%$ ) represents $96.3 \%$ of the target. As another example, if the result on the same measure is $75 \%$, then the target has not been met since $75 \%$ represents only $93.8 \%$ of the target.

This method of assessing performance represents a high level of achievement in relation to the target, i.e., clearing a hurdle. The $95 \%$ rule acknowledges the variability in data as well as the complexities of the learning system. In such an environment, targets are general objectives rather than specific values, and achieving $95 \%$ of the target value indicates results are "in the ball park."

The $95 \%$ rule is not used to assess achievement of targets for provincial achievement tests, which are administered to students in grades 3, 6 and 9. It does not apply to the results for students who wrote the tests as that set of results represents the achievement of those students and there is negligible variability. The rule also does not apply to the results for all students in grades 3,6 and 9 as those results are the minimum possible and under-represent the true results for the population had all students in the grade taken the test. Instead, as a difference of four-tenths of a percentage point $(0.4 \%)$ is considered significant for these results, targets are considered met if the result is within four-tenths of a percentage point ( $0.4 \%$ ) of the target.

## Trend Lines

Trend lines are an aid to interpreting the results for measures reported in the Annual Report. Trend lines augment data interpretation techniques already in use such as the calculation of confidence intervals, which is used to determine the significance of a change between two survey results (either over time, or among groups). Trend lines provide a useful method of understanding the year-to-year fluctuations over the longer term, since most measures have data spanning three or more years. Trend lines shift the focus from smaller year-to-year changes to providing information about the longer-term direction of the data and whether or not it is tracking towards the performance target for the measures with targets.

Comments in the text on results with at least three data points are supported by trend lines. The type of trend line used is selected based on an informed interpretation of the data series underlying the trend line.

Logarithmic trend lines are appropriate for proportional data (i.e., data expressed as percentages of a whole, and therefore ranging between $0 \%$ and $100 \%$ ), such as the performance measures in this report. A logarithmic trend line is a best-fit straight line that is most useful when the rate of change in the data increases or decreases quickly, then levels out. The leveling out can be seen in the results for some measures in the report, along with examples of year-to-year increases or decreases on other measures.

A logarithmic trend line is calculated using the following formula:
$Y=c \ln x+b$ where $c$ and $b$ are constants, and $\ln$ is the natural logarithm function.

## Endnote C: Methodology for Performance Measures

## Employment Rates of Albertans 25-34 (High School Graduates Only)

Statistics Canada's Labour Force Survey is a monthly Canada-wide survey of a representative sample of households. Data are collected about all members of the household included in the survey who are 15 years of age or older. The employment rates for Alberta 25-34 year-olds whose highest level of education is high school completion are presented as they represent recent outputs of Alberta's K-12 school system. The employment rates are annual aggregates for the calendar year. Specifically excluded from the Labour Force Survey are persons living on Indian reserves and inmates of prisons. As these groups, which represent less than $2 \%$ of the population age $15+$, typically have lower employment levels than the total population, employment rates for 25-34 year-olds whose highest level of education is high school completion based on Labour Force Survey data may be slightly higher than the rate would be for the total population of Albertans aged 25-34 whose highest level of education is high school completion.

The Canadian sample size for the monthly Labour Force Survey has been approximately 54,000 households over the reporting period. Alberta's sample size corresponds to its share of the population. In 2004, between 5,180 and 5,354 Alberta households were surveyed each month (an average of 5,258 per month), with information provided on between 10,421 and 10,701 individuals per month. Of these, about $1,850-1,940$ individuals each month are 25-34 years old. The coefficient of variation (the standard error as a percentage of the reported result) is $2.5 \%$.

Additional information on the Labour Force Survey methodology and interpreting coefficients of variation (a measure of sampling variability) is available on pages 18-25 of the Guide to Labour Force Survey, Revised February 2005. Catalogue no. 71-543-GIE (Revised, February 2005), available online from Statistics Canada: www.statcan.ca. This document provides the following definitions which apply to the data reported:

- Employment rate: the number employed in a particular group expressed as a percentage of the population for that group (page 11).
- Participation rate: the number of persons in a group that are in the labour force (i.e., either employed or looking for work) expressed as a percentage of the population for that group (page 14). Examples of persons not in the labour force are homemakers and full-time students.
- Unemployment rate: the number unemployed in a group expressed as a percentage of the number of persons in the labour force for that group (page 17).


## Annual Dropout Rate of Students Aged 14-18

The annual dropout rate reports the percentages of Alberta students aged 14-18 who, in the following school year:

- are not enrolled in the K-12 system;
- are not enrolled in a post-secondary institution in Alberta;
- are not registered in an apprenticeship program in Alberta;
- have not completed high school.

The annual dropout rate is derived from data in Alberta Education and Advanced Education Systems as of March 31, 2005, and includes adjustments for attrition using estimates derived from Statistics Canada's Annual Demographic Statistics 2004 (R) (CD-ROM).
Students whose education is not the responsibility of the provincial government, as well as students who are identified as having a severe cognitive disability or a severe multiple disability are not included in the annual dropout rate.
A detailed description of the methodology used to calculate the annual dropout rate is available online at http://www.education.gov.ab.ca/k 12/completion/DropRet.asp.

## Provincial Achievement Tests

Students in Grades 3, 6 and 9 write provincial achievement tests annually in language arts and mathematics while Grade 6 and 9 students also write tests in science and social studies. The achievement test results for Grades 3, 6 and 9 provide information on how well students are meeting provincial standards in the core academic subjects. Tests are developed and administered by educators and are based on expectations in the provincial curriculum. Results are reported in relation to the acceptable standard and the standard of excellence. A student achieving the acceptable standard in a specific grade shows an adequate understanding of the core knowledge and adequate basic skills essential to that course. A student achieving the standard of excellence consistently shows a deeper understanding of the concepts of the course - an ability to integrate information and evaluate it from various points of view. For each achievement test, the cut scores for the acceptable standard and the standard of excellence are set initially by a standard-setting committee of about 20 teachers using the Modified Angoff Standard Setting Procedure. This procedure uses teachers' judgment to determine how many items a student must answer correctly to achieve each standard. In subsequent years, the cut scores for each test are adjusted through test equating. This ensures that the standards remain constant even if test difficulty varies slightly from year to year. Whenever curriculum is revised, the standard-setting process is done again.

Given the large number of students in each grade, approximately 40,000, differences in results from year to year of more than 0.4 percentage points on each test are considered significant. Results on provincial achievement tests are calculated and presented in two ways:

- on the basis of student writing the achievement tests in Grades 3,6 and 9 who achieved the standards; and - on the basis of total enrolment in each grade who demonstrated the standards.

Not all students write the provincial achievement tests. Achievement test results are not available for students who were absent, who were excused from writing by the superintendent (because participation would be harmful to the student, or the student could not respond to the test instrument), who wrote but whose results were withheld, or who wrote only one part of a language arts test. It is possible that some of these students, under different circumstances, could have demonstrated achievement of standards on the test. Participation rates are calculated by dividing the number of students who wrote the test by the sum of total enrolment in grade plus the ungraded students who are in the corresponding year of schooling.

Provincial combined results present the unweighted averages based on percentages achieving standards as the populations are relatively stable from year to year and grade to grade. Test results and participation are recorded and aggregated in Ministry systems. Provincial, school authority and school results (Achievement Test Multi-Year Reports 2001-2005), are available on Alberta Education's website at: www.education.gov.ab.ca/k 12/testing/default.asp

## Diploma Examinations

Examinations are administered in all diploma examination courses in January, June and August each year. Examinations are administered in three courses in both November and April, for a total of six courses. Results on diploma examinations show how well students are meeting provincial expectations as outlined in the Programs of Study. Examination items are developed and cut scores established by committees of teachers. The examination design is vetted through committees of stakeholders, and by a standard-setting committee of teachers.

A test equating initiative is being phased in for the Diploma Examination Program so that over time examinations are consistent and the results are comparable. Starting in the 2003/04 school year with Social Studies 30 and 33, the multiple-choice portion of the examinations contains a set of items common to administrations in subsequent years. By comparing the achievement of students writing in January 2004 with those writing in any subsequent administration on the common items and on the unique items, Alberta Education is able to determine whether or not the examinations were of equal difficulty. Student scores on the subsequent examinations can then be equated back to the January 2004 baseline examinations to remove any influence that differences in examination difficulty may have on student scores. A similar equating process was implemented for Pure Mathematics 30, Chemistry 30 and Physics 30 starting in January 2005. Through equating, all students, regardless of which examination they have written, receive test scores that are based on an identical standard and, consequently, the test results for a particular diploma examination course can be directly compared over time.

Diploma examination results are reported in relation to the acceptable standard and the standard of excellence. A student achieving the acceptable standard demonstrates that $\mathrm{s} /$ he has met the basic requirements of the course. A mark of $50 \%$ on the examination represents the acceptable standard in a diploma examination course. A mark of $80 \%$ on the examination represents the standard of excellence and indicates that the student has demonstrated performance significantly beyond the minimum requirements of the course. For student marks in diploma examination courses, the diploma examination mark is worth $50 \%$ of the final mark in a course and the school-awarded mark contributes the other $50 \%$.

Participation in diploma examination courses is presented in the table "Percentages of Grade 12 Students Completing Diploma Examination Courses. This participation rate is defined as the percentages of students who received a final mark in each diploma examination course in their third year of high school. This information is an indicator of participation, as the course enrolment is representative of the group of students who typically take the course. The proportion of Grade 12 students completing diploma
examination courses varies from year to year and from school to school depending on course enrolments and student success in achieving course requirements.

Diploma examination results and participation in diploma examination courses are recorded and aggregated in Ministry systems. The provincial reports (The Diploma Examination Multiyear Reports 2001-2005) are available online at: www.learning.gov.ab.ca/k_12/testing/multipublic/dip/. These multiyear reports contain five years' of data extracted each year from live systems, which are updated regularly. As a result of the updating online, the prior years' results in the multi-year reports may differ from prior years' results in the Annual Report, which presents the previously published results.

## Rutherford Scholarship Eligibility Rate of Grade 12 Students

The Rutherford Scholarship eligibility rate reports the percentages of grade 12 students in public, separate, francophone, charter, and private schools whose marks in specified courses in grades 10, 11, and/or 12 qualify them to receive a Rutherford Scholarship should they decide to attend a post-secondary institution.

Students whose education is not the responsibility of the provincial government, as well as students who are identified as having a severe cognitive or a severe multiple disability are not included in the Rutherford Scholarship rate.

Data for this measure are from Alberta Education and Alberta Advanced Education systems as of March 31, 2005. A more detailed description of the methodology is available online at:
www.education.gov.ab.ca/k_12/completion/Rutherford.asp

## High School Completion Rates

The high school completion rate reports the percentages of Alberta students who, within three, four, and five years of entering Grade 10 :

- received a high school diploma, equivalency diploma (GED) or Integrated Occupational Program (IOP) certificate; or
- entered an Alberta post-secondary program or an apprenticeship program; or
- earned credits in five Grade 12 courses, including one language arts diploma examination course and three other diploma examination courses.
The tracking of Grade 10 students excludes some groups of students, such as those identified as having a severe cognitive disability or a severe multiple disability and students whose education is not the responsibility of the provincial government. Data for this measure are from Alberta Education and Alberta Advanced Education systems, with attrition adjustments using estimates from Statistics Canada's Annual Demographic Statistics, 2004 (R) (CD-ROM). In particular, the Grade 10 cohorts are based on the March 2005 update of Alberta Education's Corporate Data Warehouse. A more detailed description of the methodology and high school completion rates for Alberta school jurisdictions are available online at www.education.gov.ab.ca/k_12/completion/.


## Educational Attainment of Albertans Aged 25-34 (high school completion)

The Labour Force Survey is a monthly Canada-wide survey of a representative sample of households. Data are collected about all members of the household who are 15 years of age or older. The high school completion rate for 25-34 year-olds is presented as it represents recent outputs of Alberta's education system.

The Canadian sample size for the monthly Labour Force Survey has been approximately 54,000 households over the reporting period. Alberta's sample size corresponds to its share of the population. In 2004, between 5,180 and 5,354 Alberta households were surveyed each month (an average of 5,258 per month), with information provided on between 10,421 and 10,701 individuals per month (an average of 10,546 per month). Of these, about $1,850-1,940$ individuals each month are $25-34$ years old.

Excluded from the Labour Force Survey are persons living on Indian reserves, inmates of prisons, and members of the military. As these groups, which represent about $2 \%$ of the population age $15+$, typically have lower education levels than the total population, educational attainment rates based on Labour Force Survey data may be slightly higher than the rate would be for the total population age $15+$.

The educational attainment rates presented are annual aggregates for the calendar year. The coefficient of variation, or CV, (the standard error as a percentage of the reported result) for the Labour Force Survey is $1.0 \%$ for both the Alberta and the Canadian data. Additional information on the Labour Force Survey methodology and interpreting CVs is available on pages 18-25 of Guide to the Labour Force Survey, Catalogue no. 71-543-GIE (Revised, February 2005), available on-line from Statistics Canada: http://www.statcan.ca.

## Participation in Early Childhood Services (ECS) Programs

The participation rate in ECS programs is the percentage of all Alberta Grade 1 students in the current school year who had an Alberta ECS registration in any prior school year. The calculation is adjusted to account for Grade 1 students who entered Alberta from another province or country in the previous year, and thus would not have attended ECS in Alberta. In-migration data include the estimated number of five-year-old immigrants and inter-provincial in-migrants as of July $1^{\text {st }}$ of the calendar year. The Grade 1 and ECS registration data are from Ministry systems. The in-migration estimates are from Statistics Canada, Annual Demographic Statistics, 2004 CD-ROM (R).

## High School to Post-Secondary Transition Rates

The high school to post-secondary transition rate reports the percentages of Alberta students who, within four and six years of starting Grade 10 :

- enrolled in a credit program, part-time or full-time, in an Alberta post-secondary institution;
- registered in an apprenticeship program other than the Registered Apprenticeship Program for high school students.

Students are tracked using data from Alberta Education and Alberta Advanced Education systems. In particular, the Grade 10 cohorts are based on the March 2005 update of Alberta Education's Corporate

Data Warehouse. The high school to post-secondary transition rate includes adjustments for attrition and for attendance at post-secondary institutions out-of-province. Attrition adjustments are based on estimates from Statistics Canada's Annual Demographic Statistics 2004 (R) (CD-ROM). The estimate of Alberta students attending post secondary institutions out-of-province uses aggregate student counts from Alberta Advanced Education's enrolment and Students Finance systems.

Students whose education is not the responsibility of the provincial government, as well as students who are identified as having cognitive disabilities or a severe multiple disability are not reported on in the high school to post-secondary transition rate.

Prior years' results have been restated as a result of revising the calculation of the out of province postsecondary attendance estimate.

A more detailed description of the methodology is available online at: www.education.gov.ab.ca/k 12/completion/Transition.asp


[^0]:    Results from base year for measures without targets or not meeting targets (taking the confidence interval into account):
    $=$ No change
    N No prior data for this measure

