EDMONTON PUBLIC SCHOOLS

November 7, 2006

TO: Board of Trustees

FROM: L. Thomson, Superintendent of Schools

SUBJECT: Alberta Education Diploma Examination Results

ORIGINATOR: T. Parker, Executive Director

RESOURCE STAFF: Anne Mulgrew, Kathy Toogood, Lorie Welk

INFORMATION

This report provides results of the provincial diploma examinations written during the 2005-2006 school year. The results, which represent a merging of results from the January, June and August examination writings, are taken from data provided by Alberta Education.

The grade 12 diploma examination program is intended to develop and maintain excellence in educational standards by certifying academic achievement. The program provides examinations in English 30-1 and 30-2, Social Studies 30 and 33, Pure and Applied Mathematics 30, Biology 30, Chemistry 30, Physics 30, Science 30 and French Language Arts 30. All grade 12 students in Alberta are required to write at least two diploma examinations, English 30-1 or 30-2 and Social Studies 30 or 33, to receive a high school diploma.

To obtain credit in a diploma examination course, students must write both the multiple-choice and open-ended part of that diploma examination and attain a final blended mark of 50 per cent or higher. The final blended mark is the average of the school-awarded mark and the diploma examination mark. Appendix I provides information on the percentage of students achieving the standard of excellence and the acceptable standard based on blended marks for the past five years. For English 30-1 and English 30-2, data prior to the 2003-04 school year is not included as a new program of studies was implemented in that year.

The major generalizations with respect to the information included in this report are as follows:

- The percentage of third year high school students in the district who wrote grade 12 diploma examinations increased for 5 out of 10 diploma examination courses compared to 2005.
- The district has higher participation rates than the province for all four grade 12 science courses, Social Studies 30, and Pure Mathematics 30.
- The percentage of students meeting the standard of excellence was higher for the district than for the province for seven out of ten diploma examination courses.

Diploma Examination Participation Rates

One factor to be considered in reviewing diploma examination results is participation rates. The participation rate reflects the percentage of students enrolled in their third year of high school who complete the course by August 31 of the reported school year. Students may have completed the course in the reported year, or an earlier school year. Regardless of how many times they complete the course, students are only counted as a participant once, in their third year of high school.

Table 1 provides information on the 2005-2006 diploma examination participation rates for the district compared to 2004-05 rates.

TABLE 1
DISTRICT PARTICIPATION RATES FOR GRADE 12 DIPLOMA COURSES FROM 2004-2005 TO 2005-2006

Diploma Examination Course	2004-2005 (%)	2005-2006 (%)	Difference
English 30-1	57.2	58.0	+0.8
English 30-2	27.4	24.7	-2.7
English Grade 12 Total	**84.6**	**82.7**	**-1.9**
Social Studies 30	54.8	54.6	-0.2
Social Studies 33	29.2	27.9	-1.3
Social Studies Grade 12 Total	**84.0**	**82.5**	**-1.5**
Applied Mathematics 30	21.1	19.3	-1.8
Pure Mathematics 30	46.3	48.7	+2.4
Mathematics Grade 12 Total	**67.4**	**68.0**	**+0.6**
Biology 30	45.3	45.7	+0.4
Chemistry 30	41.3	42.9	+1.6
Physics 30	27.5	29.2	+1.7
Science 30	10.2	10.0	-0.2

Since grade 12 students are typically enrolled in either the academic stream or the alternate stream course of study for English, social studies, and mathematics, it makes sense to look at participation rates based on the total for the two streams. A total is not included for grade 12 science courses because many students are enrolled in more than one course. Relative to the previous year, district participation rates increased for English 30-1, Pure Mathematics 30, and three science courses, Biology 30, Chemistry 30 and Physics 30. Participation rates decreased in grade 12 English and in grade 12 social studies. The increase in the participation rate for Pure Mathematics led to a higher percentage of students completing grade 12 mathematics.

Table 2 provides information on the 2005-2006 diploma examination participation rates for the district compared to the province.

TABLE 2
DISTRICT AND PROVINCIAL PARTICIPATION RATES
FOR GRADE 12 DIPLOMA COURSES: 2005-2006

Diploma Examination Course	Province (%)	EPS (%)	Difference
English 30-1	59.8	58.0	-1.8
English 30-2	26.0	24.7	-1.3
Grade 12 English Total	**85.8**	**82.7**	**-3.1**
Social Studies 30	54.0	54.6	+0.6
Social Studies 33	31.9	27.9	-4.1
Grade 12 Social Studies Total	**85.9**	**82.5**	**-3.4**
Applied Mathematics 30	21.6	19.3	-2.3
Pure Mathematics 30	46.3	48.7	+2.4
Grade 12 Mathematics Total	**67.9**	**68.0**	**+0.1**
Biology 30	43.6	45.7	+2.1
Chemistry 30	39.1	42.9	+3.8
Physics 30	24.3	29.2	+4.9
Science 30	7.8	10.0	+2.1

District participation rates are lower than provincial rates for English 30-1 and 30-2, Social Studies 33 and Applied Mathematics 30, but are higher than provincial rates for Social Studies 30, Pure Mathematics 30 and all four science courses.

Diploma Examination Results

Table 3 provides a comparison of district results to provincial results based on diploma examination marks.

TABLE 3
DISTRICT AND PROVINCIAL RESULTS FOR
GRADE 12 DIPLOMA EXAMINATIONS: 2005-2006

Diploma Examination	Percentage of Students Meeting Acceptable Standard			Percentage of Students Meeting Standard of Excellence		
	Prov.	E.P.S.	Diff.	Prov.	E.P.S.	Diff.
English 30-1	88.0	87.0	-1.0	19.3	20.3	+1.0
English 30-2	86.1	83.3	-2.8	8.1	8.1	0.0
Social Studies 30	85.5	87.0	+1.5	23.9	28.2	+4.3
Social Studies 33	83.5	81.9	-1.6	19.0	17.4	-1.6
Applied Math 30	77.5	73.1	-4.4	11.8	10.8	-1.0
Pure Math 30	82.8	84.9	+2.1	26.5	31.0	+4.5
Biology 30	81.4	83.3	+1.9	26.4	29.7	+3.3
Chemistry 30	88.4	88.9	+0.5	37.1	38.3	+1.2
Physics 30	84.4	84.2	-0.2	30.0	31.5	+1.5
Science 30	82.8	82.2	-0.6	17.3	17.9	+0.6

The percentage of students achieving the acceptable standard on individual diploma examinations is higher for the district than for the province for Social Studies 30, Pure Mathematics 30, Biology 30 and Chemistry 30, but lower than the province for the remaining six diploma examinations. The

percentage of students achieving the standard of excellence is higher for the district than for the province for seven of the ten courses: English 30-1, Social Studies 30, Pure Mathematics 30, Biology 30, Chemistry 30, Physics 30 and Science 30. The percentage of students achieving the standard of excellence was equal to the province for English 30-2 and lower for the district than for the province for Social Studies 33, and Applied Mathematics 30. It is interesting to note that in Pure Mathematics 30, and many of the science courses, both the participation rates and percentage of students achieving standards are higher for the district than for the province. In other words, a greater proportion of district students are being successful in these challenging courses than is true for the province as a whole.

Five Year Trends

The graph included as Appendix I indicates that for most courses, based on blended marks, there is a positive upward trend in the percentages of students meeting the acceptable standard. There are two exceptions to this generalization. For English 30-1, there has been a very slight decrease in the percentage of students meeting the acceptable standard over the three years that the new program has been in place. For Applied Mathematics 30, there was a substantial decrease in the percentage of students meeting the acceptable standard in 2006. A similar substantial decrease occurred at the provincial level. This was the first year that the Applied Mathematics 30 examination was equated using a secured set of questions, and it appears that Alberta Education took this opportunity to apply revised standards to this examination. As a result of this, Alberta Education has cautioned jurisdictions that, because of a new approach to scoring, this year's Applied Mathematics 30 results should not be compared to previous years.

Implications for Action

The Alberta Education diploma examinations are used as one of the measures to monitor student achievement in the district. As part of the AISI professional development, high school staff will continue to be provided with

- strategies in the areas of differentiated instruction, assessment for learning, and technology integration;
- strategies to ensure more students successfully complete grade 10 and 11 courses;
- research on the factors that affect high school completion; and
- data to support the practice of enrolling higher percentages of students in more academic courses.

These structures and processes are designed to assist more students to challenge and successfully complete diploma examination courses which will in turn result in increased high school completion rates.

AM:fm

APPENDIX I - Student Achievement Report: 2002 – 2006 Based on Blended Marks

STUDENT ACHIEVEMENT REPORT 2002-2006

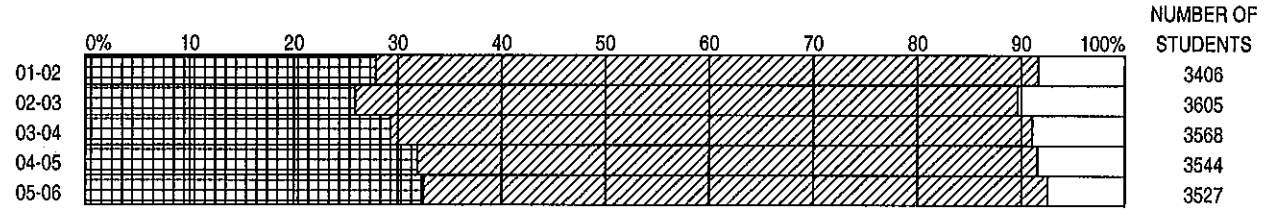
Based on Blended Marks

District

% Meeting Standard of Excellence | % Meeting Acceptable Standard | % Not Meeting Acceptable Standard

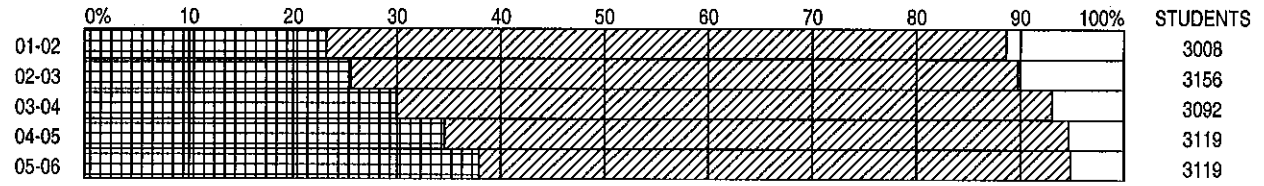
ALBERTA EDUCATION DIPLOMA EXAMINATIONS

Biology 30



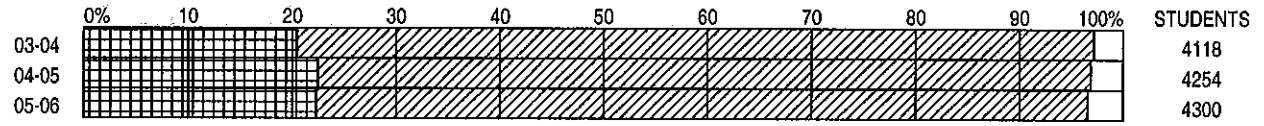
	NUMBER OF STUDENTS
01-02	3406
02-03	3605
03-04	3568
04-05	3544
05-06	3527

Chemistry 30



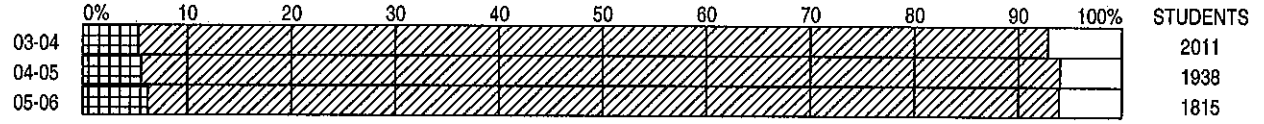
	NUMBER OF STUDENTS
01-02	3008
02-03	3156
03-04	3092
04-05	3119
05-06	3119

English 30-1



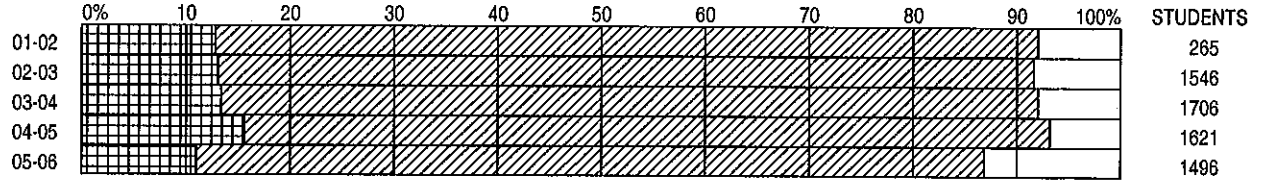
	NUMBER OF STUDENTS
03-04	4118
04-05	4254
05-06	4300

English 30-2



	NUMBER OF STUDENTS
03-04	2011
04-05	1938
05-06	1815

Mathematics 30 (Applied)



	NUMBER OF STUDENTS
01-02	265
02-03	1546
03-04	1706
04-05	1621
05-06	1496

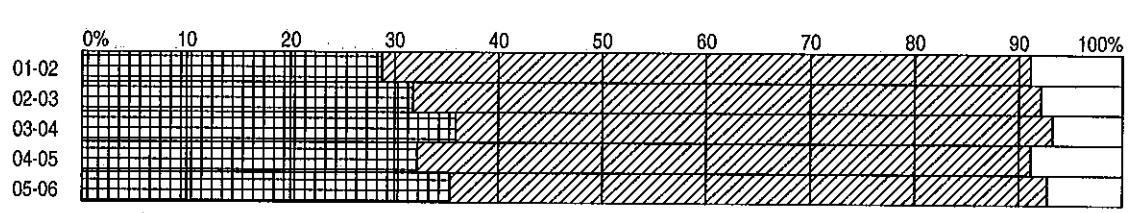
Data for English 30-1 and English 30-2 are not comparable prior to 2003-04.

STUDENT ACHIEVEMENT REPORT 2002-2006

Based on Blended Marks

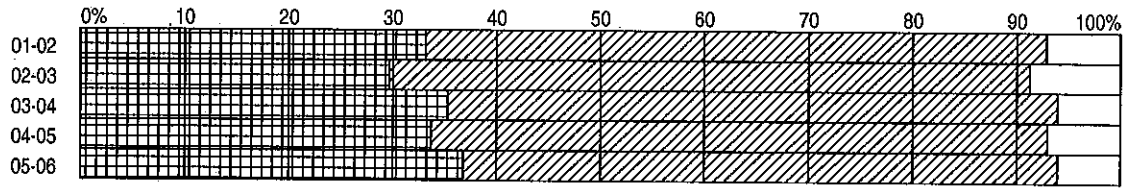
District

Mathematics 30 (Pure)



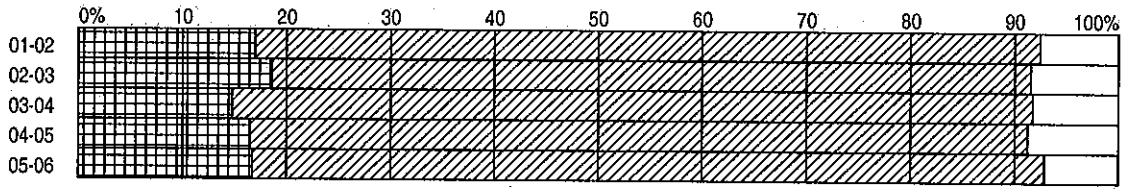
	NUMBER OF STUDENTS
01-02	3105
02-03	3448
03-04	3482
04-05	3637
05-06	3669

Physics 30



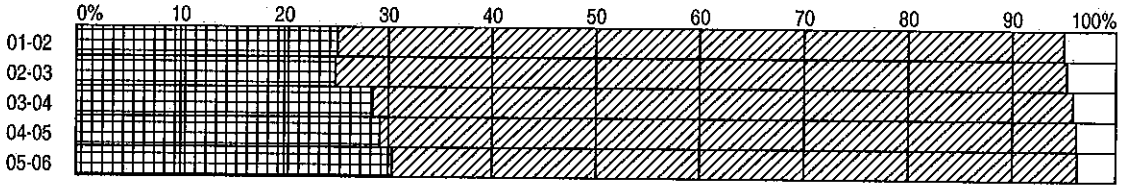
	NUMBER OF STUDENTS
01-02	1901
02-03	1827
03-04	1972
04-05	1967
05-06	2034

Science 30



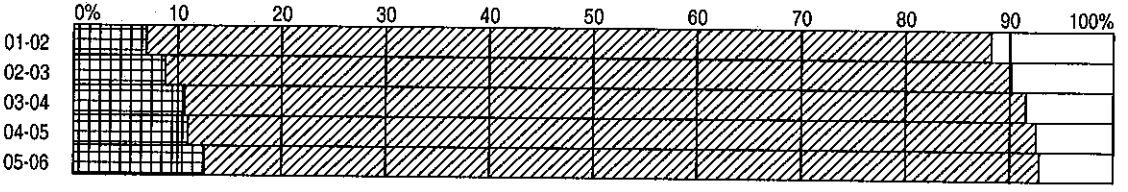
	NUMBER OF STUDENTS
01-02	294
02-03	489
03-04	697
04-05	762
05-06	798

Social Studies 30



	NUMBER OF STUDENTS
01-02	3463
02-03	3630
03-04	3595
04-05	3612
05-06	3543

Social Studies 33



	NUMBER OF STUDENTS
01-02	1961
02-03	1997
03-04	2179
04-05	2027
05-06	1925

Data for English 30-1 and English 30-2 are not comparable prior to 2003-04.