

**British Columbia  
Foundation Skills Assessment**

# Highlights 1999



**BRITISH  
COLUMBIA**

**Ministry of Education**

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# Highlights

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## OVERVIEW

This document provides an overview of the British Columbia 1999 Foundation Skills Assessment, the first of what will be an annual provincial assessment of reading comprehension, writing and numeracy skills. It includes a general description of the assessment, its purposes, steps in the provincial assessment process, and the overall results of the assessment. Through the use of common items, results of the 1999 assessment are compared with those of previous years. Differences in the performance of female and male students, and of students in specific education programs are also reported.

Comments by an interpretation panel of representatives of educational and community organizations regarding the 1999 assessment results are presented, along with the panel's recommendations regarding steps that could be taken to improve the reading comprehension, writing, and numeracy skills of BC students. Consistent with the findings of past provincial, national, and international assessments and examinations, the overall performance of BC students on this assessment was generally regarded as acceptable. However, of ongoing concern is the proportion of students, particularly boys and aboriginal students, who have not yet reached the expected level of performance.

## PURPOSE OF THE ASSESSMENT

### THE 1999 ASSESSMENT IS INTENDED TO:

- provide information to districts about the performance of their students in relation to provincial expectations and standards in order to assist districts to plan for improvement;
- provide information to the public about the performance of students provincially in relation to expectations and trends over time;
- measure the achievement of students in reading comprehension, first-draft writing, and selected components of numeracy;
- determine if there are any trends in student performance at the district and provincial levels; and
- determine if there are any groups of students who under-perform with respect to provincial standards.

## SCOPE OF THE ASSESSMENT

The Foundation Skills Assessment is only one measure of what students know and are able to do, and is intended to complement regular classroom assessment. It provides a “snapshot” of how students are doing at several key stages of their schooling. Although only Grade 4, 7, and 10 students participate in the assessments, the results reflect students’ learning up to and including these grade levels.

The assessment measures critical skills that are embedded in the provincial curriculum. While these skills are not confined to any single course or grade, they very much are linked to prescribed learning outcomes, particularly in the language arts and mathematics curricula.

Results of the 1999 assessment are available at the provincial and district levels. Results of subsequent Foundation Skills Assessments will be available at the provincial, district, school and individual student levels.

## ADMINISTRATION OF THE ASSESSMENT

The assessment was administered in all provincial public and funded independent schools in the first two weeks of May 1999. With limited exceptions, all students in Grades 4, 7, and 10 were expected to participate.

English and French versions of the assessment were available. Districts were given the option to have their French Immersion students write in English or French. Students in Programme francophone were expected to write the French version of the assessment, however, a large percentage wrote in English. All other students wrote the English version of the assessment.

The assessment required approximately three hours to conduct and could be administered in up to three separate sessions.

Unpredictable world events occurring at the time of the assessment put a focus on issues which were considered to be potentially sensitive to some students. Booklets containing two reading passages touching on these issues were consequently withdrawn from the assessment, resulting in the removal of some reading items and all writing items at Grades 7 and 10.

## THE COMPONENTS OF THE 1999 ASSESSMENT

### STUDENT QUESTIONNAIRE



A brief questionnaire asked students about their reading, writing, and numeracy habits and attitudes. Data was also collected on how often students use a computer at school, how often they engage in physical activities, and whether students were enrolled in English as a Second Language (ESL), Learning Assistance, French Immersion, or Programme francophone programs. Students were also asked about aboriginal heritage. All program and student background information was self-reported by students, with some assistance given by their teachers.

### READING



Reading comprehension across a variety of reading selections (i.e., literary passages, poetry, and informational texts) was assessed through multiple-choice questions (at Grades 7 and 10) or a combination of multiple-choice and written-answer questions (at Grade 4). Students in each grade were given approximately 45 questions. As described below, several levels of reading comprehension were addressed:

#### LITERAL COMPREHENSION:

- student understands explicitly stated information.
- student is required to do little analysis, translation, or evaluation.

#### INFERENTIAL COMPREHENSION:

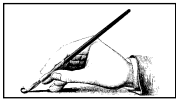
- student infers meaning through reorganization, translation, and generalization.
- student infers meaning through reorganizing and interpreting relationships.

#### CRITICAL COMPREHENSION:

- student makes a personal response to text.
- student evaluates material in such terms as purpose, source bias, validity, relevance, and technique.

To determine changes in students' reading performance over time, three passages and associated items were selected at each grade level from the 1998 Assessment of Reading and Writing and used on the 1999 assessment.

## WRITING



Writing was assessed at Grade 4 by asking students to write one composition based on their choice of two possible topics. Student work on the writing task should be considered “first-draft” as there was little or no opportunity to revise or edit.

## NUMERACY



Numeracy refers to the understanding and confidence students develop that enable them to use mathematics in daily activities at school, at home, at work, and in the community. The numeracy component of the assessments consisted of approximately 30 multiple-choice and written-response questions relating to the application of mathematics to daily activities (e.g., money and financial transactions, measurement, statistics and probability, and problem solving and estimation).

## KEY STEPS IN THE 1999 ASSESSMENT

### DEVELOPMENT

- Assessment development began in October 1998 with the establishment of the Table of Specifications and the selection of item-writing and item-review teams comprising 50 practicing classroom teachers.
- An Assessment Review Committee consisting of representatives of educational and community organizations provided the Ministry with ongoing input regarding the content of the assessment.
- In December 1998, field-testing took place in 150 classrooms throughout British Columbia.

### ADMINISTRATION

- The assessment was administered in early May 1999, in all public and publicly-funded independent schools. Approximately 130,000 students participated across the three grades.
- Consistent with the 1998 assessment, teachers administering the 1999 assessment were provided with scoring guides and answer keys to give them the opportunity to score their students' test booklets before returning them. Teacher scoring was optional. It allowed teachers to receive immediate feedback on how well their students performed on the assessment.

### PROVINCIAL MARKING

- In July 1999, 250 educators marked the reading written-response, writing, and numeracy-written response booklets.
- Each Grade 4 writing paper was marked by at least two markers. Papers were assigned a score representing one of nine writing levels based on the *Evaluating Writing Across Curriculum Reference Set* (a classroom assessment resource distributed in 1993 to all schools and districts). These levels reflect a wide range of writing abilities characteristic of students from Kindergarten to Grade 12. Students who did not write the composition were assigned a score of zero.

- At Grade 4, an overall reading comprehension score was given by combining the multiple-choice and written-response components. Each component was given equal weight. At Grades 7 and 10, reading comprehension scores were based on multiple-choice items only.
- An overall numeracy score was given at all grades by combining the multiple-choice and written-response components of the numeracy tests. Each numeracy component was given equal weight.

## STANDARD-SETTING

- In August 1999, approximately 80 educators from across the province with experience at Grades 4, 7, and/or 10 met to define grade-level standards of performance for the assessment. After carefully familiarizing themselves with the assessment instruments, this standard-setting panel provided recommendations about the setting of two standards for each grade level in reading, writing and numeracy:

### MEETS EXPECTATIONS

The level of performance where a student meets or exceeds the widely-held expectations for the grade on this test. With no other information, this is the level below which a teacher would want to know more about the reasons for a student's low performance.

### EXCEEDS EXPECTATIONS

The level of a student's performance that is beyond that at which a teacher would say the student has fully met the expectations of the grade on this test. Student performance would be considered excellent for the grade on this test.



## INTERPRETATION

- In September 1999, a provincial interpretation panel of representatives of educational and community organizations met to comment on the overall results of the assessments in relation to the standards defined by the standard-setting panel and make recommendations. Organizations represented on this panel included the Principals and Vice Principals Association, BC Teachers Federation, BC School Trustees Association, BC School Superintendents Association, BC Confederation of Parent Advisory Councils, Federation of Independent School Associations, Business Council of BC, Advanced Education Council of BC, and University Presidents' Council of BC.

# 1999 OVERALL RESULTS FOR READING COMPREHENSION, FIRST-DRAFT WRITING AND NUMERACY

In the following section, the overall results of the assessment will be presented for each grade, as will the performance of boys and girls on each component of the assessment.

A note about statistics: all percentages in this highlights document are expressed as whole numbers and may not add up to 100. Small differences between grades or groups of students should be interpreted with caution.

## GRADE 4 RESULTS

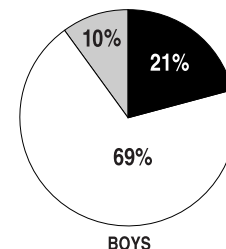
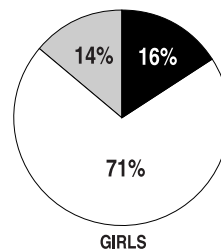
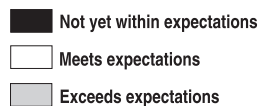
Across the province, approximately 87% of all Grade 4 students participated in at least one component of the assessment.



### READING COMPREHENSION RESULTS

Overall, 82% of Grade 4 students' work met or exceeded the expectations defined for their grade; this includes the 70% that met expectations and the 12% that exceeded expectations. Nineteen percent of Grade 4 students' work was not yet within the expectations defined for their grade.

In Grade 4 reading, girls outperformed boys. The proportion of students by gender meeting each standard for reading is presented in the following graphs:



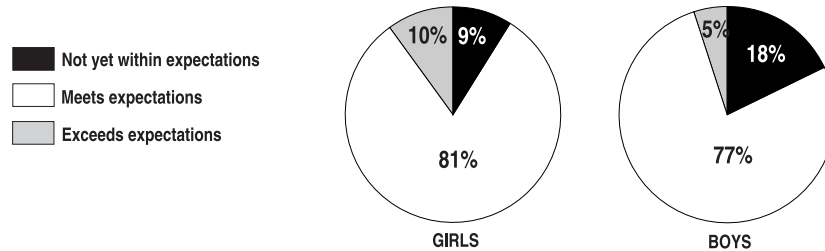
GRADE 4 RESULTS...continued



**FIRST DRAFT WRITING RESULTS**

Overall, 87% of Grade 4 students' work met or exceeded the expectations defined for their grade; this includes the 79% that met expectations and the 8% that exceeded expectations. Thirteen percent of Grade 4 students' work was not yet within the expectations defined for their grade.

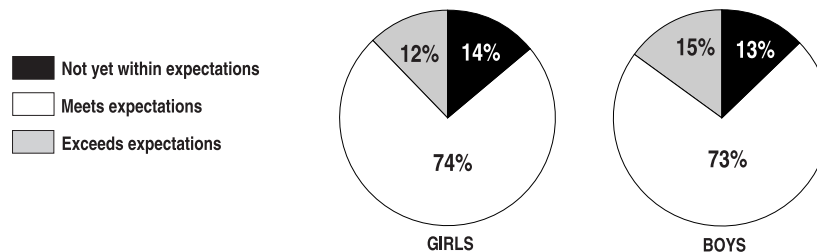
In Grade 4 writing, girls outperformed boys. The proportion of students by gender meeting each standard for writing is presented in the following graphs:



**NUMERACY RESULTS**

Overall, 86% of Grade 4 students' work met or exceeded the expectations defined for their grade; this includes the 73% that met expectations and the 13% that exceeded expectations. Thirteen percent of Grade 4 students' work was not yet within the expectations defined for their grade.

In Grade 4 numeracy, girls and boys performed about the same. The proportion of students by gender meeting each standard for numeracy is presented in the following graphs:



## GRADE 7 RESULTS

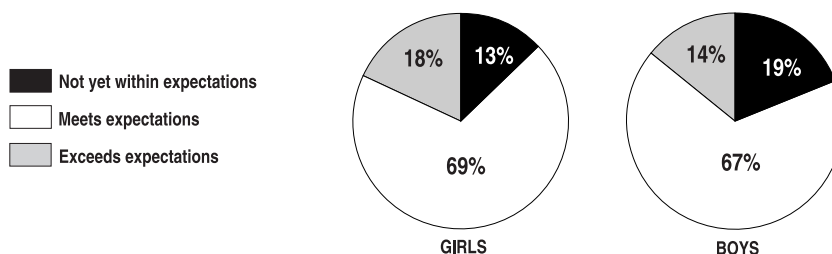
Across the province, approximately 85% of all Grade 7 students participated in at least one component of the assessment.



### READING COMPREHENSION RESULTS

Overall, 84% of Grade 7 students' work met or exceeded the expectations defined for their grade; this includes the 68% that met expectations and the 16% that exceeded expectations. Sixteen percent of Grade 7 students' work was not yet within the expectations defined for their grade.

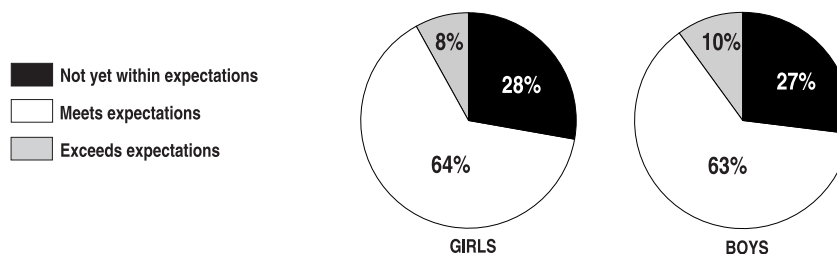
In Grade 7 reading, girls outperformed boys. The proportion of students by gender meeting each standard for reading is presented in the following graphs:



### NUMERACY RESULTS

Overall, 72% of Grade 7 students' work met or exceeded the expectations defined for their grade; this includes the 63% that met expectations and the 9% that exceeded expectations. Twenty-eight percent of Grade 7 students' work was not yet within the expectations defined for their grade.

In Grade 7 numeracy, girls and boys performed about the same. The proportion of students by gender meeting each standard for numeracy is presented in the following graphs:



## GRADE 10 RESULTS

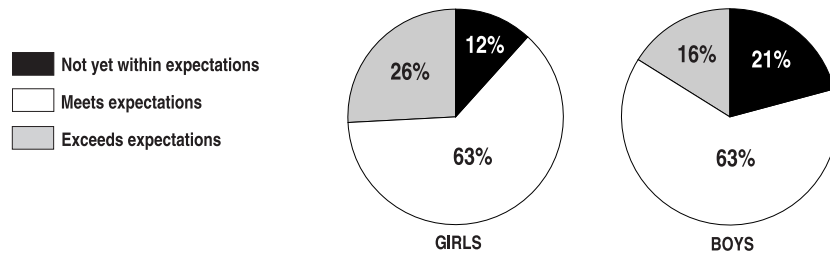
Across the province, approximately 70% of all Grade 10 students participated in at least one component of the assessment.



### READING COMPREHENSION RESULTS

Overall, 83% of Grade 10 students' work met or exceeded the expectations defined for their grade; this includes the 62% that met expectations and the 21% that exceeded expectations. Seventeen percent of Grade 10 students' work was not yet within the expectations defined for their grade.

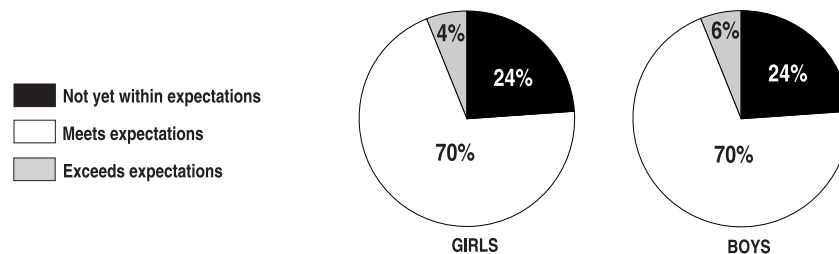
In Grade 10 reading, girls outperformed boys. The proportion of students by gender meeting each standard for reading is presented in the following graphs:



### NUMERACY RESULTS

Overall, 76% of Grade 10 students' work met or exceeded the expectations defined for their grade; this includes the 71% that met expectations and the 5% that exceeded expectations. Twenty-four percent of Grade 10 students' work was not yet within the expectations defined for their grade.

In Grade 10 numeracy, girls and boys performed about the same. The proportion of students by gender meeting each standard for numeracy is presented in the following graphs:



## 1999 RESULTS OF PARTICULAR STUDENT POPULATIONS

### ENGLISH AS A SECOND LANGUAGE (ESL) STUDENTS

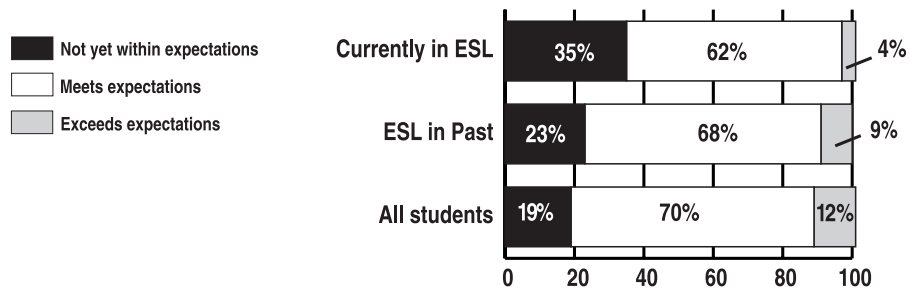
In reading comprehension and first-draft writing, results for students who are either currently attending an ESL class or have attended an ESL class in the past were lower than for all students as a whole.

In numeracy, a lower percentage current or former ESL students met or exceeded the Grade 4 standard for performance than did all other students as a whole. At Grades 7 and 10, however, a higher percentage of former ESL students met or exceeded the provincial standards for numeracy than did students who are either currently attending an ESL class or all other students as a whole.

### RESULTS FOR STUDENTS IN ESL PROGRAMS



#### READING COMPREHENSION GRADE 4

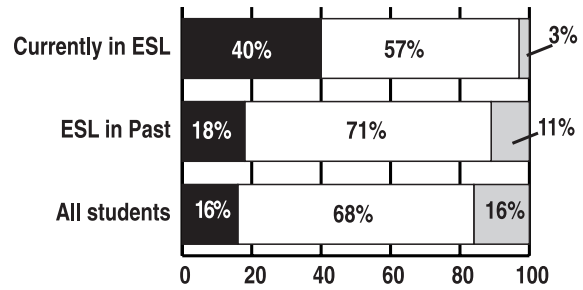


RESULTS FOR STUDENTS IN ESL PROGRAMS...continued



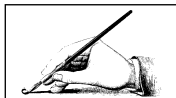
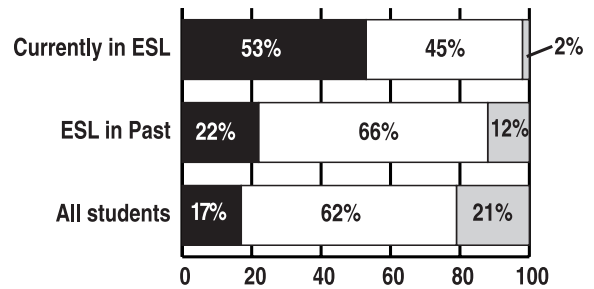
**READING COMPREHENSION GRADE 7**

Not yet within expectations  
 Meets expectations  
 Exceeds expectations



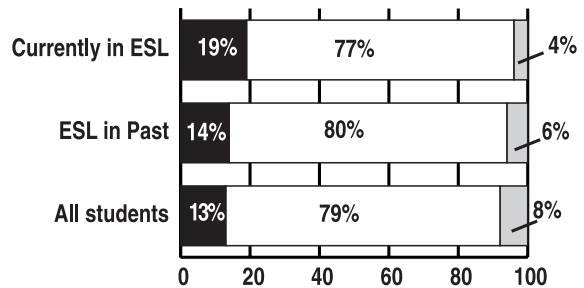
**READING COMPREHENSION GRADE 10**

Not yet within expectations  
 Meets expectations  
 Exceeds expectations



**FIRST-DRAFT WRITING GRADE 4**

Not yet within expectations  
 Meets expectations  
 Exceeds expectations

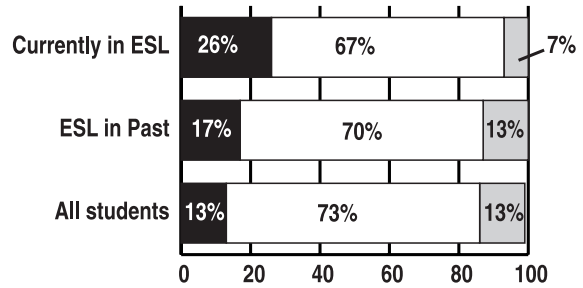


RESULTS FOR STUDENTS IN ESL PROGRAMS...continued



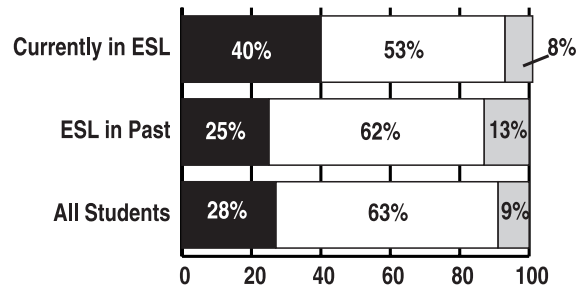
**NUMERACY GRADE 4**

Not yet within expectations  
 Meets expectations  
 Exceeds expectations



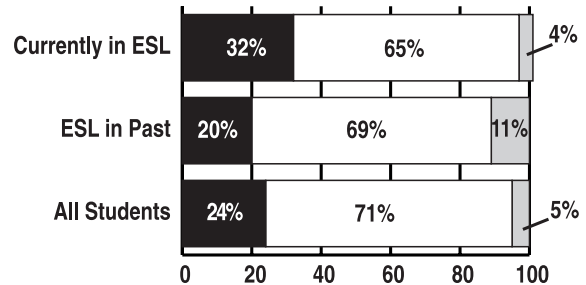
**NUMERACY GRADE 7**

Not yet within expectations  
 Meets expectations  
 Exceeds expectations



**NUMERACY GRADE 10**

Not yet within expectations  
 Meets expectations  
 Exceeds expectations





## ABORIGINAL STUDENTS

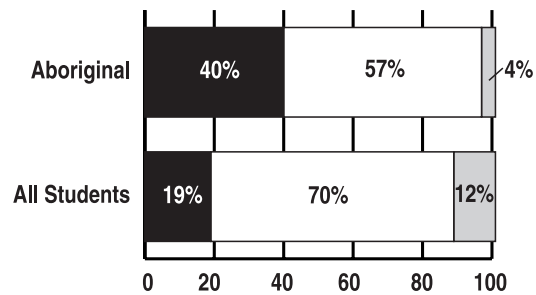
In both reading comprehension and numeracy, aboriginal students as a whole consistently performed lower than the overall group of students in Grades 4, 7, and 10. A similar pattern was found for writing in Grade 4.

### RESULTS FOR ABORIGINAL AND ALL STUDENTS



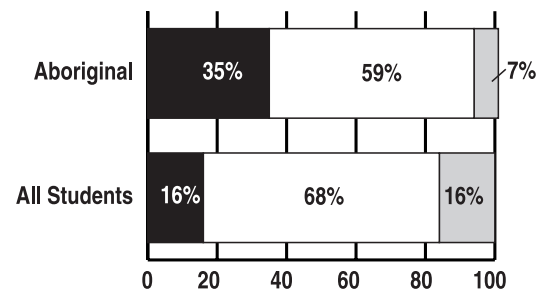
#### READING COMPREHENSION GRADE 4

- Not yet within expectations
- Meets expectations
- Exceeds expectations



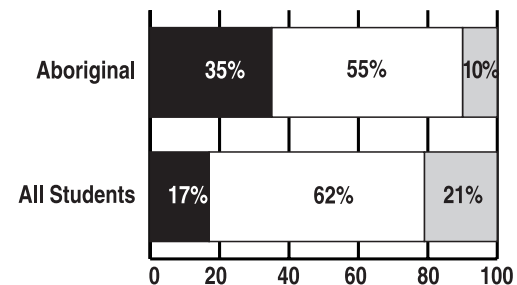
#### READING COMPREHENSION GRADE 7

- Not yet within expectations
- Meets expectations
- Exceeds expectations



#### READING COMPREHENSION GRADE 10

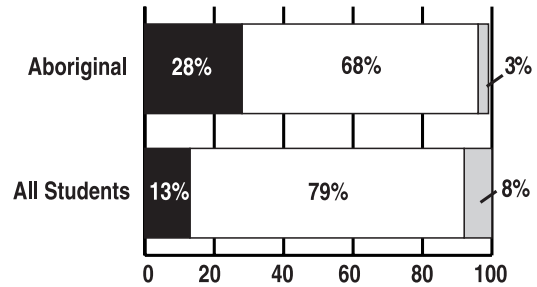
- Not yet within expectations
- Meets expectations
- Exceeds expectations





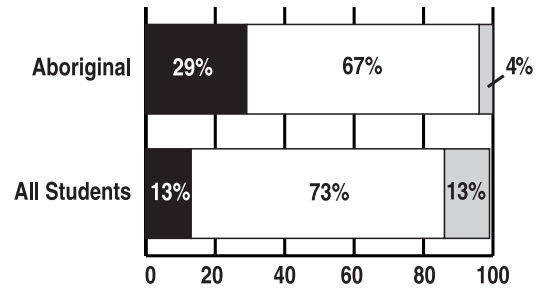
**FIRST-DRAFT WRITING GRADE 4**

- Not yet within expectations
- Meets expectations
- Exceeds expectations



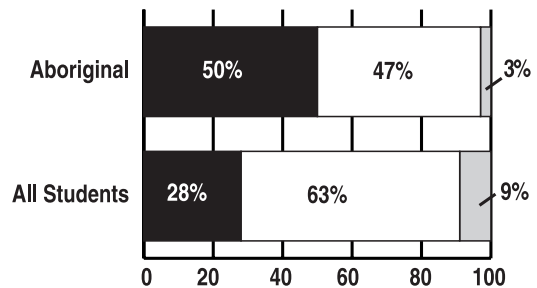
**NUMERACY GRADE 4**

- Not yet within expectations
- Meets expectations
- Exceeds expectations



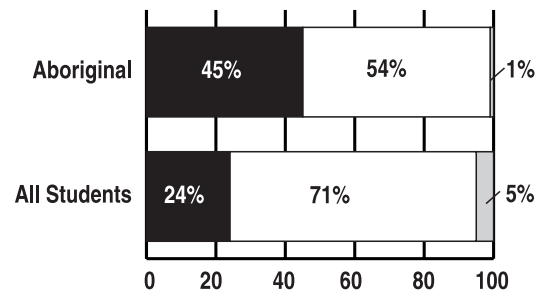
**NUMERACY GRADE 7**

- Not yet within expectations
- Meets expectations
- Exceeds expectations



**NUMERACY GRADE 10**

- Not yet within expectations
- Meets expectations
- Exceeds expectations



# 1999 ASSESSMENT RESULTS IN CONTEXT

## RESULTS OF PAST PROVINCIAL ASSESSMENTS AND EXAMINATIONS

### PAST PROVINCIAL ASSESSMENTS

In addition to providing an important baseline for future assessments, the 1999 assessment provides a measure of how student achievement in reading comprehension and numeracy compares to student achievement on past provincial assessments.

When interpreting assessment results, it is important to consider changes in student performance over time. Change over time is currently determined by comparing students' results in 1999 with students' results on common items from past assessments. For future assessments, procedures will be in place to permit a more comprehensive analysis of overall change over time.

#### READING

Overall, the results for multiple-choice items selected from the 1998 assessment and re-used in the 1999 assessment indicate a slight decline in reading comprehension at Grades 4, 7, and 10 (down by 2% at each grade). These slight differences should be interpreted with caution.

#### NUMERACY

In numeracy, the results for multiple-choice items selected from the 1990 Mathematics assessment and re-used in the 1999 Numeracy assessment indicate some improvement in numeracy skills at Grade 4 (up by 5%), Grade 7 (up by 2%), and Grade 10 (up by 5%). These small differences should be interpreted with caution.

## PROVINCIAL SENIOR SECONDARY EXAMINATIONS

Student performance on Grade 12 examinations in English 12 and Principles of Mathematics 12 has remained relatively constant over the past five years.

- The success rate on the Grade 12 English exam has been between 89% and 91% between 1993-94 and 1997-98. The success rate for Grade 12 Principles of Mathematics has been between 80% and 83% over the same time period.

*("Success rate" is defined as the percentage of all students who wrote receiving a grade of C- or better on the exam.)*

- The participation rate in the Grade 12 English exam has ranged from 69% to 74% between 1993-94 and 1997-98. The participation rate in the Principles of Mathematics exam has ranged from 35% to 39%.

*("Participation rate" is defined as the number of unique exam writers for the course divided by the September 30 Grade 12 enrolment headcount, expressed as a percentage.)*

## RESULTS OF NATIONAL AND INTERNATIONAL ASSESSMENTS AND EXAMINATIONS

### NATIONAL AND INTERNATIONAL ASSESSMENTS

British Columbia has participated in a number of national assessments, the most recent of which have been the Council of Ministers of Education, Canada's *School Achievement Indicators Program* (SAIP) assessments of reading and writing in 1998 and mathematics in 1999. Internationally, British Columbia participated in the 1995 *Third International Mathematics and Science Study* (TIMMS).

The age/grade groupings of students for national and international assessments are often different from the provincial target grades of Grade 4, 7, and 10. However, there is enough overlap to be of interest.

The 1997 SAIP Mathematics assessment results showed that British Columbia:

- 13- and 16-year-olds students were lower than similar students in Canada in problem solving;
- 16-year-olds were lower in the mathematics content than similar Canadian students; and
- 13-year-old students were not different from Canadian students in the content area.

The 1995 TIMSS mathematics results showed that British Columbia:

- Grade 4 students were close to the Canadian average and were surpassed by 6 out of 25 other countries;
- Grade 8 students performed better than Canadian students and were exceeded by only 4 out of 40 other countries;
- overall Grade 12 mathematics students were close to the Canadian average; and
- the top 10% of Grade 12 mathematics students were exceeded by the top 10% in only one other country out of 16 others.

The 1998 SAIP Reading and Writing assessment results showed that British Columbia 13- and 16-year-old students perform similarly to Canadian students.

In general, these results show that British Columbia students are performing about the same in reading and mathematics as other students in Canada and better than other students internationally.

## INTERNATIONAL SENIOR SECONDARY EXAMINATIONS

- The performance of British Columbia students in internationally-recognized, senior secondary examinations compares favourably with the performance of students globally and across Canada.
- Advanced Placement (AP) examinations are scored on a five-point scale.
- In 1998, the global average grade for AP English Language and Composition was 2.99. The Canadian average grade was 3.16; the British Columbia average grade was 3.13.
- In 1998, the global average grade for AP English Literature and Composition was 3.05. The Canadian average grade was 3.05; the British Columbia average grade was 3.04.
- In 1998, the global average grade for AP Calculus (AB) was 3.05. The Canadian average grade was 3.39; the British Columbia average grade was 3.43. The global average grade for AP Calculus (BC) was 3.61. The Canadian average grade was 3.38; the British Columbia average grade was 3.70.
- More British Columbia students participate in AP exams than in any other Canadian jurisdiction. Of 8231 AP exams written in 1998, more than half (4559) were written by British Columbian students.

## 1999 STUDENT QUESTIONNAIRE RESULTS

### HOW WELL DO STUDENTS THINK THEY READ, WRITE AND DO MATHEMATICS?

In the Student Questionnaire that accompanied the assessment, a large majority of students across Grades 4, 7, and 10 stated that they read, write, and do mathematics well or very well, but this proportion declined from Grades 4 to 7 to 10. The greatest decline across grades occurred in the proportion of students who stated they do mathematics well or very well (80% at Grade 4, 68% at Grade 7, and 53% at Grade 10).

### FREQUENCY OF READING

In Grade 4, 68% of students reported they read in their spare time almost every day. The percentage of students reading in their spare time every day dropped to 51% at Grade 7 and to 35% at Grade 10.

### FREQUENCY OF WRITING

In Grade 4, 73% of students reported they write in their spare time almost every day or about once a week. The percentage of students who write in their spare time almost every day or about once a week dropped to 65% at Grade 7 and to 55% at Grade 10.

### ATTITUDES TOWARD READING, WRITING AND MATHEMATICS

In Grades 4 and 7, a majority of students like reading, writing, and doing mathematics or like reading, writing, and doing mathematics a lot, but this proportion declined from Grades 4 to 7. In Grade 10, 59% of students liked reading or liked reading a lot, 51% of students like writing or liked writing a lot, and 41% of students liked doing mathematics or liked doing mathematics a lot.

In Grades 4 and 7, 87% of students feel that mathematics is useful in everyday life. This proportion declined to 69% in Grade 10.

In Grade 4 and 7, 94% of students feel that knowing how to do mathematics is important for getting a good job. This proportion declined to 83% in Grade 10.

## CALCULATOR USE

The percentage of students who use a calculator in their mathematics class increases substantially across grades (47% of all students in Grade 4, 81% in Grade 7, and 97% in Grade 10). The percentage of students who use a calculator almost every day or about once a week is largest in Grade 10 (90%); this percentage drops substantially at Grade 7 (51%) and Grade 4 (15%).

## COMPUTER USE

A high percentage of Grade 4 students reported that they use computers at school to search for information (81%). This percentage increases to 87% in Grade 7 and declines to 80% in Grade 10. A greater percentage of students in Grade 4 (83%) and Grade 7 (82%) use a computer at school to write reports or stories than Grade 10 students (65%). A similar pattern was found for use of computers at school to organize and display data (71% of Grade 4 students, 73% of Grade 7 students, and 55% of Grade 10 students). In Grade 4, 8% to 14% of students do not get to use a computer at school to search for information, write reports or stories, or organize or display data. This percentage decreases at Grade 7 (6% to 9%) and increases at Grade 10 (9% to 16%).

## PHYSICAL ACTIVITIES

Across all three grades, most students reported they get involved in physical activities at least once a day or several times a week (85% in Grade 4, 89% in Grade 7 and 81% in Grade 10).



## 1999 PROVINCIAL INTERPRETATION PANEL COMMENTS AND RECOMMENDATIONS

In September, an interpretation panel of representatives of educational and community organizations reviewed and commented on the results of the 1999 assessment and made recommendations regarding steps that could be taken to improve BC students' reading comprehension, writing and numeracy skills.

### 1999 PROVINCIAL INTERPRETATION PANEL COMMENTS

#### STRENGTHS

##### READING

- large proportion (82% to 84%) of students met or exceeded expectations in Grades 4, 7, and 10
- strong evidence of growth in reading skills from Grades 4 to 7
- evidence that ESL programs improve reading performance at all grades
- students showed strength in their ability to read literary and informational texts

##### WRITING (GRADE 4)

- strong majority (87%) of students met or exceeded expectations
- students showed evidence of knowledge of the writing process

##### NUMERACY

- large proportion of students met or exceeded expectations in Grade 4
- gender balance: girls and boys performed at about the same level

## AREAS REQUIRING ATTENTION

### READING

- student performance in reading poetry was weaker than in literary and informational text, especially at Grade 4
- the percentage of students at all grades (16% to 19%) who did not meet the expected standards, especially at Grade 10 (17%)
- the increasingly weaker performance of boys compared to girls from Grades 4 to 10
- the weak performance of aboriginal students

### WRITING

- boys did not perform as well as girls
- low performance of aboriginal students

### NUMERACY

- the percentage of students who are not yet meeting expectations, especially in Grades 7 (28%) and 10 (24%)
- relatively low percentage of students who are exceeding expectations in Grades 7 (9%) and 10 (5%)
- weakness on problem solving and application of mathematics items at all grade levels
- weak results of aboriginal students

## 1999 PROVINCIAL INTERPRETATION PANEL RECOMMENDATIONS

### TO TEACHERS, PRINCIPALS, AND SUPERINTENDENTS

#### GENERAL

- provide in-service opportunities in the areas of reading, writing, and numeracy
- provide real-life applications of mathematical concepts regularly in classroom instruction
- provide problem solving activities that encourage various solution strategies
- ensure full implementations of the mathematics Integrated Resource Packages at all grade levels

#### READING

- increase the amount of direct instruction in reading from Kindergarten to Grade 12
- emphasize that all teachers should teach reading strategies in all subject fields, not just in English Language Arts
- develop strategies to improve the reading level of boys
- select reading materials that will engage boys

#### WRITING

- encourage students to write daily
- make storytelling an integral part of English Language Arts classes

## NUMERACY

- increase emphasis on applications of mathematics and problem solving
- increase the amount of support available for students weak in math
- develop math intervention programs similar to reading intervention programs

### TO THE MINISTRY

- increase access to ESL programs
- place greater emphasis on the teaching of reading in all content areas
- provide updated writing reference sets (a classroom assessment resource), with samples of writing from provincial assessments
- provide additional support for implementation of the mathematics Integrated Resource Packages
- phase out the “A” stream in mathematics (Math 9A, 10A, 11A) and lobby for post-secondary institutions to accept Applications of Mathematics courses

### TO PARENTS AND GUARDIANS

- encourage children to read regularly and read to your children regularly
- ensure children have access to a wide range of reading materials
- promote numeracy and problem solving in the home
- emphasize to children the importance of mathematics in our lives

### TO TEACHER EDUCATION PROGRAMS

- require that all education students take at least one course on the teaching of reading
- require that all education students take a course in the teaching of numeracy

TO EDUCATIONAL RESEARCHERS

- increase research on strategies for teaching boys to read
- look into how different types of learners acquire reading, writing, and numeracy skills
- research effective support strategies for numeracy
- conduct research on the relationship between student achievement and computer use/physical activities

## NEXT STEPS

1. Districts are encouraged to engage in follow-up activities and interpretation of their results to improve student performance. The Ministry has provided follow-up materials to assist districts in this regard.
2. Schools, teachers, parents, and universities are encouraged to reflect on the recommendations made by the interpretation panel and find ways to promote student learning in reading, writing, and numeracy.
3. In order to provide further information about the performance of students in relation to provincial expectations and standards, the results of future Foundation Skills Assessments will be provided at the provincial, district, school, and individual student levels. With limited exceptions, all Grade 4, 7, and 10 students in BC public schools and funded independent schools take part in these annual assessments of reading, writing, and numeracy skills.

### A NOTE OF THANKS

*We wish to express our appreciation  
to the teachers and administrators of BC  
who gave care and attention  
to the administration of the  
assessment.*

**For further information contact:**

**Student Assessment & Program Evaluation Branch**

**Phone: (250) 356-2419**

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**Web site: [http://www.bced.gov.bc.ca/assessment/prov\\_assess.htm](http://www.bced.gov.bc.ca/assessment/prov_assess.htm)**