# INDIVIDUAL JURISDICTION REPORTS

The following section presents a description of the context in which each jurisdiction's students learn mathematics, including such areas as social factors, the organization of the school system, and mathematics teaching and assessment in the schools.

Charts presenting the results for that jurisdiction in comparison with the results for Canada follow the context statements.

**Note: Quebec 16-year-old students did not participate in the assessment. This must be taken into consideration when comparing jurisdictional results with those of Canada.**

## BRITISH COLUMBIA

### Context Statement

*Social Context*

British Columbia has a population of approximately 4 million with 86% of people living in urban areas. The province promotes student achievement for all. Varied specialized educational services are offered. Student enrolment in English-as-a-second-language (ESL) classes has increased exponentially over the last ten years with about 10% of public school students categorized as ESL students. The number of Aboriginal students enrolled in British Columbia public schools has increased to approximately 7% of the public school population. Enrolment in French Immersion and Programme francophone has also increased steadily (over 5% of the total population). The province supported a further 11% of students through special education funding.

*Organization of the School System*

Approximately 634,000 students are enrolled in the public school system, which employs over 39,000 educators. The province has 59 school districts and the Conseil scolaire francophone, in addition to its independent schools. Most 13-year-old students are in grade 8 or 9, while 16-year-olds are in grade 11 or 12.

*Mathematics Teaching*

There is only one common mathematics course for students up to and including grade 8. In grade 9, students can select either the Principles of Mathematics pathway or the Applications of Mathematics pathway. In grade 10, a third pathway (Essentials of Mathematics) is also offered. In addition to these courses, an Introductory Mathematics course is offered in grade 11 and a calculus course in grade 12.

As is the case in many other provinces and in many subject areas, British Columbia is completing a thorough review of its mathematics curricula. Integrated Resource Packages (IRPs), consistent with *The Common Curriculum Framework* developed by the Western Canadian Protocol (WCP) for Collaboration in Basic Education, are gradually being introduced. IRPs describe the provincially prescribed learning outcomes, suggested instructional and assessment strategies, and recommended learning resources. Learning outcomes in mathematics are grouped under five organizers identified in WCP documents: problem solving, number, patterns and relations, shape and space, and statistics and probability.

Mathematics is increasingly important in British Columbia's technological society. To succeed in the workplace, students require the ability to reason and communicate, to solve problems, and to understand and use probability and statistics, technology, and measurement. Skills in these areas are also

required of all mathematically literate citizens. As they develop mathematical literacy, students generally experience a growth in motivation and self-confidence in mathematics. The provincial mathematics curriculum emphasizes the practical applications of learning and the types of skills needed in the knowledge-based workplace. To ensure that students are prepared for the demands of both further education and the workplace, the mathematics curriculum must help students develop mathematical literacy.

*Mathematics Assessment*

In addition to participating in national (SAIP) and international (TIMSS, PISA) assessments, British Columbia assesses all students in grades 4, 7, and 10 on an annual basis in reading comprehension, writing, and numeracy through the Foundation Skills Assessment (FSA). The FSA provides teachers, students, and parents with an additional external source of information about a student's performance in these important skill areas. The skills assessed by the FSA are closely linked to the prescribed provincial learning outcomes. FSA results do not count toward a student's report card, but school, district, and provincial results are available to the public.

At the grade 12 level, provincial examinations are administered to students taking the Applications of Mathematics and Principles of Mathematics courses. These exams count for 40% of a student's final mark on the course. To meet British Columbia's graduation requirements, students need to successfully complete either the grade 11 Applications of Mathematics, Essentials of Mathematics, or Principles of Mathematics course.

# Results for British Columbia

*Mathematics Content*

British Columbia students in both age groups performed as well as Canada as a whole.

Fewer 16-year-old students reached level 3 in the 2001 assessment than in the 1997 assessment. There were no significant changes in the performance of British Columbia 13-year-old students.
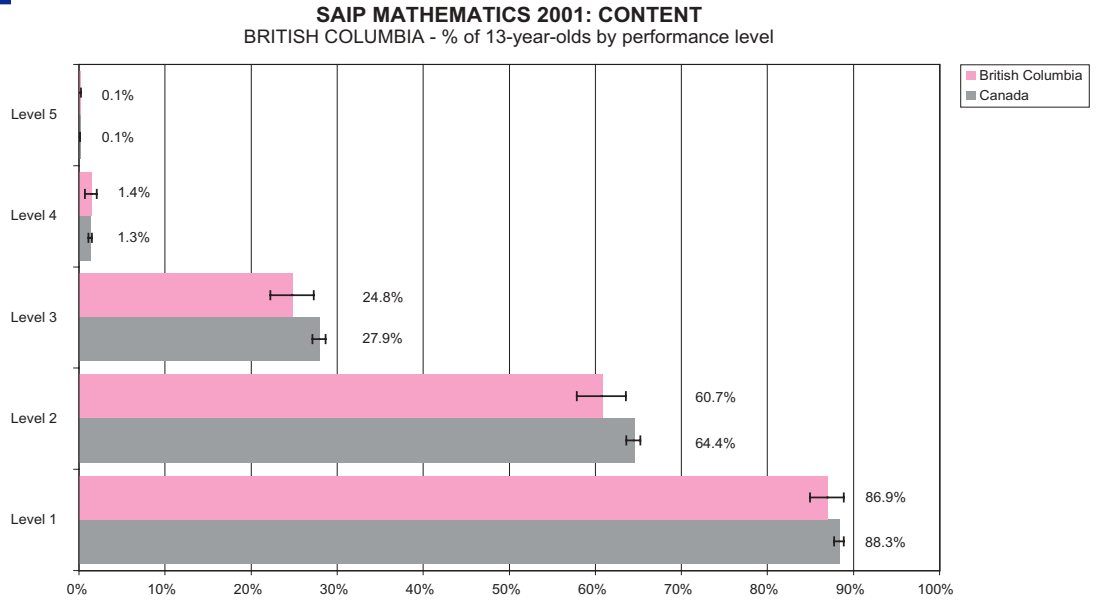
## CHART BC1

**SAIP MATHEMATICS 2001: CONTENT**
BRITISH COLUMBIA - % of 13-year-olds by performance level



Legend: British Columbia, Canada

| Level | British Columbia | Canada |
|-------|------------------|--------|
| Level 5 | 0.1% | 0.1% |
| Level 4 | 1.4% | 1.3% |
| Level 3 | 24.8% | 27.9% |
| Level 2 | 60.7% | 64.4% |
| Level 1 | 86.9% | 88.3% |

## CHART BC2

**SAIP MATHEMATICS 2001: CONTENT**
BRITISH COLUMBIA - % of 16-year-olds by performance level



Legend: British Columbia, Canada

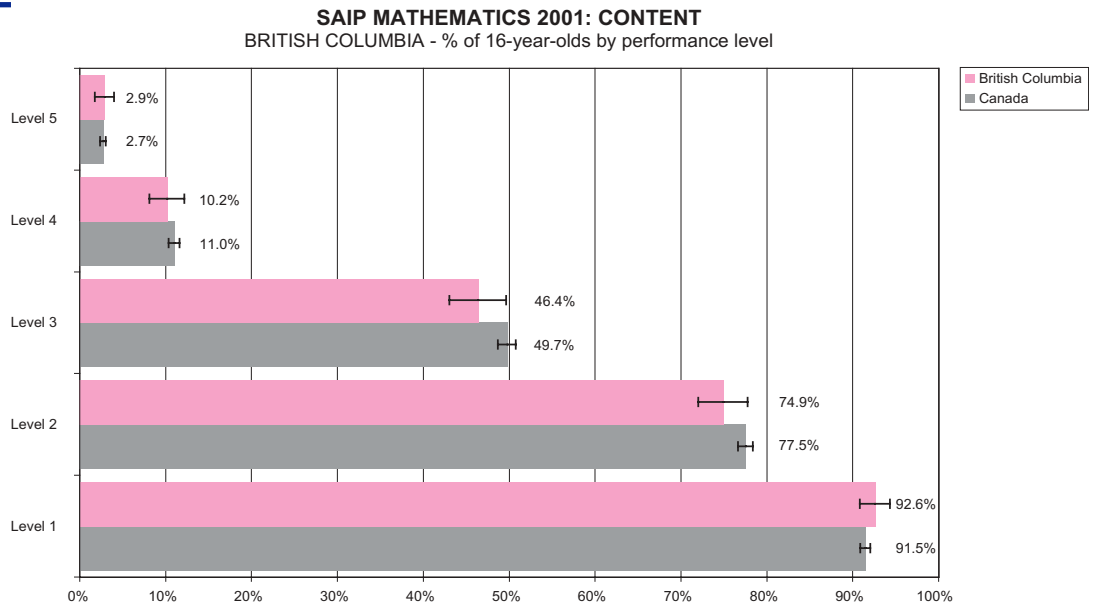| Level | British Columbia | Canada |
|-------|------------------|--------|
| Level 5 | 2.9% | 2.7% |
| Level 4 | 10.2% | 11.0% |
| Level 3 | 46.4% | 49.7% |
| Level 2 | 74.9% | 77.5% |
| Level 1 | 92.6% | 91.5% |

## Problem Solving

In general, British Columbia students performed as well as the Canadian average. Slightly fewer 13-year-old students reached level 2 than did the Canadian average.

More 13-year-old and 16-year-old students reached levels 2 and 3 in 2001 than in the 1997 assessment.
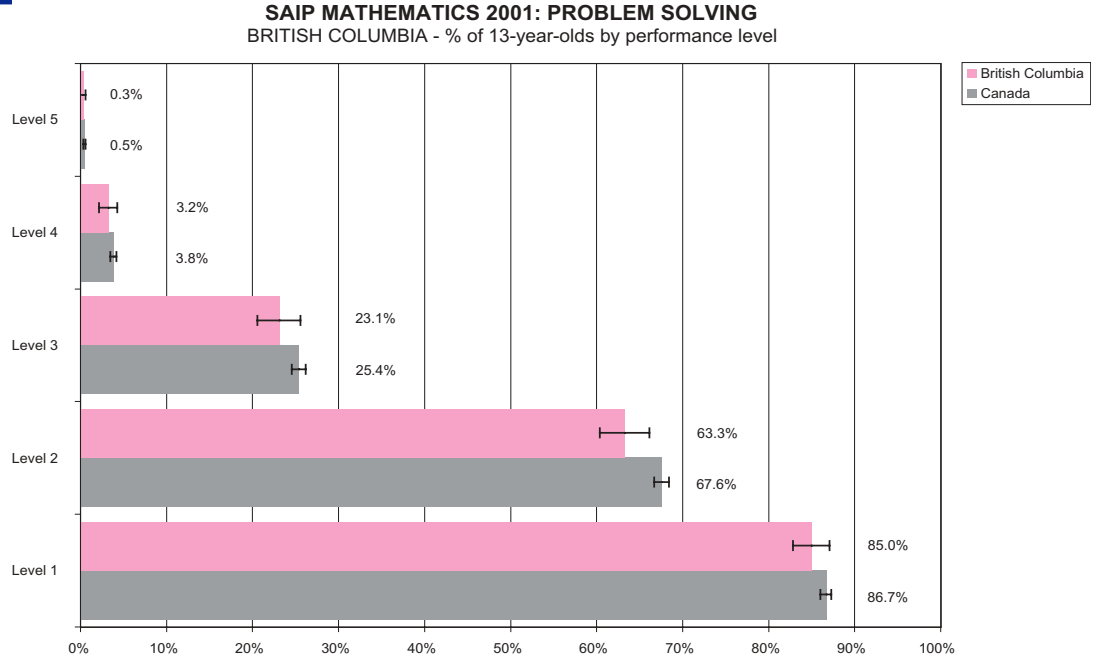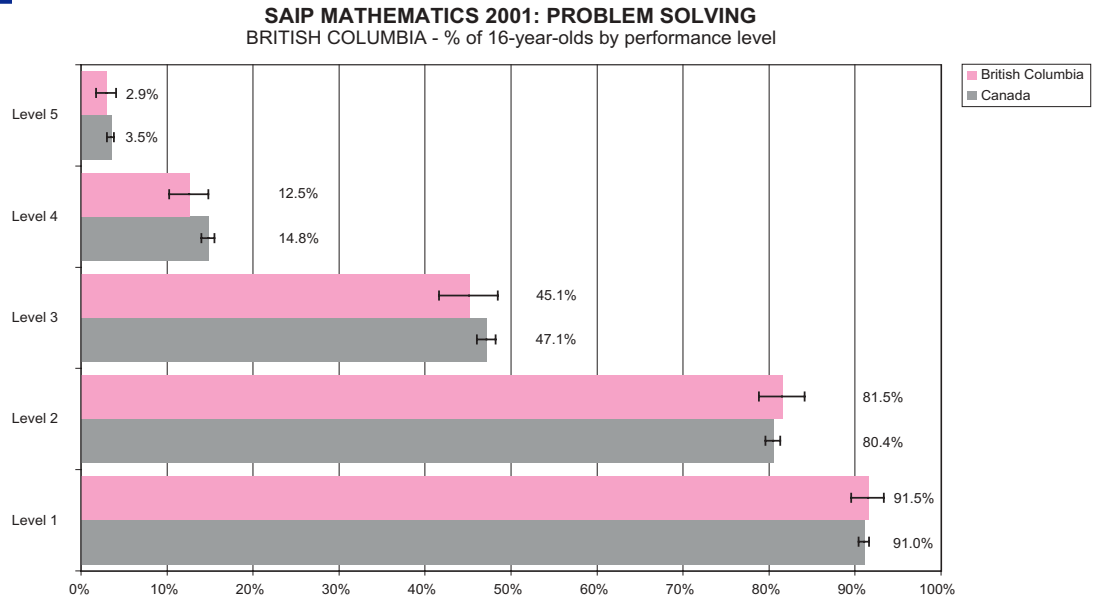
*CHART BC3*

**SAIP MATHEMATICS 2001: PROBLEM SOLVING**
BRITISH COLUMBIA - % of 13-year-olds by performance level

Legend: ■ British Columbia  ■ Canada

| Level | British Columbia | Canada |
|-------|------------------|--------|
| Level 5 | 0.3% | 0.5% |
| Level 4 | 3.2% | 3.8% |
| Level 3 | 23.1% | 25.4% |
| Level 2 | 63.3% | 67.6% |
| Level 1 | 85.0% | 86.7% |

*CHART BC4*

**SAIP MATHEMATICS 2001: PROBLEM SOLVING**
BRITISH COLUMBIA - % of 16-year-olds by performance level

Legend: ■ British Columbia  ■ Canada

| Level | British Columbia | Canada |
|-------|------------------|--------|
| Level 5 | 2.9% | 3.5% |
| Level 4 | 12.5% | 14.8% |
| Level 3 | 45.1% | 47.1% |
| Level 2 | 81.5% | 80.4% |
| Level 1 | 91.5% | 91.0% |

## Context Statement

*Social Context*

Alberta has a multicultural population of approximately 3 million. All children are required to attend school from age 6 to age 16.

The Minister of Learning defines the curriculum and standards for student achievement in consultation with employers, parents, school authorities, teachers, and other stakeholders. Schools, school authorities, and the Minister of Learning assess and report yearly to the public on a range of student outcomes.

*Organization of the School System*

Nearly all (99.9%) of the 42,432 thirteen-year-old students in Alberta are enrolled in junior high school. Only one mathematics course is offered at each of grades 7, 8, and 9.

*Percentage of 13-year-old students in a mathematics course in each grade*

| | 1997–98 | 2000–01 | | 1997–98 | 2000–01 |
|---|---|---|---|---|---|
| Grade 7 | 7.4 | 5.8 | French Immersion | 5.3 | 4.8 |
| Grade 8 | 65.6 | 65.3 | Francophone | 0.5 | 0.6 |
| Grade 9 | 25.3 | 27.9 | | | |

Out of the 42,275 sixteen-year-old students in the province, nearly all (98.8%) are enrolled in senior high school. The senior high school mathematics program has been revised since the administration of SAIP Mathematics II in 1997–98. The new program, which was being phased in during the 2000–01 school year, consists of four course sequences: Pure Mathematics 10–20–30; Applied Mathematics 10–20–30; Mathematics 14–24; Mathematics 16–26. The 10–30 sequences are designed for students contemplating postsecondary study and careers; the 14–24 sequence is for general program students, some of whom are not planning postsecondary studies; and the 16–26 sequence is for students enrolled in the Integrated Occupational Program.

| | 1997–98 | 2000–01 |
|---|---|---|
| Number of 16-year-old-students in the province | 38,929 | 42,275 |
| Number of 16-year-old students taking a math course | 32,582 | 34,517 |
| Percentage of 16-year-old students taking a math course | 83.7% | 81.6% |

The following are the course completions for 16-year-old students as a percentage of the population:

| | | 1997–98 | | | |
|---|---|---|---|---|---|
| | Grade 10 | | Grade 11 | | Grade 12 |
| Number and | 5,041 | | 23,976 | | 9,286 |
| % in grade | (12.9%) | | (61.6%) | | (23.9%) |
| Math 10 | 5.5% | Math 20 | 32.3% | Math 30 | 18.9% |
| Math 13 | 9.9% | Math 23 | 19.2% | Math 33 | 8.0% |
| Math 14 | 5.3% | Math 24 | 5.6% | | |
| Math 16 | 1.1% | Math 26 | 0.7% | | |

| | | | 2000–01 | | | |
|---|---|---|---|---|---|---|
| | **Grade 10** | | | **Grade 11** | | **Grade 12** |
| Number and %<br>in grade | 4,097<br>(9.7%) | | | 27,189<br>(64.3%) | | 10,478<br>(24.8%) |
| Pure Math 10 | 5.3% | Pure Math 20 | | 30.4% | Pure Math 30 | 17.6% |
| Applied Math 10 | 5.2% | Applied Math 20 | | 8.1% | Applied Math 30 | 2.0% |
| Math 14 | 5.5% | Math 23 | | 10.0% | Math 30 | 1.2% |
| Math 16 | 0.8% | Math 24 | | 7.6% | Math 33 | 4.9% |
| | | Math 26 | | 0.6% | | |

*Mathematics Teaching*

Alberta Learning reviews and revises the mathematics curriculum in a ten-year cycle. As a core program, the mathematics program identifies goals designed to prepare students to use mathematics confidently to solve problems, to communicate and reason mathematically, to appreciate and value mathematics, to commit themselves to lifelong learning and to become mathematically literate adults, and to use mathematics to contribute to society.

Mathematics is a common human activity, increasing in importance in a rapidly advancing technological society. Proficiency in using mathematics increases the opportunities available to individuals. Students need to become mathematically literate in order to explore problem-solving situations, to accommodate to changing conditions, and to actively create new knowledge in striving for self-fulfillment.

At the completion of a program, students should have developed a positive attitude toward mathematics and have a base of knowledge and skills related to number, patterns and relations, shape and space, and statistics and probability.

It is important for students to develop a positive attitude toward mathematics so that they can become confident in their ability to undertake the problems of a changing world, thereby experiencing the power and usefulness of mathematics. Students should also gain an understanding and appreciation of the contributions of mathematics, as a science and as an art, to civilization and to culture.

Specific outcomes in Alberta's curriculum expect students to do the following:

- exhibit a positive attitude toward mathematics
- engage and persevere in mathematical tasks and projects
- contribute to mathematical discussions
- take risks in performing mathematical tasks
- exhibit curiosity
- show some enjoyment of mathematical experiences

All students should receive a level of mathematics education appropriate to their needs and abilities.

*Mathematics Assessment*

Since 1982, data about student performance in mathematics have been collected through a provincial assessment program for grades 3, 6, and 9. Since 1995, tests have been administered annually. As well, since 1984, provincial diploma examinations have counted for 50% of a student's final mark in Mathematics 30. A diploma examination in Mathematics 33 has been offered since 1996. These examinations are being phased out and replaced by examinations in Pure and Applied Mathematics 30. All diploma examinations include a written component that emphasizes communication, problem solving, and application in mathematics. The province has developed the Classroom Assessment Materials Project (CAMP) for use by teachers in grades 1, 2, 4, 5, 7, 8, 10, and 11. This award-winning program provides examples of student work that illustrate standards.

Provincial tests are based on provincial standards and provide information on the degree to which students in the province have met these standards.
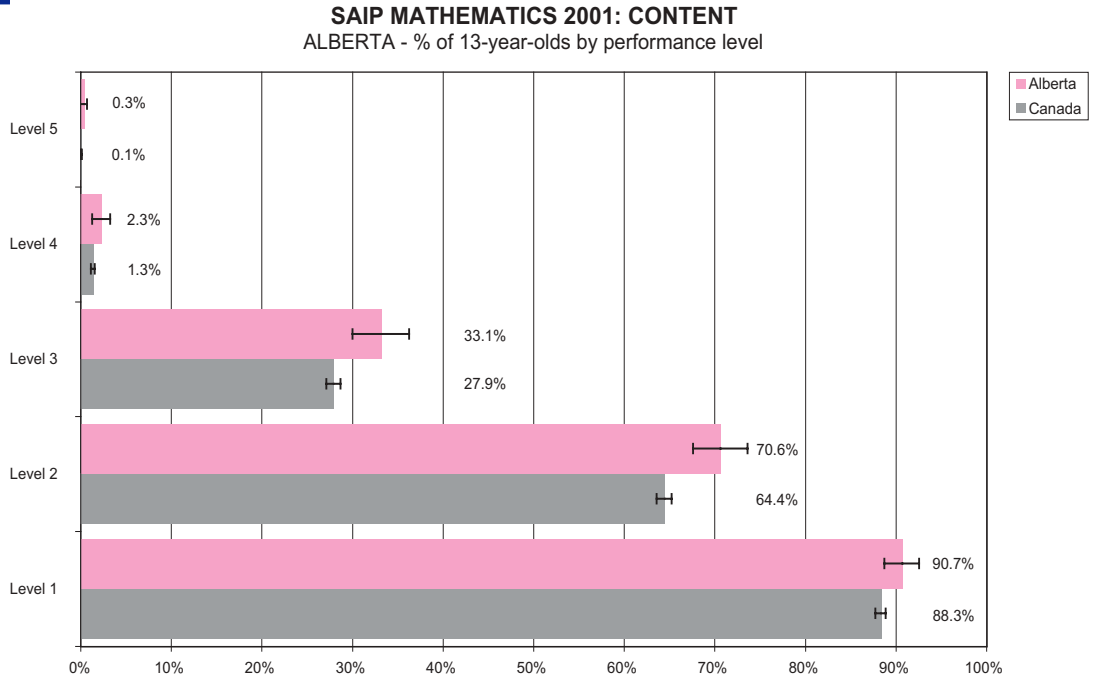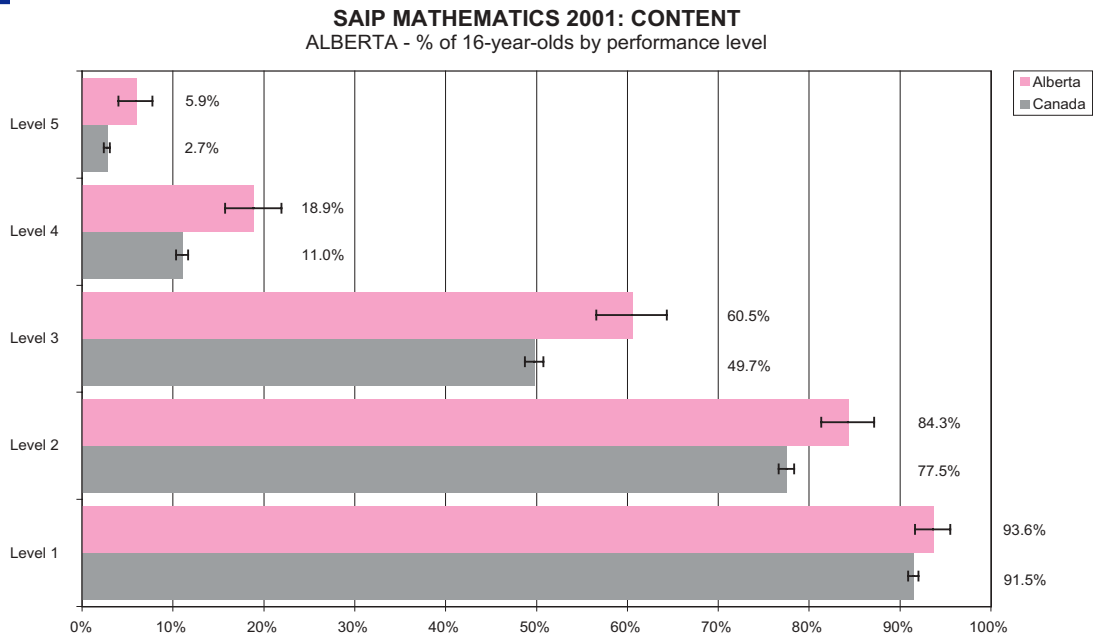
# Results for Alberta

*Mathematics Content*

Alberta students performed as well as or often better than Canada as a whole. Significantly more Alberta students in both age groups achieved levels 2 and 3. More 13-year-old students reached level 1, and more 16-year-old students reached levels 4 and 5, than the Canadian average.

There were no significant changes in achievement in mathematics content for Alberta students between 1997 and 2001.

## CHART AB1

**SAIP MATHEMATICS 2001: CONTENT**
ALBERTA - % of 13-year-olds by performance level

Legend: Alberta, Canada

| Level | Alberta | Canada |
|-------|---------|--------|
| Level 5 | 0.3% | 0.1% |
| Level 4 | 2.3% | 1.3% |
| Level 3 | 33.1% | 27.9% |
| Level 2 | 70.6% | 64.4% |
| Level 1 | 90.7% | 88.3% |

## CHART AB2

**SAIP MATHEMATICS 2001: CONTENT**
ALBERTA - % of 16-year-olds by performance level

Legend: Alberta, Canada

| Level | Alberta | Canada |
|-------|---------|--------|
| Level 5 | 5.9% | 2.7% |
| Level 4 | 18.9% | 11.0% |
| Level 3 | 60.5% | 49.7% |
| Level 2 | 84.3% | 77.5% |
| Level 1 | 93.6% | 91.5% |

*Problem Solving*

In general, Alberta students performed better than the Canadian average in problem solving. Significantly more Alberta students in both age groups achieved levels 2, 3, and 4, while more 13-year-old students reached level 1 as well.

In comparison with the results of the 1997 assessment, there were significant increases in the number of students in both age groups in the 2001 assessment reaching levels 2, 3, and 4.
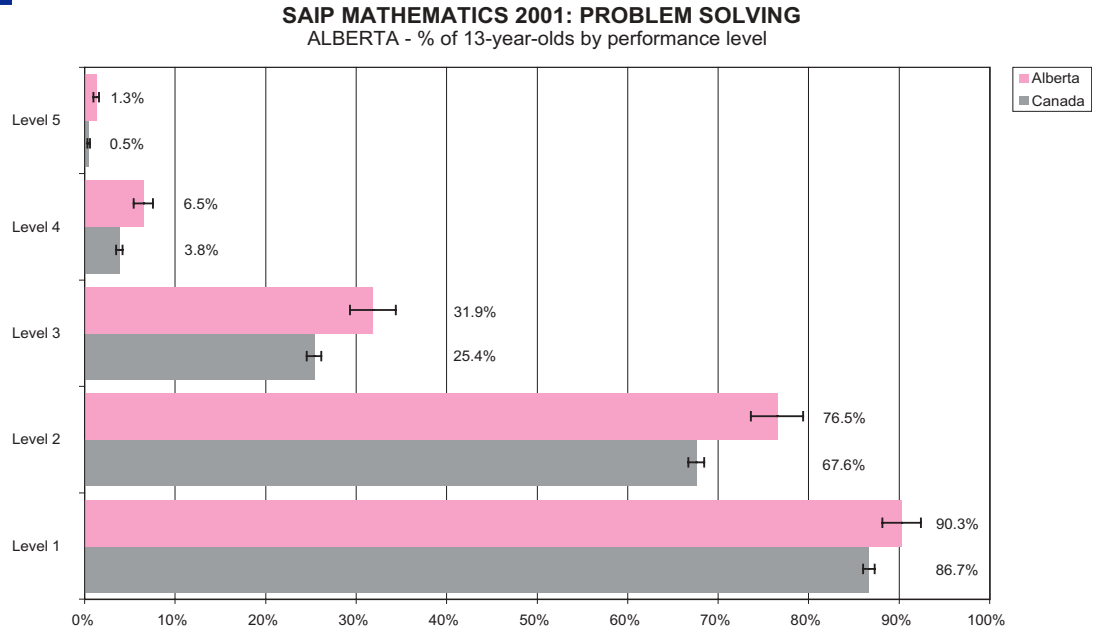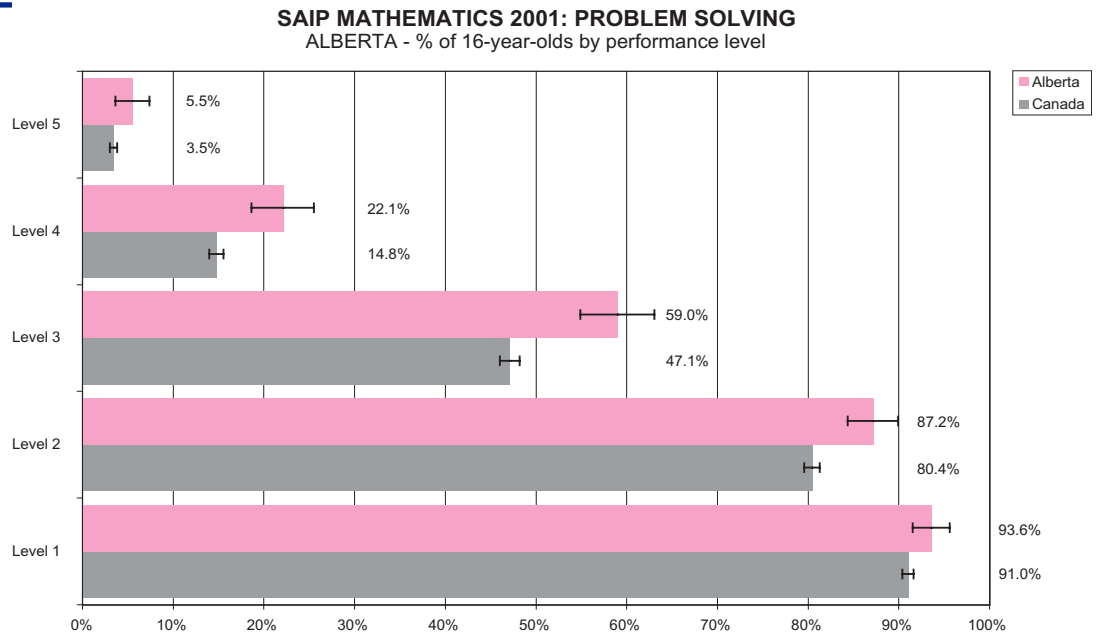
## CHART AB3

**SAIP MATHEMATICS 2001: PROBLEM SOLVING**
ALBERTA - % of 13-year-olds by performance level



| | Alberta | Canada |
|---|---|---|
| Level 5 | 1.3% | 0.5% |
| Level 4 | 6.5% | 3.8% |
| Level 3 | 31.9% | 25.4% |
| Level 2 | 76.5% | 67.6% |
| Level 1 | 90.3% | 86.7% |

## CHART AB4

**SAIP MATHEMATICS 2001: PROBLEM SOLVING**
ALBERTA - % of 16-year-olds by performance level



| | Alberta | Canada |
|---|---|---|
| Level 5 | 5.5% | 3.5% |
| Level 4 | 22.1% | 14.8% |
| Level 3 | 59.0% | 47.1% |
| Level 2 | 87.2% | 80.4% |
| Level 1 | 93.6% | 91.0% |

## Context Statement

*Social Context*

Saskatchewan has a population of approximately 1 million spread throughout a vast geographic area. Although the province still retains a predominantly rural character, over the past 25 years the balance of the population has shifted from living mostly in towns, villages, and rural municipalities to almost 60% living in the 12 largest communities in the province. Saskatchewan has a diverse cultural and ethnic heritage, including a large and growing First Nations population who live either on reserves or in urban centres. The Métis population is also thriving in rural and urban Saskatchewan. Agriculture, potash and uranium mining, oil production, forestry, and the service sector are the major industries.

*Organization of the School System*

Saskatchewan has approximately 184,000 students in kindergarten to grade 12 classrooms in its 789 provincially funded schools.

*Mathematics Teaching*

Over the past decade, the province has devoted considerable effort to reforming its curricula. Specifically in mathematics, new courses consistent with the *Curriculum and Evaluation Standards for School Mathematics* (National Council of Teachers of Mathematics, 1989) have been designed and are at various stages of implementation across the elementary, middle, and secondary levels. Saskatchewan has participated in the Western Canadian Protocol developing a common curriculum framework in mathematics. Saskatchewan's current curriculum alignment with this framework is 85% or greater.

The aim of the mathematics program in Saskatchewan is to graduate individuals who value mathematics and appreciate its role in society. The program seeks to actively engage students in exploring, communicating, and extending mathematical concepts through the use of manipulatives, technology that includes calculators and computers, and cooperative learning experiences. Students experience mathematics through various strands: measurement, data management analysis, consumer issues and problems, numbers and operations, geometry, algebra, equations, functions, and trigonometry. Introduction to the learning and application of these mathematics concepts and skills occurs best in the context of solving problems relevant to students' life experiences.

Experiencing broad-based mathematics through exploration and interaction in interesting and relevant situations provides all students with the mathematical preparation essential to

- develop the skills and knowledge of concepts necessary to meet the needs of the average worker and consumer
- develop the ability to analyze and interpret quantitative information as informed citizens
- develop logical thinking skills, effective work habits, and an appreciation for mathematics
- develop the desire, confidence, and ability to solve problems
- communicate mathematically
- pursue further studies in mathematics and mathematically related areas

*Mathematics Assessment*

Classroom teachers in Saskatchewan are responsible for assessment, evaluation, and promotion of students from kindergarten through grade 11. At the grade 12 level, teachers are responsible for assigning at least 60% of each student's final mark, and those teachers accredited in mathematics are responsible for assigning 100% of the grade 12 final mark.

Students are assessed on the full range of knowledge, understandings, skills, attitudes, and values they have been using and developing during instruction. Teachers are encouraged to develop diversified evaluation plans that reflect the various instructional methods they use in adapting instruction to each class and each student.

During 1995, 1997, and 2001, student learning in mathematics was assessed provincially at grades 5, 8, and 11. Randomly selected schools participated in either a written component or a performance-based component of the assessment. The results of these assessments are interpreted against provincial standards to provide information on how well the students in the province are performing in mathematics.
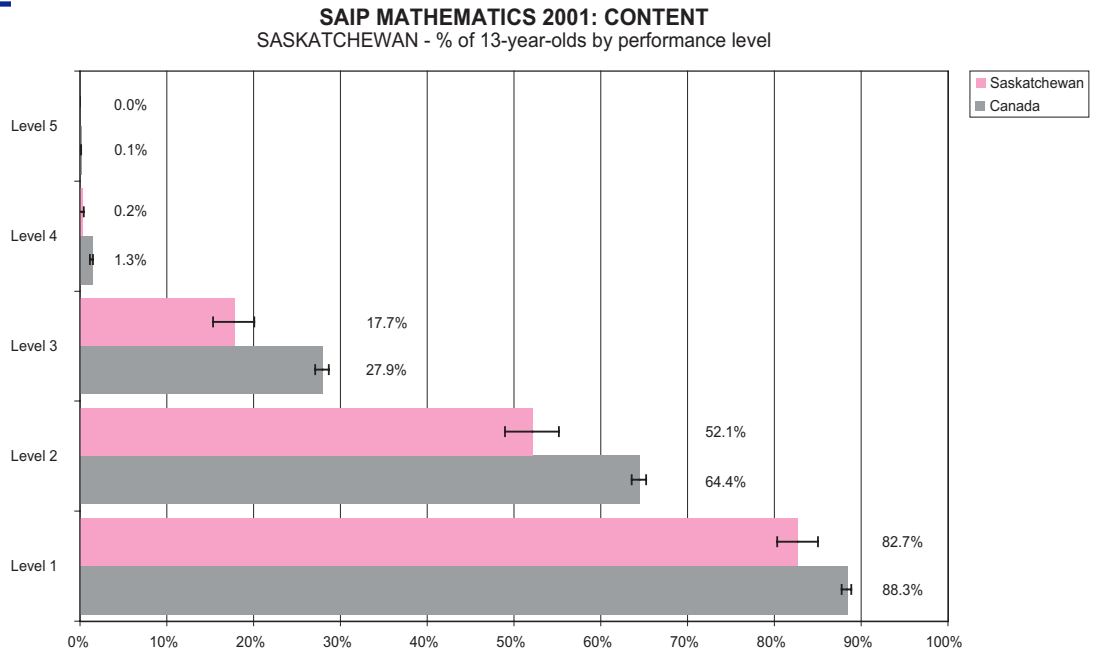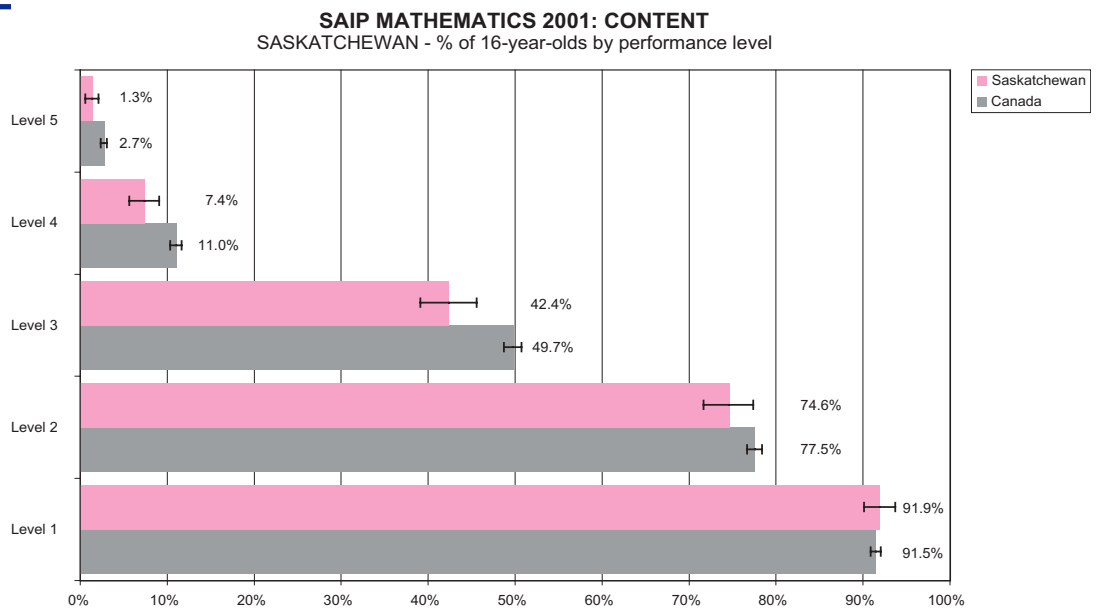
# Results for Saskatchewan

*Mathematics Content*

There are significant differences between the achievement of Saskatchewan students of both age groups and Canada as a whole, except at levels 1 and 2 for 16-year-old students and at level 5 for 13-year-olds.

There were few significant changes in achievement in mathematics content for Saskatchewan students between the 1997 assessment and that of 2001. Fewer 13-year-old Saskatchewan students reached level 1 in the 2001 assessment.

## CHART SK1

**SAIP MATHEMATICS 2001: CONTENT**
SASKATCHEWAN - % of 13-year-olds by performance level

Legend: Saskatchewan, Canada

| Level | Saskatchewan | Canada |
|-------|--------------|--------|
| Level 5 | 0.0% | 0.1% |
| Level 4 | 0.2% | 1.3% |
| Level 3 | 17.7% | 27.9% |
| Level 2 | 52.1% | 64.4% |
| Level 1 | 82.7% | 88.3% |

## CHART SK2

**SAIP MATHEMATICS 2001: CONTENT**
SASKATCHEWAN - % of 16-year-olds by performance level

Legend: Saskatchewan, Canada

| Level | Saskatchewan | Canada |
|-------|--------------|--------|
| Level 5 | 1.3% | 2.7% |
| Level 4 | 7.4% | 11.0% |
| Level 3 | 42.4% | 49.7% |
| Level 2 | 74.6% | 77.5% |
| Level 1 | 91.9% | 91.5% |

*Problem Solving*

There are significant differences between the achievement of Saskatchewan 13-year-old students and Canada as a whole, at all levels. In general, Saskatchewan 16-year-old students performed as well as the Canadian average, except at Level 4.

In comparison with the results of the 1997 assessment, there was a significant increase in the number of students in both age groups in the 2001 assessment achieving levels 2 and 3.
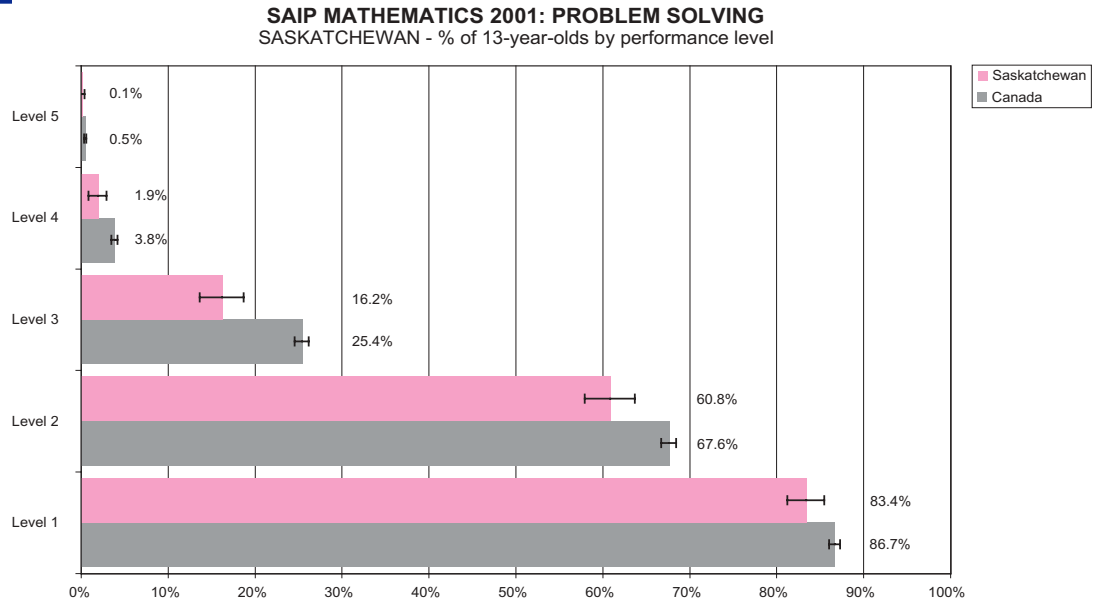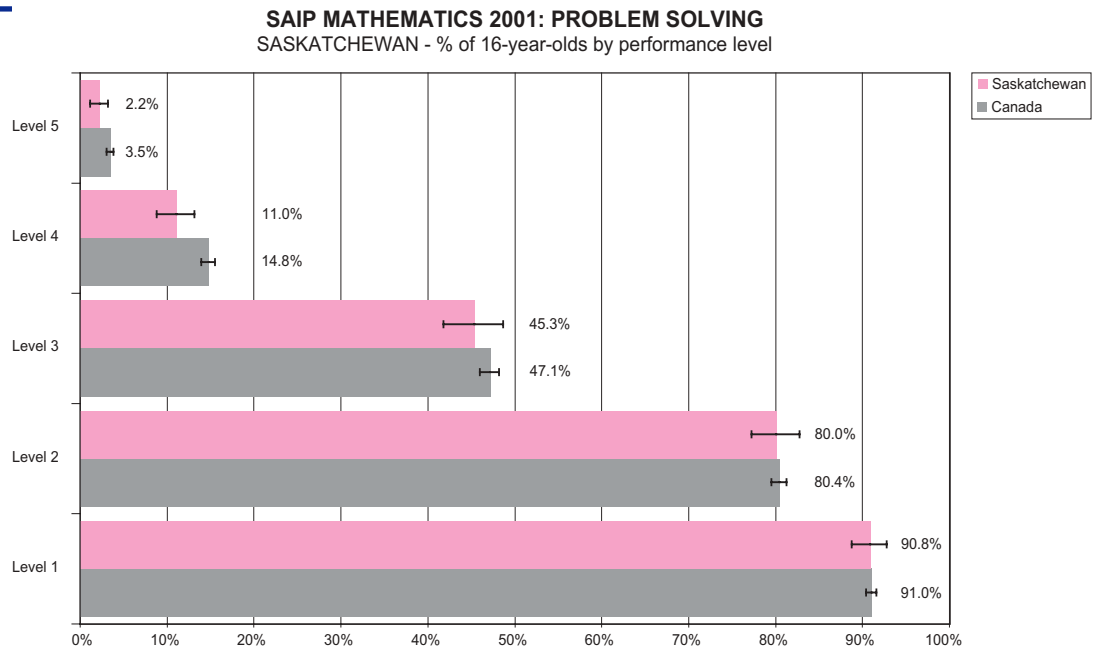
## CHART SK3

**SAIP MATHEMATICS 2001: PROBLEM SOLVING**
SASKATCHEWAN - % of 13-year-olds by performance level



| Level | Saskatchewan | Canada |
|-------|-------------|--------|
| Level 5 | 0.1% | 0.5% |
| Level 4 | 1.9% | 3.8% |
| Level 3 | 16.2% | 25.4% |
| Level 2 | 60.8% | 67.6% |
| Level 1 | 83.4% | 86.7% |

## CHART SK4

**SAIP MATHEMATICS 2001: PROBLEM SOLVING**
SASKATCHEWAN - % of 16-year-olds by performance level



| Level | Saskatchewan | Canada |
|-------|-------------|--------|
| Level 5 | 2.2% | 3.5% |
| Level 4 | 11.0% | 14.8% |
| Level 3 | 45.3% | 47.1% |
| Level 2 | 80.0% | 80.4% |
| Level 1 | 90.8% | 91.0% |

## Context Statement

*Social Context*

Manitoba has a population of approximately 1 million, 60% of whom reside in the capital city of Winnipeg. Manitoba must meet the educational needs of a wide range of ethnic and cultural groups. English-as-a-second-language (ESL) instruction is provided for immigrant students. There is a strong Franco-Manitoban community in the province, with students enrolled in the Français program. The French Immersion program has become an option for about 9% of students. In addition, there is a notable representation of the Aboriginal community in public schools in urban and rural/remote regions of the province. Manitoba has a broad and diverse economic base.

*Organization of the School System*

Manitoba's school system enrols over 200,000 students in kindergarten to senior 4 (grade 12). It employs about 13,500 teachers in 46 school divisions and 8 districts. For program delivery purposes, schools are encouraged to group grades according to early years (kindergarten to grade 4), middle years (grades 5 to 8), and senior years (senior 1 to 4). Students may choose courses from four school programs — an English Program, Français Program, French Immersion Program, and a senior year Technology Education Program. The students selected to participate in the SAIP Mathematics Assessment were either 13 or 16 years of age. Most 13-year-old students were in grade 8 or grade 9 (senior 1), and most 16-year-old students were in senior 3 or senior 4.

*Mathematics Teaching*

In 1995, as part of the Western Canadian Protocol for Collaboration in Basic Education, Manitoba with the other western provinces and territories, developed the document *The Common Curriculum Framework for K–12 Mathematics*. This initiative led Manitoba Education, Training and Youth to publish revised curriculum documents for kindergarten to senior 4 (grade 12) in mathematics. General and specific learning outcomes describe the mathematical knowledge and skills that students are expected to learn at each grade level. Implementation of revised mathematics curricula has been ongoing, beginning with kindergarten to grade 4 in the 1995–96 school year. The current cycle of revision was completed in 2000, with the implementation of senior 4 curricula.

*Mathematics Assessment*

From 1979 to 1994, Manitoba Education, Training and Youth administered a provincial curriculum assessment program in major subject areas at early, middle, and senior years. This program was suspended in 1994. The senior 4 Provincial Examinations in Mathematics and English and French Language Arts were introduced in 1996 for all senior 4 students. The Senior 1 Mathematics Standards Test was introduced in 1999. This standards test is currently optional for school divisions.

The Senior 4 Provincial Examinations will be replaced by the Senior 4 Standards Tests in Mathematics and English and French Language Arts in the 2001–02 school year.

For the SAIP Mathematics Assessment, students were tested in their language of instruction.

# Results for Manitoba (English)

*Mathematics Content*

Manitoba 16-year-old students who responded in English performed as well as Canadian students as a whole at all levels. However, there are significant differences between the achievement of Manitoba English-language 13-year-old students and Canada as a whole, except at level 5.

There were no changes in achievement for Manitoba English-language 13-year-old students between the 1997 assessment and that of 2001. Fewer 16-year-old Manitoba English-language students performed at level 1 in the 2001 assessment.
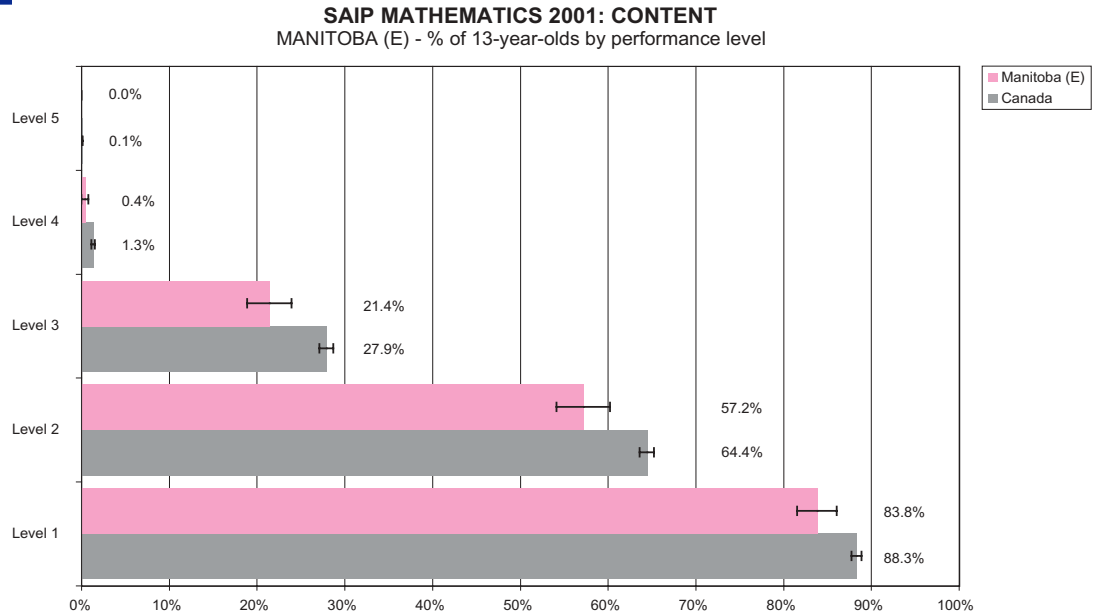
## CHART MB(E)1

**SAIP MATHEMATICS 2001: CONTENT**
MANITOBA (E) - % of 13-year-olds by performance level

Legend: Manitoba (E), Canada

| Level | Manitoba (E) | Canada |
|-------|-------------|--------|
| Level 5 | 0.0% | 0.1% |
| Level 4 | 0.4% | 1.3% |
| Level 3 | 21.4% | 27.9% |
| Level 2 | 57.2% | 64.4% |
| Level 1 | 83.8% | 88.3% |

## CHART MB(E)2

**SAIP MATHEMATICS 2001: CONTENT**
MANITOBA (E) - % of 16-year-olds by performance level

Legend: Manitoba (E), Canada

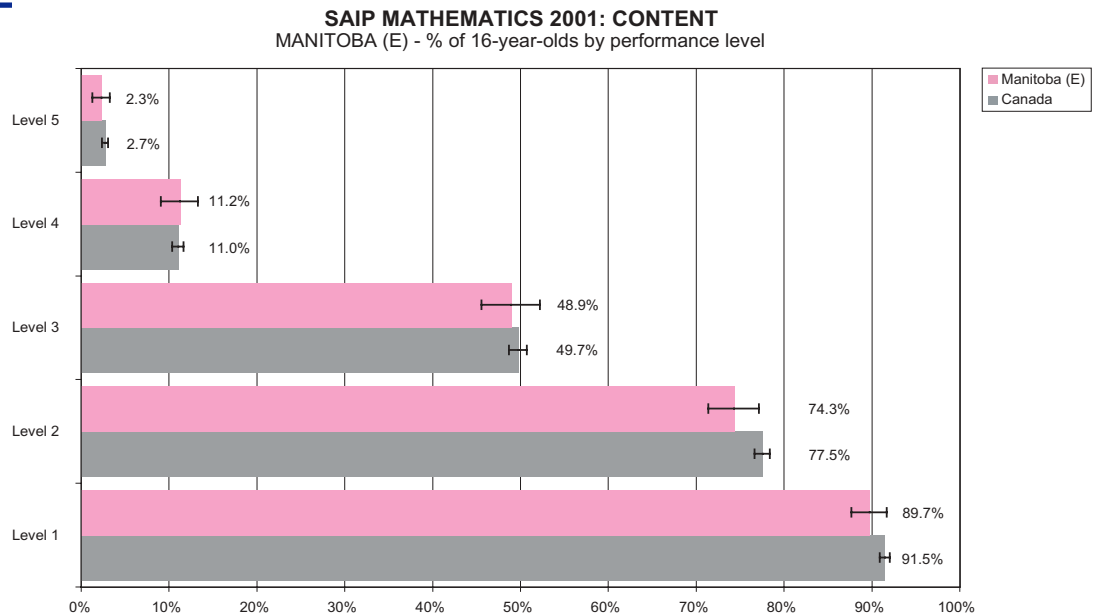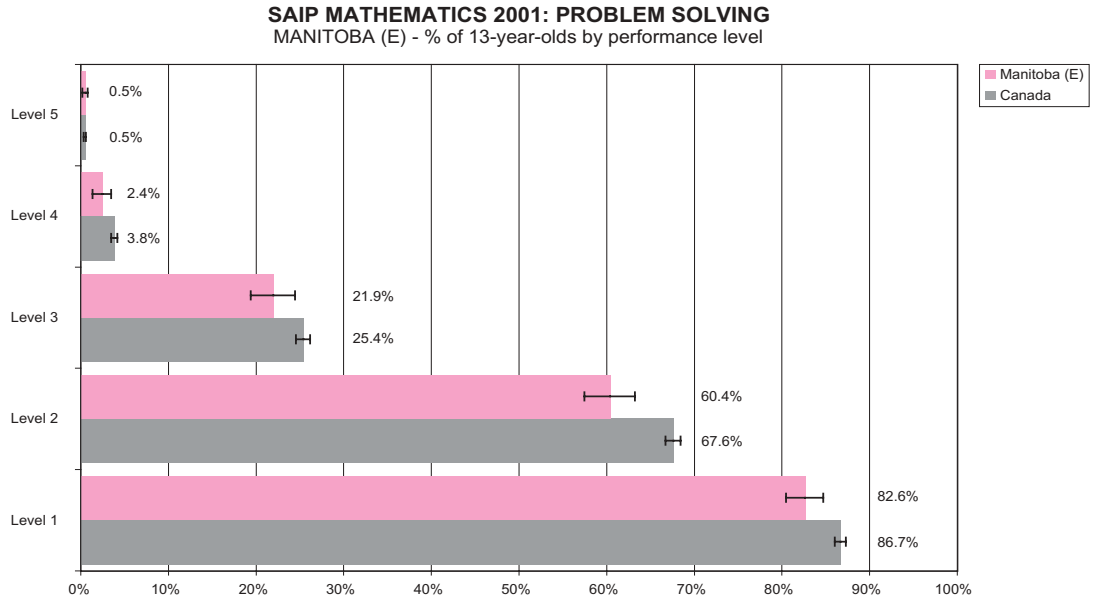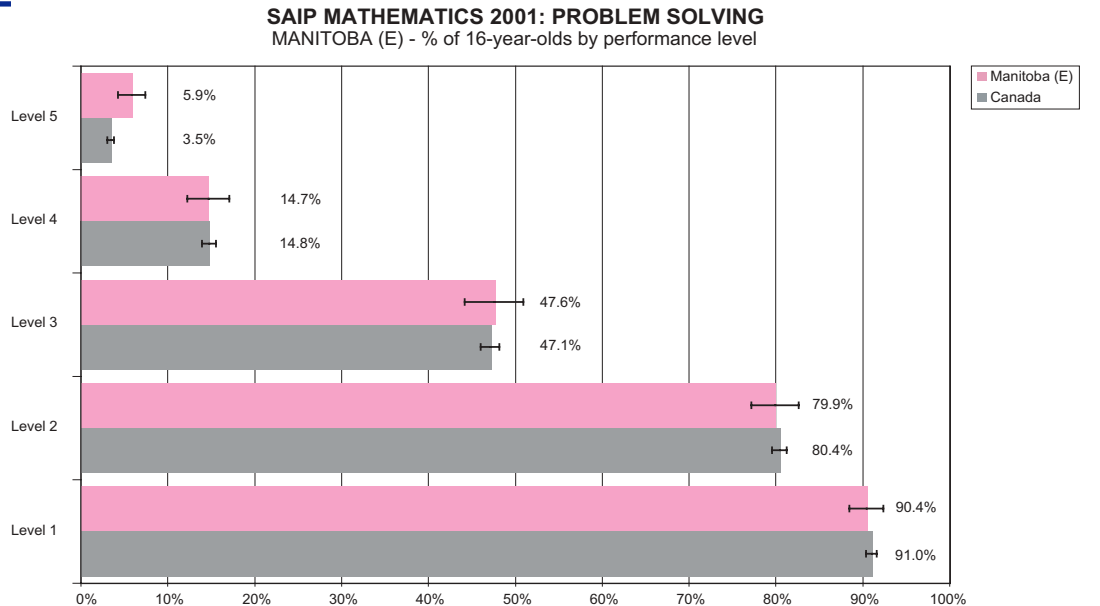| Level | Manitoba (E) | Canada |
|-------|-------------|--------|
| Level 5 | 2.3% | 2.7% |
| Level 4 | 11.2% | 11.0% |
| Level 3 | 48.9% | 49.7% |
| Level 2 | 74.3% | 77.5% |
| Level 1 | 89.7% | 91.5% |

*Problem Solving*

There are significant differences between the achievement of Manitoba 13-year-old students who responded in English and Canada as a whole, except at levels 4 and 5. In general, Manitoba 16-year-old students who responded in English performed as well as the Canadian average at levels 1 to 4, and better than the Canadian average at level 5.

In comparison with the results of the 1997 assessment, there was a significant increase in the number of 13-year-olds in the 2001 assessment achieving levels 2 and 3. More 16-year-old students performed at levels 3, 4, and 5 as well in 2001.

## CHART MB(E)3

**SAIP MATHEMATICS 2001: PROBLEM SOLVING**
MANITOBA (E) - % of 13-year-olds by performance level



Legend: Manitoba (E), Canada

| Level | Manitoba (E) | Canada |
|-------|--------------|--------|
| Level 5 | 0.5% | 0.5% |
| Level 4 | 2.4% | 3.8% |
| Level 3 | 21.9% | 25.4% |
| Level 2 | 60.4% | 67.6% |
| Level 1 | 82.6% | 86.7% |

## CHART MB(E)4

**SAIP MATHEMATICS 2001: PROBLEM SOLVING**
MANITOBA (E) - % of 16-year-olds by performance level



Legend: Manitoba (E), Canada

| Level | Manitoba (E) | Canada |
|-------|--------------|--------|
| Level 5 | 5.9% | 3.5% |
| Level 4 | 14.7% | 14.8% |
| Level 3 | 47.6% | 47.1% |
| Level 2 | 79.9% | 80.4% |
| Level 1 | 90.4% | 91.0% |

# Results for Manitoba (French)

*Mathematics Content*

Manitoba 16-year-old students who responded in French performed significantly better than Canada as a whole at levels 1, 2, and 3, and as well as Canada at levels 4 and 5. There are significant differences between the achievement of Manitoba French-language 13-year-old students and Canada as a whole at levels 2 and 4. At other levels, these students performed as well as Canadian students as a whole.

There were no changes in achievement for Manitoba French-language 16-year-old students between the 1997 assessment and that of 2001. Fewer 13-year-old Manitoba French-language students performed at level 3 in the 2001 assessment.
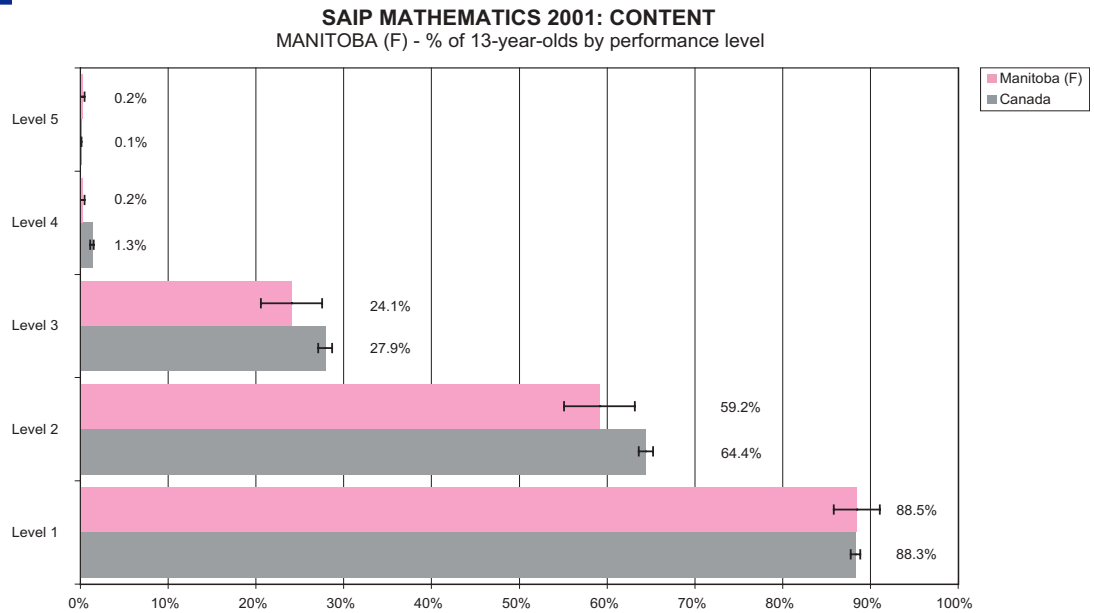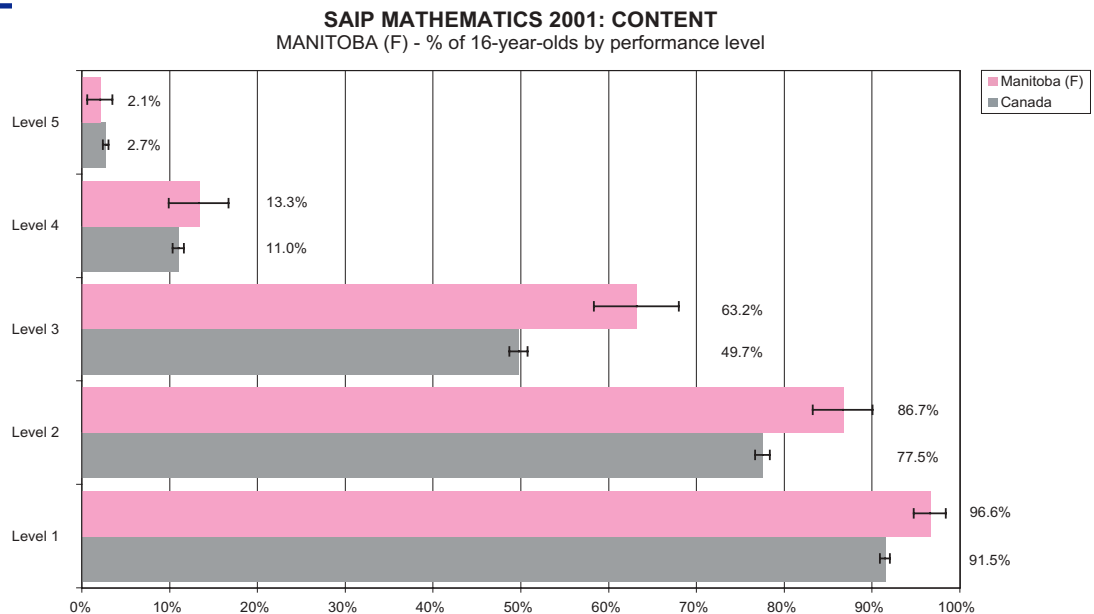
## CHART MB(F)1

**SAIP MATHEMATICS 2001: CONTENT**
MANITOBA (F) - % of 13-year-olds by performance level



## CHART MB(F)2

**SAIP MATHEMATICS 2001: CONTENT**
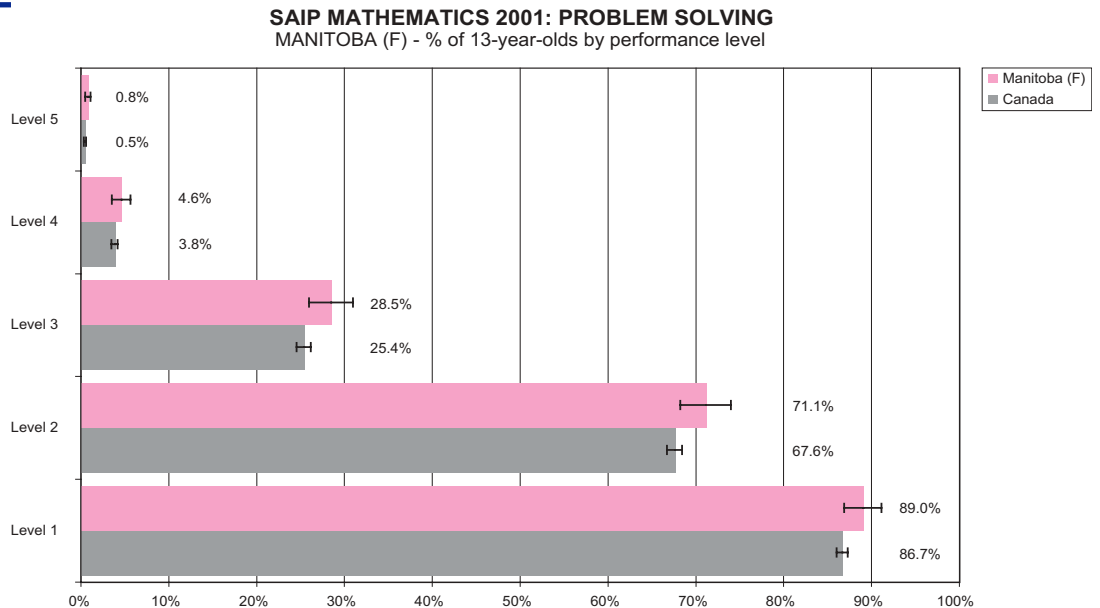MANITOBA (F) - % of 16-year-olds by performance level

*Problem Solving*

Manitoba 16-year-old students who responded in French performed better than the Canadian average at levels 1, 2, and 3, and as well as Canada overall at levels 4 and 5. There are no significant differences between the achievement of Manitoba 13-year-old students who responded in French and that of Canada as a whole.

In comparison with the results of the 1997 assessment, there were significant increases in the number of students in both age groups in the 2001 assessment achieving levels 2, 3, and 4. More 16-year-old students performed at level 5 as well in 2001.

## CHART MB(F)3

**SAIP MATHEMATICS 2001: PROBLEM SOLVING**
MANITOBA (F) - % of 13-year-olds by performance level



Legend: Manitoba (F), Canada

| Level | Manitoba (F) | Canada |
|-------|--------------|--------|
| Level 5 | 0.8% | 0.5% |
| Level 4 | 4.6% | 3.8% |
| Level 3 | 28.5% | 25.4% |
| Level 2 | 71.1% | 67.6% |
| Level 1 | 89.0% | 86.7% |

## CHART MB(F)4

**SAIP MATHEMATICS 2001: PROBLEM SOLVING**
MANITOBA (F) - % of 16-year-olds by performance level



Legend: Manitoba (F), Canada

| Level | Manitoba (F) | Canada |
|-------|--------------|--------|
| Level 5 | 5.2% | 3.5% |
| Level 4 | 17.2% | 14.8% |
| Level 3 | 59.2% | 47.1% |
| Level 2 | 89.5% | 80.4% |
| Level 1 | 97.1% | 91.0% |