

Why Census Testing is needed for “Fairness to Students”

San Sebastian
July, 2008

Grading Policies

Student's Assignments

Grade

1

C

2

C

3

MA (Missing Assignment)

4

D

5

C

6

B

7

MA (Missing Assignment)

8

MA (Missing Assignment)

9

B

10

A

Final Grade

Gender influences ICU care, study says

Women less likely to be
admitted, more likely to die

MARGARET MUNRO
CanWest News Service

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Older women with heart failure and other critical conditions receive less life support and die in greater numbers than men in intensive-care units, according to a disturbing new Canadian study.

This difference was most pronounced among women over 50, who were 32 per cent less likely than men to be admitted to ICUs. They were also nine per cent less likely than men to receive mechanical ventilation to assist breathing, and 20 per cent less likely to receive pulmonary artery catheters to monitor failing hearts.

They were also more likely to die.

"Among older patients, being female was associated with a 20-per-cent increased risk of death in ICU, an eight-per-cent increased risk of death in hospital and six-per-cent increased risk of death over one year," reports a medical team that looked at almost 500,000 patients admitted to 13 Ontario hospitals over two years.

"You can't deny there are differences," says Dr. Robert Fowler, a critical-care doctor at Sunnybrook Health Sciences Centre and a researcher at the University of Toronto, who headed the study.

The report, to be published in the Dec. 4 issue of the *Canadian Medical Association Journal*, is being held up as clear evidence of gender disparities in the quality and provision of health care.

Dr. Arlene Bierman of the U of T describes the differences in death rates between older men and women in ICU as "particularly troubling."

Dr. Nancy Baxter of Toronto's St. Michael's Hospital notes that the study focuses on critically ill patients who had already been admitted to hospital "where it is assumed that care is delivered strictly on the basis of need." But the study, she says, "demonstrates that the sex of the patient influences not only the care he or she receives in ICU, but also whether he or she is admitted to ICU in the first place."

Bierman and Baxter say the findings are just the latest evidence of gender-related differences in Canadian health care. Other studies have found women are not as likely as men to be admitted to hospital after arriving at emergency departments with heart problems, are less likely than men to receive implantable cardiac defibrillators, and are at increased risk of receiving potentially inappropriate medications.

See ICUs / A2

- Female knee surgery patients face gender bias.
- Men twice as likely to be offered access to replacement option, study finds.

- Ontario Study
- Edmonton Journal
- March 11, 2008

- Women would be wrong to trust their doctors to treat their chronic knee pain as seriously as they would a man's, new undercover Canadian research suggests.
- In a unique, covert experiment dubbed "Operation Knee," one male and one female "mystery" patient with arthritis of the knee were sent to 67 family doctors and orthopedic surgeons in Ontario to ask, "Doctor, do I need a new knee?"

- Overall, the male patient was twice as likely as the female to be recommended for total knee replacement.
- Among orthopedic surgeons only, the man was nine times more likely than the woman to be recommended for a new knee joint.

- They're also less likely to receive kidney dialysis, a kidney transplant or to undergo cardiac catheterization to unblock clogged coronary arteries.
- Another Ontario study published in 2000 found that, compared to men, women have more arthritis of the hip or knee, worse symptoms and greater disability. But women are three times less likely to be offered joint replacement than men.

- But past opinion surveys by some of the same researchers found that more than 93 per cent of family doctors and orthopedic surgeons say a patient's gender has no bearing whatsoever on their decision to recommend or perform joint replacement.
- The Toronto team wondered, are doctors saying one thing and doing another?
- Acknowledging a gender bias exists, “is the first step toward ensuring that women receive complete and equal access to total joint arthroplasty,” the researchers write in today's CMAJ.

Teacher bias that I have observed is most insidious not in the tests themselves, but in the conflation of **academic performance and behavior** when translating test performance into marks for the report card.

Doug Reeves
November 18, 2007

Students (disproportionately minority girls in my research) receive higher letter grades for lower actual achievement, because of their quiet, compliant, and respectful attitude. I will note, parenthetically, that I'm all in favor of quiet, compliant, and respectful behavior among teenagers – I just wish that we would not call these characteristics “algebra” or “physics”. Other students (disproportionately boys) receive lower letter grades for higher actual achievement, because of disorganization and oppositional behavior. Every time I ask teachers if they can think of students who make A's or B's on tests, yet receive D's or F's in the class, almost every hand goes up. These educators – nice people no doubt – do not seem to realize that they are admitting clear evidence that their homework assignments are irrelevant and their grading policies are corrupt.

I ask audiences how their community would react if, in the course of a school athletic contest, three officials on the field of play simultaneously rendered three different rulings on a play. They readily agree that parents and students would be on their feet screaming, “That’s not fair!” And so they would, because in activities we value, such as school sports, we expect fairness and consistency. It’s only in the classroom where that value is rarely expected.

Redefining Alberta's Education System in the 1980's

- Within three years of the abolishing of Grade 12 Departmental Examinations concern was voiced over conditions that were perceived to have developed in the education system. These included:
 - Standards in schools had fallen
 - School systems needed to be more accountable for their performance to taxpayers

Redefining Alberta's Education System in the 1980's continued

- **Grade inflation**
- Students entering post-secondary institutions were not as well-prepared as before
- The school system was not challenging the most gifted students to do their best

Redefining Alberta's Education System in the 1980's continued

In response to the proposals the following were announced in 1980:

Achievement Testing Program for Grades 3, 6, and 9. **One test per year** would be administered in each of these grades on a rotating basis in the four core subjects of social studies, English language arts, science and mathematics. Grade 3 would only be in social studies and English language arts.

Redefining Alberta's Education System in the 1980's continued

Grade 12 Achievement Tests are introduced.

A system of comprehensive tests for certifying academic achievement for high school graduates were introduced. Due to misunderstanding of this initiative a new position paper was circulated that called for the return of compulsory Grade 12 examinations.

Redefining Alberta's Education System in the 1980's continued

After meeting with all major education stakeholders it was agreed that compulsory diploma examinations were to be introduced and the **weighting of these exams would be 50% of the final grade 12 mark**. This was announced on May 31, 1983.

Alberta Assessment Changes - 1990's

1994-Achievement Testing Program expanded to have tests offered in each of the testing areas **annually** instead of on a rotational basis.

1996-Diploma examinations expanded with the addition of exams in Social Studies 33, Mathematics 33 and Science 30.

Alberta Assessment Changes - 2000's

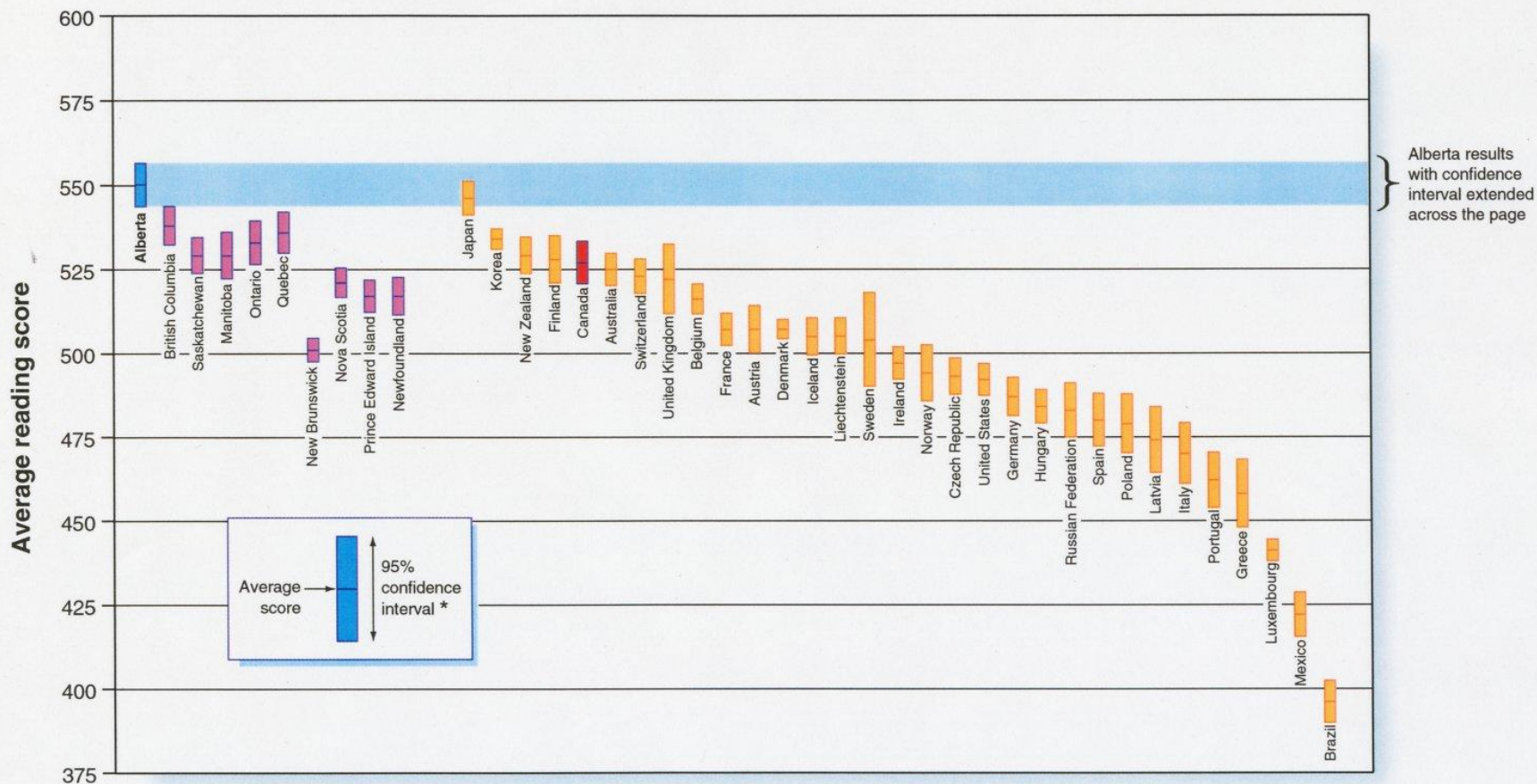
2001 - Achievement over-time initiative and the introduction of anchor tests.

“The key purpose of the introduction and use of anchor tests is to ensure that students writing diploma examinations at different times in the school year and across school years are being **evaluated fairly**. Evidence from the anchor tests will serve as reference to determine whether “differences” in examination results are due to examination difficulty or to actual performance changes.” (Alberta Education, *Letter to Superintendents of Schools, September 28, 2001, p. 1*)

PISA 2000 - (OECD) - Students Aged 15

Alberta results in relation to other provinces and participating countries

Alberta ranks high in reading literacy



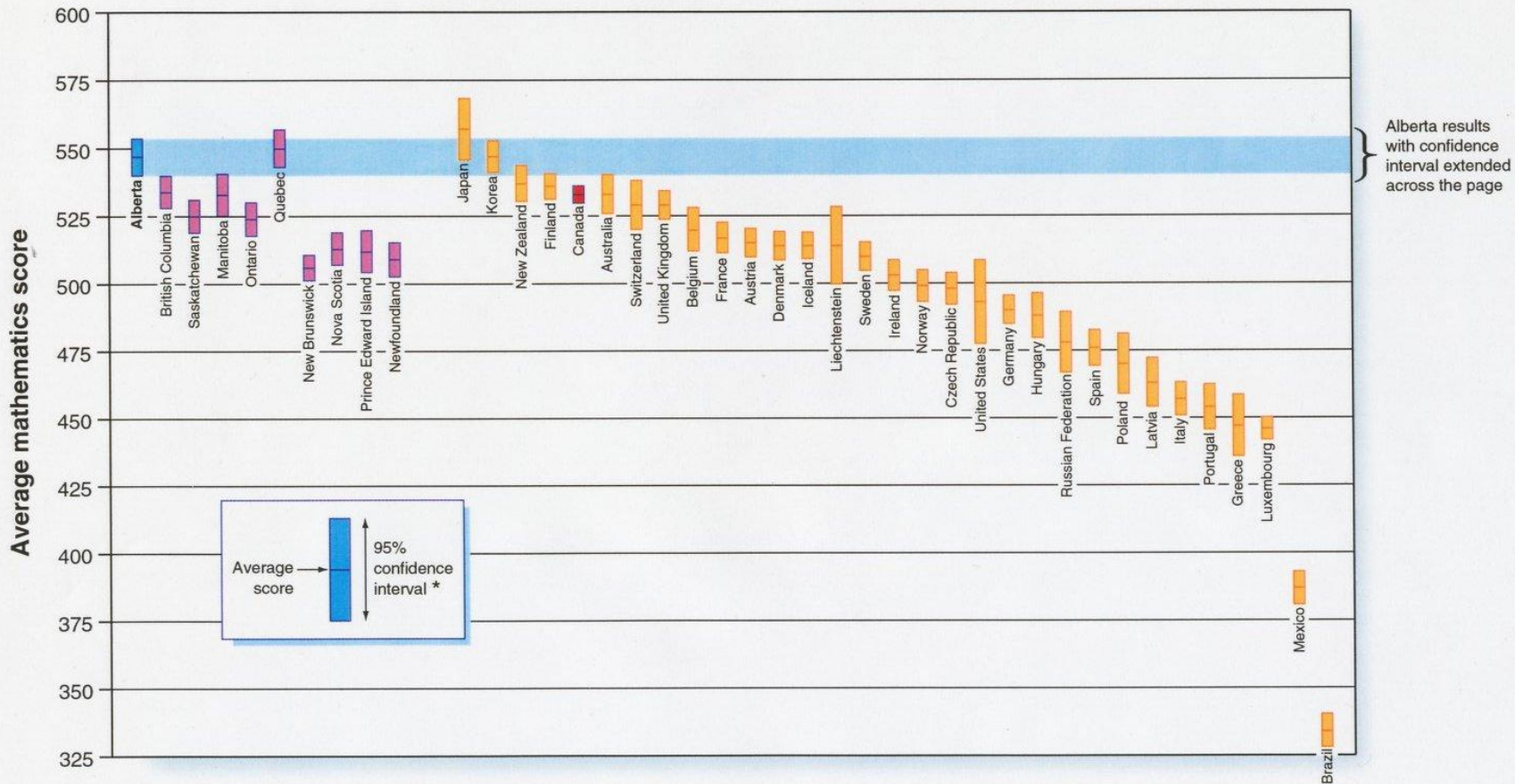
Note:

* Confidence intervals are used because relatively small samples of students are assessed. The study was designed with an overall OECD average of 500 and standard deviation of 100.

PISA 2000 - (OECD) - Students Aged 15

Alberta results in relation to other provinces and participating countries

Alberta ranks high in mathematics



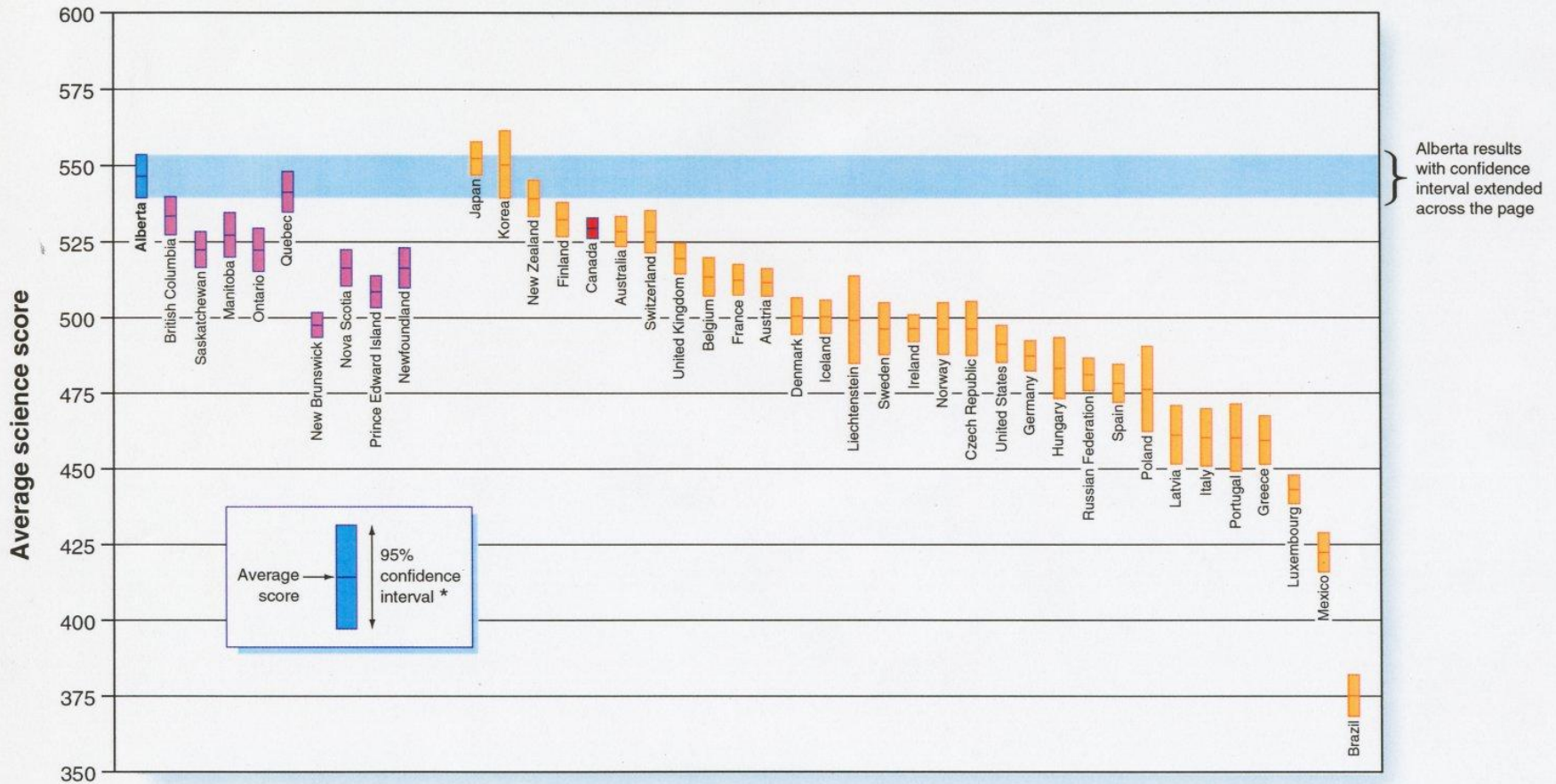
Note:

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PISA 2000 - (OECD) - Students Aged 15

Alberta results in relation to other provinces and participating countries

Alberta ranks high in science



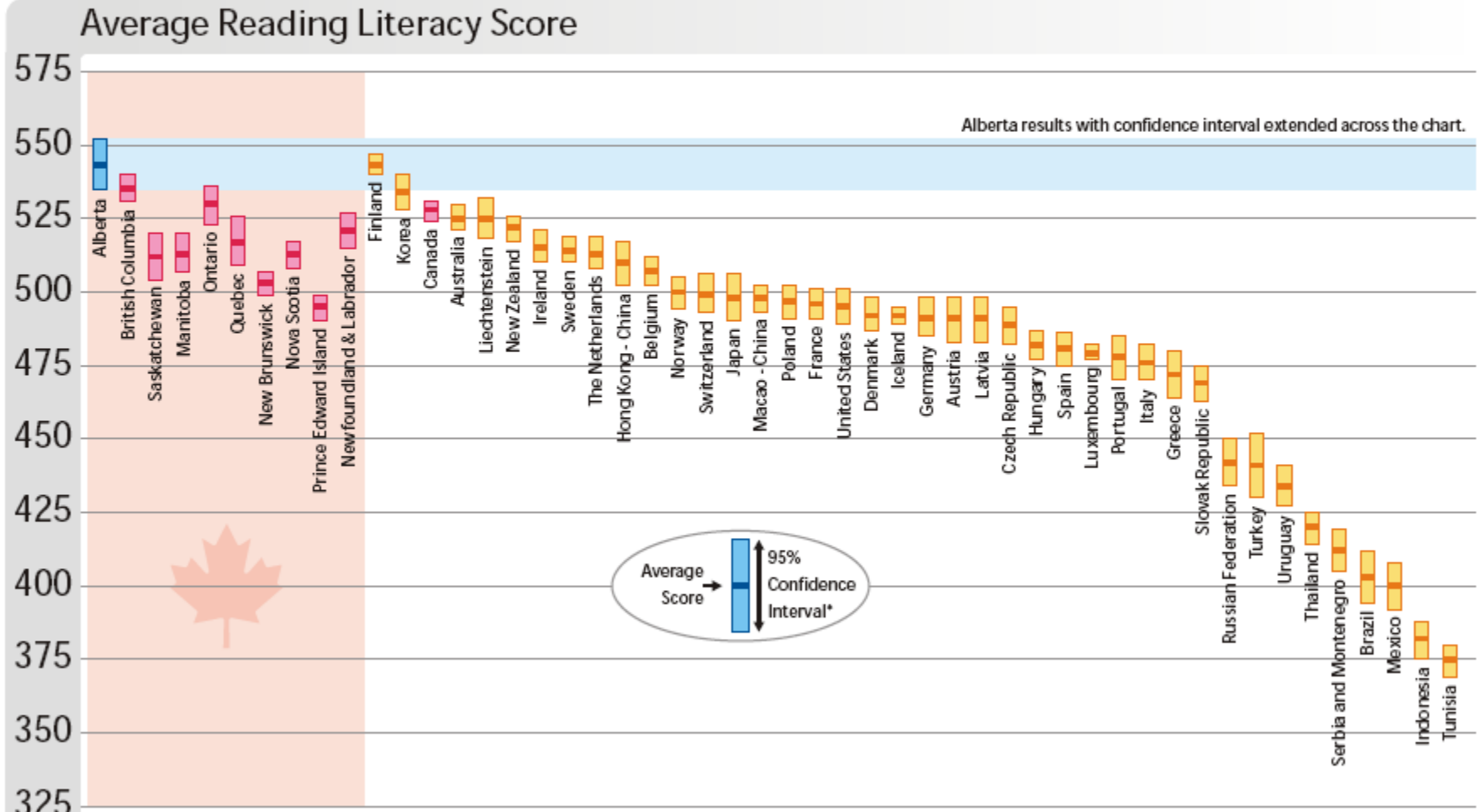
Note:

* Confidence intervals are used because relatively small samples of students are assessed. The study was designed with an overall OECD average of 500 and standard deviation of 100.

PISA 2003 - Students Aged 15 - Reading Literacy

Alberta results in relation to other provinces and participating countries

Alberta ranks high in reading literacy

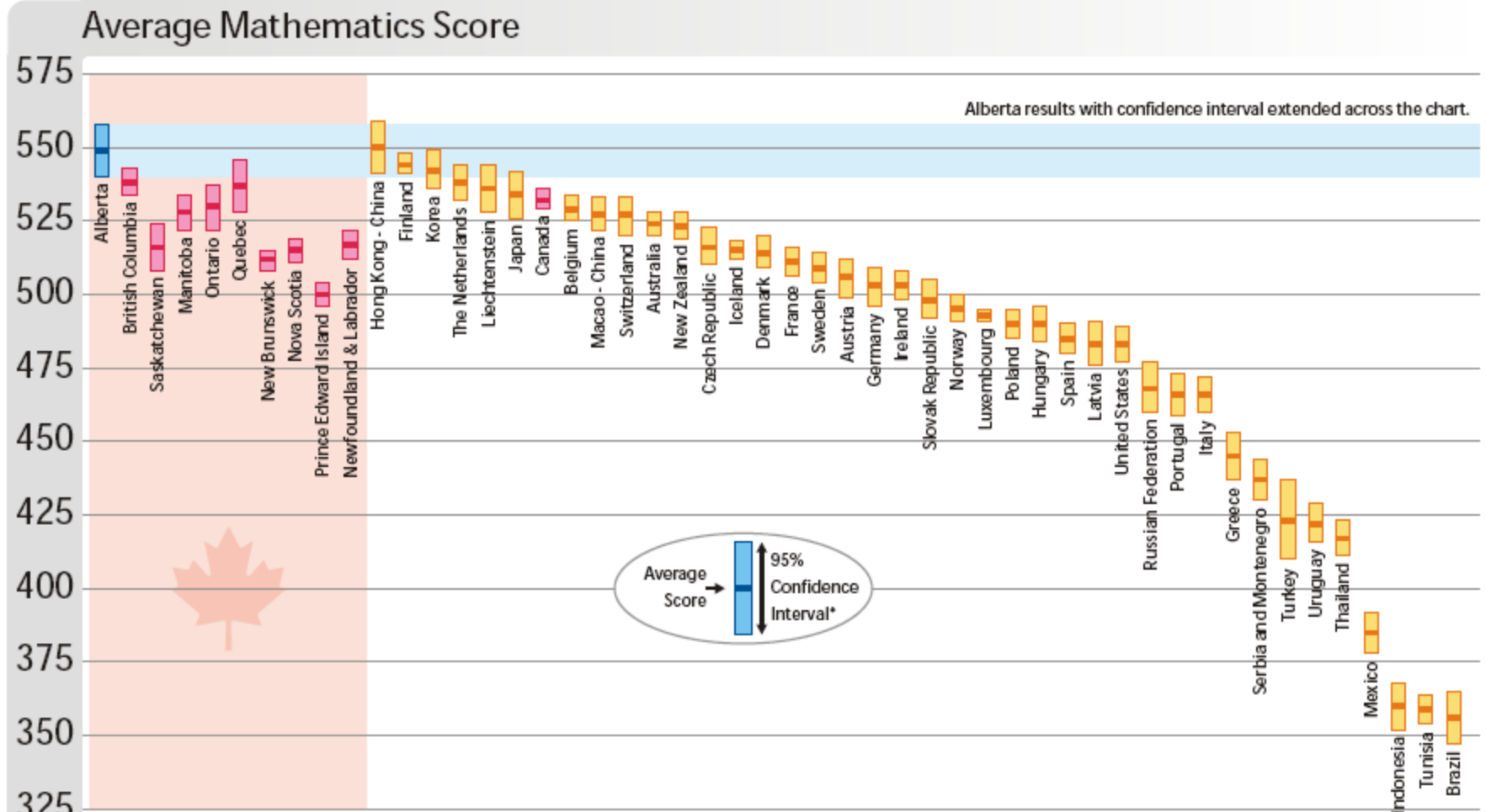


* Differences in average scores are not statistically significant when the confidence intervals overlap. The overall OECD average score for the PISA 2003 reading test is 494.

PISA 2003 - Students Aged 15 - Mathematics

Alberta results in relation to other provinces and participating countries

Alberta ranks high in mathematics

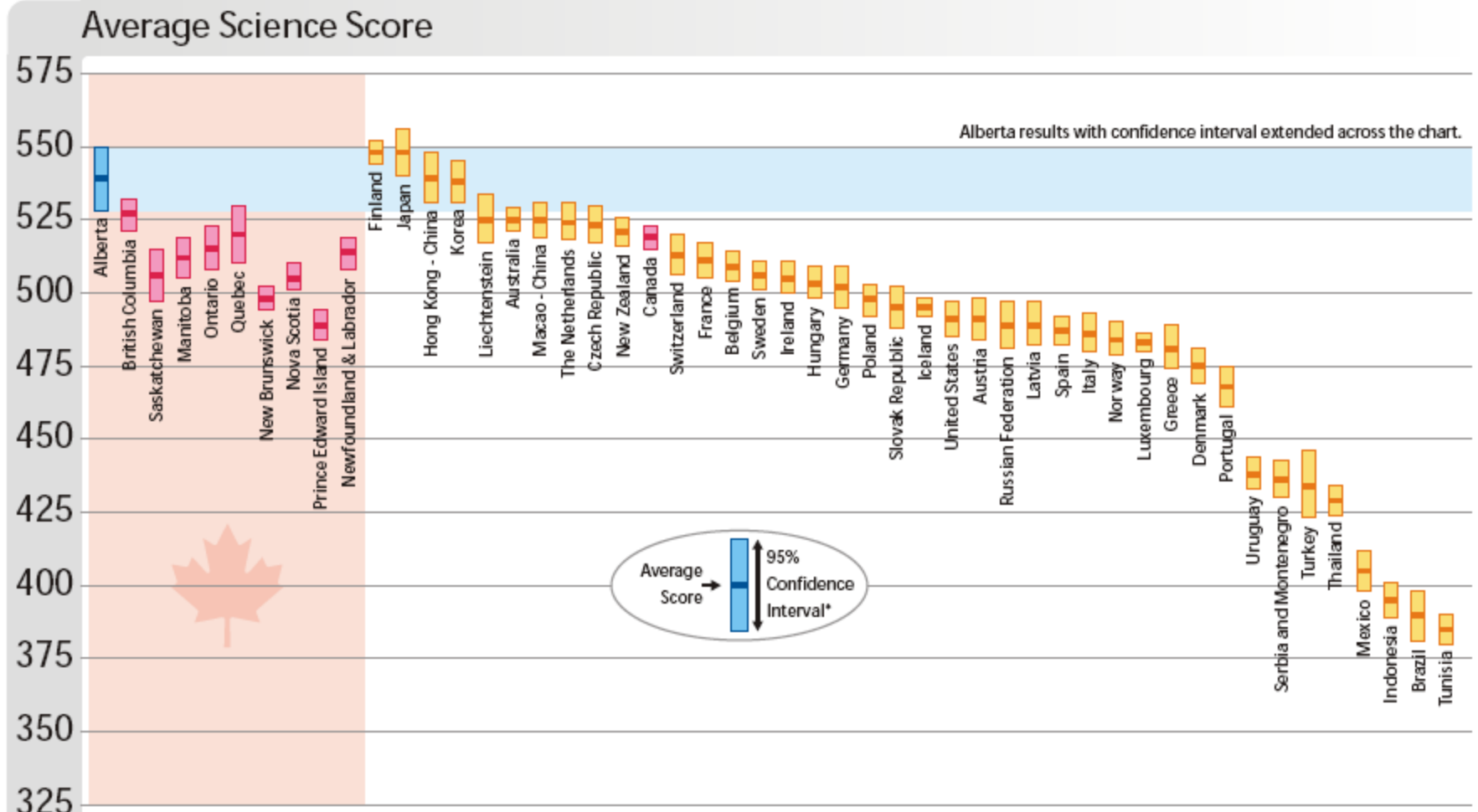


* Differences in average scores are not statistically significant when the confidence intervals overlap. The average score for the OECD countries as a whole is 500 with a standard deviation of 100.

PISA 2003 - Students Aged 15 - Science

Alberta results in relation to other provinces and participating countries

Alberta ranks high in science



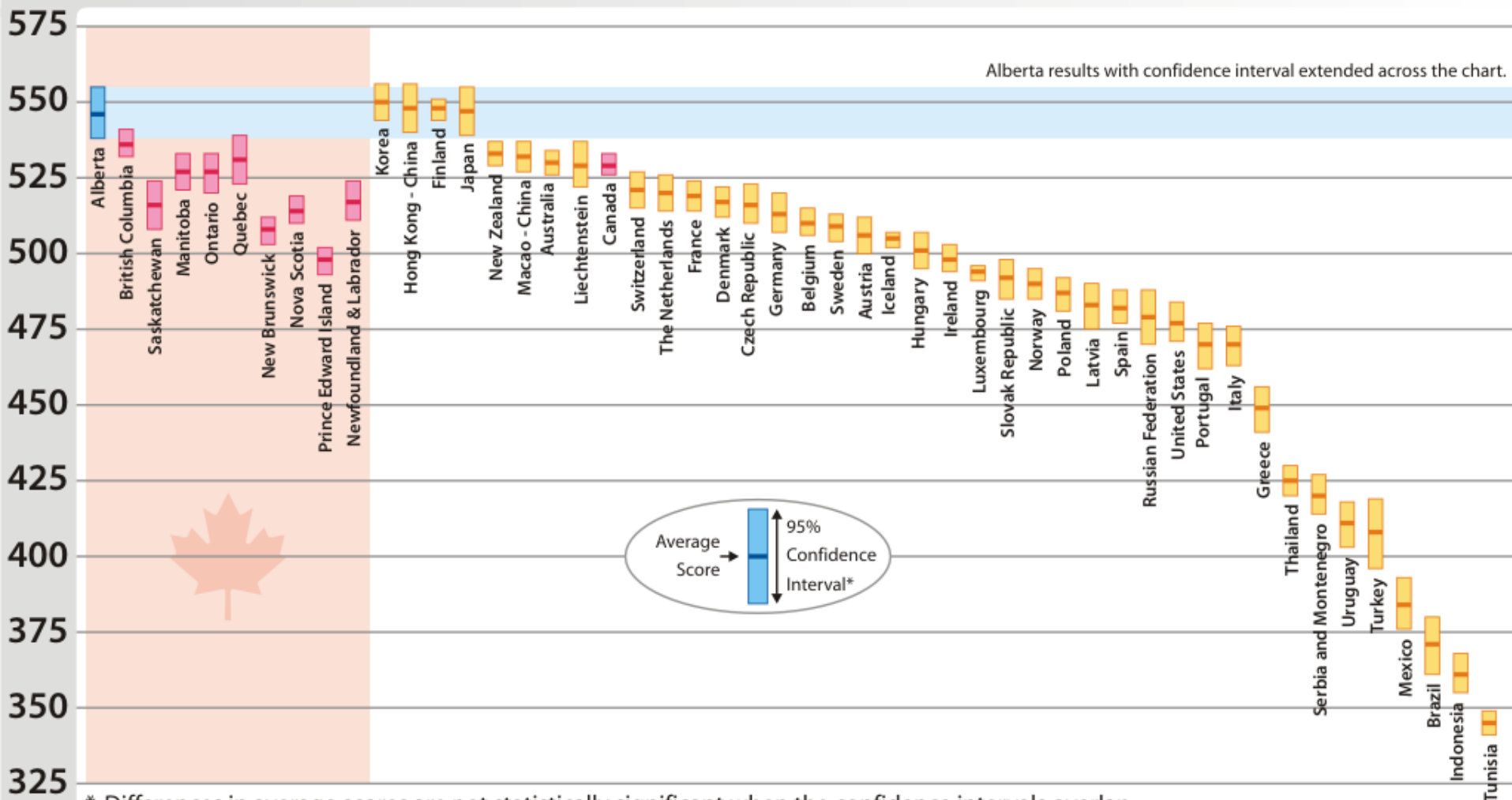
* Differences in average scores are not statistically significant when the confidence intervals overlap. The average score for the OECD countries as a whole is 500 with a standard deviation of 100.

PISA 2003 - Students Aged 15 - Problem Solving

Alberta results in relation to other provinces and participating countries

Alberta ranks high in problem solving

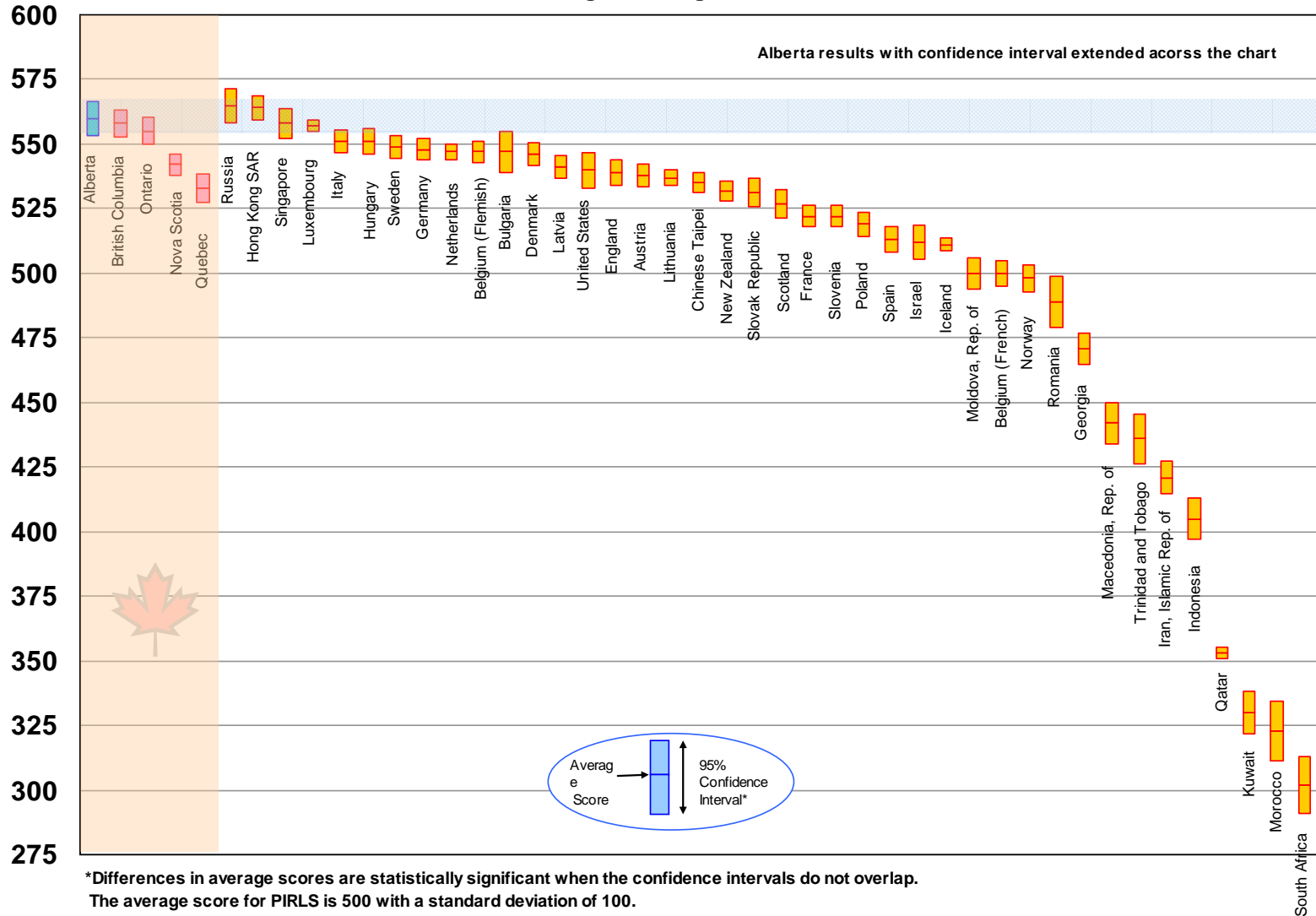
Average Problem Solving Score



* Differences in average scores are not statistically significant when the confidence intervals overlap. The average score for the OECD countries as a whole is 500 with a standard deviation of 100.

PROGRESS IN INTERNATIONAL READING LITERACY STUDY (PIRLS) 2006

Alberta Results in relation to other provinces and participating countries Grade 4 Average Reading Score

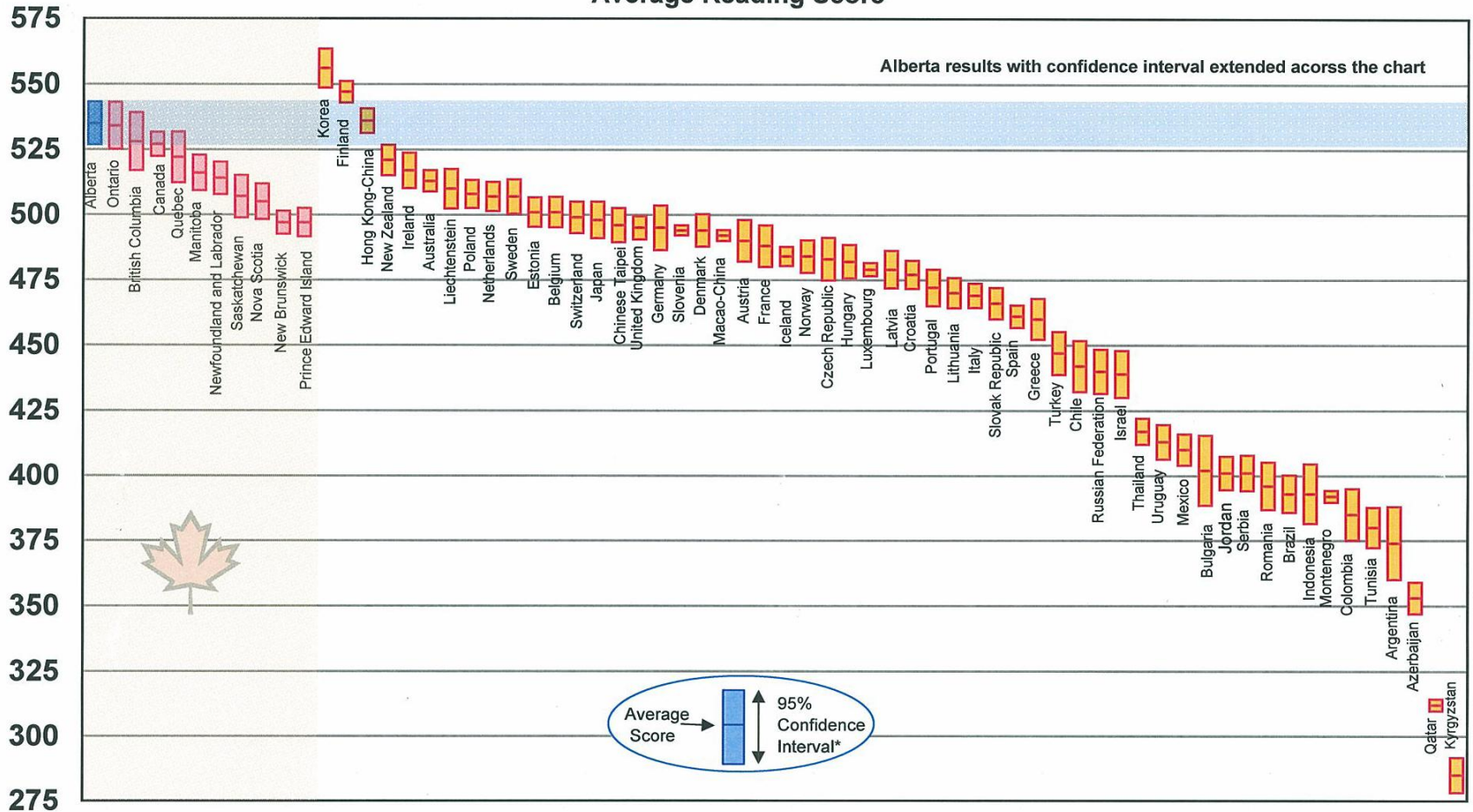


*Differences in average scores are statistically significant when the confidence intervals do not overlap.
The average score for PIRLS is 500 with a standard deviation of 100.

PISA 2006 - Students Aged 15 - Reading

Alberta Results in relation to other provinces and participating countries

Average Reading Score

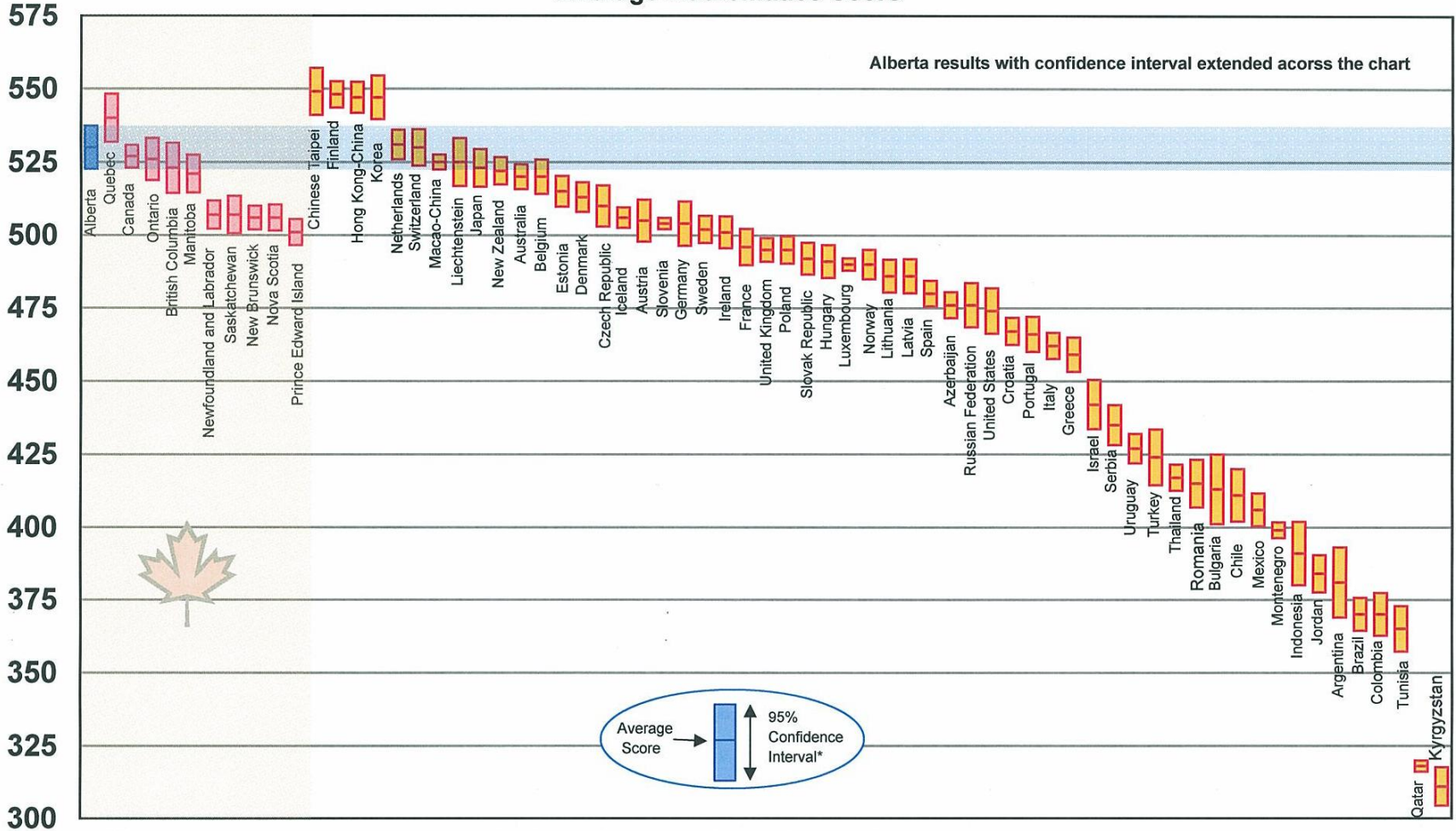


*Differences in average scores are not statistically significant when the confidence intervals overlap.
 The average score for the OECD countries as a whole is 500 with a standard deviation of 100.

PISA 2006 - Students Aged 15 - Mathematics

Alberta Results in relation to other provinces and participating countries

Average Mathematics Score

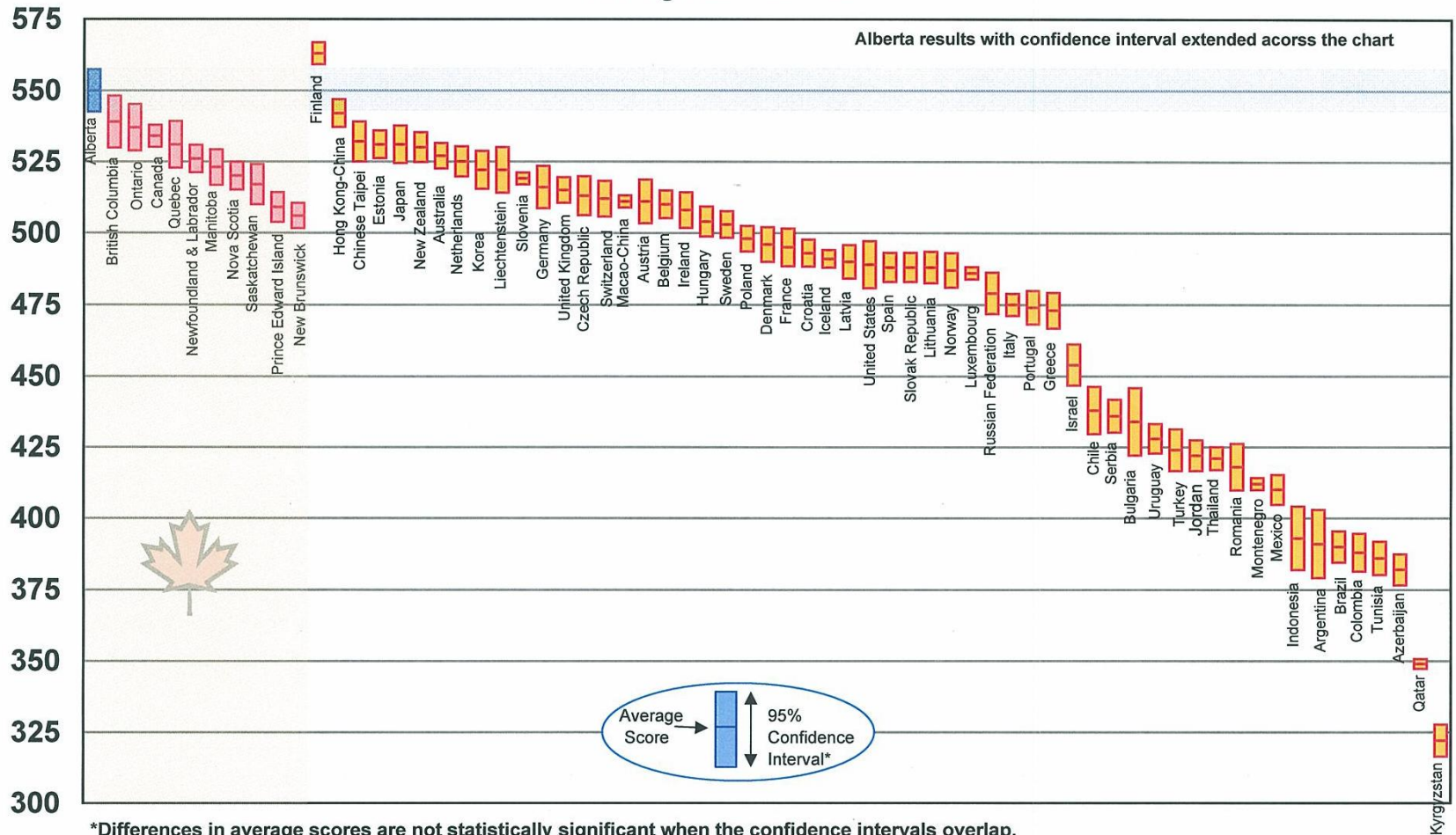


*Differences in average scores are not statistically significant when the confidence intervals overlap.
 The average score for the OECD countries as a whole is 500 with a standard deviation of 100.

PISA 2006 - Students Aged 15 - Science

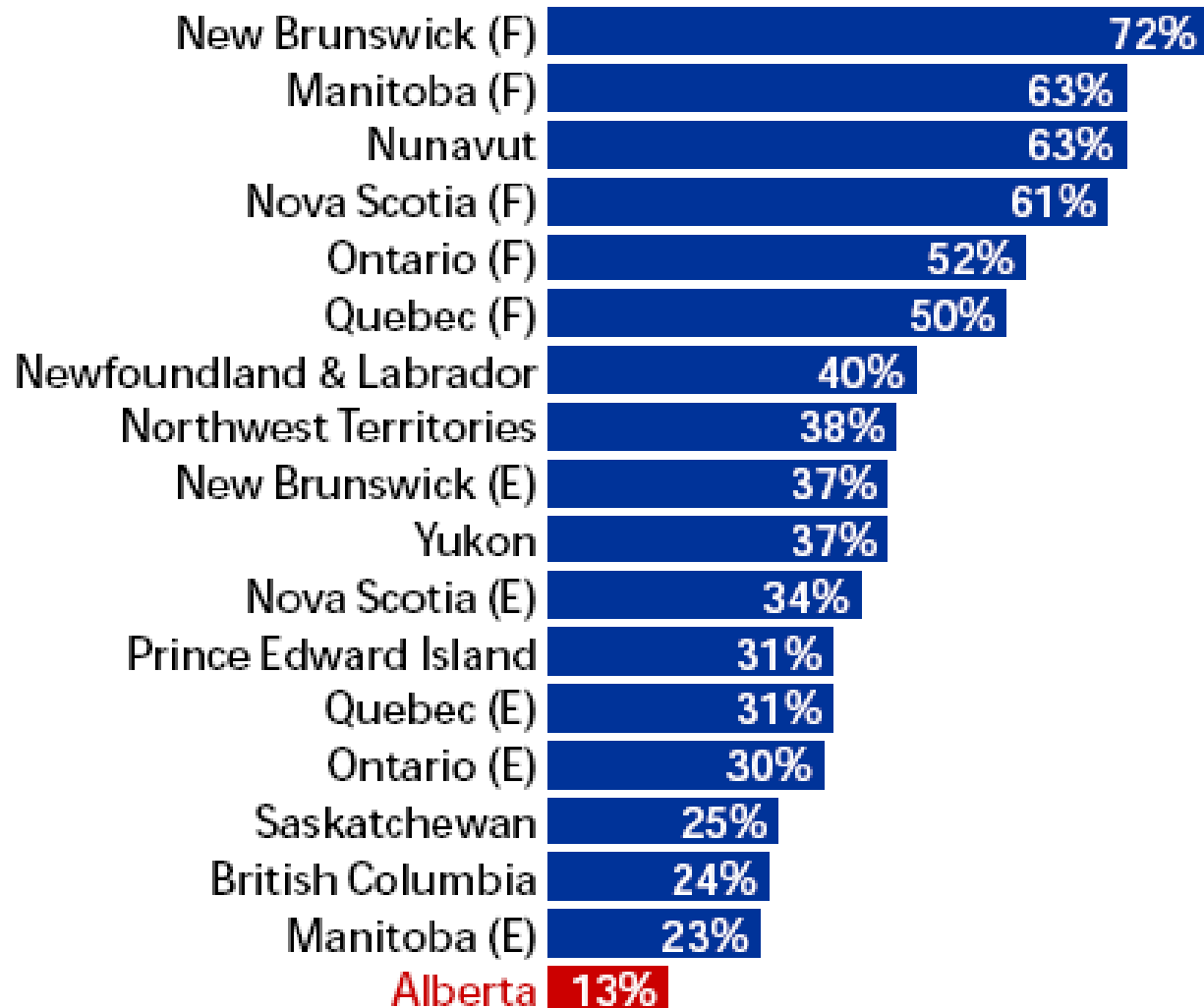
Alberta Results in relation to other provinces and participating countries

Average Science Score

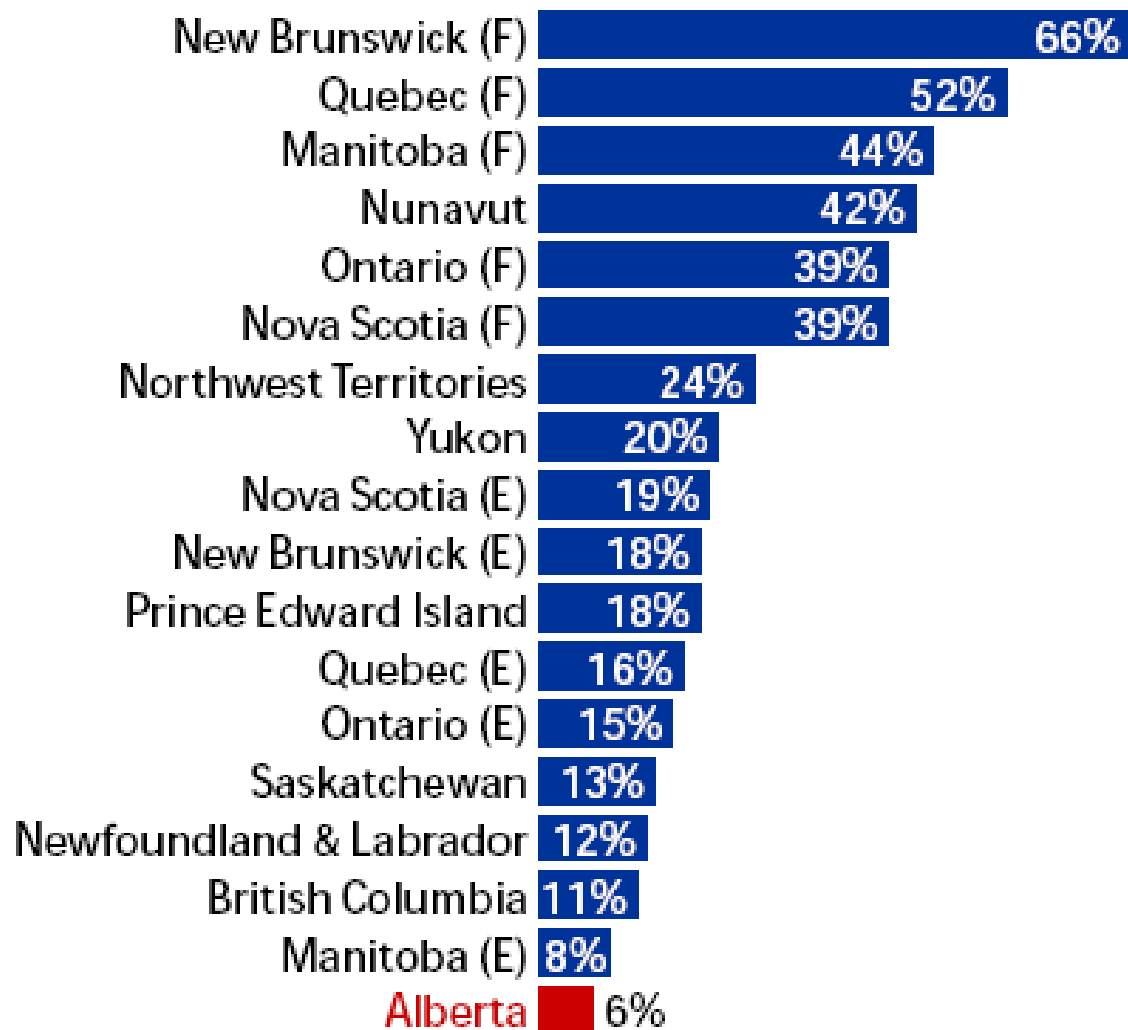


*Differences in average scores are not statistically significant when the confidence intervals overlap.
The average score for the OECD countries as a whole is 500 with a standard deviation of 100.

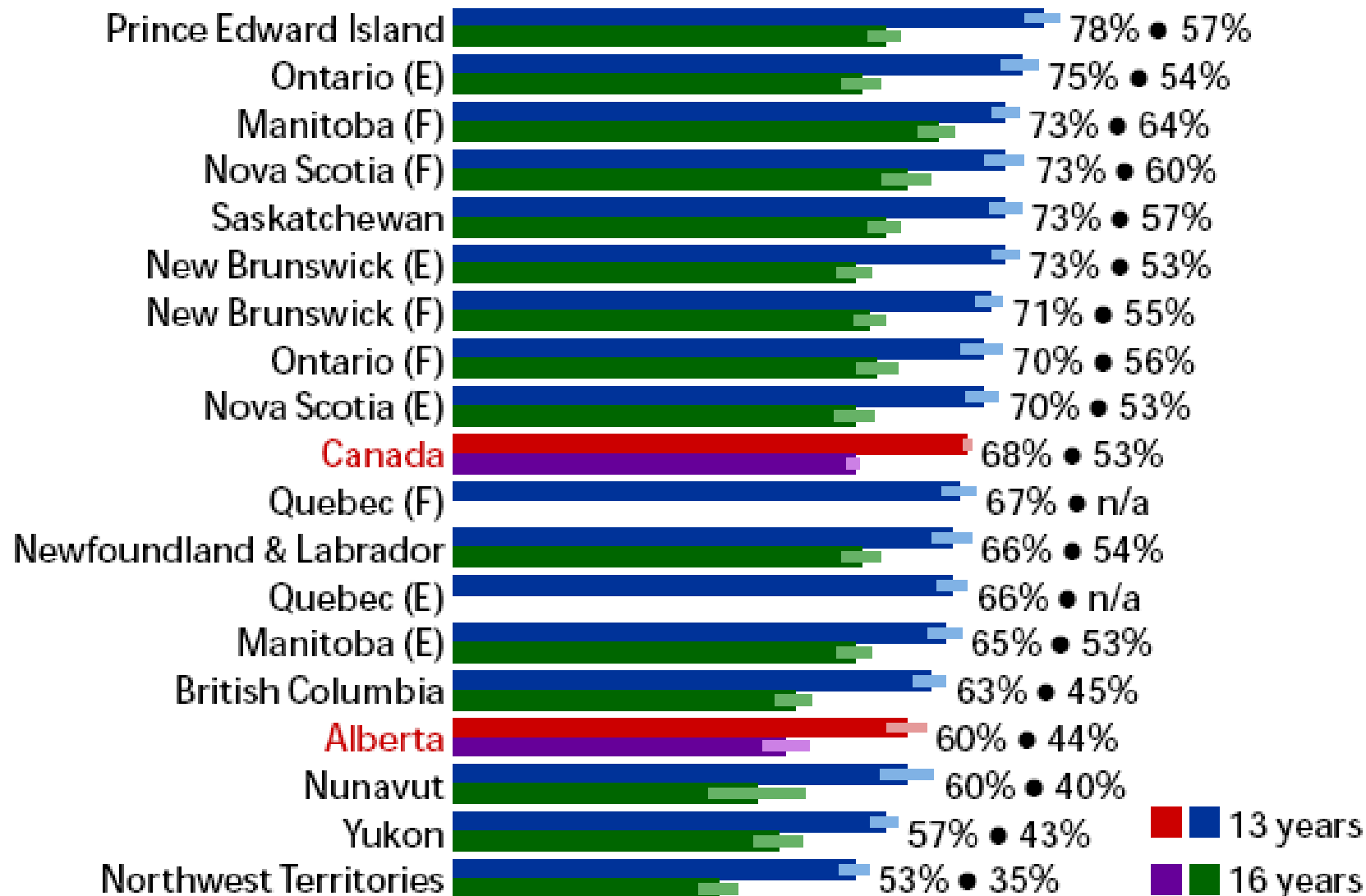
teachers giving quite a lot or a great deal of weight to improvement over the year or term in assigning student grades



teachers giving quite a lot or a great deal of weight to class attendance in assigning student grades



students with average math mark of 70% or more



McGill admits Ontario applicants require higher marks to get in: Grade inflation

By: Sarah Schmidt

National Post April 22, 2004 Pg. A4

OTTAWA – Montreal's McGill University has become the first in Canada to insist applicants from Ontario have higher marks than their peers from other provinces to earn admission.

Universities have long wrestled with concerns over grade inflation, particularly at Ontario high schools, always concluding there was no fair way to measure or account for it in the admissions process. But pressure has been mounting to address the issue because demand for post-secondary education is outpacing growth in the system, and entrance requirements are rising as a result.

McGill is alerting high school guidance counselors across Canada that minimum grades required for admission have been higher for Ontario students than applicants from the rest of Canada. The system has been in place for a few years, but McGill has just recently begun publicizing the information.

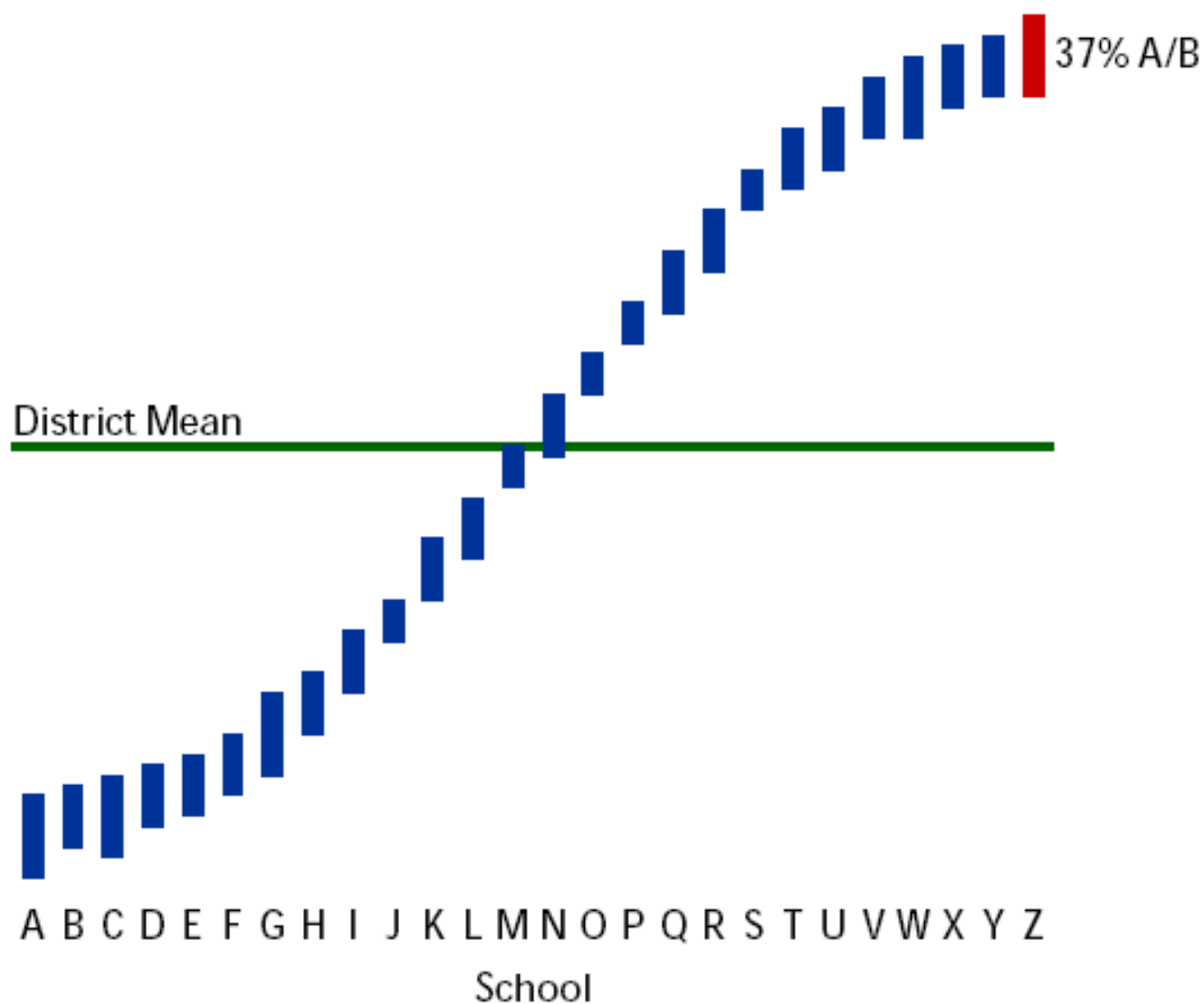
“They’re not equal,” Kim Bartlett, McGill’s director of admissions, said of high school grades across Canada’s education systems. “What we’re trying to do is to get the best students from every applicant pool and get students about the same caliber from every applicant pool.”

Last fall, it meant Ontario applicants needed at least an **89%** average in their last year of high school to earn admission to McGill’s science program.

Other Canadian high school students needed at least an **82%** average in Grade 12.

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School Scores on Achievement Tests



School Scores on Achievement Tests

School awarded marks can vary considerably. Achievement tests establish a common standard across the province.

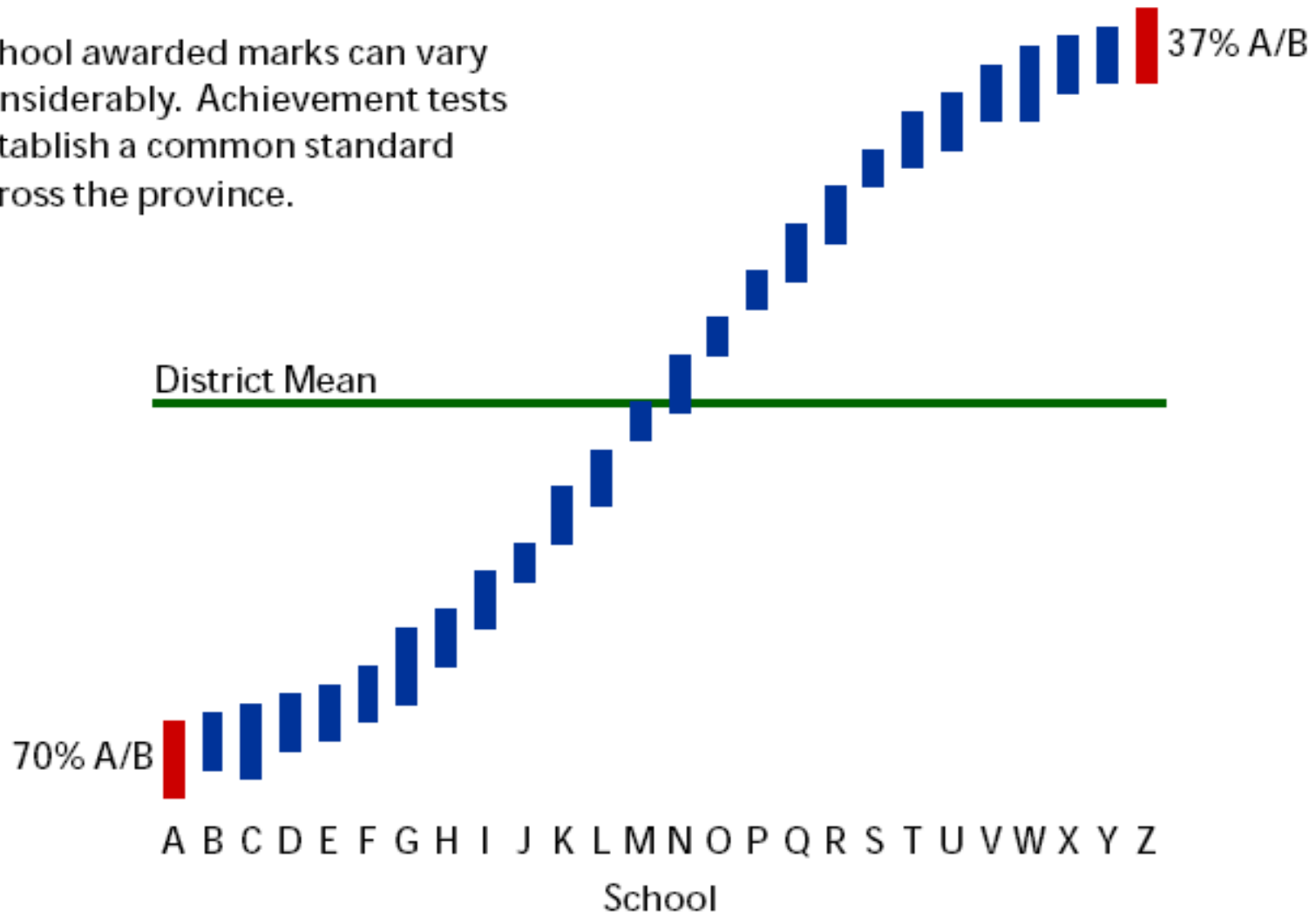


Figure 1: NB francophone average school marks and average provincial exam marks

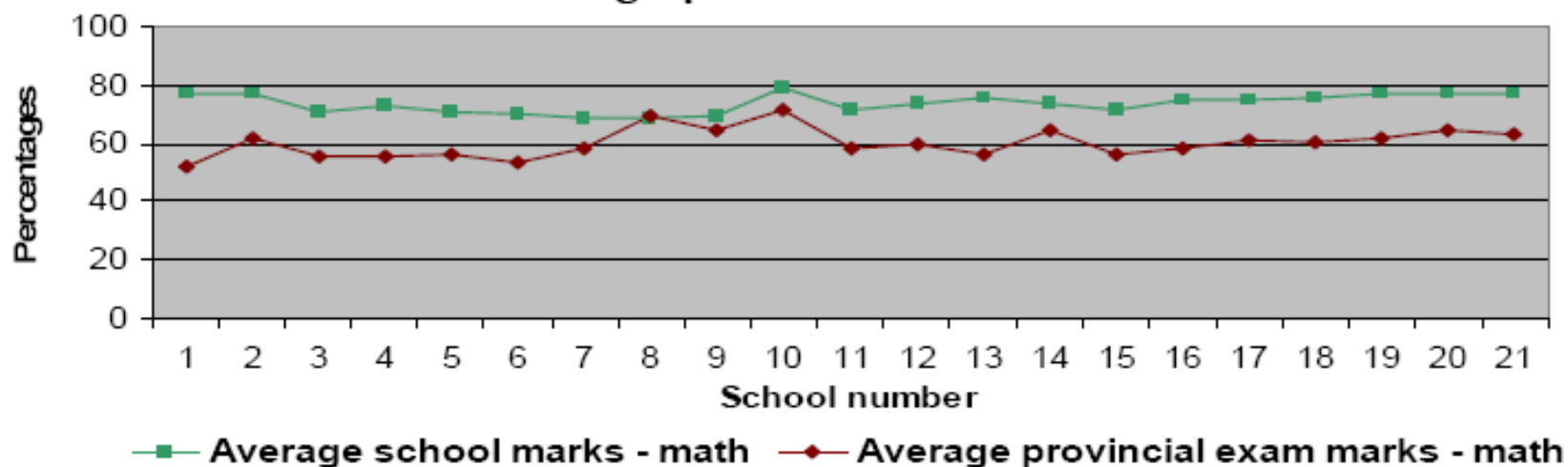
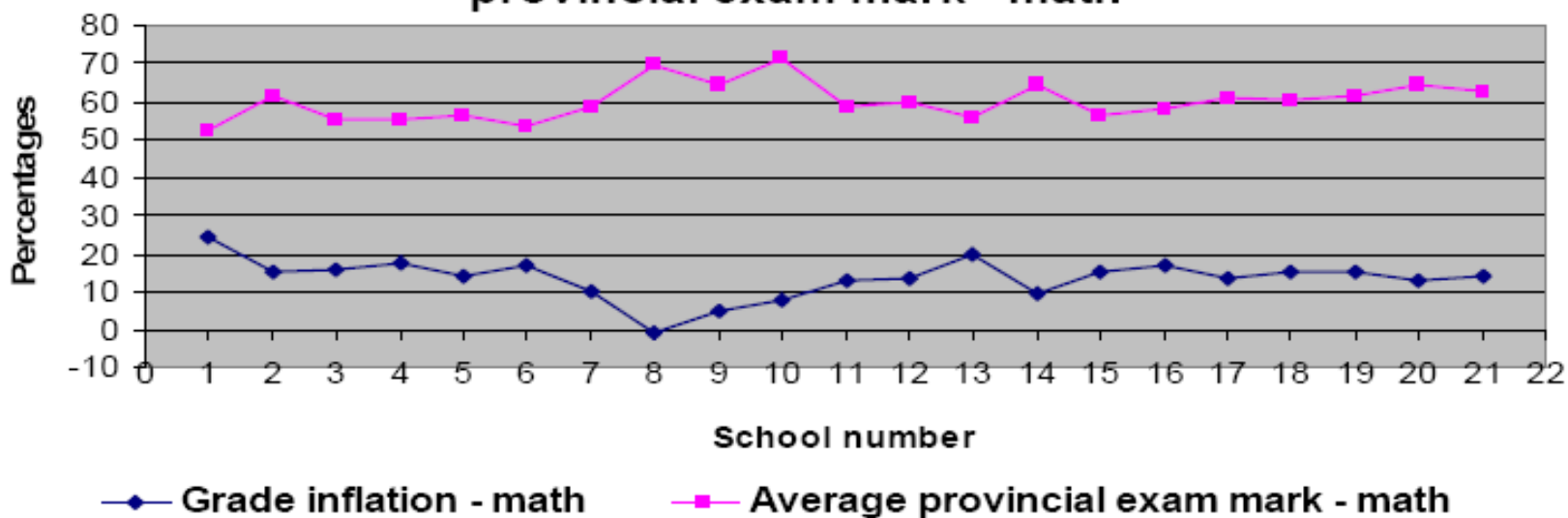
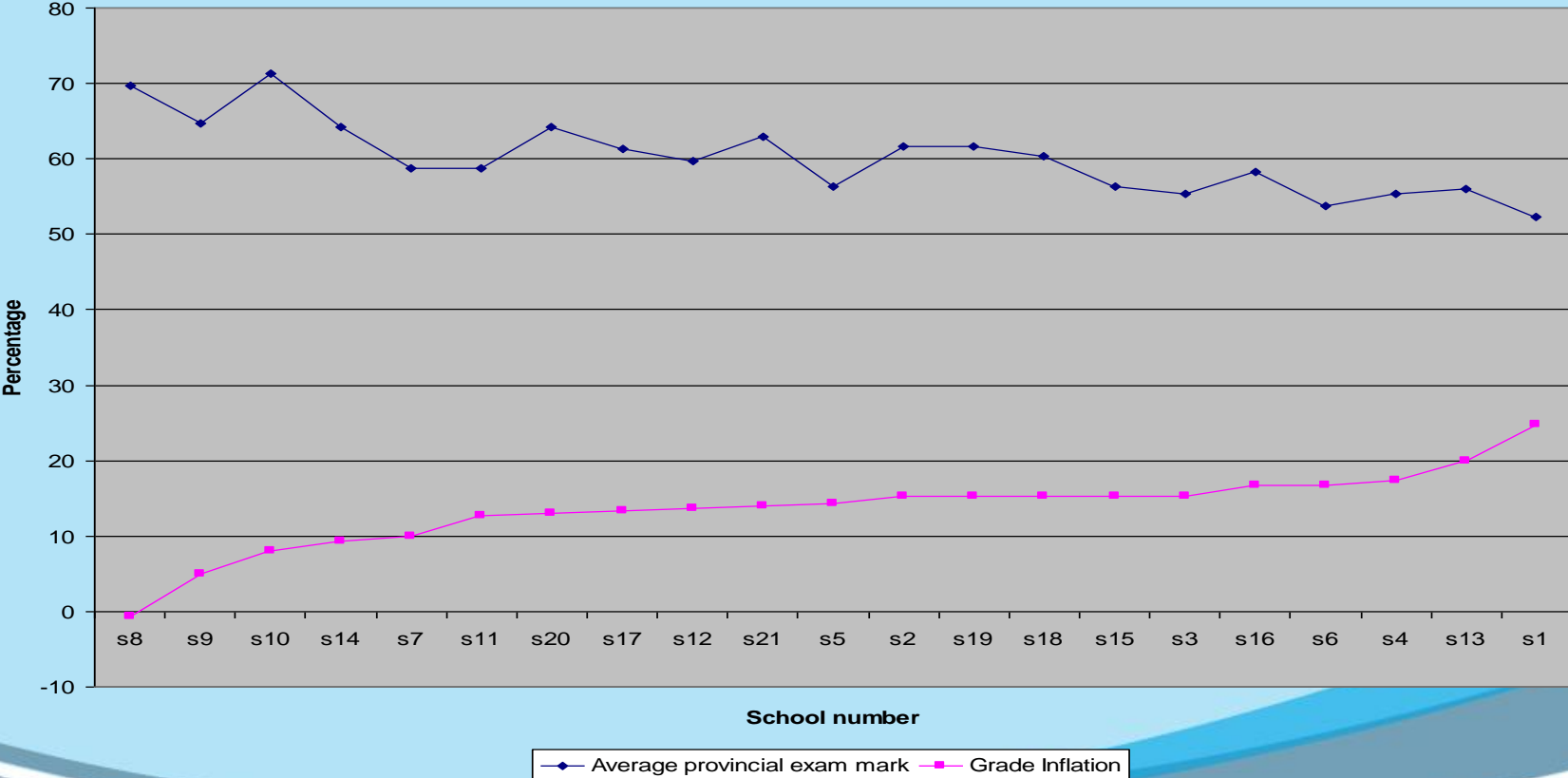


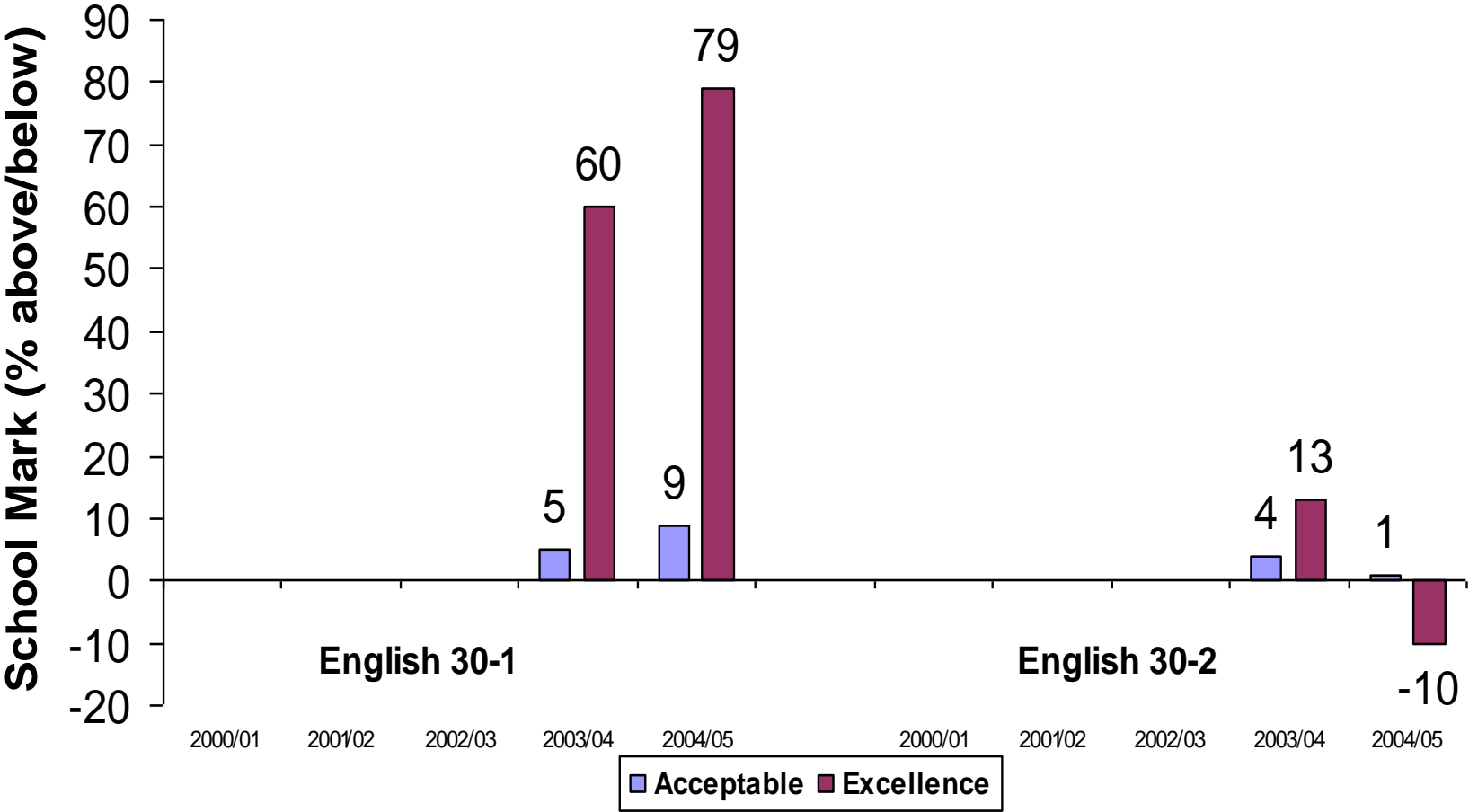
Figure 2: NB francophone grade inflation and average provincial exam mark - math



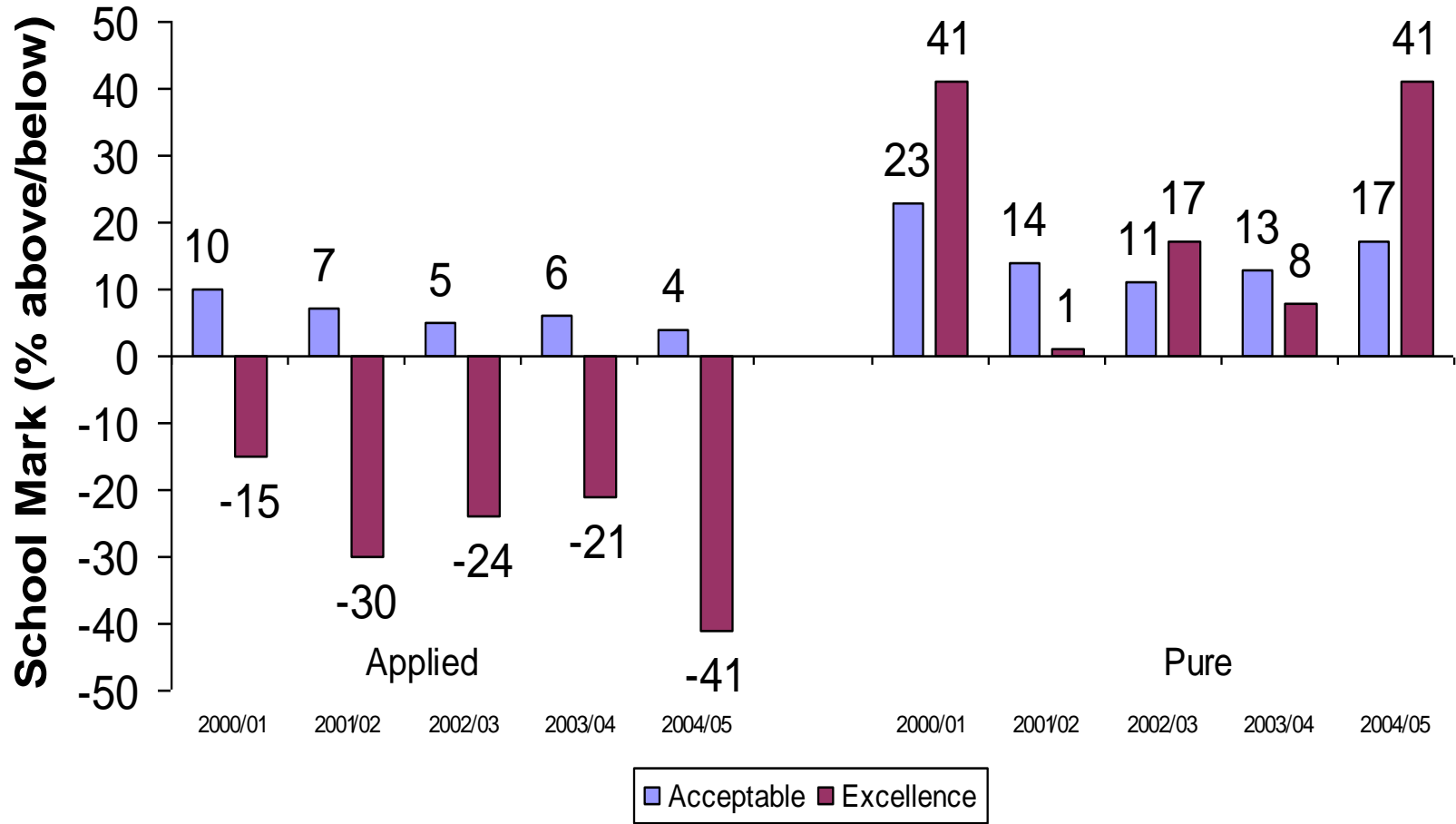
NB francophone grade inflation and average provincial exam mark



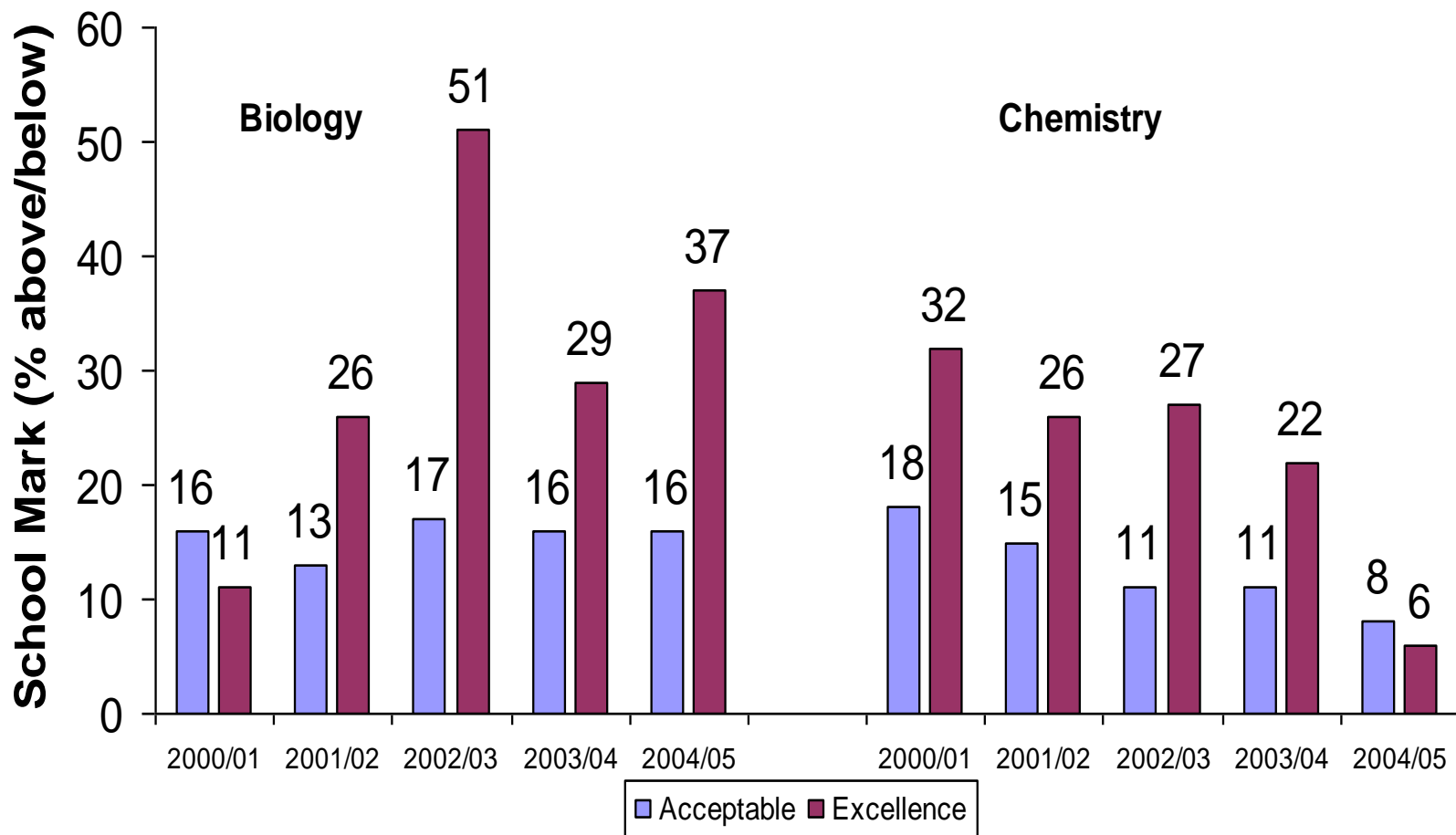
Diploma Examination Results
School Mark Compared to Diploma Exam Mark
English 30-1 and 30-2



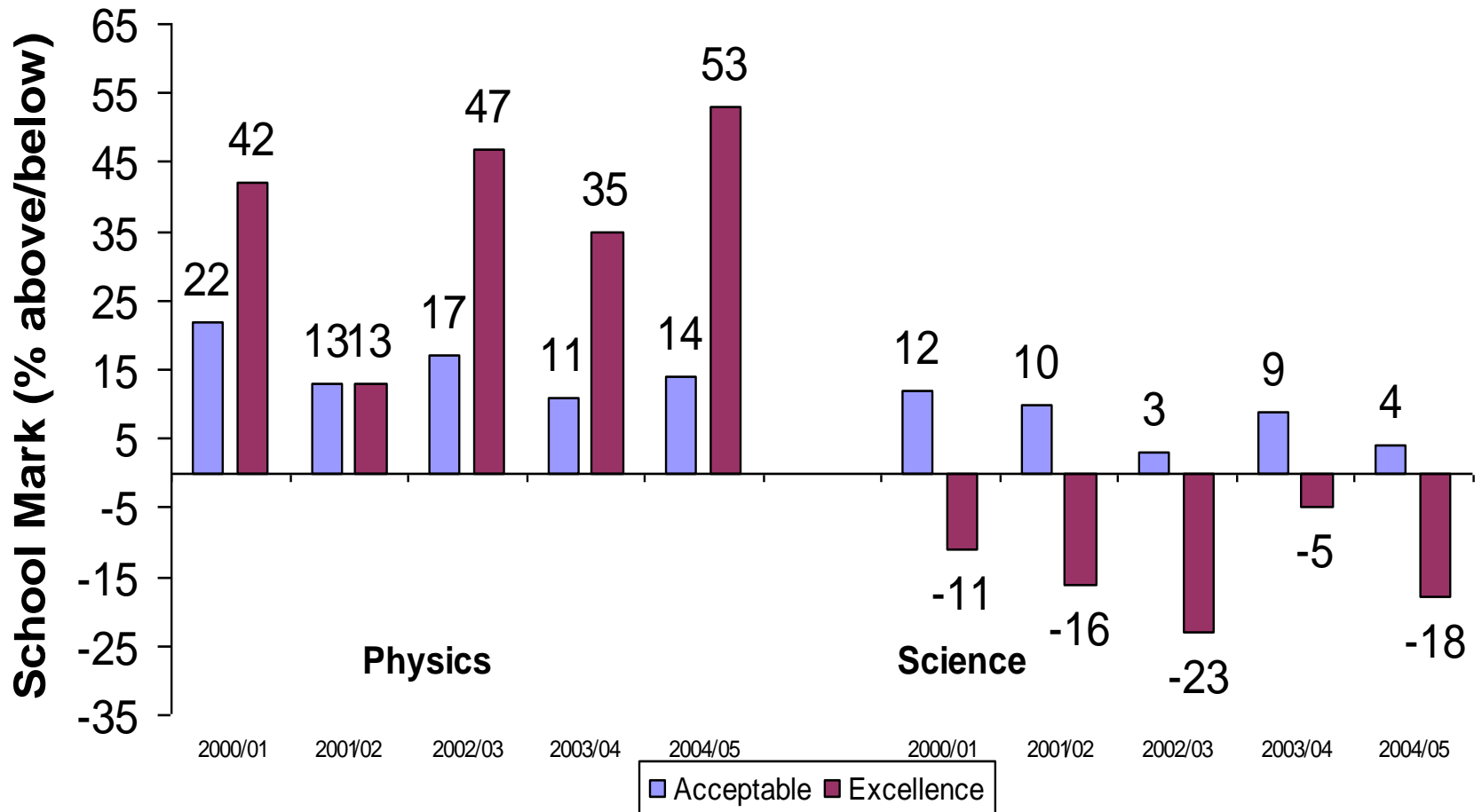
Diploma Examination Results
School Mark Compared to Diploma Exam Mark
Math: Pure and Applied



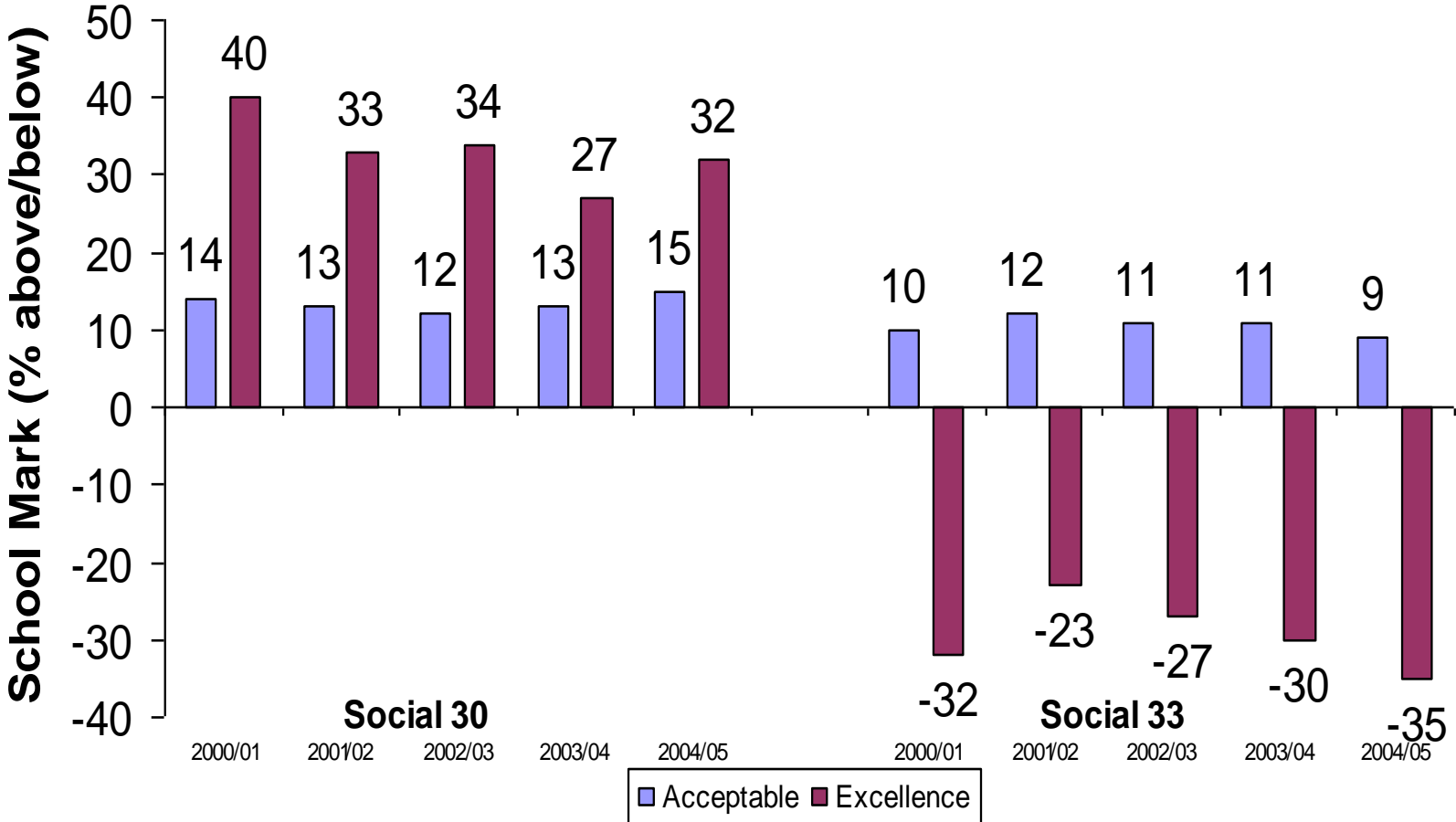
Diploma Examination Results
School Mark Compared to Diploma Exam Mark
Science: Biology and Chemistry



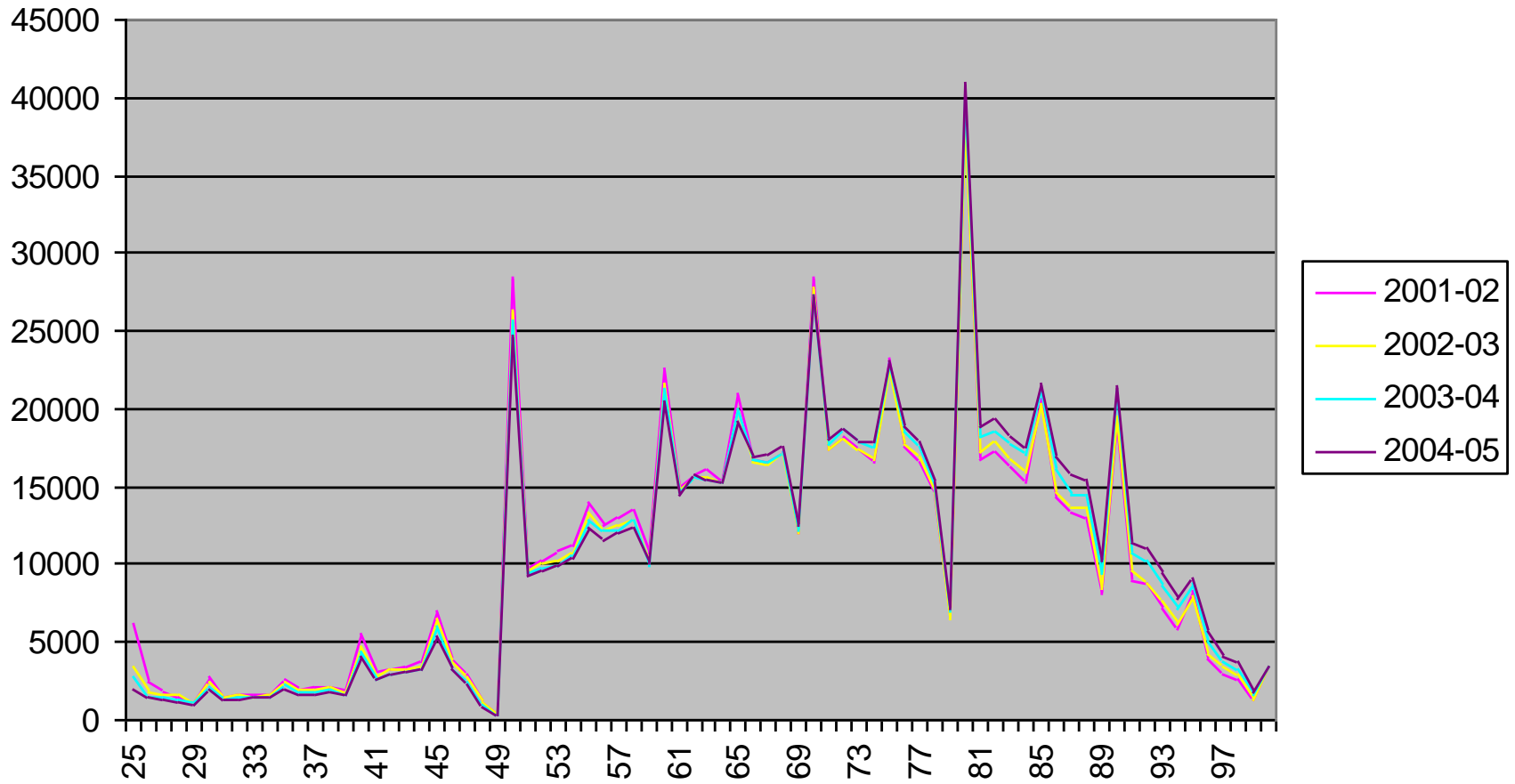
Diploma Examination Results
School Mark Compared to Diploma Exam Mark
Science: Physics and Science 30



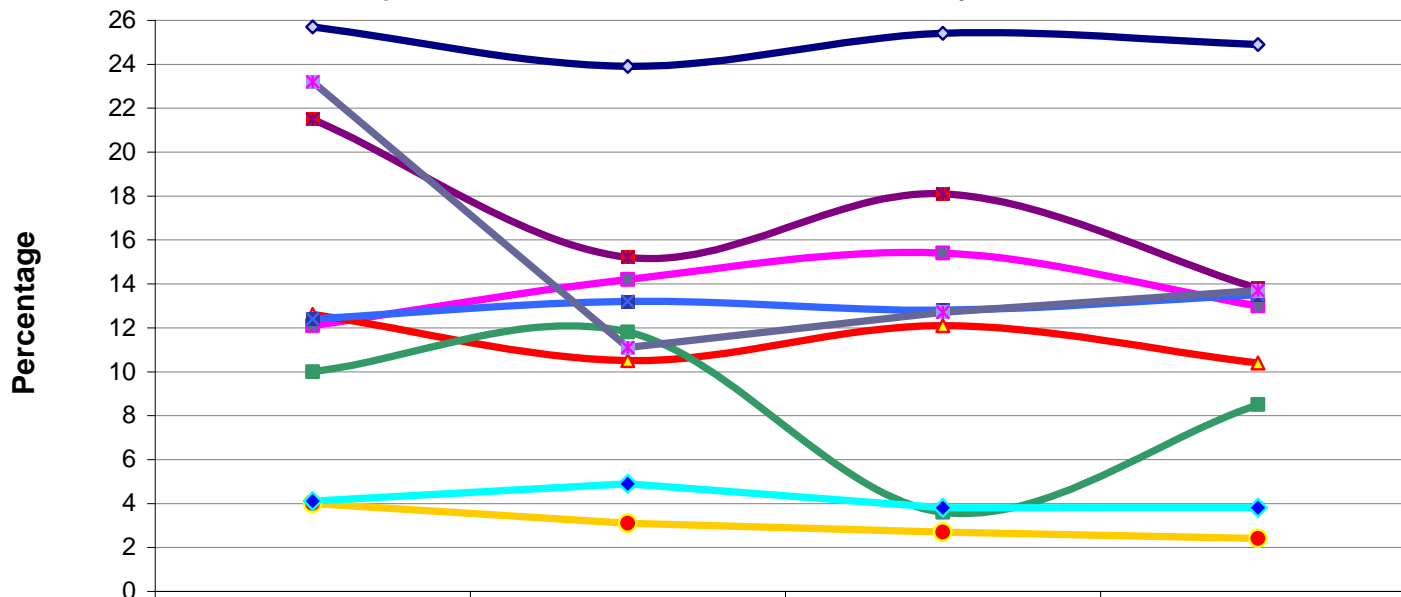
Diploma Examination Results School Mark Compared to Diploma Exam Mark Social Studies 30 and 33



Provincial Mark Distribution - Funded (CEU)



Diploma Examination Third Read Summary 2006 - 2007



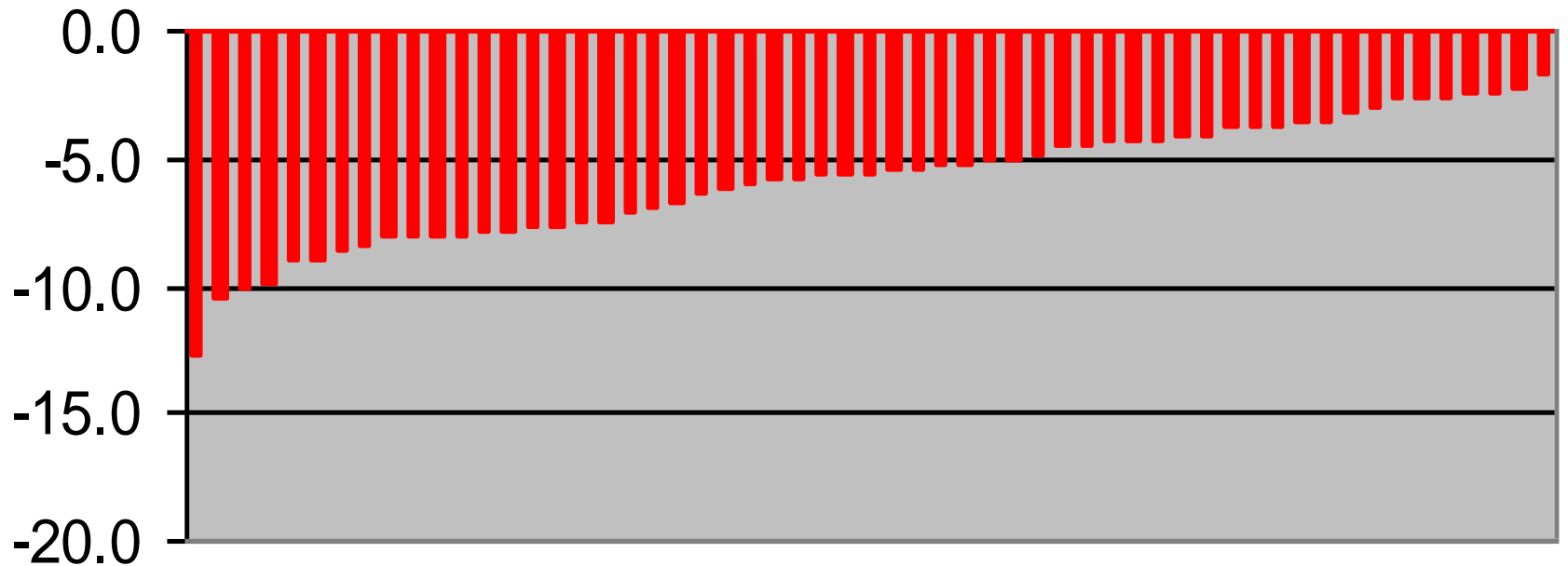
	Jan 2006	June 2006	Jan 2007	June 2007
English 30-1	25.7	23.9	25.4	24.9
English 30-2	12.1	14.2	15.4	13.0
Social Studies 30	12.6	10.5	12.1	10.4
Social Studies 33	12.4	13.2	12.8	13.5
French Language Arts 30	21.5	15.2	18.1	13.8
Biology 30	4.0	3.1	2.7	2.4
Chemistry 30	10.0	11.8	3.6	8.5
Physics 30	4.1	4.9	3.8	3.8
Science 30	23.2	11.1	12.7	13.7

As bad as tests are the alternatives strike me as even worse.

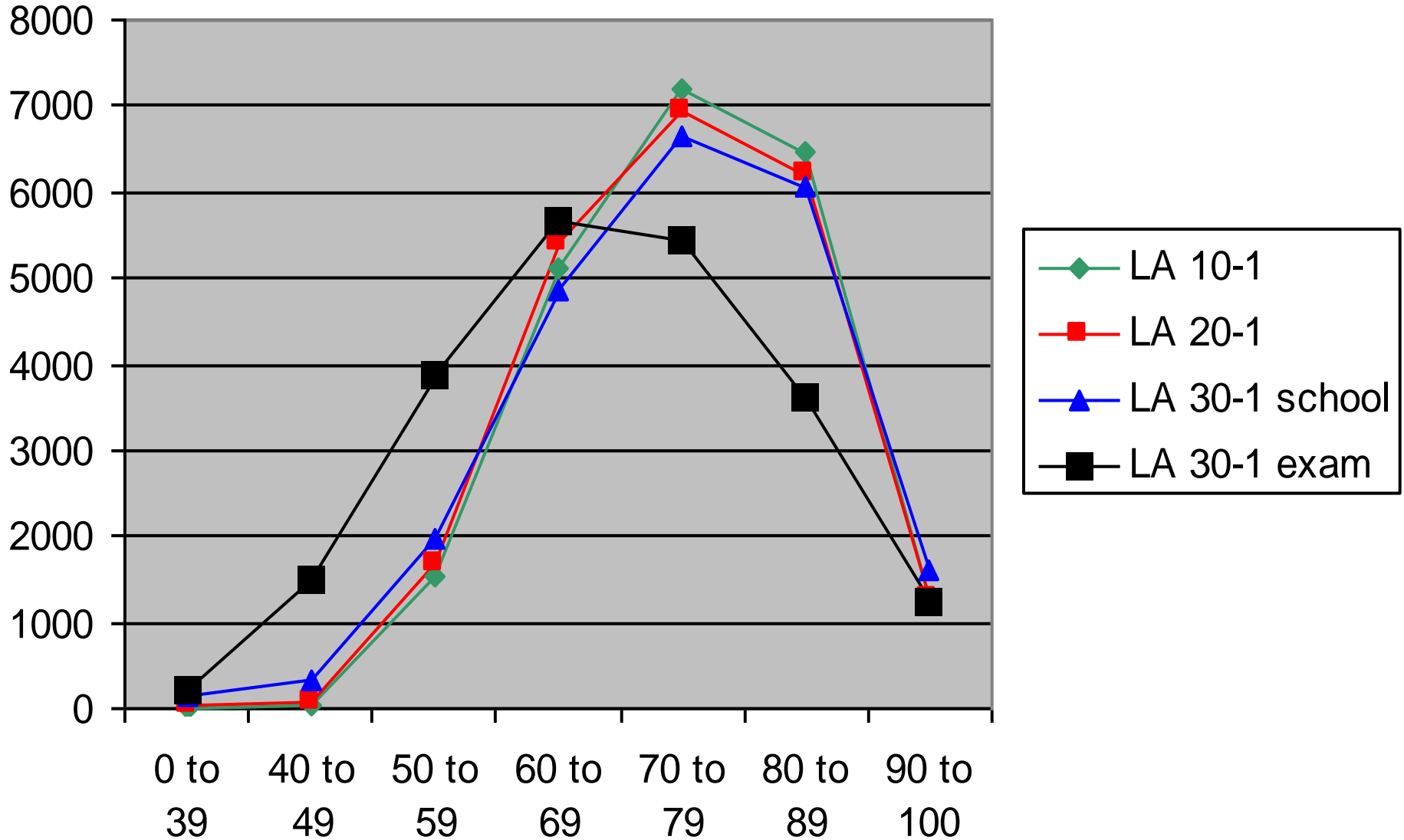
For example, grades, grades are just notoriously poor indicators to compare Kid A to Kid B when you are in different schools and different classrooms. **Teachers have different grading criteria.** Those just aren't very good indicators.

Diploma exam average mark minus school awarded average mark - jurisdictions

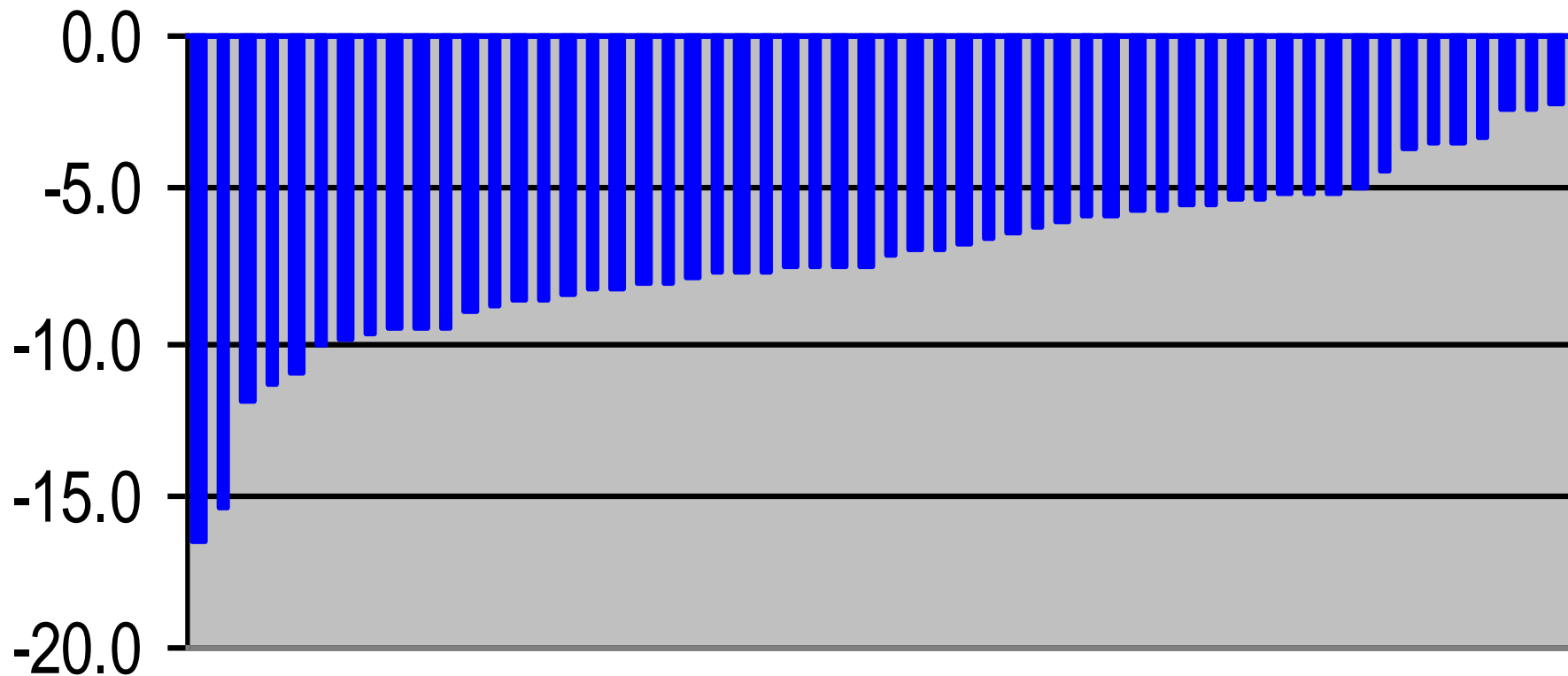
LA 30-1



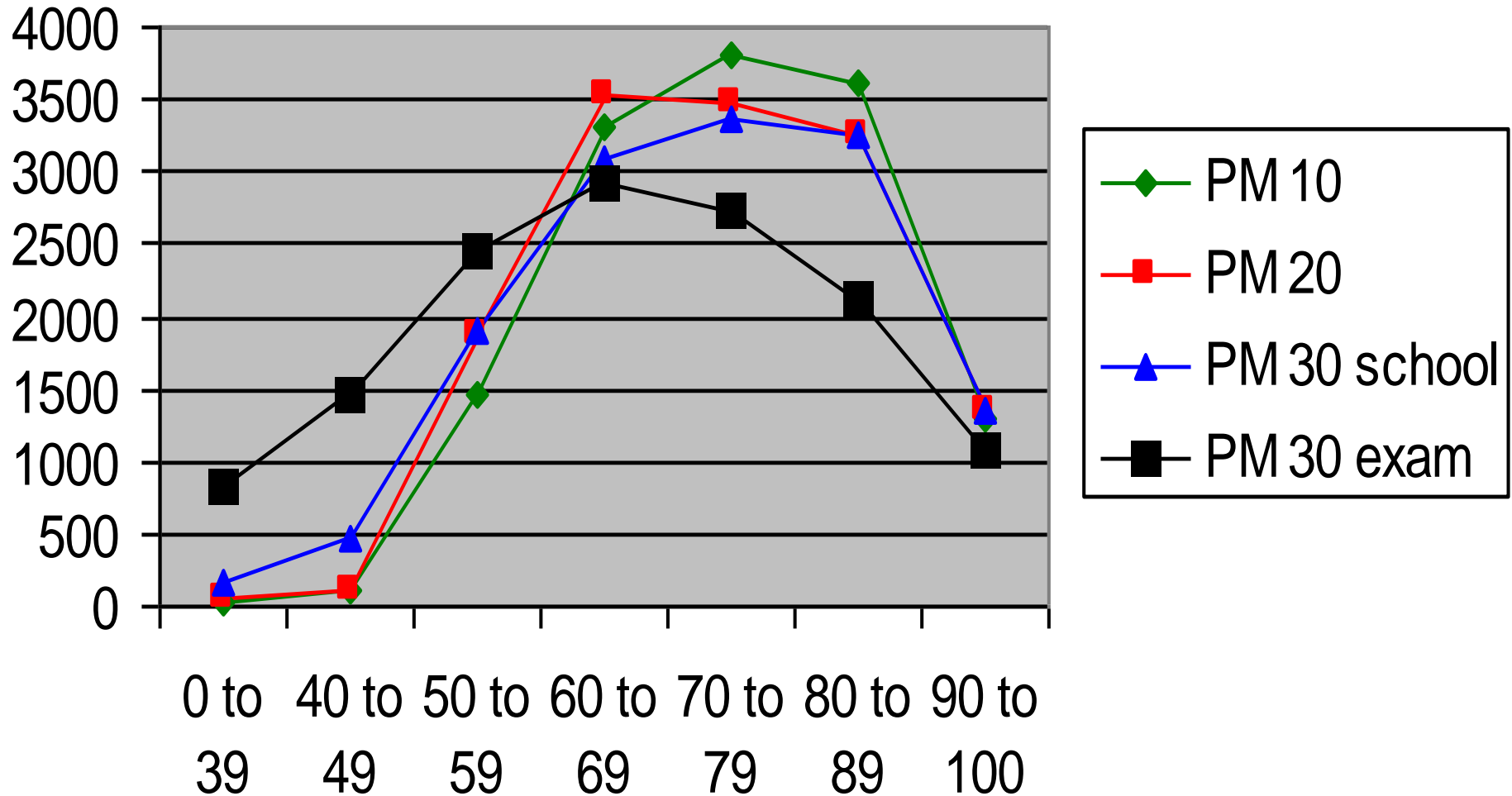
Count of marks awarded - LA stream 1



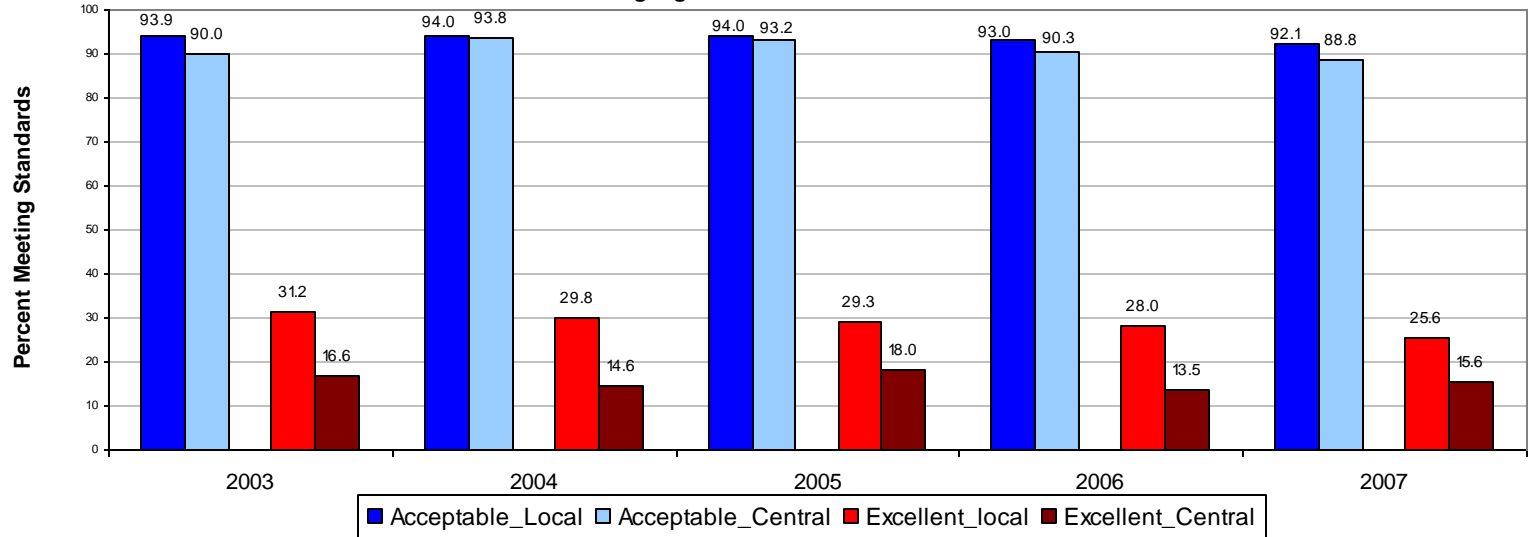
Diploma exam average mark minus school
awarded average mark - jurisdictions
Pure Math 30



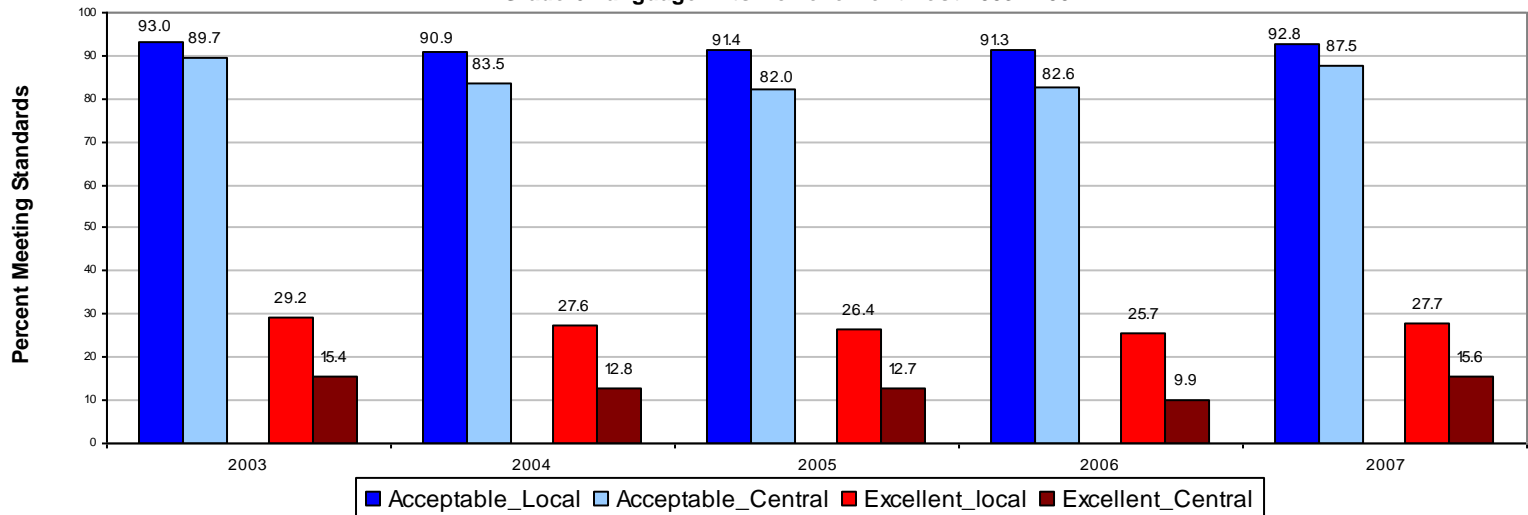
Count of marks awarded in Pure Math



**Comparison of Percentages Meeting Standards Between Local Marking and Centralized Marking
Grade 3 Language Arts Achievement Test 2003 - 2007**



**Comparison of Percentages Meeting Standards Between Local Marking and Centralized Marking
Grade 6 Language Arts Achievement Test 2003 - 2007**



Comparison of Percentages Meeting Standards Between Local Marking and Centralized Marking
Grade 9 Language Arts Achievement Test 2003 - 2007

