Programme for International Student Assessment (PISA) Summary of Results for British Columbia 2012

WHAT IS PISA?

- The Programme for International Student Assessment measures the skills and knowledge of 15-year-old students in the key areas of mathematics, reading, and science.
- PISA is a collaborative effort among member countries of the Organisation for Economic Co-operation and Development (OECD) and takes place every three years. In Canada, PISA is coordinated by the Council of Ministers of Education, Canada (CMEC). BC has participated in PISA since its first assessment in 2000, allowing for our results to be compared over time.
- PISA 2012 included paper-based assessments in mathematics (major domain), reading and science, as well as new computer-based assessments of mathematics, problem-solving, and reading.
- In 2012, approximately 510,000 students from 65 countries participated in the paper-based PISA. 32 of these countries, including Canada, also participated in the computer-based assessment. In BC, approximately 1,700 students from 74 schools participated in PISA.
- Students and schools who participate in PISA also complete questionnaires, which help to contextualize achievement results and provide information on factors associated with successful students, schools and education systems.

HOW DID BC STUDENTS DO OVERALL?

- As with previous PISA assessments, BC students performed very well in PISA 2012:
  - In mathematics, only 9 jurisdictions outperformed BC: Shanghai-China, Singapore, Hong Kong-China, Chinese Taipei, Korea, Macao-China, Japan, Quebec, and Liechtenstein. Twelve jurisdictions performed in the same range as BC, and 54 jurisdictions performed below BC.
  - In reading, only 1 jurisdiction outperformed BC: Shanghai-China. Seven jurisdictions performed in the same range as BC and 67 jurisdictions performed below BC.
  - In science, only 2 jurisdictions outperformed BC: Shanghai-China and Hong Kong-China. Seven jurisdictions performed in the same range as BC and 66 jurisdictions performed below BC.

<table>
<thead>
<tr>
<th>PISA 2012 Results</th>
<th>Mathematics</th>
<th>Reading</th>
<th>Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jurisdictions above BC’s range</td>
<td>9</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Jurisdictions in BC’s range</td>
<td>12</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Jurisdictions below BC’s range</td>
<td>54</td>
<td>67</td>
<td>66</td>
</tr>
</tbody>
</table>

Note: Results are based on statistically significant differences between average scores on the paper-based assessment.

1 Questionnaire results are released separately from achievement results and are expected in late 2014.
2 Includes BC and Canada.
HOW DID BC STUDENTS DO IN MATHEMATICS (MAJOR DOMAIN)?

- Mathematics was the major domain of PISA 2012, and there is a large amount of data available for this domain.
- On the paper-based assessment, BC students had an average score of 522, which was in the same range as the Canadian average (518) and above the OECD average (494).
- On the computer-based assessment, BC students had an average score of 532, which was in the same range as the Canadian average (523) and above the OECD average (497).
- BC has been praised as a jurisdiction that demonstrated both high achievement and equity; BC had a relatively small gap between its high- and low- performers.
- 88% of BC students reached at least level 2 on the mathematics proficiency scale; level 2 is considered the baseline level of mathematics proficiency that is required to participate fully in modern society. 86% of Canadian students reached at least level 2, and 77% of students across the OECD countries reached at least level 2.
- In BC, males performed significantly higher than females in mathematics; this has generally been the same result since 2000 (in 2003 males and females performed the same). The gender gap is larger in the computer-based assessment than in the paper-based assessment.
- In BC, there was no significant difference between Anglophone and Francophone students in the paper-based mathematics assessment. However, Anglophone students outperformed their Francophone counterparts in the computer-based assessment.
- BC’s performance in mathematics has remained stable since 2006 (BC’s performance decreased slightly between 2003 and 2006).

WHERE CAN I GET MORE INFORMATION?

BC Ministry of Education webpage: www.bced.gov.bc.ca/assessment/nat_int_pubs.htm
FAQs on National and International Assessments: www.bced.gov.bc.ca/assessment/nat_int_FAQ.pdf
Email questions to: NatIntQuestions@gov.bc.ca