PISA Strategic Development Group

QUESTIONS ON EXPERIENCES USING COMPUTERS IN ASSESSING STUDENT PERFORMANCE

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QUESTIONS ON EXPERIENCES USING COMPUTERS IN ASSESSING STUDENT PERFORMANCE

At its last meeting, the PISA Governing Board agreed to seek information from countries on their uses of computers in large-scale student assessment, testing, and examination programs and/or their capacities to do so internationally in the future. This information is needed to inform efforts to develop a plan for using computers in the PISA assessments. From PISA 2012 onward, it is anticipated that computer-based assessment will be available for all schools in countries’ PISA samples.

The questions on the following pages solicit information on the “basics” of computer-based assessments, with closed-ended items on design and process, and on broader issues, with open-ended items on capacity, challenges, successes, etc.

Please send your responses to [INSERT CONTACT AND DATE]. The Secretariat will collate the material obtained and send out a summary report inviting further comments from the PISA Governing Board.

Thank you for your participation!
Country:
Name of PGB member:

This survey asks questions about countries’ uses of computers in student assessment, testing, and examination programs.

The first section asks for specific details about the use of computers in assessments, tests, or examinations in your country that are implemented system-wide (e.g., at the national/federal or provincial/regional level). The second section asks about capacity for future implementation.

The third section is broader and asks about issues in and implications from implementing computer-based assessment. Your thoughtful answers to the questions in the second section, especially, will provide valuable information for planning the future of PISA.

I. Describing Computer-Based Assessments

The first item asks about the use of computers to assess student performance.

1)  a. Does your country currently use computers to assess student performance?

    YES / NO (Circle one)

b. If yes, what is the name of the assessment/test/examination program in which they are used?

    (If there is more than one example in your country, please complete this survey individually for each example.)

c. If yes, please mark all those that apply from among the following choices.

   The assessment/test/exam items mainly:

   ___ Mirror the paper-and-pencil items of a paper-based assessment **OR**
   ___ Are taken from a paper-based assessment but are enhanced by the increased functionality of the computerised environment (e.g., hypertext, audio/video) **OR**
   ___ Have no analogy to paper-based items, either because the items have been reconceptualised or measure content or skills that are not measurable in a paper-based format
The items a student receives are:

___ Presented in a linear fashion **OR**
___ Selected adaptively, based on the student’s responses to prior questions

Student responses are:

___ Provided/recorded on paper **OR**
___ Provided to/recorded by the computer

Scoring of the assessment/test/exam:

___ Is manual **OR**
___ Is automated and performed by the computer **OR**
___ Includes both manual and automated elements

The assessment/test/exam is delivered:

___ On individual laptops or computer, onto which the testing system/software has been loaded **OR**
___ Using a browser on the Internet (i.e., web-based) **OR**
___ Using a single computer/laptop acting as a server for local computers/laptops (i.e., server-based) **OR**
___ Using a large-scale network of computers (i.e., cloud computing).

II. Capacity

1) We are interested in your country’s capacity to deliver a computer-based assessment to the entire PISA sample.

   a. In 2012, what proportion of your country’s schools do you expect would have computers manufactured after 2005?

   b. In 2012, what proportion of your country’s schools do you expect would have stable high speed internet access?

   c. Would you have the capacity to provide hardware (e.g. laptops, server) to schools during test administrations to make up for any lack of school hardware?

III. Issues and Implications with Using Computers to Assess Student Performance

1) What was/were the purpose(s) of implementing computers to assess student performance in your country? Did the computerised assessment/test/exam, as planned or implemented, fulfill this/these purpose(s)?
2) If you moved from a paper-based assessment to a computer-based format, was maintaining comparability of the assessment over time a specific goal? Was it met? How was this issue dealt with?

3) What are the benefits (not including costs, see below) of using computers to assess student performance compared to paper-and-pencil assessments in the instances in which they are used in your country? That is, have they provided added value and what was that value?

4) Did you encounter any problems in implementing the computer-based assessment/test/exam (e.g., with the hardware or software platform, capacity of schools for implementation, etc.)? If so, please describe.

5) Did you implement procedures to maintain the security of the instruments (e.g., to prevent email transfer, printing, saving locally, etc.)? If so, please describe.

6) How does the cost of implementing computer-based assessments/tests/exams compare with implementing paper-and-pencil assessments? Are they more expensive or less? In what areas have the higher costs been? The lower costs?

7) Has the use of computers to assess student performance affected the information that is provided to users (e.g., policy makers, schools, teachers, the public)?