

TIMSS and PIRLS 2011 Survey Operations Procedures Software

Five specialized software systems were provided by the IEA Data Processing and Research Center to support the national research coordinators. These software packages greatly simplified the tasks and assisted in producing much of the required documentation (e.g., class sampling documentation, survey tracking forms, participation status). The software systems were customized from IEA's proprietary software systems for TIMSS 2011 and PIRLS 2011, and included options for countries that were administering only TIMSS, only PIRLS, and both TIMSS and PIRLS. Below is a list of the software systems:

- ◆ Windows® Within-school Sampling Software (WinW3S) and Manual:

This software enabled TIMSS 2011 and PIRLS 2011 participants to randomly select classes in each sampled school. The software also was used to track school, teacher, student, and student-teacher linkage information; prepare the survey tracking forms (see [Survey Tracking Forms](#)); and assign test instruments to students, including printing labels for all the test booklets and questionnaires.

- ◆ Windows® Data Entry Manager Software (WinDEM) and Manual:

This software was provided for entering, editing, and verifying the TIMSS 2011 and PIRLS 2011 data. Along with the software, countries also received codebooks, which described the properties and the layout of the variables to be entered from each TIMSS and/or PIRLS assessment instrument.

- ◆ IEA Online SurveySystem (OSS) and Manual:

The IEA Online SurveySystem supported the online administration of the school and teacher questionnaires (see [Online School and Teacher Questionnaire Administration](#)). The software included three distinct components—*Designer*, *Web*, and *Monitor*.

The Designer: This is a Windows-based application used to create, delete, disable and adapt survey components (e.g., deleting “not administered” questions/options; translate and/or adapt questions/options) and their properties, as well as additional system text (e.g., navigation buttons). The Designer also allows exporting the data definition information, such as WinDEM codebooks. The exported codebooks can be used by WinDEM data entry software to create corresponding data files and enter any additional paper questionnaire data.

The Web Component: This is a compiled ASP.NET (Active Server Pages) application that presented HTML questionnaires to the respondents, using any standard Internet browser.

The Web-based Monitor: This component allows for auditing participation in real time, including the respondent's ID number, the first and last date of login, the total number of logins, the current question, the response status for each individual question, and the questionnaire completion status.

◆ Trend Scoring and Reliability Scoring Software (TSRS) and Manual:

The software was provided to document scoring reliability between assessment cycles. Each participating trend country and benchmarking entity received an individually prepared CD with the TSRS software and a sample of scanned student responses from the previous assessment cycle. More information on this process can be found in [Operations and Quality Assurance](#).

◆ Cross-country Scoring and Reliability Software (CCSRS) and Manual:

The software was provided to document the reliability of scoring across countries. The responses to be scored were scanned and provided on CDs along with the software and its manual. More information on this process can be found in [Operations and Quality Assurance](#).