

Report from IEA TEG

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Overview

- The IEA Technical Executive Group (TEG) met 10-11 December 2020 and 25-26 May 2021 in virtual meetings
- Apart from specific study issues, quality control measures and requirement management for the RM assessment system were discussed. Consequences of the pandemic were also on the agenda
- This report can only highlight a few agenda points

TEG Members

- Dirk Hastedt (Chair)
- Henry Braun
- Marc Joncas
- Michael Martin
- Irimi Moustaki
- Ina Mullis
- Monica Rosén
- Jostein Ryssevik
- Wolfram Schulz
- Heiko Sibberns
- Matthias von Davier



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Project Related Discussions

ICILS

- Having ICILS and TIMSS at the same time; options for overlap were considered
- Since the number of countries taking the CT module in 2023 and 2016 is very limited, options were discussed to establish a trend scale:
 - The TEG recommended that the same school can be used for both studies, but different classrooms need to be selected
 - In the absence of Field Trial data, the question related to a CT trend scale is on hold for the moment

- The study center presented on the impact of COVID-19 on the study, as well as the changes to the schedule. Data collection was delayed in several countries. Smaller samples from the field trial were an issue
- Mode effects were discussed—in particular, ensuring trend measures in ICCS
 - The TEG appreciated the careful approach with respect to the mode change
 - A joint set of methods and procedures across studies was suggested by the TEG

PIRLS

- PIRLS reported about the challenges caused by shifts in test administration windows due to school shutdowns
 - The TEG appreciated the continuation of the study
 - The TEG suggested clear documentation on data collection conditions in the reporting and the encyclopedia, e.g., changes in the data collection window

TIMSS 2019

- Results of problem solving and inquiry (PSI) item analyses were presented, and challenges were discussed
 - The TEG appreciated the careful analyses and reporting of the PSI
- Availability of new types of data and changes in work processes as a consequence of the shift towards CBA were presented
 - The TEG endorsed the collection and use of process data

TIMSS 2023

- PSI items will be developed further, taking into account the lessons learned from TIMSS 2019
 - The TEG appreciated that complexity of PSI items will be considered and that the adaptive design will be utilized to place the tasks in the adequate difficulty level
- Innovations in TIMSS 2023 were presented. The focus covered all areas of technology-based assessments
 - The TEG endorsed the shift towards the utilization of new technologies and stressed the importance of carefully observing the impact on the assessment

- The study was presented to the TEG, and particular limitations of the REDS study and the resulting consequences for analyzes and reporting were discussed
 - The TEG appreciated the progress made despite the adverse conditions
 - The TEG suggested a careful review of the data so that the study management can decide which information should be reported jointly and which should be reported in the form of case studies

ICILS Teacher Panel

- The study was presented to the TEG, and limitations due to nonresponse were discussed
- Consequences for analyses and reporting were carefully considered
 - The TEG discussed the standards that should be applied to a panel study and decided that we should stick to the high standards that we have in all our IEA studies, with respect to response rates
 - However, the TEG noted that the application of regular IEA standards may be difficult in panel studies
 - Careful and detailed documentation of all challenges and approaches should be part of the reporting



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General Topics

Quality Control Working Group

- Lauren Musu presented the work of the Quality Control Working Group which was established by IEA to scrutinize the existing QC procedures
- The TEG appreciated the work of the group and made suggestions related to specific QC areas:
 - Make use of technology to detect suspicious response behavior
 - Apply QC procedures as early as possible
 - Compare items statistics across cycles
 - Advise NRC to provide more guidance when countries subcontract aspects of data collection
- The TEG endorsed further work of the working group

Versioning of Data

- Heiko Sibberns proposed a versioning system for the International Databases (IDBs) because changes to existing IDBs occurred and will occur in future, e.g., new scales will be added
- Assignment of Digital Object Identifiers (DOIs) was suggested as a standard for references
- Note: As of the end of September, IEA is a registered member of an organization which can assign DOIs (data|ra consortium)
- All IDBs will receive DOIs in the following months

Thank you!

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