



Researching education, improving learning

IEA Research and Development Funds

*63rd General Assembly
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Research and Development (R&D) Fund

- Developed to advance and improve the science and methodology of IEA and its studies
- Funding is drawn from a 3% overhead on participation fees across IEA studies
- So far, two calls have been released:
 - Call 1: Thematic call for proposals related to computer-based assessment released March 2021
 - Call 2: Open call released February 2022

Call 1: Update

- The three funded projects are underway:
 - One is wrapping up, with a final report expected in October
 - One is making good progress, in close coordination with IEA
 - One has been extended due to timeline delays (with no change to total funding)
- Outcomes of the projects will be disseminated through:
 - Research reports on IEA website
 - Journal publications
 - Symposium at IRC

Call 2: Overview

- Open call to explore changes, innovations, and improvements to IEA studies' design and methodology
- Improvements based on lessons learned during Call 1:
 - Informational webinar on 22 February to provide details about the call and allow for Q&A
 - Tier 1 proposal submissions were encouraged
 - Proposals and their review managed via the “Good Grants” platform
 - More structured, smooth, and transparent process

Call 2: Summary of Proposals

- 16 proposals received in total
 - 12 Tier 1 proposals (6-month duration, € 50,000 limit)
 - 4 Tier 2 proposals (12-month duration, € 100,000 limit)
- Proposals spanned the full life cycle of IEA's assessment from frameworks to reporting
- All proposals assigned to at least two reviewers with expertise in the content area
- Top proposals and reviewer comments sent to the IEA Standing Committee
- 6 proposals selected for funding

Call 2: Funded Proposal 1

- **Title:** Automatic Scoring of Text Responses in Multilingual Assessment Data
- **Lead Researcher:** Hyo Jeong Shin, Sogang University
- **Aim:** To evaluate the performance of automatic scoring systems for text responses in PIRLS multilingual assessment data

Call 2: Funded Proposal 2

- **Title:** Challenging the Design Principle of Mixed-Worded Questionnaire Scales
- **Lead Researcher:** Isa Steinmann, Oslo Metropolitan University
- **Aim:** To explore the hypothesis that some respondents are more likely to answer inconsistently on positively- and negatively-worded items on the same scale and investigate measurement invariance between groups of students and countries

Call 2: Funded Proposal 3

- **Title:** Credible Assumptions for Bound Estimation (CABE): Studying School-level Nonresponse within a Partial Identification Framework
- **Lead Researcher:** Diego Cortes, IEA
- **Aim:** To examine how different assumptions about nonresponse can impact inferences and introduce a partial identification framework as an analytical tool to study nonresponse in IEA studies

Call 2: Funded Proposal 4

- **Title:** Improving Data in Electronic Surveys (IDES)
- **Lead Researcher:** Rolf Streitholt, IEA
- **Aim:** To study the effects of computer-based item and response formats by analyzing data from randomized controlled trials included in ICILS 2023

Call 2: Funded Proposal 5

- **Title:** Improving Parental Occupation Coding Procedures with AI
- **Lead Researcher:** Daniel Duckworth, IEA
- **Aim:** To use machine learning to improve parental occupation coding procedures and to construct a public benchmark for evaluating the accuracy of ISCO classification methods

Call 2: Funded Proposal 6

- **Title:** Interpretable and Accurate Scaling in Large-Scale Assessment: A Variable Selection Approach to Latent Regression
- **Lead Researcher:** Yunxiao Chen, London School of Economics and Political Science
- **Aim:** To evaluate a more interpretable method for estimating student performance by using variable selection to identify the most relevant background variables to use as predictors of achievement

Looking to the Future

- Exploring options for dissemination of results:
 - Awardees strongly encouraged to disseminate through open-access channels and journals
 - As much as possible, results will be publicly available
 - Updates will be provided on the R&D website as working papers and links to published journal articles
 - Authors' submission to the 10th IEA IRC and a dedicated session on the R&D topics and insights

- Call 3 planning will commence soon!
 - Expected to follow a similar schedule to Call 2 (tentative Feb 2023 release)
 - Scoping to be determined (open vs. thematic)

Thank you!



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