

IEA Research and Development Funds

65th General Assembly

Tbilisi, Georgia

1 October 2024

Thierry Rocher, Chair

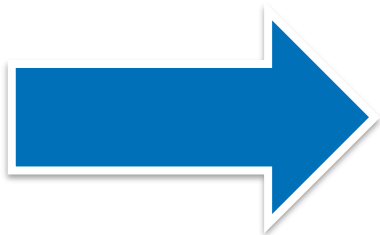
Fostering research and innovation

- Contributes to IEA's mission to provide a model for research in education and innovative approaches
- Funding is drawn from a 3% overhead on participation fees across, by now, all IEA studies
- Four calls released to date:
 - Call 1: Early 2021
 - Call 2: Early 2022
 - Call 3: June 2023
 - Call 4: June 2024
- Call 1 and 2 outcomes are finalized and Call 3 projects are all underway with some already near completion

Continued improvement and innovation

- R&D team recently revised the concept note to guide current procedures and future development
 - Updated based on lessons learned from calls 1 through 3
 - Clearer descriptions of eligibility, criteria for evaluation, actual and projected funding
- Revised note includes plans for targeted, IEA-initiated calls
 - Topic recommendations will come from TEG members, Study Directors, and IEA Management, Unit Heads, and Senior IEA Researchers, followed by (restricted) tendering
 - Recently approved and will be launched in 2025

Moving forward: Two possible avenues



Field-initiated proposals

- Regular, annual call
- Proposals from researchers active in the field
- Award by Standing Committee



IEA-initiated projects

- Irregular call based on IEA's own needs
- Tendering or assignment exclusively to externals with required expertise
- Award by Standing Committee

Call 1: Status of awarded projects

Title	Status
Using Neural Network Classification of the Automated Scoring of Images Responses in TIMSS 2023 Lale Khorramdel, Lillian Tyack, and Matthias von Davier (Boston College)	Final report posted on IEA website
Understanding Students' Computational Thinking Strategies Using Process Data in ICILS 2018 Qiwei He and Eugenio Gonzalez (ETS)	Final report posted on IEA website
Validity and Measurement Properties in Technology-Enhanced Items: A Balancing Act Saskia Wool, Paul Drijvers, Remco Feskens, Dylan Molenaar, and Emmelien van der Scheer (Cito)	Final report posted on IEA website

Call 2: Status of awarded projects

Title	Status
CABE: Studying School-level Nonresponse within a Partial Identification Framework Diego Cortes (IEA), Jeff Dominitz, Maximiliano Romero, and Sabine Meinck	Final report posted on IEA website
Improving Scaling in Large-scale Assessment: A Variable Selection Approach to Latent Regression Yunxiao Chen (London School of Economics and Political Science), Motonori Oka, and Matthias von Davier	Final report posted on IEA website
Improving Data in Electronic Surveys Mojca Rožman (IEA), Andrés Christiansen, Rolf Strietholt, Jeppe Bundsgaard, Julian Fraillon, and Ronny Scherer	Final report posted on IEA website
To Mix or not to Mix Positively and Negatively Worded Items Isa Steinmann (OsloMet)	Final report posted on IEA website
Operational Automatic Scoring of Text Responses in 2016 ePIRLS: Performance and Linguistic Variance Hyo Jeong Shin (Sogang University), Nico Andersen, Andrea Horbach, Euigyum Kim, Jisoo Baik, and Fabian Zehner	Final report posted on IEA website
Improving Parental Occupation Procedures with AI Daniel Duckworth (IEA) and Julian Fraillon	Final report to be posted in October

Call 3: Funded projects

Title

An Examination on the Performance of Sampling Variance Estimators in ILSAs

Umut Atasever (IEA)

Field Trial Sample Size (FITS³): Requirements for Questionnaire Scale Analysis

Andrés Christiansen (IEA)

Using Large Language Models for Automatic Item Generation: Development and Valudation for TIMSS Fourth Grade

Marek Muszyński (Polish Academy of Sciences)

Approximate Areas of Interest for Enhance Understanding of Student Motivation and Task Interaction in IEA Assessments

Artur Pokropek (Polish Academy of Sciences)

Enhancing Cross-Cultural Comparisons in ILSAs: A Comprehensive Investigation and Guideline Development Using TIMSS 2019 Data

Andrés Sandoval-Hernández (University of Bath)

Dimensionality and Mode Effects in PIRLS 2016 and 2021: Evaluating the Comparability of Different Assessment Modes

Rolf Strietholt (IEA)

Gauging the Instructional Sensitivity of Ordinal Assessment Items

Anne Taylor (Purdue University)

Communication of outcomes

- Improved overview of awards and posted outcomes is now live on the IEA website
- R&D Coordinators regularly present status updates and solicit feedback at SC and TEG meetings
- Study Directors have been asked to further reflect on outcomes from funded R&D projects to consider potential applications for IEA studies
- Planning in progress for relevant outcomes to be shared with IEA units and staff who may benefit

Alignment with the IRC

- The IEA International Research Conference (IRC) offers a unique opportunity to highlight R&D work, discuss the science and methodology of our studies, and generate interest in the calls
- This worked nicely for the 10th IRC in Dublin (June 2023) with individual contributions as well as a symposium, covering almost all active and completed projects at the time
- All Call 3 awardees have been encouraged to submit proposals for the 11th IRC in Rome, and the Call 5 release will coincide
- In addition, R&D funding opportunities are highlighted at relevant research conferences (e.g., ECER, AERA, etc.)

Call 4: Overview of proposals received

- 21 complete proposals received by 23 September deadline
 - 14 Tier 1 proposals (6-month duration, € 55,000 limit)
 - 4 Tier 2 proposals (12-month duration, € 110,000 limit)
 - 3 rejected during initial screening (not relevant to IEA work)
- Proposals cover a nice range of areas
- Expert reviewers are being identified and contacted for the review period from October to November
- Awards will be decided by Standing Committee in December, with projects beginning in early 2025

Financial overview

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	Period	2021 (call 1)	2022 (call 2)	2023 (call 3)	2024 (call 4)	2025
TIMSS 2023	2021-24	250	250	250	250	
TIMSS 2027	2025-28					250
PIRLS 2026	2023-26			135	135	135
ICCS 2027	2024-27				50	50
ICILS 2028	2025-28					50
Available		250	250	385	435	485
Awarded		265	320	317	TBD	
Balance		-15	-70	68		
Balance (cumulative)		-15	-85	-17		

Summary and next steps

- Communication of outcomes and plans for implementation are key priorities for the coming years
- Call 3 outcomes will start to be available in early 2025 so check the website and communication from IEA
- Call 4 awards will be made by the end of this year
- Targeted calls are envisaged for 2025 and will be based on IEA needs and priorities
- Call 5 will align with the 11th IRC
- Overall, R&D is offering opportunities for knowledge growth and dissemination within and outside of IEA

Thank you!

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