IEA Research and Development Funds

64th General Assembly
Versailles, France
26 September 2023

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IEA
Researching education, improving learning

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 IEA studies

- Two Tiers: <50K euros, <100K euros

- Three calls released to date:
  - Early 2021 (computer-based assessment theme)
  - Early 2022 (thematically open)
  - June 2023 (thematically open)

- Call 4 projected for mid-2024

Status update on funded projects (as of Sep 2023)

Call_	Project Title_	Status_
1	Using Neural Network Classification for the Automated Scoring of Image Responses in TIMSS 2023	*Completed, available via IEA website*
	Understanding Students' Computational Thinking Strategies and Test Taking Behaviors Across Countries Using Process Data in ICILS 2018 with Analytical Approach	*Reviewed, with authors for final revisions*
	Validity and Measurement Properties in Technology-enhanced Test Items: A Balancing Act	*Reviewed, with authors for final revisions*
2	Credible Assumptions for Bound Estimation (CABE): Studying School-level Nonresponse within a Partial Identification Framework	*Completed, report dissemination pending*
	Interpretable and Accurate Scaling in Large-Scale Assessment: A Variable Selection Approach to Latent Regression	*Completed, available via IEA website*
	Improving Data in Electronic Surveys (IDES)	*Submitted for review*
	Challenging the Design Principle of Mixed-Worded Questionnaire Scales	*In progress*
	Improving Parental Occupation Coding Procedures with AI	*In progress*
	Automatic Scoring of Text Responses in Multilingual Assessment Data	*In progress*

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Alignment with the IRC

- The IEA International Research Conference (IRC) in Dublin offered a unique opportunity to highlight R&D work and encourage interest in subsequent calls

- To better align with the IRC, the release of Call 3 for R&D proposals was shifted from February to June 2023
  - More time for reflecting on previous calls and collating feedback to make it more successful and streamlined
  - Greater opportunity to drum up interest at the IRC
  - Manage workload during an exceptionally busy start of the year for IEA

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Alignment with the IRC (cont'd)

- 7 of the 9 current awardees presented their research at the IRC as part of a thematically matching session or in the organized symposium on the R&D fund

- Good interaction and interest from conference attendees

- Alignment with future IRCs planned to the extent possible given its biannual schedule
  - Increase sharing of results and debate, including with study centers
  - Solicit interest from researchers invested in the work of IEA

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Call 3: Open call

- Call 3 was released as thematically open in June 2023

- As in the previous calls, applicants were informed that proposals should relate to one or more of the following:
  - Designing, managing, and implementing IEA studies
  - Developing data collection instruments
  - Data collection and processing
  - Analyzing data and reporting results

- Additional references to recently published handbooks and literature were included

- Deadline for submission was 18 September 2023

Call 3: Changes and improvements

- Continued successful changes from Call 2:
  - Good Grants online platform used for submission and review
  - Informational webinar with interested applicants at the end of August

- Improved reviewing criteria
  - New criterion "Innovation and creativity" to strengthen alignment with strategic mission
  - Better explanation / vignette of what each criterion implies
  - Expanded rating scheme with additional guidance (from 0 to 5)

- Additional clarity with respect to the expected outputs
  - Peer-reviewed journal article submission (open source strongly encouraged and partially eligible for funding)
  - Research report to IEA
  - An internal research report that remains confidential to IEA

- Cross-location team expanded and working well (Lauren Musu, Ralph Carstens, Raegen Jackson)

Call 3: Overview of proposals received

- 16 proposals received in total
    - 12 Tier 1 proposals (6-month duration, € 50,000 limit)
    - 1 Tier 2 proposals (12-month duration, € 100,000 limit)
    - 3 rejected during initial screening (out of scope or incomplete)

- The 13 proposals cover a nice range of areas

- The R&D team is currently identifying expert reviewers for each proposal and will reach out to request reviews in early October

- The Standing Committee is scheduled to review top-rated proposals in December

- Award or rejection planned to be communicated prior the holidays, agreements to be developed in January

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R&D Financial Summary

- The following funds were estimated to be available by year based on anticipated study enrollment

	Period	2021	2022	2023	2024	2025	2026
TIMSS 2023	2021-24	200K	200K	200K	200K		
TIMSS 2027	2025-28					200K	200K
PIRLS 2026	2023-26			100K	100K	100K	100K
ICCS 2027	2024-27				50K	50K	50K
ICILS 2028	2025-28					50K	50K
Total		200K	200K	300K	350K	400K	400K

R&D Financial Summary

- The Call 1 awardees completed their work in 2022-23 and work by Call 2 awardees mostly took place in 2023

- Out of the EUR 700,000 allocated for 2021 to 2023, about EUR 600,000 has been paid/allocated to awardees from Call 1 and Call 2 (one commitment reduced given a lead researcher's move)

- Call 3 awardees will not begin work until early 2024, this leaves a balance of EUR 100,000 plus the EUR 350,000 already allocated to 2024 to potentially be awarded (i.e., a total of EUR 450,000)

- Financial allocations will need to be updated once study enrollment is finalized for subsequent cycles

- Overall, finances are healthy

Call 4: Ideas for Thematic Call

- During IRC and other recent IEA meetings, some ideas for future themes were solicited

- SC recommended:
  - Artificial intelligence (AI) and Large Language Models (LLMs) (e.g. test development, scoring/coding, data management and processing, analysis, reporting, and dissemination)

Thank you!

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