CALL FOR PROPOSALS No. RD 3/06-2023

IEA Research and Development Funds

Open Call for Research Proposals due 18 September 2023

1.   Introduction and objectives

Starting in 2021, the International Association for the Evaluation of Educational Achievement (IEA) invited proposals for research and development to advance and improve the science and methodology of IEA studies, ensuring that they remain at the forefront of international large-scale assessments (ILSAs) in education. The aim of the IEA Research and Development (R&D) Funds relates to IEA's mission to advance research and innovation. Funding is drawn from an overhead on participation fees across IEA studies.

Over time, the R&D program will address a range of topics through *open* and *thematic* calls. The first R&D Call for Proposals in 2021 was thematic and related to technology/computer-based assessments. Three tier 2 proposals were selected for funding from this cycle. The 2022 call was open and allowed for a wider range of topics to be investigated, and this call resulted in five awardees from tier 1 funding and one proposal from tier 2 funding. This 2023 Call for Proposals is thematically open.

Note that awards are not intended to fund substantial, policy-related, or related secondary studies and analyses. Please refer to https://www.iea.nl/about/opportunities/rdfund for details about the funds, past calls, topics, and awardees.

2.   Eligibility and funding tiers

IEA R&D Calls for Proposals are open to external researchers (e.g., individuals or those associated with a university or survey organization) regardless of their current involvement in IEA studies, as well as staff and experts from study centers for IEA studies, and IEA staff. The program welcomes proposals from all groups, and award selection will be based on proposal merit only.

The level of funding is generally based on the proposed project's needs and will fall into either:

- tier 1: projects up to 50,000 EUR/USD; or
- tier 2: projects between 50,000 and 100,000 EUR/USD.

Proposals are accepted for both funding tier 1 and 2. While proposals at tier 2 are likely to provide more depth, proposals at tier 1 are more likely to translate into more varied and timely insights for IEA. Tier 1 proposals can also benefit a larger number of applicants and are hence preferable.

Proposals must identify a lead researcher. A lead researcher may not submit more than one application for a given funding call and may only hold one active grant from the fund as the lead researcher. This restriction does not apply to any administering organizations, which may submit multiple proposals if they are for different projects and have different lead researchers.

All projects covered by the IEA R&D funds must:

- be based on rigorous, intellectually ambitious, and technically sound research that is relevant to the most pressing questions and opportunities in IEA's work on ILSAs;

- be clearly related to methods and approaches that IEA uses in one or more of its studies, or related to those methods and approaches that would, in a forward-looking way, have the potential to significantly improve IEA's work in the future;

- propose specific approaches, innovations, and methods with a tangible outcome or recommendation that adds value to IEA studies and can be realistically implemented and used within the work of IEA; and

- must not be duplicative of work already ongoing at IEA.

Please note that proposals that fail to meet these criteria will not be considered.

IEA R&D projects should relate to the four major strands of the *Technical Standards for IEA Studies* (Martin, Rust, & Adams, 1999), noting that topics can cut across many or all of them:

- designing, managing, and implementing IEA studies;

- developing data collection instruments;

- data collection and processing; and

- analyzing data and reporting results.

3.   Thematic direction and possible topics

This third Call for Proposals is *open*, i.e., proposals are field-initiated and not related to a predefined topic, theme, design, or method and the choice is up to the proposing researcher(s). This type of call is intended as an incentive to the research community and network to recommend changes, innovations, and improvements to IEA, based on the applicant's observation of IEA studies' designs and methodologies.

International large-scale assessments in education have undergone foundational transformations in recent decades and many areas have seen substantial progress to better understand antecedents, processes, and outcomes of education and their societal implications. This also applies to IEA and its current studies including, but not limited to, the mathematics, science, and reading assessments (TIMSS and PIRLS), the International Computer and Information Literacy Study (ICILS), and the International Civic and Citizenship Education Study (ICCS). [1]

A non-comprehensive set of sources on these advances and possible topics for this call include:

- Rutkowski, von Davier, and Rutkowski (2013), who brought together recognized scholars in the field of large-scale assessment to describe technological and statistical advances;

- Bennet (2018), who describes the possible future of educational assessment, including what is likely to change and what is unlikely to do so;

- Johnson, Pennell, Stoop, and Dorer (2018), who collate and illustrate advances across various areas of social science research in cross-cultural settings;

- Harju-Luukkainen, McElvany, and Stang (2020), who provide a cross-national perspective of challenges in international and national student assessments as well as strategies and recommendations for further development.

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[1] For a full description see: https://www.iea.nl/studies/ieastudies

- Nilsen, Stancel-Piątak, and Gustafsson (2022), who have collated overviews and current developments in education across a range of ILSAs;

- and, specific to the IEA context, Wagemaker (2020) provides an overview of key validity, reliability, and comparability considerations and advances for contemporary IEA studies.

Applicants are also strongly recommended to consult international and technical reports for IEA studies and related materials.

Although this is not a requirement, topics may relate to a specific area or study phase or cut across several of them. IEA typically organizes the lifecycle of its studies around 10 keys phases: (1) defining policy goals and research questions; (2) developing assessment, conceptual, and contextual frameworks; (3) sample design and selection; (4) developing and piloting assessments and questionnaires; (5) translation and verification; (6) field operations and data collection; (7) quality observations; (8) data management and cleaning; (9) scaling and analyses; and (10) reporting and dissemination/communication.

Proposals that use data and/or insights from multiple countries and those that have relevance for multiple countries and/or across IEA studies are preferred.

Proposals can also be related to other quality frameworks, including the *total survey error* paradigm (Biemer et al., 2017) or the *Cross-cultural Survey Guidelines* (CCSG; Survey Research Center, 2016), i.e., those covering major aspects across the full lifecycle of international surveys and assessments.

4. Evaluation process and criteria

The review process will consist of a single-blind review approach. The identity of the applicant(s) will be known to the reviewer(s) but not vice versa. A minimum of two reviewers, typically one from IEA's staff and one from the wider network of experts, will be assigned to each proposal based on their methodological and/or subject matter expertise. Internally authored IEA proposals will only be sent to external reviewers. In cases of conflicting/pronounced differences in scoring, a third reviewer may be involved at IEA's discretion.

At all stages, those with conflicts of interest regarding a particular proposal will be excused from both the review process as well as subsequent award decisions.

Following an initial screening for eligibility (see Section 2 above), reviewers will evaluate all in-scope proposals for scientific quality and originality using the following set of criteria.

- **Theoretical background**: accurate and comprehensive understanding of (existing) theories, concepts, definitions, and existing scholarly literature with clear reference to their relevance, appropriateness, and explanatory power.

- **Research design**: systematic and well-articulated strategy for implementing the proposal's aims and answering research questions through rigorous and ambitious methods, analytical approaches, interpretation, and outputs.

- **Innovation and creativity**: extent to which the proposal or its approaches, methodologies, or technologies are either entirely novel, adopted from another discipline, or adapted from an existing approach in a new way, along with a clear rationale on how a new approach might overcome existing limitations.

- **Potential impact**: extent to which a proposed approach, methodology, or technology can benefit IEA studies (and additionally the field at large) and lead to a real change or improvement, e.g., an added value, efficiency gain, or a reduction in total survey error.

- **Significance/relevance for IEA**: extent to which the outcomes and outputs can feasibly be implemented and (readily) result in tangible changes, innovations, and improvements for specific, multiple, or all IEA studies.

- **Adequacy of budget**: sufficiency of the overall budget and its components for the proposal aims relative to the proposal's scope (neither abundance nor underfunding) as well as a clear balance of staff costs, direct costs, and any overheads.

- **Appropriateness of timeline**: suitability and reliability of the overall timeline and of its phases for the proposal's aims, in particular activities that are more open in terms of outcomes or entail a higher risk of delay (e.g., given external cooperation).

- **Team qualification**: (scholarly) expertise and experience of the lead researcher and team members as well as clear task sharing, communication, and leadership to assure transparency, reliability, and flexibility as appropriate for the proposal.

Each criterion will be rated on the following score scale:

- **0 – Insufficient**: the proposal fails to address the criterion or cannot be assessed due to missing or incomplete information.

- **1 – Poor:** the criterion is inadequately addressed or there are serious inherent weaknesses.

- **2 – Fair:** the proposal broadly addresses the criterion, but there are significant weaknesses.

- **3 – Good;** the proposal addresses the criterion well, but a number of shortcomings are present.

- **4 – Very good:** the proposal addresses the criterion very well, but a small number of shortcomings are present.

- **5 – Outstanding:** the proposal successfully and comprehensively addresses the criterion. Shortcomings, if any, are minor.

Proposals will be reviewed, and any requests for clarification made, within about a two-month period following the submission deadline.

The R&D Funds administrators will formulate recommendations based on the merit and transactional value of the reviewed proposals for IEA and submit those to the IEA Standing Committee, which will decide on the projects to fund, followed by award notification (or rejection).

5. Terms and Conditions

Successful applicants will conclude a research agreement with IEA where the proposal constitutes the statement of work, with an opportunity for refinement based on reviewer feedback.

The research agreement will set out the framework for the funding and its terms and conditions, particularly concerning deliverables, such as progress reports, and payments. In addition, the research agreement will set the start and end day of the agreement, as well as specify grounds for termination of the agreement. The Contractor will be asked to commit to confidentiality and data protection. The research agreement will also regulate intellectual property rights. Please note that if any new intellectual property is generated as part of the work, this shall be vested in IEA but include an appropriate return license. Please note that this condition is non-negotiable.

The final research agreement must specify details about the type of product(s)/output(s) as well as the conditions for review and public sharing in the statement of work, noting that IEA is generally committed to the principle of open access/science. Awardees should therefore already clearly specify the type of product(s)/output(s) expected in their proposal considering the following as a guideline. For research that will be of interest to the broader research community, awardees may elect to

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publish results in a peer-reviewed journal. In addition to this, IEA would request a separate report to be published on the IEA website as grey literature focusing on how the research supports IEA, so including or augmenting a journal article and linking to it as applicable. This different structure and conception allow for alignment of interests whilst respecting the varying guidelines and processes of external publishers. While the timeline for the execution of the project itself and its deliverables will be fixed in the agreement, there will be some latitude on how outputs will be made available to the general public, e.g., to allow for sufficient time to publish the research in a journal prior to being placed on the IEA website.

In some cases, the awardees and IEA may choose to produce an internal research report that remains confidential to IEA and authors. For example, this might be applicable for IEA study centers that develop new procedures that should remain protected.

Successful proposals, provided that a research agreement is in place by that time, will be announced to IEA members followed by public announcements on IEA's website and social media.

At IEA's discretion, rejected proposals might be invited for re-submission or can be re-submitted by the lead researcher(s) for subsequent calls, provided that substantial concerns and feedback are addressed in the revised proposal. On request, the reviewers' comments on the proposal will be provided.

IEA reserves the right to accept or reject any or all proposals. In particular, IEA reserves the right to reject proposals from an applicant who, in the opinion of IEA, has previously failed to perform properly, failed to complete work on time, or is not in a position to perform the work.

No applicant shall have any claim for any compensation of any kind whatsoever, as a result of participating in this Call and by submitting a proposal each applicant agrees that they have no claim.

6. Guidelines for submission

There is no requirement to submit a letter of intent. There is no requirement to separate technical and financial proposals. The process starts with a full proposal, which must be submitted in English and electronically via the third-party grant management system used by IEA (see link below). This requires the applicant to register on the platform and accept the respective data privacy policies.

Required proposal information includes:

- Summary (up to 500 words)
- Theoretical background, research design, and possible impact (each up to 1,000 words)
- References (no limit)
- Timeline and milestones
- Budget, notes, and justification
- Lead researcher information (including CV) and team member bios and roles (each up to 250 words per person)
- Declaration of no conflicts of interest with respect to commercial/financial interests
- Declaration of intent and name of an authorized representative of the organization

Biographical notes on team members should highlight the relevance of the person's expertise and experience to the proposed activities.

It is important that proposals discuss the type and use of project outcomes or product envisaged (e.g., a tool, methodology, or framework). Further, proposals must clearly describe the extent to which collaboration with IEA is desired or necessary for completing the work. For example, the type and

detail of non-public/confidential information/data that is required should be clearly specified so that data availability and feasibility can be evaluated during the proposal review stage.

When developing timelines, proposals should assume a start date of 1 January 2024. As outlined in the evaluation process and criteria, it is envisaged that most projects will be completed within three to six months (tier 1) or six to twelve months (tier 2). Starting later or extending the duration is possible but requires clear justification. It is IEA's interest to provide reports at General Assembly meetings (typically in October of each year, 25-27 September this year) and/or IEA's biannual International Research Conference (typically in June of every other year, next occasion in 2023, then 2025), when possible.

Budgets must include the expected number of working days needed to complete each activity related to the project and a total budget in Euros or US dollars. Funding will be provided as a lump sum and can be used for staff (including one's own position) and direct project costs (e.g., travel, software). Indirect cost charges and institutional overheads need to be clearly described and justified and should be kept to a minimum. Applicants should also describe if and to what extent the project has previously received or will receive co-funding from other sources, including the applying organization's own funds.

Additional guidance on completing the electronic proposal form is provided on the Good Grants platform, and applicants are encouraged to register at their earliest convenience.

All proposals must be submitted via Good Grants at
https://ieard.grantplatform.com
before or on Monday, 18 September 2023, 13:00 CEST.

7. Further information

Questions may be submitted at any time to Lauren Musu and Ralph Carstens via rd@iea.nl.

An informational webinar will be hosted by IEA to present the R&D Call for Proposals and address the questions of interested researchers on 31 August 2023 at 14:00 CEST. For registration, visit https://forms.office.com/e/SX1ztyCqRw.

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