

Call for proposals 5 Can technology accelerate learning and skills?

March 23, 2020

Around the world, there is a learning crisis that starts early in life and continues throughout a child's educational experience in school.¹ Low levels of learning in school translate into low levels of skills in labor markets, and this is often identified as a barrier to unlocking a country's growth potential. Accelerating learning and skill development in these contexts likely requires a change in strategy. In addition, current global challenges, such as the Syrian and Rohingya refugee crises and the global Covid-19 pandemic, have created populations who either cannot access standard learning opportunities or require different modes of learning. Even in the absence of these shocks, populations with disabilities, children younger than school-age, and adult learners often cannot benefit from the services that education systems typically offer. In many countries, girls of all ages face similar forms of exclusion.

Since 2012, the World Bank's <u>Strategic Impact Evaluation Fund</u> (SIEF) has funded four open, competitive calls for proposals for impact evaluations in low- and middle-income countries focused on early childhood development and nutrition, basic education, health systems, or water and sanitation. The current portfolio has around <u>80 evaluations</u> spread across <u>38 countries</u>, and these evaluations are a mix of government, NGO, and researcher-implemented programs.² SIEF-funded evaluations have led to <u>peer-reviewed publications</u> in top research journals, such as the Lancet and the American Economic Review, and as well as <u>citations and profiles in mainstream media outlets</u>, such as National Public Radio, the Economist, and the Guardian. These evaluations have also had large <u>policy footprints</u>, including at national scale.

We would like to continue this successful matching of scientifically sound research methods with policy challenges in a fifth call for proposals focused on technology. In particular, SIEF aims to fund evaluations that examine the extent to which technology can accelerate learning and skills for both children and adults in low- and middle-income countries who are currently not learning adequately with their current set of services. As maintaining implementation fidelity is not easy in many low- and middle-income countries, evaluations that help uncover which implementation approaches promote sustained use of these technologies will also be a priority of this call.

¹ World Development Report 2018: Learning to Realize Education's Promise

² From 2007-2012, SIEF stood for the *Spanish* Impact Evaluation Fund, which had a similar mandate and funded 42 completed evaluations.

This call for proposals will be split into two different funding windows. First, there will be an emergency window focused on school closures resulting from the current Covid-19 global pandemic that, at the time of writing, has led more than 150 countries to close their schools, affecting more than 1.5 billion children worldwide. This window will have earlier deadlines and an expedited screening process, as it is intended to generate evidence that would be immediately useful for countries' education systems as they deal with the Covid-19 pandemic. Second, there will be a more general window for the use of digital technologies to address learning and skill deficits more broadly and for any longer-term responses to the pandemic.

In both cases, SIEF will offer a maximum grant size of \$300,000 and expects to fund approximately 10-12 evaluations in this funding round. If, however, there are many high quality proposals with nimble designs, then the total number of funded evaluations may exceed 10. As the current global pandemic may require cheaper forms of data collection, such as phone surveys or online assessments, this is certainly a possibility. SIEF encourages teams not to request the full amount only for the option value of having flexible funds for research. We are in an unprecedented emergency, and SIEF would like to use the funds in the Covid-19 window to learn as much as possible to help children, parents, and educators deal with the crisis around the world.

The rest of this note details the rationale for the technology-focused call for proposals, describes who is eligible to apply and the criteria for funding, and provides a timeline for the entire screening process.

WHY A FOCUS ON TECHNOLOGY?

Today's learning crisis is evident along many dimensions.

- Learning poverty: 53 percent of 10-year old children in low- and middle-income countries cannot read and understand a short story (rising to over 80 percent in poor countries).³
- Access and equity: 263 million students are still out of school, including 61 million children of primary or secondary school age. Conflict and violence are major barriers to getting children to school. At the time of writing, more than 150 countries have announced Covid-19 related school closures, leaving close to 1.5 billion children out of school.
- *Relevance*: Technology is rapidly becoming a part of daily life, both inside and outside the home. Many governments wonder whether their young and adult citizens are being adequately prepared with the appropriate skills to live in a changing world.

Addressing these issues will require innovative approaches, and the effective use of technology provides an opportunity to do things differently. Evidence shows digital technologies have the potential to: offer scalable and cost-effective learning experiences; enhance access to educational resources, particularly in challenging environments; provide a more personalized learning experience; diversify the opportunities of lifelong learning; expand the accessibility and inclusion of high-quality learning materials for people with disabilities; enhance examination and assessment; contribute to better evidence-based decisions; and support the use of management information systems to improve learning. There is also a growing consensus that the labor market will increasingly demand digital skills along with other foundational skills.

³ See <u>here</u> for more on learning poverty.

Despite existing research about the efficacy of certain digital technologies on teaching and learning, the results are hardly conclusive. The adoption of digital technologies is not necessarily associated with more or better learning, and all technologies may not be useful for improving learning in all populations. Also missing is evidence on the impacts of digital technologies that have any chance of being scaled and sustained in low-resource settings. Therefore, we need to look beyond the debate about the effect of generic technology use on learning and generate evidence on which technologies are the most effective, under what circumstances, and for whom.

OBJECTIVES OF THE CALL

SIEF will use this call for proposals to meet four objectives that advance SIEF's core mandate of supporting evidence-based policy design in low- and middle-income countries.

OBJECTIVE 1 Building evidence on the benefits and costs of scalable and affordable technology-based interventions

Technology has been proposed as a solution for low levels of learning and skill development among both children and adults. Experimental evidence on this has been scant, mixed, and mostly limited to small-scale pilots. Needed is evidence on how governments, with their current capacity for scale and their current budgets, can or cannot tackle problems associated with learning and skills through technology. Even more scarce is evidence on the costs of developing, deploying, and maintaining these types of interventions.

OBJECTIVE 2 Building evidence on how to successfully implement of technology-based interventions

Ensuring implementation fidelity is a major challenge in many middle- and low-income countries (as well as in high-income countries). When measured impacts of a program suggest limited or even no effect, it is typically not clear if the program was the wrong solution to the policy problem or if the program was just not implemented correctly. While this challenge affects all sectors, it is particularly salient for technology-based interventions where equipment and software are utilized for limited durations, if at all, and where capacity to use technology by management, personnel, older adults, and children may be limited. Thus, in addition to estimates of technology's impact, SIEF will be interested in more <u>nimble evaluations</u> that use experimental methods to uncover *how* to do things, not just what to do – in particular, how to promote the sustained use of technologies. Similarly, iterative experimentation may be necessary to quickly identify interventions that are not working and to reoptimize their design and assess impact before the end of a year. Therefore, this SIEF call will prioritize evaluations that build in iterative experimentation into their research designs, along with high frequency reporting of results.

OBJECTIVE 3 Spurring innovations in the use of project-generated data and machine learning

SIEF is particularly interested in learning about less expensive data capture methods in low and middleincome countries, as well as data re-use. For example, to what extent can existing administrative data, once accessed, be used in evaluations? What about data from apps used by families, service delivery personnel, or managers? Interventions like adaptive learning collect high frequency data on learners, and it would be good to feed this data back into the design of interventions in a rigorous way and to use it to predict which groups might benefit the most from certain interventions. Similarly, psychometric research using evaluation data can tell us how we can improve future measurement.

OBJECTIVE 4 Facilitating successful matches between researchers and operational teams

As in SIEF's previous call for proposals, SIEF will use the screening process to match operational teams with interested external researchers. During a first phase of screening, researchers will fill out a short application, where they outline their designs for evaluations either for their own projects or for specific questions generated by a set of World Bank and DFID financed projects that appear in the <u>appendix</u> to this call for proposals. Then after vetting by SIEF, operational leads can choose a research team to collaborate with during the second phase of screening, when a full proposal is required.

WHO AND WHAT ARE ELIGIBLE?

Who is eligible?

SIEF is a Bank-executed trust fund, which means that only World Bank task team leaders can apply for funding and only their respective units receive the awards. These task team leaders provide fiduciary oversight for SIEF funds and, at the same time, increases the likelihood that governments engage with evaluation results. They also ensure that both intervention and evaluation designs will deliver evidence that countries will find useful.

While only World Bank task team leaders can submit full proposals to SIEF, each proposal must have at least one experienced researcher dedicated to the evaluation⁴. This researcher can be a current staff member of the World Bank or can be an external researcher who will eventually be hired as an individual (as a World Bank short-term consultant) if the proposal turns out to be successful. The section on *How to apply* below details how researchers can be paired with World Bank task team leaders.

No universities or research organizations or firms can participate in SIEF's call for proposals, as it is not a procurement process. Moreover, if a researcher collaborates with a task team leader on a proposal, any organization, firm, or institution that also compensates that researcher will *not* be eligible to be a vendor for any evaluation activities. For researchers accustomed to applying for grants that go to their respective institutions, this is important since for activities financed through Bank-executed trust funds, the World Bank can only compensate universities, firms, and organizations through vendor contracts.

What is eligible?

Digital technologies are technologies that capture, transmit and display data and information electronically and include all devices, applications, and networking elements that allow organizations as well as people to connect in the digital world. Digital technologies cover any communication device or application, encompassing smartphones, computers, and network hardware and software, as well as the various services and applications associated with them, such as videoconferencing and distance learning, e-books, information management systems, among other tools that facilitate communication between users. For the purposes of this call, television and radio would be considered digital technologies, even if their transmission is not yet digital everywhere.

Given the broad focus on learning and skills, it is important to note that not all interventions under evaluation need to take place in educational institutions. In fact, the point of some technologies may be to reach populations that cannot access schools – either because they are girls or refugees, they have disabilities that require different modes of learning, they are in disease environments that require social

⁴ An experienced researcher is someone who has successfully completed an impact evaluation in the past.

distancing, or they are adult learners past school-age. The hypothetical examples listed in Box 1 demonstrate the cross-sectoral potential for digital technologies to improve learning and skills throughout the life-cycle.

BOX 1 TECHNOLOGY & SKILLS ACROSS SECTORS

Here are some examples of research questions that would fall under this call for proposals.

EARLY CHILDHOOD DEVELOPMENT: Can text message reminders and goal setting make parenting programs more effective? Can a decision-support app help make early childhood stimulation activities more effective?

EDUCATION: Can adaptive learning software help ensure all children in the classroom learn? Can it help teachers be more effective? Would an information-management system help identify and address skills deficits of students and teachers? Which interventions promote the regular use of learning technology in the classroom? Can an app help refugee child learn to read and address their psychosocial needs?

HEALTH: Can technologies help improve school-based diagnoses of conditions that impair learning such as vision, hearing, and mental health conditions? Can technologies make official training and medical education programs more effective?

GIRLS' EDUCATION: Can digital technology help girls consistently access learning opportunities, particularly if they are more likely to be pulled out of school to help at home? Can girls benefit from having a virtual network, particularly in male-dominated subjects?

SIEF would also be interested in evaluations that investigate the role of technology in the education sector to build resilience and to deal with issues related to climate change and energy.

General window

SIEF's main objective for the more general window is to fund impact evaluations that either (i) estimate the benefits and costs of using scalable and affordable digital technologies to improve learning or skills among children, youth, or adults or (ii) identify implementation approaches that facilitate take-up and use of these technologies.

Covid-19 emergency window

Evaluations funded under the emergency window must estimate the effectiveness of approaches that use digital technologies for delivering education services that have been disrupted by the global Covid-19 pandemic. SIEF is most interested in identifying (i) remote learning approaches that achieve high coverage, high take-up, and learning, (ii) supplementary interventions that might be needed to maintain children's psycho-social well-being, and (iii) and successful strategies for transitioning children back into school. Results must be useful immediately, not for the next pandemic and not for when a country can double its investment in the education sector. Data collection methods for evaluations funded under this window must adapt to the situation on the ground and protect the safety of anyone collecting or providing data – for example, by moving surveys to the phone, by implementing online assessments, or by installing IoT devices. Quasi-experimental evaluations of data from past health emergencies, epidemics, and pandemics, such as Ebola, H1N1, and SARS, would also be of interest.

For both windows, SIEF requires that all evaluations that receive funding fulfill all criteria listed in Table 1. Exceptions for the Covid-19 emergency window are noted in the table.

TABLE 1 CRITERIA THAT ALL APPLICATIONS MUST MEET

If short applications and full proposals do not have all the following 14 elements, they will not be considered for SIEF funding.

1	Causal impact	All evaluation designs must aim to estimate causal impacts of an intervention or set of interventions. These evaluations must be quantitative studies. Although we acknowledge that qualitative research may provide important supplementary evidence, SIEF funds cannot be used for these kinds of analyses. Most studies in SIEF's current portfolio are randomized control trials. While SIEF does consider applications with quasi-experimental designs, the onus will be on applicants to convey that all the necessary conditions for credible inference will be satisfied in the proposed country context.
2	Relevance for SIEF's core themes	SIEF funds evaluations in four core domains: education, health, early childhood development and nutrition, and water and sanitation. For the purposes of this call for proposals, education can include education activities targeting skills of adult learners as long as these activities can eventually be linked to the country's education system.
3	World Bank client country	The evaluation must take place in a World Bank client country. For a list of these countries, see <u>here</u> .
4	Funding only for evaluation	SIEF funds can only finance evaluation activities – ensuring compliance to the evaluation design, data collection, data management and analysis, and writing and other forms of dissemination. Funds cannot go towards implementation of the intervention under evaluation. Intervention design would be counted as an implementation activity, not an evaluation activity.
5	Secured funds for implementation of intervention	When writing the full proposal, teams should have already secured financing for the intervention under evaluation.
6	Implementer with experience and necessary permits	The implementer of the intervention under evaluation should have experience implementing the intervention– even if in a pilot stage – when teams submit the full proposal. The implementer should also be in a position to obtain any necessary permits and approvals to implement the intervention in the proposed country context.
7	Interventions with potential for immediate scale and affordability	Interventions under evaluation should have the potential to scale in the country context immediately, and they should be affordable with current expenditures. For example, SIEF will not fund an intervention like expensive smart classrooms (or e-coaching) in a context that can only guarantee connectivity (or a sufficient number of coaches) for a small minority of its school-going population unless there is a concurrent reform in the current

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		budget that aims to dramatically improve connectivity (or increase the number of coaches).
8	Researcher with evaluation experience	The researcher proposed to lead the evaluation must have completed an evaluation in the past.
9	Collection of cost and implementation fidelity data	All SIEF-funded evaluations must collect cost data on the intervention under evaluation using the ingredients method. Teams must also collect data on the implementation fidelity of interventions under evaluation.
10	Data access	World Bank task team leaders of SIEF-funded evaluations must submit any data collected partially using SIEF funds to the <u>World</u> <u>Bank's MicroData catalog</u> within 6 months of data collection. After submission, research teams can have private access to the data for a period of two years after the end of data collection, after which they need to make the data available for licensed use. All data must be made publicly available within 4 years of data collection.
11	General window only Psychometric analysis of learning data	For all evaluations that propose to collect data on learning or skills, research teams must either (i) conduct psychometric analysis of the instrument and resulting data following the validity and reliability standards in the field of psychometrics (for example, the 2014 standards from the American Educational Research Association, the American Psychological Association, and the National Council on Measurement in Education) or (ii) submit all instruments and clean data prior to the standard data submission deadlines so that SIEF can arrange for these analyses independently. To the extent possible, it would be advisable to score all items as either <i>correct</i> or <i>incorrect</i> and avoid partial scores. Please see below in the <i>SIEF deliverables</i> section for more information on standard data submission deadlines.
12	Covid-19 emergency window Results within 6 months General window Results within 2 school- years	SIEF will not fund long-term experiments under this call for proposals, although long-term retrospective evaluations with credible quasi-experimental designs will still be eligible. For the Covid-19 emergency window, evaluations must produce useable and actionable information within 6 months of receiving funding.
		For the general window, experimental results must be measured within two school years (for school-based interventions) or 24

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	months (for interventions that are not based in schools) from the start of the evaluation. ⁵
13 Research ethics	All team members must obtain human subjects certification and approval from either a local or university research ethics review board before starting any evaluation activities.
14 <i>General window only</i> Meaningful dissemination to research subjects	Dissemination must go beyond research papers, policy briefs, presentations to the government, and presentations in academic conferences. All research subjects must learn about the results of the evaluation in a format that is physically and conceptually accessible to them, whether this happens in person at community events or via the distribution of materials. This type of dissemination must be included in proposed budgets.

While all evaluations that receive SIEF funding must fulfill the criteria listed in Table 1, SIEF will use the criteria in Table 2 to prioritize funding both on the extensive margin (acceptance) and intensive margin (final dollar amount). The more of these prioritized attributes that a proposed evaluation has, the more likely it will receive funding in this first round of evaluations focused on the role of digital technologies in improving learning and skills throughout the life-cycle. Evaluation designs that do not meet at least three of these criteria will not be eligible for the maximum amount of \$300,000.

TABLE 2 PRIORITY CRITERIA FOR ALLOCATING FUNDING

Short applications and full proposals that meet any of the following 9 criteria will be given priority for funding, both on the extensive margin (acceptance) and the intensive margin (final amount allocated). Evaluation designs that do not meet at least 3 of these criteria will not be eligible for the maximum funding amount of \$300,000.

1	Focus on disability	SIEF is seeking to fund evaluations that focus on improving access to learning opportunities and the quality of instruction for individuals with disabilities.
2	Focus on girls' education	Similarly, SIEF seeks to fund evaluations that identify successful approaches for improving access and learning for girls.
3	Measurement of learning or skill-related outcomes	Evaluations that generate data on learning or skill-acquisition will be given priority.
4	Nimble evaluation design	Studies with a nimble design will also be given priority, particularly in contexts where implementation fidelity may be a challenge.

⁵ We realize that some interventions must start at the beginning of the school year and that decisions about SIEF awards might come in the middle of the school year. We also realize that many schools around the world are currently closed for an indefinite amount of time. Reviewers will take these issues into account when assessing applicants' proposed timelines in the general window.

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		Please see SIEF's previous call for <u>proposals</u> for more information. A successful application, for example, might propose to quickly test different implementation approaches in a first nimble stage and then move on to test impacts on learning in a second stage.
5	Potential for iterative experimentation	Many technology-based applications permit high-frequency data collection. This information can be used to tailor interventions to different users and more quickly learn what works best for which populations. ⁶ SIEF will be looking for applications that credibly build this type of learning into their evaluation designs
6	Use of baseline data beyond the evaluation	Evaluations that propose to use baseline data to refine the intervention under evaluation or to shed light on other policy-priorities in the proposed country context will be given priority.
7	Co-funding for evaluation	As SIEF funding may not be sufficient to cover the costs of many evaluations in data-scarce environments, particularly those aiming to measure learning outcomes, evaluations that already have secured co-funding at the time of the full proposal will be given priority.
8	Identified decision that depends on the evaluation	SIEF aims to finance evaluations that answer questions that a real (rather than hypothetical) policymaker has posed. That is, SIEF will prioritize evaluations that will inform an already identified decision that a policymaker has to make in the future.
9	DFID-priority country	Given that the United Kingdom's Department for International Development is the largest contributor to SIEF, proposing to conduct an evaluation in a DFID-priority will earn a proposal extra points during screening. These countries include the following: Afghanistan, Bangladesh, Democratic Republic of Congo, Ethiopia, Ghana, Indonesia, Iraq, Jordan, Kenya, Lebanon, Malawi, Mozambique, Myanmar, Nepal, Nigeria, West Bank and Gaza, Pakistan, Rwanda, Sierra Leone, Somalia, South Sudan, Sudan, Syria, Tanzania, Uganda, Yemen, Zambia, and Zimbabwe.

⁶ For an example of an adaptive intervention, please see <u>this paper</u> by Muralidharan, Singh, and Ganimian in the American Economic Review. For an example of an adaptive experiment, please see <u>this research protocol</u> submitted to the Cameroon National Ethics Committee by Athey, Baird, Jamison, McIntosh, Ozler, and Sama.

HOW TO APPLY

General window

The general application process will proceed in two stages. In the first stage, researchers fill out a short application form (insert link). This short proposal will help us assess the overall suitability of the evaluation design for the proposed country context. We want the evaluation to be technically viable; at the same time, we want the resulting evidence to be immediately useful where it is produced. At this stage, researchers do not need to be matched with a World Bank operational team. These short applications will be due June 1, 2020.

SIEF will screen these short applications and invite those passing the screening criteria (see section below on *How will proposals be assessed*) to proceed to the second stage of the application process: the full proposal. These proposals will be due September 1, 2020.

For the full proposal stage, steps are likely to differ based on whether the researcher is an employee of the World Bank and whether the researcher has already matched with someone in the World Bank who can play the role of task team leader for the evaluation.

Researchers employed by the World Bank as regular staff

Since only World Bank task team leaders can apply for SIEF funding and since SIEF awards are made to their respective units, researchers who are regular staff in the World Bank can play this role for themselves. That is, there is no need for them to submit a full proposal jointly with an operational task team leader working in the country of study.

External researchers

External researchers, on the other hand, will need to be paired with a World Bank task team leader who will ultimately submit the full proposal to SIEF. This group includes researchers currently employed as short-term consultants by the World Bank. This pairing between researchers and operational teams can happen in multiple ways.

<u>CASE 1</u>

First, some external researchers may already have a working relationship with the World Bank task team leader working in their country of study. If this is the case, then the researcher(s) and task team leader can work on the proposal together without the involvement of SIEF.

CASE 2

Second, in their short application, some external researchers may have proposed an evaluation design for a World Bank or DFID project listed in the <u>appendix</u> of this call for proposals. SIEF will share all of these proposals that pass through the first screening with the corresponding World Bank task team leaders, who will determine whether they want to work with these researchers on a full proposal or whom they want to work with if more than one researcher submits a successful short application for the same project.

CASE 3

Finally, some external researchers who pass through the first screening may have no preexisting connections to World Bank task team leaders and may have proposed an evaluation design for an intervention that has no connection to a World Bank or DFID project. In this case, SIEF will contact relevant World Bank task team leaders and ask if they would be interested in collaborating with the researchers to submit a full proposal. This might happen if the evaluation would generate evidence that could be useful for future projects or policy dialog with the government. If the task team leader is interested, then (s)he would work with the researcher(s) to submit a full proposal. If, however, the relevant task team leaders are not interested in partnering on the proposal, then researchers cannot move on to the second stage of the application process.

Tables 3 and 4 summarize this process for researchers and World Bank task team leaders who are not researchers using a series of "yes or no" questions.

TABLE 3 HOW TO APPLY IF YOU ARE A RESEARCHER

If you are a researcher or a research team, please answer the following questions to determine how you should apply for SIEF funding and get matched with a World Bank task team leader. Each SIEF evaluation needs at least one experienced researcher who has successfully implemented an impact evaluation in the past. As mentioned in the text, however, institutions or organizations cannot apply for funding.

	Question	Yes	No
Q1	Are you World Bank staff?	Go to Q2.	Go to Q2.
Q2	Do already have an intervention in mind that you would like to evaluate?	Submit short application and go to Q4.	Go to Q3.
Q3	Are you interested in designing an evaluation for a World Bank or DFID project listed in the <u>appendix</u> ?	Submit <u>short application</u> proposing a hypothetical design for one of these projects and go to Q4.	Sorry, this call for proposals is not for you.
Q4	After the first round of screening, were you invited to submit a full proposal?	If you answered "yes" to Q1 and to Q2, submit a full proposal with you or a colleague listed as the TTL and go to Q8. Everyone else, go to Q5.	Thanks for participating. The process ends here for you.
Q5	Did you propose an evaluation design for a World Bank or DFID project listed in the appendix?	Go to Q7.	Go Q6.
Q6	Do you already have a relationship with a World Bank TTL working in your country context?	Collaborate with this World Bank TTL who will submit a full proposal and go to Q8.	Go to Q7.
Q7	Was SIEF able to match you with an interested TTL?	Collaborate with this World Bank TTL who will	Thanks for participating. The process ends here for you.

		submit a full proposal and go to Q8.	
Q 8	Was the full proposal awarded	Submit first set of	Thanks for participating.
	funding by SIEF?	deliverables to unlock first	The process ends here for
		disbursement.	you.

TABLE 4 HOW TO APPLY IF YOU ARE A WORLD BANK TTL BUT NOT AN IE RESEARCHER

If you are a World Bank task team leader who cannot lead an impact evaluation, please answer the following questions to determine how you should apply for SIEF funding. Each SIEF evaluation needs at least one experienced researcher who has successfully implemented an impact evaluation in the past.

	Question	Yes	No
Q1	Do you have a project that can benefit from an experimental or quasi- experimental evaluation?	Go to Q2.	Sorry, this call for proposals is not for you.
Q2	Do you already have a researcher in mind to help you with this evaluation?	Ask this researcher to submit a <u>short application</u> and go to Q5.	Go to Q3.
Q3	Did you submit a project description that was included in the <u>appendix</u> ?	Go to Q4.	Please contact SIEF immediately for help finding a researcher.
Q4	Did SIEF send you any short applications that passed the first screening?	Choose whether you would like to work with the researcher or choose which researcher you would like to work with if there were multiple successful short applications showing interest in your project. Submit a full proposal and go to Q6.	Thanks for participating. The process ends here for you.
Q5	Did the short application pass the first screening?	Submit a full proposal and go to Q6.	Thanks for participating. The process ends here for you.
Q6	Was the full proposal awarded funding by SIEF?	Submit first set of deliverables to unlock first disbursement.	Thanks for participating. The process ends here for you.

Covid-19 emergency window

The emergency window will follow a similar process to the general window but with four main differences:

- 1. There is a separate <u>short application form</u>.
- 2. Review of the short application will not be blinded.
- 3. Applications cannot propose evaluation designs for the World Bank and DFID projects listed in the appendix of this call for proposals.
- 4. Screening for these applications will happen on a different timeline.
 - Short applications will be due April 10, 2020
 - SIEF will screen these proposals by April 17, 2020.
 - Those who pass the first screening should submit full proposals by May 1, 2020.7
 - SIEF will make funding decisions by May 11, 2020.

HOW PROPOSALS WILL BE ASSESSED

Proposals will be assessed on the extent to which they fulfil the required criteria in Table 1 and the priority criteria in Table 2. For the general window, a team of reviewers consisting of the SIEF program manager and individuals with expertise in impact evaluation, SIEF's themes, and applications of digital technologies will make these assessments. These reviewers will not be allowed to apply for SIEF funding through this round, nor can they be current collaborators of anyone who is applying. During the first stage of screening, reviewers (other than the SIEF Program Manager) will not know the identities of applicants; they will just know whether the applicant has completed an impact evaluation and whether they are certified in human subjects research. During the full proposal stage, however, reviewers will take into account the research and country experience of team members when assessing the potential of proposals.

For the emergency window, a team of reviewers consisting of the SIEF program manager and experts in the application of digital technologies in education and rapid data collection methods will review short applications and full proposals. All reviewers will know the identity of applicants and may request interviews with the applicants to obtain additional information.

SIEF DELIVERABLES

It is important for both researchers and World Bank task team leaders to be aware from the outset that SIEF funding does not come for free; there are specific deliverables that teams must submit throughout the evaluation process. These deliverables listed in Table 5 help the SIEF program ensure that its criteria for funding evaluations (Table 1) are being met. They also help advance principles of research transparency within SIEF's portfolio and will eventually serve as global public goods for both the broader research community and consumers of evidence among those working to accelerate human capital accumulation in low- and middle-income countries.

⁷ Templates for the full proposal will be available by April 1, 2020.

TABLE 5 SIEF DELIVERABLES

All evaluations financed by SIEF must submit the following deliverables. SIEF funding is provided in tranches. Submission of these deliverables triggers the disbursement of these tranches.

Get	etting started		
1	<i>General window</i> Concept Note with approval of relevant World Bank country director	For researchers in the World Bank's Development Economics Research Group, email approval from the relevant country director would suffice even in the general window.	
	<i>Covid-19 emergency window</i> Written approval of the relevant World Bank country director		
2	Registration of evaluation in a trial registry	For example, teams can register their evaluation in the American Economics Association <u>RCT registry.</u>	
3	Plan for cost data collection	All teams must submit their plan for collecting data on costs of the intervention under evaluation. These plans should follow the ingredients method, and costs would ideally be collected in real time, as the intervention is implemented. For more information, see <u>SIEF's brief on costing</u> .	
4	Plan for collection of data on implementation fidelity	All teams must submit their plan for collecting data on the implementation fidelity of the intervention under evaluation. Much of this data will likely be collected as part of cost data collection activities.	
5	Documentation of human subjects certification and relevant research ethics approval	All members of the research team, as well as the World Bank's task team leader, must receive training in human subjects research. The evaluation designs and protocols for data collection, storage, and analysis must also receive approval from a relevant institutional review board (IRB) and/or a local research ethics body in the country under study.	
Bas	seline		
6	Baseline data and documentation	SIEF teams must submit baseline data and documentation to the World Bank's MicroData catalog. As poorly documented data will sit in a queue for a lengthy period of time and generate multiple back-and-forths between the research team and catalog staff, it is important that research team properly document their data at the time of data collection. See Table 1 for when this data should be submitted.	
7	Baseline report	While this report can set the context and be used for policy dialog, the report must also include the following: statement of final designs for the intervention and evaluation, balance tables comparing all experimental arms, updated power	

TABLE 5 SIEF DELIVERABLES

All evaluations financed by SIEF must submit the following deliverables. SIEF funding is provided in tranches. Submission of these deliverables triggers the disbursement of these tranches.

		calculations, and a plan for analysis. Registered reports and pre-analysis plans may in many cases serve the same purpose as the baseline report.
8	<i>General window only</i> Updated plans for the collection of data on costs and implementation fidelity	Many things can change between when SIEF makes its awards and the start of an intervention, and the research team has likely spent more time in the field learning about how the intervention will be implemented. It is important that these changes and new discoveries be reflected in the team's plans for collecting data on costs and implementation fidelity. This should include any draft forms that may be required for collecting this information (e.g. time use surveys or interview questions).
SIE	F monitoring	
9	General window Brief updates every 6 months Covid-19 emergency window Brief updates every month	SIEF-financed teams fill out a short form with updates on the progress of field work and any changes to the evaluation design or timeline. Teams can also report on any interim findings, publications, presentations, or policy impacts that might have resulted from their evaluations.
10	General window only Annual interviews	SIEF-financed teams will also provide updates through an annual interview (approximately 30-60 minutes).
Enc	lline	
11	Endline data and documentation	SIEF teams must submit endline data and documentation to the World Bank's MicroData catalog. See Table 1 for when this data should be submitted.
12	Endline report	This report should include <i>at a minimum</i> a description of the intervention and evaluation designs; a measure of compliance; information on the sample, including evidence of any differential attrition across experimental arms; information on the development of instruments used to collect data used to measure impact; a presentation of average treatment effects without any covariate adjustment aside from indicators for stratifying variables and baseline values of the outcome variable; heterogeneous treatment effects by strata; a description of the methodology used to collect data on costs and implementation fidelity; a discussion of estimated intervention costs and implementation fidelity; and a table that lists all ingredients used in the intervention, their units, quantities, allocations (if less than 100% to the intervention under evaluation) and values (in local prices and PPP-adjusted US dollars).

TABLE 5 SIEF DELIVERABLES

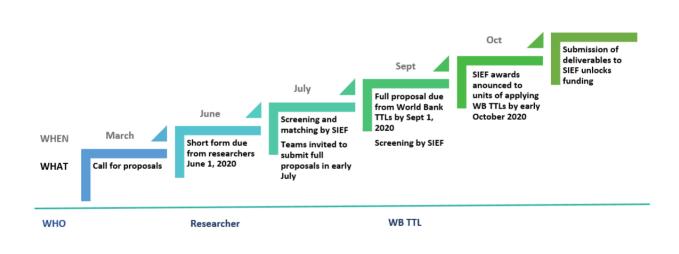
All evaluations financed by SIEF must submit the following deliverables. SIEF funding is provided in tranches. Submission of these deliverables triggers the disbursement of these tranches.

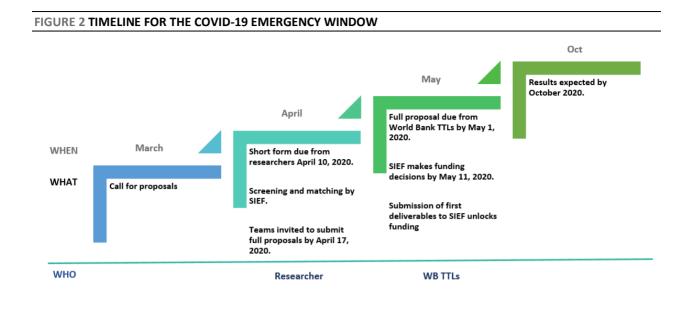
13	Cost data and documentation	All cost data and any forms used to collect this information (for example, time use surveys or interviews) must be submitted to SIEF.
14	Implementation fidelity data and documentation	All data on implementation fidelity and any forms used to collect this information must be submitted to SIEF.

TIMING

As this call for proposals goes out, the global Covid-19 pandemic has created multiple uncertainties about work flows and the normal operations of public services in many countries, particularly education institutions. These circumstances will also likely require both applicants and those involved with screening to work remotely for an indeterminate amount of time. Given this situation, please consider the following timelines in Figures 1 and 2 tentative. The SIEF team will send out updates as we receive more information.

FIGURE 1 TIMELINE FOR THE GENERAL WINDOW





CONTACT

For any questions that are not answered in this call for proposals, please send an email with "SIEF Call 5 query" in the subject line to <u>siefimpact@worldbank.org</u>.