

IES Learning Acceleration Challenges: Virtual Information Session Transcript

Eden Baker (00:00):

Alright. I think in the interest of time, we have a fair bit to cover, I am sure there will be a few people that will join in the next few minutes, but I think we can get started. So welcome, everybody. Thanks so much for joining us today. My name is Eden Baker and I use she/her pronouns. I'm a white woman with shoulder length blonde hair, and I am sitting in front of a Zoom background that has the logo for the Learning Acceleration Challenges in the background.

I'm an Engagement Manager at Luminary Labs, and I know we had some questions about Luminary Labs before today's session. So we are an innovation consultancy based in New York, and we have been engaged by the Institute of Education Sciences to run the Learning Acceleration Challenges. We are incredibly thrilled to have you all here today.

Eden Baker (00:46):

The purpose of today's session is to provide an overview of the Learning Acceleration Challenges, including the focus areas, the selection criteria, and the participation requirements. We will be discussing both the Math Prize and the Science Prize in today's session. We will then have a Q&A at the end of the session. We'll be using the Q&A function in Zoom. So if you do have questions as we're talking, feel free to share them in the Zoom box at the bottom of your Zoom window, and we'll get back to those during the Q&A session at the end.

Eden Baker (01:18):

We'll also be publishing our answers to the questions that we receive today via the FAQ section on Challenge.gov, so if you haven't already, we really recommend that you follow the challenges on Challenge.gov to receive updates when those answers are posted. If you missed it at the beginning, we are also recording today's session and we'll also be sharing a copy of the slides. Next, I think. And then just quickly out of interest, if you're curious about who else is here today, you should be able to see the results of the poll on your screen now. So interesting. It looks like a pretty even split, actually, of kind of math, science, and interested in both. And then looking at the types of organizations, great to see lots of intervention providers here today, as well as some folks from research and policy organizations. And it looks like a fair few of you fall into the other group as well. So interesting to know who's there, thanks so much for joining.

Eden Baker (02:19):

All right. So today we are also really pleased to be joined by staff from the Institute of Education Sciences, including Dr. Joan McLaughlin, Commissioner of the National Center for Special Education and Research, as well as Dr. Matthew Soldner, Commissioner of the National Center for Education Evaluation and Regional Assistance. So Joan and Matt, I'm going to pass it over to you to introduce yourselves and then also share a little bit more about the challenges.

LUMINARY LABS

Sarah Braisel (02:55):

Joan, you're on mute.

Joan McLaughlin (03:03):

Thank you. All right, let's try that again. I'm so glad to be with you today and to kick off this challenge activity with a webinar. I am a white woman with short light brown hair, and I have on a dark ruffled shirt. My pronouns are she and her. And I want to identify two other staff members from the National Center for Special Education Research, or NCSEER as we call ourselves. One is Sarah Braisel, who is in the meeting, and another is Britta Bresina, who just delivered a baby a few days ago so she won't be joining us today, but hopefully will be involved in fairly short order. Okay. Matt?

Matthew Soldner (03:52):

Hey, thanks Joan. Hey everyone. Good afternoon. My name is Matt Soldner. I'm a white man with very, very short light brown hair, and I'm wearing a blue blazer. My pronouns are he and him. In addition to myself, I want to recognize another colleague who is on the phone with us today from IES. Christina Chhin from our National Center for Education Research. She'll also be working with us on the Science Prize. So let's-

Joan McLaughlin (04:25):

Okay. Go ahead. Sorry, Matt.

Matthew Soldner (04:26):

No problem. No problem. So let me just again give you all my welcome, our welcome from the Institute of Education Sciences. If you are not familiar with us, we are the Department of Education's research, evaluation, and statistics branch, and we are really thrilled to have been able to launch the Learning Acceleration Challenges to identify and to test intervention to improve both math and science achievement. We are running two concurrent challenges as you know, the Math Prize and the Science Prize. And over the next few slides, Joan and I are going to share more about each challenge. And we'll begin, I believe, with the Math Prize.

Joan McLaughlin (05:07):

Yes. But first, I want to talk about the overall question is why IES is running these challenges now? Mastering foundational math and science competencies in early elementary or middle elementary and middle school is crucial for future learning. These competencies are also crucial for navigating an increasingly technological world. Even before the COVID-19 pandemic, many students, particularly students with disabilities and other students historically underserved by educational systems, faced barriers to attaining these skills. Now, with three school years already impacted by the COVID-19 pandemic, the need for evidence-based and scalable interventions is greater than ever.

Joan McLaughlin (06:00):

With this in mind, the Math Prize is seeking specifically for school-based digital interventions to significantly improve math outcomes for upper elementary school students with or at risk for disabilities that affect math performance. Interventions should specifically

focus on fractions, although they can also include prerequisite skills for fractions, such as whole numbers and operations. Eden will be sharing more details about the prize later in this presentation.

Joan McLaughlin (06:40):

But I would also just like to put out a statement about the real need for impactful math interventions. What does this mean in real terms? So if we look at the recent scores on the National Assessment of Educational Progress from 2019, we see that 54% of fourth graders with disabilities scored below NAEP Basic in mathematics compared with only 15% of their peers without disabilities. I want to repeat that, because the impact is pretty apparent. 54% of fourth graders with disabilities scored below NAEP Basic. So closing this achievement gap is particularly important. And as I alluded to previously, the skills that are learned early on are critical to advancing in math. Fractions are foundational concepts, along with things like whole numbers and operations. They help students succeed in more advanced math. Okay, Matt.

Matthew Soldner (08:02):

Thanks, Joan. So the Science Prize, the companion prize here, is intended to spur the creation of interventions that address needs for science learning. Specifically, we are seeking interventions that significantly improve science outcome for middle school students with low performance in science. And unlike the Math Prize, the intervention may be digital, it may be non-digital, or it may be hybrid, and it can be designed for implementation at school. And importantly, it may also be used in out-of-school time programs.

Matthew Soldner (08:38):

And much like Joan, we have information from our National Association of Educational Progress that documents just what a significant need this truly is, and really why we believe a need for high quality, high impact science interventions for middle grade students truly is acute. In 2019, over 33% of the students, eighth grade, perform below NAEP Basic in science, and this achievement gap only widens. By the end of high school, over 40% of 12th graders perform below NAEP Basic. So we're really starting to believe that early intervention in these middle school years is needed to ensure that all students can meet science provisions and benchmarks before graduation.

Matthew Soldner (09:26):

So you may be wondering, if you are in the half or so of you who said you were intervention providers who are on the line today, "What are the benefits for me?". We believe that both of these challenges, both the Science and the Math Prize, present exciting opportunities for providers that have evidence-based interventions in these areas. And here are three benefits that come readily to mind. So the first is the opportunity to really test your intervention with students and gain valuable data about its effectiveness. Our partners, NWEA, will be conducting an evaluation of selected interventions in Phase 2, which we will share a lot more about later on in today's session.

Matthew Soldner (10:07):

The second is a chance to win monetary prizes. The total prize pool is \$1.8 million across both challenges. That works out to be \$850,000 for the Math Prize and \$950,000 for the Science Prize. And third and finally, all finalists will have access to resources and to expert

guidance about how to do high quality impact and cost evaluation. So this is a great opportunity for provider teams to build capacity of staff working on the project.

Joan McLaughlin (10:43):

There are also clear benefits for participating schools. Schools will get access to innovative interventions for students, particularly those who are often underserved, and it's also an important opportunity for schools to build the evidence base about what works in different settings and for different students. This will contribute to our broader understanding of what types of interventions are effective, how they can be approved, and how they can be scaled.

Joan McLaughlin (11:16):

We are really excited about these challenge prizes. We have been working over the last several months on every aspect of the prizes, and today marks a great milestone for us, and we hope that we can share our enthusiasm with you about competing in this exciting endeavor and to really make the difference for students who have been underrepresented in education systems in the past. Okay. Now, I'm going to turn it back to Eden for some nitty-gritty details.

Eden Baker (11:58):

Thanks so much, Joan. And I will echo the excitement from the IES team. We are really excited about these two challenges and thrilled to have you all here today. So as Joan said, I'm going to get into the nitty-gritty about the challenges, so review the timeline, the selection criteria, and prizes, amongst a few other things. So taking a look at the challenge structure. So both prizes, the Math and Science Prize are being run concurrently and follow the same timeline. Both prizes will be conducted in two phases. So we are in the first phase now, which is Intervention Design. So submissions opened on August 4 and will close on September 30 at 5:59 PM Eastern. Judging will then take place throughout October, and we plan to announce finalists in early November.

Eden Baker (12:46):

Then, in the second phase, which is called Implementation and Evaluation, selected finalists will implement their interventions at partner schools in the Math or Science Prize, or out-of-school time programs in the Science Prize only. At the end of the implementation period, analysts will need to submit specific student and school level data to support the evaluation as well as information as part of their Phase 2 submissions. And I'll share a little bit more about what this entails and what type of data that will be required a little later in today's session. Phase 2 judging will then take place throughout July and August, and we anticipate announcing the Phase 2 winners in September 2023.

Eden Baker (13:31):

So building a little bit on what Joan shared earlier, I'm going to share more about the focus of the Math Prize as well as the eligible students. So as Joan mentioned, for the Math Prize, the proposed intervention must be school-based and digital. And for the purpose of this challenge, we are defining school-based intervention as one that is primarily implemented as part of the regular school schedule and in a setting that is under the control of a public or private K-12 school, alternative school, or similar entity that is a component of the US education system. And then we are defining digital interventions as those that

provide instruction and practice through student use of a digital device, such as a computer, a laptop, or a mobile.

Eden Baker (14:14):

Intervention should specifically focus on fractions, and can also include the prerequisite skills such as whole numbers and operations as defined in the state standards for grades three to five. And the one additional thing to note here is that instructional practices should align with the best practices outlined in the “IES Practice Guide, Assisting Students Struggling with Mathematics: Intervention in the Elementary Grades”, and you can find this on the IES website. We’ve also added a link to this on the Math Prize listing on Challenge.gov.

Eden Baker (14:47):

For the Math Prize, eligible students are those in the third, fourth, and/or fifth grades with or at risk for a disability that affects math performance. Students may be identified as having a disability or being at risk for a disability that affects math performance if they: have an IEP with goals related to math, are enrolled in a Tier II or Tier III intervention in a Multi-Tiered System of Support, or are identified through another well-defined process that is used by a school. Examples of these types of alternative identification processes may include things like performance on state testing, school grades, and things like teacher referrals. One important thing to note here, too, is that intervention providers can provide the intervention to all students in a class or a group, but only data for eligible students will be included in NWEA’s evaluation.

Eden Baker (15:40):

So moving on to the focus of the Science Prize, also building on what Matt said earlier. So for this prize, the proposed intervention should align with the framework for K-12 science education from the National Research Council. As Matt noted, interventions may be digital, non-digital, or hybrid, and you can see specifically how these terms are defined on Challenge.gov. Interventions for this challenge may be school-based or designed for implementation in out-of-school time programs. And for the purposes of this challenge, an out-of-school time intervention is one that is primarily implemented at a program that occurs before or after the regular school day. Importantly, out-of-school time intervention should be aligned to a formal program of learning that is under the control of a public or private K-12 school, alternative school, or a similar entity that is a component of the US education system.

Eden Baker (16:33):

And then, for the Science Prize, eligible students are those in the sixth, seventh, and/or eighth grade who score in the bottom 25th percentile based on the NWEA MAP Growth science assessment national norms. One important flag here is that IES does encourage interventions that meet the needs of all students, including students with or at risk for disabilities. And then, as with the Math Prize, intervention providers can provide the intervention to all students in a class or a group, but again, only data for the eligible students will be considered as part of the evaluation.

Eden Baker (17:07):

So building on the timeline that they shared, I'm now going to go through each phase in more detail. So starting with Phase 1. During this phase, which we're in now, intervention providers will be invited to submit proposals for interventions that align with the focus areas that I just outlined. Submissions close on September 30, and I'll be sharing a little bit more about the submission process later in today's session. As mentioned, intervention providers will need to ensure students at their partner schools have taken the NWEA MAP Growth assessment by November 1. So this is really important to consider when you're looking at your partner schools, and I'll also share a little bit more about this process later in today's session. Eligible submissions will then be evaluated by a panel of judges, and up to five finalists per challenge will be selected to participate in Phase 2 and implement their proposed interventions.

Eden Baker (18:02):

I saw we had a question in the Q&A already about support available. So in Phase 1, all entrants will have access to technical assistance to help them prepare their submissions, and there are a few components to this. So the first is guiding documents. These are all available on Challenge.gov now, and these documents provide information on randomized controlled trials, data collection, and what you'll be expected to do if you're selected to progress to Phase 2, as well as other participation requirements.

Eden Baker (18:33):

In addition to today's webinar, we are also hosting two webinars with subject matter experts. The first is all about setting up a randomized controlled trial, and that is next Tuesday, August 23rd, at 3:00, and then the second is all about how to conduct the cost analysis and how to think about implementation planning, and that is the following Tuesday, August 30, at 3:00. And I believe my colleague Naomi has just popped a link in the chat for where you can sign up for both of those webinars. Links for these are also on Challenge.gov. And then following these webinars, the subject matter experts will also be hosting office hours, so these sessions will really be an opportunity for you to ask any specific follow-up questions you might have after the two sessions, and updates on how to sign up for these will be shared by Challenge.gov shortly.

Eden Baker (19:25):

So looking at the selection criteria, at the end of Phase 1, judges will score eligible submissions against the Phase 1 criteria for a maximum of 35 points. There are five criteria in Phase 1. Impact and Implementation Plan are both worth 10 points, Scalability, Aligned to Student Needs and Team are all worth five. In the interests of time, I am not going to read through all of these, but they are all available on Challenge.gov, so I encourage you to review them closely. And then looking at science, the criteria here are very similar with some small differences specifically in the Impact criterion and also the Aligned to Student Needs criterion. Again, I will not read through all of them, but I encourage you to review these on Challenge.gov. And again, there should be a link to both of those pages in the chat.

Eden Baker (20:19):

And then looking at Phase 1 awards. So as I mentioned, at the end of Phase 1, up to five finalists in the Math Prize will be selected to progress to Phase 2. Each finalist will receive \$25,000. And then as with the Math Prize, at the end of Phase 1, up to five finalists will be

selected to progress to Phase 2 of the Science Prize. And again, each finalist will receive \$25,000.

Eden Baker (20:48):

So moving onto Phase 2. I will now go through some of the specifics here. So as we've mentioned, in Phase 2, finalists will implement their interventions either at schools or at out-of-school time programs under routine conditions. The duration of the interventions may vary, but they must be implemented between November 2022 and April 2023. As we've mentioned, students will take the NWEA MAP Growth assessment at the beginning of the implementation period, and then again at the end of the implementation period, and this needs to be done before May 1st, 2023.

Eden Baker (21:29):

NWEA will use these assessment results as well as student level and school level data and cost data to prepare evaluation reports that describe the efficacy and cost effectiveness of each intervention. These evaluation reports, as well as additional information provided by intervention providers as part of their Phase 2 submissions, will be reviewed by a panel of judges against the Phase 2 selection criteria.

Eden Baker (21:55):

So sharing a little bit more about the data that I mentioned. So if you are selected as a finalist, you will be required to work with your partner schools to collect two types of data to support the evaluation. The first is student level and school level data, and the second is cost data. So looking at that first category, at the start of Phase 2, you'll need to work with your schools to collect information on each student's teacher, classroom, school assignment, and eligibility. Then, at the end of Phase 2, you'll need to work with your schools to collate and share information on each student's engagement with the intervention. So this includes things like any changes in random assignment.

Eden Baker (22:34):

To learn more about these requirements and some detail around the randomized controlled trial, I recommend that you sign up for next week's webinar. There are also some resources that I mentioned earlier, the guiding documents that are available on [Challenge.gov](https://www.challenge.gov). And then for the cost data, you'll need to collect and share data about the cost of your intervention. This includes things like personnel time, such as how long staff spent preparing for implementing the intervention, and non-personnel resources, so things like the cost of materials, software licenses, and equipment. And in addition to this data, NWEA will also have access to the assessment scores, and this will be used to evaluate the impact of the intervention and will be shared, as I mentioned, with judges as part of the scoring for Phase 2.

Eden Baker (23:27):

So looking at the technical assistance for Phase 2, all finalists will have access to personalized support to help them with this data collection as well as any other challenges that may arise. At the start of Phase 2, Luminary Labs will host an onboarding webinar for all finalists, and this will include an overview of Phase 2, things like specific dates and milestones and any other participation requirements. All finalists will also receive personalized support from Abt Associates subject matter experts. So during monthly calls

with this team, finalists will be able to discuss their progress and troubleshoot any challenges that they may be experiencing with regards to data collection, or implementation, or anything else that may arise.

Eden Baker (24:10):

Specific topics will vary based on finalist need, but we expect it will include guidance around things like identifying implementation measures, so things like dosage, participation and attendance, using student rosters, and also collecting cost data. These monthly hour-long calls will be conducted via video conference throughout the implementation period. So looking at the Phase 2 selection criteria, as I mentioned, at the end of Phase 2, judges will review the evaluation reports as well as the Phase 2 submissions against these criteria. In this case, Cost Effectiveness and Impact are worth 10 points, and Scalability and Sustainability are worth five, for a total of 30 points. Again, these criteria are available on Challenge.gov.

Eden Baker (25:02):

And then looking at the Science Prize, the Science Prize will follow the same review process, but will have a separate judging panel. Again, the criteria are very similar with a few minor differences, so I would recommend you take a closer look on Challenge.gov. So then looking at Phase 2 awards. So for the Math Prize, up to three winners will be selected. For the grand prize, \$500,000 will be awarded to one intervention that demonstrates a statistically significant effect size at or above a 0.77 effect size threshold. This intervention will also need to receive a minimum score against the Phase 2 selection criteria. If more than one intervention exceeds the threshold, the grand prize will be awarded to the intervention with the highest score against the Phase 2 criteria.

Eden Baker (25:53):

For the first prize of \$150,000, this will be an award based on the finalists total scores against the Phase 2 criteria, and then one runner-up will receive at least \$75,000. This prize will also be based on final scores against the Phase 2 criteria. One thing to note here is that each finalist can only receive one prize. So if a finalist is eligible for two prizes, they will receive the larger of the two.

Eden Baker (26:22):

And then as with the Math Prize, up to three prize winners will be selected for the Science Prize. For the grand prize, \$500,000 will be awarded to one intervention that demonstrates a statistically significant effect size at or above a 0.4 effect size threshold. As with the Math Prize, this intervention will also need to receive a minimum score against the Phase 2 criteria. For the first prize, one finalist will receive at least \$150,000. If the first prize winner is an out-of-school time intervention, they will receive \$250,000 instead of 150. And then, as with the Math Prize, one runner-up will receive at least \$75,000.

Eden Baker (27:07):

Okay. And then, as mentioned, I wanted to provide a brief overview of how to enter before we open it up for a Q&A. So entrants are required to submit the following four files as part of their submission. So the first is an entrant overview, which should be one page, and this must include a brief description of the entrant type, as well as if the entrant is an individual, written confirmation that you are at least 18 years old and also a citizen or permanent

resident of the United States. And if it is an entity, written confirmation that the entity is registered or incorporated in accordance with the applicable laws and maintains a primary place of business in the United States. This is really important for us to be able to confirm your eligibility for the challenge, and I encourage you to take a closer look at the eligibility requirements, which are in the rules, terms, and conditions on Challenge.gov.

Eden Baker (28:03):

The second upload is a letter of commitment from school districts or charter private school networks that you will partner with. So these districts must be conducting the NWEA MAP Growth assessment in fall 2022 and spring 2023 in order for us to be able to get the student growth data that I mentioned earlier. You can find a letter of commitment template on Challenge.gov. One thing to note here is that there are different templates for each prize, and then also for the Science Prize, there are two different templates. So the first is for school-based interventions, and then the second is for out-of-school time interventions. So just make sure you're using the right template there.

Eden Baker (28:43):

The third file upload is the school acknowledgement, and these should match the list of schools that are included in the letter of commitment from the districts or network. Again, there is a school acknowledgement template on Challenge.gov, and you'll need to work with your partner school districts or networks to circulate this with participating schools.

Eden Baker (29:04):

And then the final upload is the intervention proposal. So there are a few specific things that this should include. An overview of the intervention, including its focus, mode of delivery, and necessary equipment, empirical and/or theoretical evidence to demonstrate the potential for the intervention to significantly improve math or science outcomes, a description of eligible students that the intervention will support, including how it has been designed to meet their specific needs, a description of how the intervention could be scaled to support additional students beyond the challenge, and they should also include anticipated cost per student.

Eden Baker (29:42):

And then the implementation plan. And this really needs to detail specifics such as sample size goals and random assignment plan, recommended dosage and duration, the number of teachers and other staff who will participate, the types of professional development and training that these staff will receive, the provision of technology and other necessary equipment, your plan for gathering data, so the student and school level data that I mentioned as well as the cost data, and then also risk mitigation contingency plan. So for things like, hopefully not, but things like school closures or any other kind of delays that might happen in Phase 2. And then finally, a team description, which includes an overview of your team members and their relevant experience.

Eden Baker (30:36):

So I know that was a lot of information. I want to open up for questions. I can see we've already got quite a few through the Q&A window here. We also received quite a few questions by the Eventbrite registration before today's session, so we're going to start with those questions. I encourage you to keep asking questions via the Q&A window, and we'll

get to as many as we can today live. If we don't get to your question live, we will also be publishing, as I mentioned, written responses to all of the questions on Challenge.gov, and we will share by email when these are live.

Eden Baker (31:11):

So to start, we are going to go through some of the questions that we received before today's session. So one of the questions that we got a lot, and I think this is a very common question around open innovation challenges, is that how do these differ from grants, and then also, what is the rationale for doing an open innovation challenge as opposed to a grant? So I'm going to take a pass at the first half of that question, then I'll pass it over to the IES team to share a little bit more about their rationale. So just for context, in terms of what a challenge actually is, a challenge allows the public to solve problems presented by federal agencies and receive awards for the best solutions.

Eden Baker (31:51):

And challenges tend to be a little bit more open than other funding mechanisms that you might be used to like grants and contracts. They typically define a smaller set of requirements, which allows participants to bring more of their own creativity to solutions. One really important distinction is that our challenges, by design, do not place any restrictions on how prize funds are used. So the funds awarded through this innovation challenge are not subject to the same reporting requirements as funds awarded through grant programs. There's a little bit of an overview of challenges. I'm now going to pass over it to Matt to just share a little bit more of IES's rationale for structuring this as a challenge as opposed to a traditional grant.

Matthew Soldner (32:31):

Yeah. Thanks, Eden. So some of you may know, in recent years, IES has been growing the number and types of tools it uses to encourage innovation, and challenges have been one part of that effort. For example, one currently underway is our Digital Learning Challenge, which will enable experiments of frequency, and scope, and scale that aren't typically possible through traditional methods used in education research or commercial edtech practices.

Matthew Soldner (33:00):

One recently completed challenge focused on automated scoring of NAEP is a good example. If you want more information on our use of challenges and the larger strategy, I commend to you a blog written by our director, Mark Schneider. I believe our colleagues are going to drop a link to that blog in the chat so you can check it out. Through this challenge in math and science, we seek to more rapidly identify high impact, effective interventions that schools can implement to address the needs of historically underserved students.

Eden Baker (33:36):

Great. Thanks, Matt. We also received quite a few questions around eligibility. So the first one was, "Are small businesses eligible to apply?" The short answer here is yes. So entrants may be individuals, teams of individuals, or entities. And I mentioned this before, but to be eligible, entities must be registered or incorporated in accordance with applicable laws and maintain a primary place of business in the United States. And again, I would

suggest you take a closer look at eligibility requirements in the rules, terms, and conditions on Challenge.gov. As I said, short answer is yes, small businesses are eligible to apply. The other question we received via Eventbrite around eligibility was, "We are the recipient of an IES grant. Are we still eligible to apply?" And I'm going to pass that one over to Joan from IES.

Joan McLaughlin (34:29):

And I remembered to take myself off mute, which is always a plus. So the short answer to this is yes, you're still eligible to participate in the challenge provided that you meet the other requirements of the challenge. However, you should disclose whether your intervention has been or is currently being funded as part of an efficacy trial, whether it's IES or any other agency. You should put that in your implementation plan as part of your Phase 1 submission. I also want to note that if you are conducting an efficacy trial during the '22, '23 school year that is being funded by the IES or other federal agency grant, you must implement your intervention in different schools from the challenge schools, separately from what you would do as part of the grant. I hope that's clear.

Eden Baker (35:34):

Thanks, Joan. We got a question via Eventbrite, but I think we've also received a very similar question live today, which was, "How did IES set the effect size thresholds for the grand prize?" So for that one, I'm going to pass it over to Matt from IES.

Matthew Soldner (35:50):

All right. So the objective of the Learning Acceleration Challenges is to substantially accelerate growth in student performance in math and science outcomes. And the effect sizes we are looking for the grand prize can commence really large. The thresholds used for the grand prize are 0.77 in math and 0.4 in science. These represent about twice the expected annual growth in the achievement measure used in the challenge, which is truly an aspirational benchmark. We hope this will encourage and sufficiently reward innovators, innovative thinking that results in truly substantial improvements in student learning.

Eden Baker (36:33):

Thanks, Matt. And then another question we received around prizes was, "If we are a team, how will prize funds be distributed to team members?" So essentially, prize awards will be issued in a single payment to the individual team lead or lead entity indicated on the submission. So again, this is why it's really important to include that overview as part of your upload. Any further distribution of funds to team members is essentially at the discretion of the team lead and is not the responsibility of IES or challenge administrators.

Moving on to a couple of other questions we received before today, we had a few about specifics of Phase 1. So this one here, "Are teacher-focused solutions permitted for the Science Prize, including things like curriculum and teacher professional development, or does a solution need to be focused on students exclusively?" And Matt, I will hand that one over to you.

Matthew Soldner (37:37):

Sure. So the Science Prize seeks to recognize an intervention that can, over the course, really, of less than a full academic year, dramatically accelerate student growth in science

achievement. And as described on Challenge.gov, the interventions should be designed to be delivered primarily to the student. While success will be measured by growth and student achievement, we do obviously recognize the need for teacher engagement as well. In particular, we do hypothesize that effective interventions should include teacher engagement to effectively implement their solution. So that includes, but isn't limited to, teacher professional development. But again, it is designed to be delivered primarily to the students.

Eden Baker (38:21):

Thanks, Matt. And then another one we had around Phase 1 submission, so, "Is this prize designed to support developing completely new interventions, evaluating existing interventions, or potentially both?" So that's a really good question. Given the short timeline, we are anticipating that entrants will have an existing intervention, and this is really to ensure that selected entrants are able to implement their interventions in Phase 2 from November 2022 until April 2023. In saying that, entrants may adapt an existing intervention to meet the specific needs of eligible students in each challenge. So for example, incorporating specific accommodations are to support students with or at risk for a disability that affects math performance.

Eden Baker (39:08):

We also received some specific questions around Phase 2. So one was around judging and who will be on the judging panel. So each challenge will have a separate judging panel. So there'll be one for the Math Prize and one for the Science Prize, and each panel will be made up of a mix of judges with different relevant expertise across areas such as edtech, students with disabilities, and implementation for the Math Prize, and then areas such as assessments, cost analysis, and science content for the Science Prize. And we will be publishing more about each judging panel sometime shortly.

Eden Baker (39:48):

We also had another question around Phase 2, which is how outcomes based on fractions performance and whether they'll be assessed on the MAP or on the overall score using the NWEA assessment. So the efficacy evaluation for the prize we based on students' overall score on the NWEA MAP Growth assessment in spring 2023, as compared to overall score in fall 2022. I know we've also received a couple of questions live about the Math Prize specifically. So one was, "Why is the Math Prize focused specifically on fractions?" Joan, I will pass that over to you to share a little bit more context from IES.

Joan McLaughlin (40:28):

So yeah, I think I mentioned it when I was talking through our slides. Really, fractions are a foundational concept for higher level math, and fourth grade is where the US curriculum begins to increase its focus on rational numbers with a focus in particular on fractions. So it's important for students to gain these skills, to become more fluent in them before they hit the middle grades, grades six through eight, where algebra becomes the curriculum's primary focus. So it's true in school that fractions are the foundations for higher level math, but mastering fractions is also critical for future careers and just in independent living.

Joan McLaughlin (41:29):

Surveys of adults have shown that most employees use fractions in their jobs, and they're relevant for many life skills, including personal finance, cooking, and healthcare. Therefore, the notion is that there are long-term serious implications for children who do not develop an understanding of fractions and an ability to solve problems that involve them. Fractions is an area where there has been a large investment in research, including in NCSEER, with evidence of instructional practices, which have been outlined in the math practice guide that recently came out of the National Center for Education Evaluation and Regional Assistance. So that's one of the reasons why we are pointing potential applicants for the Math Prize to review the practice guide to determine the alignment of their practices used in the digital solution with what's in the practice guide.

Eden Baker (42:42):

Great. Thank you, Joan. We have also received several questions specifically about matching with schools and districts that are already using the NWEA MAP Growth assessment. So we're not able to provide a list of districts, but NWEA can assist intervention providers who are looking for partner schools, so we suggest you email the NWEA team, and we'll share a link in the chat to that email address. And when you do so, please include a list of 10 school districts or private school networks that you would like to potentially match with. And we do ask that you do so by September 1, 2022, just to make sure they have plenty of time to be able to look into potential match and then also for you to be able to get the necessary commitments.

Eden Baker (43:29):

And as I said, I think my colleague Naomi has just popped in the chat the link to that email address so that you can follow up with the team there. We also received a question kind of related to another one that we answered previously, which is specifically about why the Math Prize is focused on digital interventions. So Joan, I'm going to pass that one over to you as well.

Joan McLaughlin (43:54):

Okay. So the whole idea behind the focus on digital interventions is that there is a real need within the field for scalable approaches to mathematic intervention using technology. This is becoming even more important as we see the teacher shortages, especially in the area of special education. We want to provide teachers with some support using digital interventions to support students and help them improve their fraction fluency.

Joan McLaughlin (44:44):

So the other thing is that while it's a focus on digital interventions, we also know that teachers are going to play an important part of this. So thinking about the teacher... I mean, I think the focus certainly is on the student, but we understand that the teacher and interventionists or a parent may have a role in the digital math intervention implementation by doing things like monitoring progress, providing student feedback, and making any adjustments allowable given the affordances of the digital tool and the needs of the student.

Eden Baker (45:45):

Thank you, Joan. We have also received a few questions that are specifically around what is required as part of the Phase 1 submission. So I covered this a little bit in the presentation, but just a reminder. So as part of submissions, entrants will need to provide

two documents. So the first is a letter of commitment from school districts or charter or private school networks that they are going to partner with, and the template for this is available on Challenge.gov. And the second is the school acknowledgement. So as I mentioned, this should match the list of schools that are in the letter of commitment, and each individual school will need to populate this. So you'll need to circulate it with each representative or school leader to fill in their respective information. And again, there is a template for this on Challenge.gov.

Eden Baker (46:35):

We also had a couple of related questions. So one was whether you can include links in the submission of the intervention proposal. Links can be included, but we cannot guarantee they will be reviewed by judges. We also had a follow-up question around prizes. So we touched on this a little bit with the question about the difference between challenges and grants. So just to kind of reiterate, so prize money from challenges differs from funding rewarded through grants in that it is not subject to the same reporting requirements as a grant usually is. In saying that, prize winners will need to ensure they comply with regular documentation procedures for audit purposes or for any other kind of local or state reporting requirements that they would usually need to meet.

Eden Baker (47:21):

We've also just received another question live about whether the results of the competition will be made public for each phase. So we will not be sharing specific feedback or scores publicly, but we will be sharing the names of finalists in Phase 1, and then also the prize winners in Phase 2. We had a couple of other questions coming back to eligibility. So there was one around if you are serving as a judge whether your organization is permitted to enter. So if that is the case, judges will need to recuse themselves from the panel. All judges will be required to submit a signed conflict of interest forms, and any potential conflicts of interest will need to be disclosed and discussed with the challenge organizers. So judges will not be permitted to serve on the panel if their organization submits to Phase 1.

Eden Baker (48:29):

We had another question here coming back to the submission requirements, which was just around a page limit for the proposal. So yes, there is. It is 12 pages. There are specific font and spacing requirements and things like that. They are outlined on Challenge.gov, and I'll see if a colleague can post the details in the chat. But yes, there is a page limit for the proposal. There is also some information. So I believe that the entrant overview, there is a limit of one page there. That is separate to the intervention proposal, and that's just the upload that needs to outline how your organization meets the eligibility requirements. But again, I'll ask a colleague to just pop some information in the chat there, as there are some specific requirements around the formatting of each upload.

Eden Baker (49:21):

We also have a question here about whether the session is being recorded and will be available for reviewing. So yes, we're recording today's session and we will be uploading a link on Challenge.gov. We'll also be sharing a copy of the slides. So just another plug, if you're not already following the challenges on Challenge.gov, I definitely suggest you do that, because we'll circulate an update to all of the followers when the recording and the slides are available to view.

Eden Baker (49:58):

We have another question here about IP rights. There are some specifics around the intellectual property provisions in the rules, terms, and conditions. There is a fair bit of detail there, so I would encourage, rather than me reading out specifics, that you take a look at those rules. And again, I'll ask a colleague just to pop a link into the chat to the specific rules so that you can take a look at the IP provisions there.

Eden Baker (50:31):

We have another question here about NWEA's role. "So NWEA will be conducting all the analysis and reporting, and therefore product developers and providers will not need a third-party evaluator or researcher." That is correct. So NWEA have been engaged essentially as the evaluation partner for this challenge, so they will be leading the evaluation and collecting the student performance data through the two assessments. I mentioned earlier too, there will also be a technical assistance provider, Abt Associates, who will be providing support to intervention providers through Abt Phase 2 to help you with things like the random assignment, any changes to random assignment, and the other necessary data collection for finalists.

Eden Baker (51:24):

We've also got another question here about whether tech startups can apply. So again, I think this relates to the question we had at the beginning around eligibility. So essentially, as long as your company meets the eligibility requirements, so that is that it needs to be an entity that's registered or incorporated and maintains a primary place of business in the United States, you should be eligible to apply. So regardless of the specific business type, you should be eligible.

Eden Baker (52:04):

And then we have another question here around the timing of the MAP Growth assessment. So the question here is that, "It was mentioned that students' 2023 MAP Growth score will be compared to their 2022 scores. Does that mean schools must have administered the MAP Growth in 2022 in order to participate?" So yes, essentially, they will need to have administered the assessment prior to the implementation period, so that needs to be before the 1st of November, and then they need to administer it again at the end of the implementation period, and that needs to be before the 1st of May, 2023. So again, if you are looking for school partners who are already administering the MAP Growth assessment, we encourage you to reach out to the NWEA team and they will be able to assist you with matching.

Eden Baker (53:05):

We have another question here, which is, "It's not clear how long the intervention should be and whether NWEA is the only outcome of interest." So I can answer the first part of that, and then I might pass that along to IES in case they've got any additional context around the outcomes that we're looking for here. So to the first part of the question, which is how long the intervention needs to be, so the intervention can be structured however the intervention provider would like provided it is administered during the implementation period. So it needs to be administered between November 2022 and then April 2023. But the specific duration of that is really up to the intervention provider.

Eden Baker (53:49):

In terms of the outcomes, I think Matt might have already shared some additional information in the chat there. So NWEA will be used specifically to look at the impact criterion, that, as Matt has said there, we're also looking at things like cost effectiveness, there are also criteria in stage two around things like scalability, and also looking at things like team, and feasibility and things. So I would really suggest to get a better understanding of how submissions will be assessed that you take a look at the criteria. They're slightly different for Phase 1 and Phase 2, and then slightly different between the two prizes. And Naomi's just popped a link to the criteria in the chat there as well.

Eden Baker (54:36):

Okay. I am mindful of time. I know that there are a few questions we haven't quite got to, so as I said, what we will do is if we didn't get a chance to answer your question today, we will prepare a written response and publish it on Challenge.gov. So I do encourage you to follow the challenges so that you are updated when we do post the FAQs as well as the recording of today's session. And then I also just want to plug again that we are hosting two SME webinars as part of the Phase 1 technical assistance, so these webinars are really intended to help intervention providers who are interested in entering prepare their Phase 1 submissions.

Eden Baker (55:17):

So we have one next Tuesday, August 23, which is all about setting up a randomized controlled trial, and then we have another one on August 30, which is all about conducting cost analyses and implementation planning. And Naomi has popped a link in the chat to sign up for both of those. And then if you have any additional questions, we also recommend to reach out to the challenge team, and the email address is in the chat as well. It's Challenges.ies@ed.gov. All right. Thank you all so much for attending and for your excellent questions. Apologies if we did not get to yours live. As I said, we'll be publishing answers shortly. Please reach out to the challenge team if you have any specific questions in the meantime. We're really thrilled to have you all. Thanks so much, everybody.