Got Results? Moving Up EIR Funding Tiers

Lessons From Current Grantees

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What Impact Do EIR Grantees Have?

Amy, a veteran 5th–8th grade math teacher, was approached by a parent before the start of the school year. The parent informed Amy that her son was out of control and that as a parent, she couldn't do anything to support the school or his teachers. The parent simply said, "Good luck." Amy was disheartened, and by late September, she had written a letter of resignation saying she was leaving the teaching profession at the end of the semester. It just so happened that also in late September, Amy began participating in the eMINTS Prosocial and Active Learning (PAL) Classrooms program. Since she felt she had nothing to lose, she decided to try the prosocial education approach and see what would happen. At the end of October, during parent-teacher conferences, the parent of the difficult student told Amy that she didn't know what Amy had done with her child, but whatever it was, it was working. She had seen a huge change in her child's behavior at home and a completely different attitude toward her and his siblings. She said she couldn't believe her son was the same person. Amy agreed that his behavior has been tremendously improved in the classroom as well and the only thing she had done differently was to use prosocial education.

Members of the eMINTS team, along with three members of the state board of education, two state senators, and one state representative toured Amy's school and visited classrooms to see prosocial education in action with actual teachers and students. When they visited Amy's classroom, Amy shared that the eMINTS PAL Classrooms program had given her back her reason for becoming a teacher in the first place. It brought back her fire and drive to do what she once loved, and with that, she tore her letter of resignation up and threw it away. Now, not only is Amy still teaching, she is also mentoring other teachers to use prosocial education in their classrooms.

Evidence-based programs, like eMINTS PAL Classrooms, have the potential to have tremendous impact on teachers and students. The Education Innovation and Research (EIR) Program provides funding to scale such programs to produce results for more students.

What Do We Know About Successful, Sustainable Scaling?

Across funding agencies, including the U.S. Department of Education's EIR Program, there is an emphasis on funding initiatives that scale up evidence-based programs that have shown effectiveness in producing results for students.

The purpose of this paper is to share insights into the strategies of EIR Program grantees who have experienced success in scaling up and have moved from one EIR funding tier to another. It explores how the grantees have leveraged the EIR funding structure to implement and scale their innovations.

Addressing Common Scaling Challenges

According to Coburn (2003), scaling up goes beyond increasing an innovation's number of users (spread) to include depth, sustainability, and a shift in ownership of the reform. These added dimensions signal that to truly scale, there needs to be deep and consequential change in classroom practice (depth), these changes need to persist over time (sustainability), and ownership for understanding and implementing the new practices shifts to districts, schools, and teachers (shift in reform ownership).

Scaling up in any of the four dimensions, let alone multiple dimensions, is difficult, and there are many barriers to scale that must be overcome. Common challenges including recruiting new sites and retaining their buy-in, finding the balance between maintaining fidelity of implementation and adapting interventions to fit local contexts, growing capacity both internally and locally, gathering evidence of intervention effectiveness and making adaptations, and developing financial sustainability. This paper seeks to build on what is already known about strategies to address these challenges.

A <u>previous white paper</u> (DeWire, McKithen, & Carey, 2017) about grantees from the Investing in Innovation (i3) program – the EIR Program's prior iteration – revealed four key strategies for effectively scaling up an educational intervention across the dimensions of scaling:

- Using multiple methods to establish buy-in
- Building a regional and national infrastructure
- Adapting practices based on evidence
- Planning for sustainability from day one

Conversations with grantees revealed that using storytelling to share evidence, building relationships at all levels, and helping sites identify funding were among the effective methods for establishing buy-in. Doing so is a critical aspect of recruiting new sites and gaining support from key stakeholders, including those responsible for implementing the intervention. Building a regional and national infrastructure is essential for supporting capacity while scaling and requires concentrating resources regionally and getting clear on the roles and responsibilities of regional and national offices. Grantees shared the importance of adapting their practice based on evidence by leveraging up-to-date research, formatively assessing implementation, collecting stakeholder feedback, and identifying core components of their interventions through experimentation. The final key strategy, planning for financial sustainability from day one, was identified as an essential aspect of effective scaling that involves integrating predictable and significant funding sources and planning to adjust implementation support after scaling up. Other work with i3 and EIR grantees has illustrated the challenges that can hinder financial sustainability and the imperative for grantees to understand their business model and to implement strategies for financial sustainability (DeWire, Farah, & Silverman, 2019).

While scaling, it is important to establish an approach to balancing fit and fidelity. Both high fidelity of implementation and effective adaptation of interventions to meet needs in local contexts can yield results and positive outcomes for students. Therefore, it is important for those scaling educational interventions to be intentional about their approach to balancing fit and fidelity. Clawson (2019) puts forward a framework to help program developers consider their approach to fit and fidelity. The framework has three research-based elements and corresponding questions to guide program developers:

- Core components: Are the program's core components and any allowable and non- allowable adaptations of core components clearly defined?
- Fidelity and adaptation approaches: Does the approach to scaling the program encourage or discourage adaptations to improve fit, and how will fidelity be monitored?
- Facilitation strategies: What supports and resources are available to local sites to support both program fit and program fidelity?

Attending to these elements and corresponding questions can help those planning to scale an educational intervention establish an effective approach to fit and fidelity.

Lessons from EIR Grantees in Leveraging Funding Tiers

The EIR grantees featured in this paper have all experienced success in addressing many of the challenges described above while scaling interventions that yield positive results for students. We explore how they uniquely leveraged key features of the EIR Program and the results from randomized control trials (RCTs) and evaluation studies to address these challenges and employ strategies to sustainably scale their interventions. Through conversations with grantees, seven key approaches emerged:

- Responsible scaling using the EIR funding tiers
- Leveraging external evaluator expertise
- Planning for scale from the beginning
- Building internal and local capacity
- Leveraging digital tools to support scaling
- Using evaluation studies to establish a track record for the model
- Using evaluation studies to identify core program components

We explore how the grantees developed these approaches to address common scaling challenges using the EIR Program resources and funding tier requirements.

What Is EIR?

The EIR Program provides funding to support the development, implementation, or scaling of field-initiated, evidence-based educational innovations. EIR funding also supports the rigorous evaluation of funded innovations. EIR offers three different funding tiers that grantees can apply to: early-phase grants, mid-phase grants, and expansion grants. Each funding tier has different expectations for the level of innovation, prior evidence of effectiveness, evidence generated through evaluation of the innovation, and the level of scaling that will be accomplished through the grant.

- Early-phase projects are expected to develop and test innovative educational practices with prior evidence that demonstrates the rationale for the innovation. Projects should scale at the local level and be evaluated with an experimental or quasi-experimental design study that can demonstrate a statistically significant impact on intended outcomes.
- Mid-phase projects are expected to refine and expand the use of practices with prior evidence of effectiveness that meets the moderate evidence standard (meets the WWC standards version 2.1 or higher with or without reservations, has statistically significant and positive results, has a sample size of at least 350 students, and was implemented in at least two sites). Projects should be scaled to the regional or national level and be designed with the potential to meet strong evidence standards
- Expansion projects are expected to scale practices that have prior evidence of effectiveness that meets the strong evidence standard (meets the WWC standards version 2.1 or higher without reservations, has statistically significant and positive results, has a sample size of at least 350 students, and was implemented in at least two sites). Project evaluations should identify and codify the intervention's core elements, as well as examine the effectiveness of the project with any new populations or in new settings that are included in the project.

The featured grantees shared how the systems the EIR program put in place and the requirements for receiving EIR funding have supported their efforts to overcome challenges with scaling educational interventions.

Featured Grantees: Scaling Case Studies

Four grantees who have won EIR awards at multiple funding tiers shared their experiences with scaling their innovations (**Table 1** provides an overview). Their experiences provide insight into strategies for scaling and how to strategically use the EIR Program to support scaling efforts. Each grantee has won two or more EIR awards. This section provides a brief introduction to the grantees and their EIR projects. The sections that follow explore the lessons learned about strategies to leverage the EIR program for scaling.

The featured grantees used two approaches to leveraging the EIR funding tiers:

- 1. Scaling up a specific intervention
- 2. Applying an intervention model to multiple content areas

Scaling Up a Specific Intervention

Two of the featured grantees, the SERP Institute's Strategic Adolescent Reading Intervention (STARI) program and Education Analytics' Future Forward program, used the EIR funding to scale a single intervention, broadening their reach through a mid-phase grant that was followed by an expansion grant.

STARI. STARI is a literacy intervention designed to support 6th – 9th grade students who are reading two or more years behind grade level. STARI was developed through an Institute of Education Sciences (IES) grant under which the SERP Institute conducted an evaluation study that demonstrated that STARI students made meaningful gains on multiple reading skills, while control students made little or no progress on those skills. In 2017, the team received an EIR mid-phase grant to support and evaluate STARI implementation in several high-needs school districts and to build capacity to scale STARI. Despite difficulty with data collection during the COVID-19 pandemic, preliminary results suggested STARI students made meaningful gains, with effect sizes larger than were found in the IES evaluation study. Through an EIR expansion grant they were awarded in 2022, they aim to reach 15,000 struggling readers in 80 schools in four states. STARI students develop their skills through materials that are age-appropriate and provide them opportunities to engage with their peers. One STARI student shared that "STARI has helped me to become a better reader, and I know this now because I'm starting to read more often. I'm not a reader, I don't like to read, but I'm starting to read more often by myself, starting to learn new words, building my vocabulary, expanding my knowledge of reading. STARI is different from other reading classes I had, because other reading classes is just like beginner-level reading, like you're just reading and that's it for like 30 minutes or so. STARI is more advanced reading, you debate, you work with a partner, you have the experience to say what's on your mind." (Learn more about ST ARI's impact **here**.)

Future Forward. Future Forward is an early literacy intervention designed to increase student literacy skills, school-day attendance, and overall academic success. The Future Forward model combines intensive one-on-one tutoring with family engagement to provide comprehensive support for

students in grades K-3. Future Forward began as a program with a local Boys and Girls Club. In 2011, the Education Analytics team received a development-phase i3 grant to evaluate their program model. They were awarded an EIR mid-phase grant in 2017 through which they were able to scale to new communities. This led to an EIR expansion grant in 2021 that scales Future Forward by shifting ownership to schools and building local capacity. Early evaluation studies suggest that Future Forward students are six times more likely to meet grade-level reading benchmarks and 27 percent less likely to be chronically absent than students receiving only business-as-usual instruction. Through expansion and further evaluation, the Future Forward team hopes to establish themselves as a leading provider to guickly and expertly help young children of all backgrounds, particularly children from households with low incomes, have the academic tools necessary to be successful, skilled learners. Future Forward aims to make reading joyful and help students see their literacy work as a fun and integrated part of their lives. They celebrate all their students' wins by making a big deal out of their victories and sharing the joy of learning to read. For example, when a child at Troy Elementary in North Carolina advances in tutoring, they get to ring the ceremonial Future Forward bell, have their picture taken, and receive praise and applause from everyone in the room to celebrate the fun and excitement of their hard work. The students are extremely motivated to ring the bell.

Applying an Intervention Model to Multiple Content Areas

The other two featured grantees took a slightly different approach. Both ASSISTments and eMINTS strategically leveraged different EIR funding tiers to scale a core instructional model into different content areas (e.g., applying an intervention model to support algebra readiness in one grant and applying it to support COVID recovery in another).

ASSISTments. ASSISTments is a system that provides both *assistance and assessment* as students complete math assignments. The platform, originally developed at Worcester Polytechnic Institute, provides students with real-time feedback on the accuracy of their solutions as well as hints and guidance to support their learning. The platform also provides teachers with student- and class-level data to help them tailor their instruction to the needs of their class. The ASSISTments Foundation has applied these key components of their platform to support math learning in a variety of contexts through three EIR mid-phase grants. In 2019, they were awarded their first EIR mid-phase grant to implement, refine, and evaluate the proven ASSISTments approach and support scaling of the approach through online professional learning. They received another mid-phase grant in 2021 to extend their approach to a tutoring platform to address COVID learning loss and another in 2022 to support algebra readiness. Across all these projects, the ASSISTments approach aims to help teachers shift to proactive teaching rather than reactive and help students shift from feeling nervous about math to feeling excited about feedback. Teacher interviews conducted during one of ASSISTments' EIR evaluations brought to life how immediate feedback can empower students and get them excited to learn. One teacher participant shared how ASSISTments helped her tackle percentages, a concept students typically struggle with. She noticed that students were able to grasp the concept more quickly and she fully attributes that to the immediate feedback students receive in the platform: "It just clicked in their brain, 'Oh, that's what I need to do,' and they were doing the rest of the lesson correctly ... the kids understood the concept so much better than any of my previous kids. ... And I am like, OK wow, 'cause you got that feedback right away." Further, using ASSISTments and examining the provided data helped shift this teacher's focus toward the quality rather than quantity of problems she assigned to students.

eMINTS. The eMINTS National Center at the University of Missouri was founded in 1999 to help schools and teachers meet the demands of digital-age teaching and learning. eMINTS has expertise in K-20 teaching and learning with technology and offers a variety of professional development (PD) programs centered on their core instructional model. The eMINTS instructional model features four key components: high quality lesson design; a community of learners; powered by technology; and authentic learning. The University of Missouri's eMINTS National Center has been awarded four EIR grants, three early-phase and one mid-phase, to apply their core instructional model and approach to professional development. The EIR funded projects focus on a range of topics: supporting prosocial and active learning in classrooms, infusing computational thinking into math and computer science classes, literacy development, and game-based learning in middle school science. eMINTS projects have impacted students and teachers. For example, an instructional coach at a school participating in an eMINTS project said, "Student growth through eMINTS is really guite remarkable. Through eMINTS, students become the main push of their own learning. Through the inquiry model they [students] become the leaders. Their thoughts and questions drive what they learn. They really become the teacher in their own way, and we get to sit back and watch it happen. We [teachers] might ask them guiding guestions, and we might say "well, what do you think about this?' or "how do you think this might potentially affect that?'. And they just look at you and go 'Oh, yeah' and just run. It is a remarkable thing to witness."

Table 1. EIR Grantees Who Informed This Paper

Grantee & Innovation	Grant	EIR Funding Tier
Scaling Up a Specific Intervention		
Strategic Education Research Partnership (SERP) Institute	Building Capacity to Support Struggling Adolescent Readers	2017 Mid-phase
STARI – STARI is a literacy intervention for students in grades 6-9 who are reading two or more years below grade level. STARI emphasizes motivating and engaging texts and opportunities for peer interaction.	Scaling Students' Success with STARI: Expanding Eligibility, Support, and Spread	2022 Expansion
Education Analytics Future Forward – Future Forward is an early literacy intervention for students K-3 that combines high-dosage one-on-one tutoring with family engagement in order to increase student literacy skills, schoolday attendance, and overall academic success.	Spark Center: Scaling and Validating a Research-Based Cost-Effective Literacy Intervention	2017 Mid-phase
	Future Forward: Sustaining and Expanding a Student- Centered, Technology-Enabled Early Literacy and Family Engagement Intervention	2021 Expansion
Applying an Intervention Model to Multiple C	ontent Areas	
The ASSISTments Foundation ASSISTments – The ASSISTments platform provides assistance and assessment as students complete their assignments. As students solve problems, the ASSISTments system provides immediate feedback and offers additional assistance in the form of hints or scaffolds. Teachers get access to student- and class-level data that can inform instructional decisions.	Scaling Teachers' Professional Development for ASSISTments	2019 Mid-phase
	Recovering from COVID- Learning-Loss with a Platform to Support Human Tutoring	2021 Mid-phase
	Scaling ASSISTments for Algebra Readiness with Curriculum-based Professional Learning and Coaching	2022 Mid-phase
Curators for the Special Trust of the University of Missouri	Prosocial and Active Learning (PAL) Classrooms	2018 Early-phase
eMINTS – The eMINTS instructional model has four key components: high quality lesson design, a community of learners, powered by technology, and authentic learning. The eMINTS instructional model is being scaled and tested in different contexts and with different intervention goals.	eDGE: eSTEM Designing Games for Education	2020 Early-phase
	Talk to Read	2022 Early-phase
	Scaling and Sustaining Mission HydroSci: Game-Based Learning for Next Generation Learning	2022 Mid-phase

What Have We Learned From These Grantees?

Discussions with these four grantees who have leveraged the EIR funding tiers to scale and innovate/ iterate upon effective models have revealed two areas that support sustainable scaling with seven key approaches.

Leveraging key features of EIR grants

- 1. Responsible scaling using the EIR funding tiers
- 2. Leveraging external evaluator expertise
- 3. Planning for scale from the beginning
- 4. Building internal and local capacity
- 5. Leveraging digital tools to support scaling

Leveraging results from RCTs and evaluation studies

- 6. Using evaluation studies to establish a track record for the model
- 7. Using evaluation studies to identify core program components

While these strategies are framed as they relate to the EIR funding tiers, they can be used by others wishing to sustainably scale evidence-based educational innovations.

Leveraging Key Features of EIR Grants

Conversations with the grantees revealed several approaches to sustainable scaling that were supported by key features of the EIR grant program.

Responsible Scaling Using the EIR Funding Tiers

The first approach that emerged was the nature of the funding tiers themselves. Because each funding tier has different requirements for prior evidence, degree of scaling expected, and program evaluation, they offer a roadmap for sustainable and effective scaling. Further, each grant's duration is long enough to encourage a responsible approach to scaling up that includes taking time at the beginning of the grant to pilot test and refine program features.

- Both STARI and Future Forward have progressed from Mid-phase grants to expansion grants to scale their respective literacy interventions. Evidence and lessons learned from pilot grants from other funding sources (IES for STARI and i3 for Future Forward) and from mid-phase grants helped them establish evidence of their interventions' effectiveness and begin to identify their models' core components. The STARI team also reported that their mid-phase grant was crucial in preparing to scale in their expansion grant because it allowed them to create the supports and professional learning required for scaling across various contexts and to build on the many lessons learned.
- The eMINTS team said the funding tier structure enabled them to both develop their model's features, and test the model in a variety of contexts. Jen Foster, an instructional specialist and leader on eMINTS' PAL Classrooms grant, noted the value of beginning with an early-phase grant: "The early-phase really opened up a lot of opportunities. It allowed us to try this out in a small scale in a more controlled setting and find the strengths of our programs and to identify more clearly the needs of our participants, our teachers, and schools we're working with so we can more clearly

define the path moving forward." Specifically, in the PAL early-phase grant, the team found that the number one issue was getting administrators on board. They found they had school administrators who strongly encourage and even require teachers to implement strategies and practices that the eMINTS team had identified as being counterproductive to improving students' motivation, engagement, behavior, and academic success. Having gained clarity about the path forward, the team applied for and received a 2023 mid-phase grant to further scale the program. As they launch the PAL Classrooms 2.0 mid-phase grant, they are developing an administrator PD program to help administrators better understand and support prosocial education. Beyond taking advantage of the funding tiers, the eMINTS team emphasized the importance of having a pilot year at the beginning of any grant. Their experiences with all their grant projects showed them that because a lot can change in the time between submitting a grant application and receiving the award, having a pilot year to adjust to the current landscape is critical to successful implementation and scaling.

• The ASSISTments team said they appreciated how leveraging the funding tiers promotes a responsible approach to scaling. The team felt encouraged to build time to plan and pilot test into their grant timeline. Commenting on some of their current grants, they shared, "We're in pilot years. It's the best; we get to learn and do user-centered design." Taking the responsible approach supported by the EIR funding model has provided the ASSISTments team with the time they need to understand which of their intervention features are effective and ensure the design enables users to engage as they intend.

The grantees' insights highlight the value of taking time to plan and pilot test to assess the landscape at all funding tiers. While mid-phase and expansion grants often build on findings from early-phase projects, teams must examine how their intervention components function as they scale to new contexts and communities. Further, given the time that passes between writing the grant proposal and beginning implementation, the grantees' experiences showed how important it is to evaluate how conditions and commitments have changed during that time.

Leveraging External Evaluator Expertise

The EIR Program requires grantees to have their project evaluated by an external evaluator. Several grantees expressed that working closely with their evaluator has been invaluable. They shared that the evaluator can be an important resource for getting ahead of challenges that might occur during implementation. They also noted that the evaluator can highlight promising directions for additional research and exploration.

• The eMINTS team emphasized the importance of regular meetings with the evaluator and other team members. They shared that working closely with the evaluator can enable them to catch and resolve nearly all potential issues and respond, adjust, and change quickly. Specifically, one team member said, "It is critical that you meet with your evaluation team regularly, and I really mean I think at least twice a month. Those teams that we haven't met as regularly with, we're having a bit of a challenge in understanding each other in our needs, so — I just have to say shout-out to EIR. They always give us team members that have a sense and a true understanding of what goes on in education and classrooms." The eMINTS team shared that continuing these meetings even when it did not seem like there was much to discuss helped them take a proactive, rather than reactive, approach to supporting implementation.

- The Future Forward team shared how their evaluator helped them identify a promising trend in their program's impact. They noted that their evaluator always broke data down demographically when examining impacts. In doing so, they realized that across a number of studies, they were finding that the Future Forward intervention had the largest impact on Black male students. They don't yet know the reason but plan to explore this within their grant projects.
- Several teams also said recruiting for evaluation studies, particularly RCTs, was challenging. For example, the STARI team found schools reluctant to participate because of the student-level random assignment requirement. School administrators felt that it was unethical to withhold STARI from students who they felt needed it, and since STARI is an open educational resource (OER), they were able to drop out of the study and implement STARI on their own. The STARI team responded to this by shifting to school-level random assignment for their expansion grant. In the expansion study, control schools will receive STARI in year 3, and are referred to as "delayed implementation" schools.

Planning for scale from the beginning

One of the four practices for scaling identified through conversations with i3 grantees was planning for sustainability from day one (DeWire et al., 2019). Planning from the beginning has been critical for EIR grantees as well. At all funding tiers, the EIR Program application requires grantees to identify how they will scale their evidence-based program as well as what they believe their barriers to scaling will be. This emphasis in the application sets grantees up to start thinking about scale from the very beginning of their grant project. Several grantees expressed how critical this initial planning has been for their scaling success.

- The STARI team noted how planning to scale from the beginning helped ensure that they looked beyond the research to develop their program. One team member said, "I do want to highlight ... the importance of designing for scale from the beginning and thinking about it from the beginning, not just what does the research say about how to design an effective literacy program but how this is going to fit into the school day and designing so this can be implemented by teachers with different levels of capacity. Not sort of having grad students go and teach it and then go, 'Oh no! How are we going to scale this up?' But thinking about their professional learning and making the lesson plans really clear so that teachers can follow them even if they're not the superstar teachers who are dying to participate in every opportunity." The team's reflection highlights that designing a model based on research is necessary but insufficient for taking a program to scale. Team members found It critical to think about the model through the lens of the users and the realities of the classrooms and schools the model is intended to serve. The STARI team always considers three things to scale from the beginning, regardless of the EIR funding tier:
 - What is a widespread problem of practice without a solution;
 - What can be implemented by a typical teacher;
 - How to ensure student engagement.
- The ASSISTments team shared a similar perspective. One team member said, "Our first EIR grant project was really anchored on this idea of making the tool scalable as possible, making virtual support that can go along with that. I think what we realized over the years is that school and district partnerships and relationships are super important because that's where you get a deeper impact and sustained adoption."Through their experiences, the ASSISTments team recognized that providing support to and developing relationships with schools and districts is critical for deep

and sustainable scaling. With this in mind, developing easily scalable support resources from the beginning of the grant, like virtual professional learning opportunities, was an essential step for ensuring successful scaling.

Building internal and local capacity

As part of their scaling strategy, grantees needed to attend to capacity, both within their internal teams designing, promoting, and supporting their interventions, and within the local sites that were implementing the interventions.

- One of Future Forward's key features is high-dosage one-on-one tutoring. As Future Forward scales, its model requires the number of tutors placed in districts and schools to scale as well. Initially this led to a challenge where Future Forward was responsible for a large number of school-based implementation staff without having a hand in the hiring process. This often hindered relationship building between Future Forward and school- and district-level staff. To address this challenge, the Future Forward team contracted with a professional employer organization to directly hire school-based implementation staff. They have since switched to hiring all staff directly and independently. These shifts have come with challenges but have also supported relationship building and have enhanced program control over staff quality.
- Both STARI and ASSISTments are exploring how to leverage existing personnel to build local capacity in new implementation sites. One STARI team member noted that, "In terms of staffing, the person teaching STARI does not have to be a reading specialist. They don't even really have to have a background in literacy. It helps, but it's not necessary because our lesson plans are really clear and our professional learning is really comprehensive. We've had teachers from a wide range of backgrounds successful with STARI." In both their IES Reading for Understanding (RfU) grant and EIR mid-phase grant, the team hired and trained coaches who provided direct support to all STARI teachers. They have not hired coaches in their expansion grant because it is supposed to be an effectiveness study under routine conditions rather than ideal conditions. In schools and districts that have their own coaches, STARI is providing them training and support. In order to successfully scale, the team believes they need to leverage the coaching structures that already exist within schools and districts and create the resources to support coaches rather than suggest the only way to get results is hiring STARI-specific coaches. Similarly, the ASSISTments team is exploring how to leverage existing personnel or community volunteers as tutors to support the staffing needs in their grant focused on tutoring to support COVID learning loss recovery.
- Future Forward focuses on capacity building as part of their planning for financial sustainability. The team has established a model where they have both grant and fee-for-service sites. Currently, about 30 percent of their sites are fee-for-service. The team hopes they will continue to be supported by grants but over time will increase the percentage of fee-for-service sites. In service of that goal, in their current grant, they are working to support schools and districts to increase their role in implementation and cost sharing. However, they have realized that their partners in schools and districts need financial support. As such, they have added someone to their national team to support local fundraising efforts.

Leveraging Digital Tools to Support Scaling

Several grantees strategically leveraged digital tools, resources, and materials to support their scaling efforts. Whether these resources were part of the grantees' original intervention design or were developed in response to the challenges and opportunities presented by the pandemic, they have been a key part of the scaling approach taken by the ASSISTments and STARI teams. Beyond supporting broader access to intervention materials, the use of digital tools has opened avenues for financial sustainability.

- The ASSISTments platform is an already scalable digital learning tool that students use to complete teacher-assigned problems online and that provides educators with information about their students' performance. The team's EIR grant has allowed them to take their scalability a step further by developing a virtual Professional Learning Community (PLC) model, which proved invaluable for continued impact during the pandemic and even continues to benefit teachers across the country at a low cost. The virtual PLC goes beyond a one-and-done webinar and engages teachers in deep discussion around shared problems of practice. The team learned it's possible to build community and energize teachers, even over Zoom.
- The STARI team has found that much of the work they did to adjust to the pandemic during their mid-phase grant project has helped them continue to scale in their expansion grant. It has led to a new revenue stream to support financial sustainability. During the pandemic, they moved their professional learning opportunities online and expanded their offerings to include teacher and facilitator licenses. This enabled them to scale up by making professional learning accessible and affordable even for small, rural schools. STARI also developed key partnerships with a book distributor and printer that have been critical for their scaling by making it easier for schools to access all the materials needed for STARI. These efforts have helped STARI strike a balance between providing access and ensuring financial sustainability. For example, to support access, the STARI team committed to keeping their curriculum free for download to serve users such as individual teachers tasked with teaching a reading intervention class without a curriculum or resources. To support financial sustainability, the team is working on developing ordering systems and packages for users such as larger school districts that are willing to pay for ready-to-use curriculum materials instead of having schools download and print them.

Leveraging Results from RCTs and Evaluation Studies

At all funding tiers, EIR grantees are required to conduct rigorous evaluation of their program models. Many grantees use RCTs to obtain robust evidence of their program's effectiveness. The grantees shared how valuable these evaluation studies and their results are for supporting their endeavors in scaling. First, the evidence produced helps establish a track record for the model and provides results to share with potential new implementation sites. Further, the results help clarify the model's core elements and provide insight into how to strike a balance between being flexible to accommodate certain implementation sites' local contexts while also maintaining fidelity to core components.

Using evaluation studies to establish a track record for the model

When applying for EIR grant funding, potential grantees need to establish evidence that speaks to their model's efficacy. This requirement promotes careful evaluation of their model's components. It also provides grantees with a track record for their model that they can use to convince schools and districts to participate in or even pay for their program. As the grant progresses, the required evaluation studies can provide additional information about the program's efficacy.

- The Future Forward team shared how valuable the data from evaluation studies have been for their ability to scale to new sites. They said the data are useful for schools and districts, both to illustrate impact and to support the schools' or districts' own evaluation of student progress. With this in mind, the team has come to view data as a tool that can be used to build relationships with districts and schools.
- The ASSISTments team noted the value of having results from an evaluation study to build demand for services with districts committed to purchasing evidence-based solutions. While their ASSISTments Teacher tool is free, a commitment they made in the early days of development before the EIR funding, the nonprofit ASSISTments Foundation does sell the virtual PLC developed through their first EIR grant. With their tutoring-focused grant, they are proactively designing the product with the market in mind so they will be primed and ready to sell it once they have study results. Part of the approach they are trying is a subscription model where schools or districts pay for wraparound services for the ASSISTments Teacher tool. Their vision for this model involves establishing a culture at schools where ASSISTments data are routinely discussed and used in regular department meetings and are an integral part of the work done by a school's instructional leaders. When the grant period ends, they hope ASSISTments data will continue to be a core feature of how the school operates, motivating schools or districts to pay for continued access to district-level data tools. The ASSISTments team also believes that demonstrating the ASSISTments approach's impact is crucial for establishing a revenue stream.

Using evaluation studies to identify core program components

As grantees take their innovations to scale, it is common to wonder which aspects of their model are essential to achieve results for students, in other words, what their program's core components are. In scaling to new schools, districts, and contexts, grantees grapple with how to balance adaptation to fit the local context with preserving fidelity to their model. Many of the featured grantees said the results of their evaluation studies have been critical for understanding their models' core components and establishing boundaries for what they can and cannot be flexible about with new sites.

• The ASSISTments team has found their evaluation studies valuable for thinking about their core components that need to be implemented with fidelity and what elements can be adapted locally. For their ASSISTments Teacher tool, they were able to develop usage guidance based on the results from RCTs and make the guidance broadly available. In their current grant focused on extending their model to tutoring, they are putting hypotheses forward about what is core to the model and will leverage their upcoming evaluation studies to test those hypotheses. The team noted that designing and executing a research project every time is hard but necessary. They said one advantage of conducting these evaluation studies through an EIR grant is that they get advice from their evaluator that helps them understand where in their model they can flex and where they can't.

- The STARI team also shared how the results from their evaluation studies have impacted their scaling process. When recruiting new sites to use STARI, they established fit criteria and are open to working with schools to get STARI to their students. One team member said, "We do not put out public readiness criteria because it's an OER and everybody can do it. The hardest thing is finding the time and the schedule. When schools want to scrimp on that and say, 'OK, it's going to be 30 minutes, 3 days a week,' they're not going to get through the curriculum and they're not going to see the results they want to see. And so that's something I push hard on." When recruiting, the team emphasizes how important the time commitment is to producing results for students using STARI. However, rather than requiring schools to follow their model exactly, the team can point to their evaluation studies' results and make clear to potential users that the STARI time commitment is key for producing such results.
- Both Future Forward and eMINTS experienced delays in data collection for the evaluation studies due to interruptions from the pandemic but through the changes to their initial plans have continued to gather evidence about their programs' effectiveness. The Future Forward team had to modify their evaluation studies but were still able to detect positive effects on student learning. They also experienced a delay in getting pilot year data for their expansion grant. eMINTS has experienced delays in their evaluation studies as well as reduced power due to fewer participants. While the changes to the program and the evaluations may preclude them from meeting What Works Clearinghouse standards with or without reservations, they are still learning about their programs' effectiveness through anecdotes and conversations with participants.

Conclusions

The EIR Program provides funding to support the scaling of evidence-based education innovations. The EIR funding tiers and the grants' requirements provide valuable structures to support sustainable scaling – scaling that addresses spread to new sites, consequential change in classroom practice, sustainability, and a shift of ownership from the grantee to districts, schools, and teachers. The grantees featured in this paper have developed scaling strategies that take advantage of the road map the EIR funding tiers provided and that leverage resources EIR provided. Key strategies to support different dimensions of scaling include drawing on the expertise of external evaluators, using evaluation studies to establish the core components of the program model, and taking advantage of a pilot year. While these strategies are framed by the affordances and challenges of scaling through the EIR Program, they can be applied to other scaling contexts and contribute to our understanding of practices that support the scaling of educational innovations.

Citations/Links

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Appendix A: Interview Participants

Grantee Interviewee(s)	Project
Strategic Education Research Partnership (SERP) Institute • Margaret Troyer, Director of Literacy Research & Development • Allie Huyghe, Assistant Director	 Building Capacity to Support Struggling Adolescent Readers (2017, Mid-phase) Scaling Students' Success with STARI: Expanding Eligibility, Support, and Spread (2022, Expansion)
Education AnalyticsKate Bauer-Jones, Executive Director	 Spark Center: Scaling and Validating a Research-Based Cost-Effective Literacy Intervention (2017, Mid-phase) Future Forward: Sustaining and Expanding a Student- Centered, Technology-Enabled Early Literacy and Family Engagement Intervention (2021, Expansion)
 The ASSISTments Foundation Cristina Heffernan, Executive Director Britt Neuhaus, Vice President of Program and Partnerships 	 Scaling Teachers' Professional Development for ASSISTments (2019, Mid-phase) Recovering from COVID-Learning-Loss with a Platform to Support Human Tutoring (2021, Mid-phase) Scaling ASSISTments for Algebra Readiness with Curriculum-based Professional Learning and Coaching (2022, Mid-phase)
 Curators for the Special Trust of the University of Missouri Cara Wylie, Co-Director Jen Foster, Director of ProsocialEd Collaborative Carla Chaffin, Instructional Consultant 	 Prosocial and Active Learning (PAL) Classrooms (2018, Early-phase) eDGE: eSTEM Designing Games for Education (2020, Early-phase) Talk to Read (2022, Early-phase) Scaling and Sustaining Mission HydroSci: Game-Based Learning for Next Generation Learning (2022, Mid-phase)