Accelerate's 2023-24 Call to Effective Action

A Synthesis of Lessons Learned

BRIEF PREPARED BY

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Acknowledgments

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Thank you also to our grantees doing the important work of proliferating effective academic interventions and bringing evidence-based practices to scale. Special thanks to the Accelerate grantees featured in this report: Air Reading (formerly Air Education), Air Tutors, District of Columbia Public Schools (DCPS), Ignite Reading, KIPP Indy, Once, Reading Futures, and Step Up Tutoring.

Cover photo: District of Columbia Public Schools

About Accelerate

The National Collaborative for Accelerated Learning

Accelerate is a national nonprofit organization that serves as a central hub for proliferating effective, evidence-based academic interventions. By bridging gaps between research, policy, and practice, Accelerate aims to embed proven high-dosage tutoring programs into public schools now and for the long term.

Accelerate funds innovation in schools, supports high-quality research, and advances a federal and state policy agenda to support this work. Accelerate was incubated and launched by America Achieves in 2022, and is a lead technical assistance partner to the Partnership for Student Success. In its initial years of work, Accelerate has made grants to over 60 programs across 29 states and has funded and supported over 65 research studies, including 25 randomized controlled trials.

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For more information, visit www.accelerate.us.

Executive Summary

This report synthesizes findings from eight selected grantees from the 2023-24 Call to Effective Action (CEA) cohort to highlight effective tutoring strategies, share considerations for scaling up tutoring, and describe lessons for designing and conducting research on tutoring impacts.

Overview of 2023-24 Call to Effective Action Grant Program and Grantees
Accelerate selected 33 grantees from 110 applicants for the 2023-24 Call to Effective Action grant program (CEA). These grantees included high-dosage tutoring providers, school districts, and community-based organizations implementing various tutoring models in English Language Arts (ELA) and math—virtual, in-person, and hybrid/blended approaches—serving students from Pre-K through 12th grade across 25 states. Providers in the cohort tutored a diverse group of more than 62,000 students in which 73 percent were students of color, 83 percent qualified for Free or Reduced-Price Lunch (FRPL), 20 percent had Individualized Education Programs (IEPs), and 27 percent were classified as English Language Learners (ELL) or Multilingual Learners (MLL).

The study team selected eight grantees for in-depth focus because they had reports available by January 2025 and met three key criteria. Specifically, they completed well-documented randomized controlled trials (RCTs) or matched comparison studies, demonstrated adherence to their program design, and implemented a tutoring model that Mathematica and Accelerate considered to have promise for adoption at scale. The study team reviewed grantee evaluation reports and extracted information on research designs, the amount of tutoring students received, and findings on student learning impacts. They then conducted interviews with tutoring providers and their evaluation partners to learn about implementation challenges and successes, as well as lessons from completing their evaluations.

Key Findings on Student Learning Outcomes
Four of the eight grantees observed positive, statistically significant impacts on student learning. Relying on Accelerate's tutoring efficiency index to contextualize student learning impacts, the amount of tutoring per student required to yield a month of additional learning ranged across programs from 2 hours to 34 hours.

Findings on Implementation, Scaling, and Research
In their interviews and evaluation reports, the eight tutoring grantees highlighted common strategies to successfully implement tutoring, scale models, and conduct rigorous research.

- **To establish enabling conditions for tutoring,** build relationships and buy-in with teachers and district and school leaders, identify a tutoring coordinator at each school, support schools to build tutoring into their schedules, and ensure there is physical space for tutoring that allows students to focus.
- **To ensure consistent and high-quality instruction,** offer training tailored to the needs of tutors and use structured or scripted curricula.
- **To maximize tutoring dosage,** provide attendance incentives to districts through outcomes-based contracts, offer stipends to school coordinators and teachers, and arrange for substitute tutors to fill in for tutors who are absent.
- **To make tutoring models easier to scale up,** offer tutoring during academic or flex blocks to address scheduling challenges, use structured or scripted curricula to maintain quality at scale, and provide a guide for districts and schools that offers a checklist for them to follow.
- **To address the challenge of conducting rigorous research in schools and districts,** collaborate with districts that are invested in building evidence to inform their decision making, invite principals and teachers to help inform the random assignment approach, and provide tutoring at no or low cost to increase participation.

Looking Ahead

The findings from this report have informed new grant opportunities through Accelerate, including the 2025 Evidence for Impact (EFI) and Call for Effective Technology (CET) grant opportunities. These initiatives aim to advance standardized measurement of tutoring dosage and student outcomes; support multi-arm randomized controlled trials to compare different tutoring approaches; and build evidence on new instructional technologies in early stages of development.

Photo: KIPP Indy

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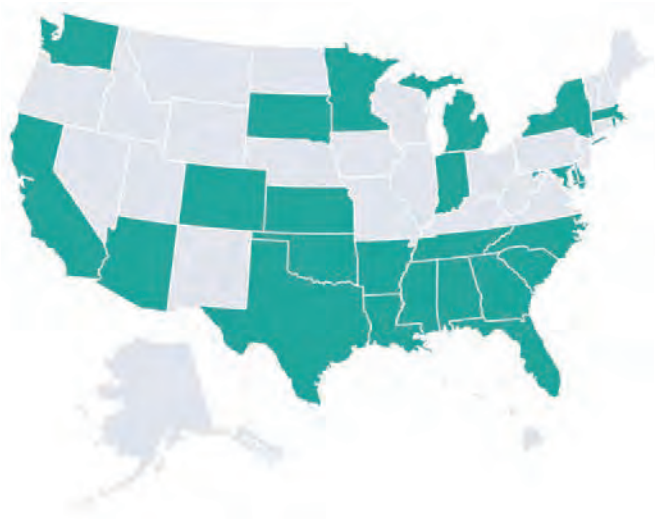
The Call to Effective Action

Accelerate awarded more than $6 million in grants to 33 partners to develop, scale, and evaluate sustainable, cost-effective tutoring models that could boost academic achievement for students.

In the 2023-24 academic year, Accelerate selected 33 grantees from a pool of 110 applicants to join the second cohort of the Call to Effective Action grant program (CEA). The 23-24 CEA grants supported grantees in developing new evidence in one of two ways, based on the grantee's stage of development and the extent of prior evidence about their program. Specifically, Accelerate provided Promise grants to 12 recipients who had more established tutoring models, and those grantees conducted evaluations of impacts on student outcomes using quasi-experimental designs (QEDs) and randomized controlled trials (RCTs). Accelerate provided Innovation grants to the other CEA grantees, whose models were in earlier stages of development. These evaluations generally did not include a comparison group but instead focused on testing usability and measuring implementation to produce preliminary evidence of student learning gains.

Grantees included high-dosage tutoring providers, school districts, and community-based organizations that implemented a range of tutoring models—virtual, in-person, and hybrid/blended approaches—serving more than 60,000 students from Pre-K through 12th grade across 25 states and Washington, D.C. (Exhibit 1). The content of the tutoring focused on English Language Arts (ELA) (48 percent of tutoring programs), math (29 percent), or both subjects (23 percent).

Exhibit 1. States where 2023-24 CEA grantees operate



Student Demographics in Tutoring Districts (2023-24)

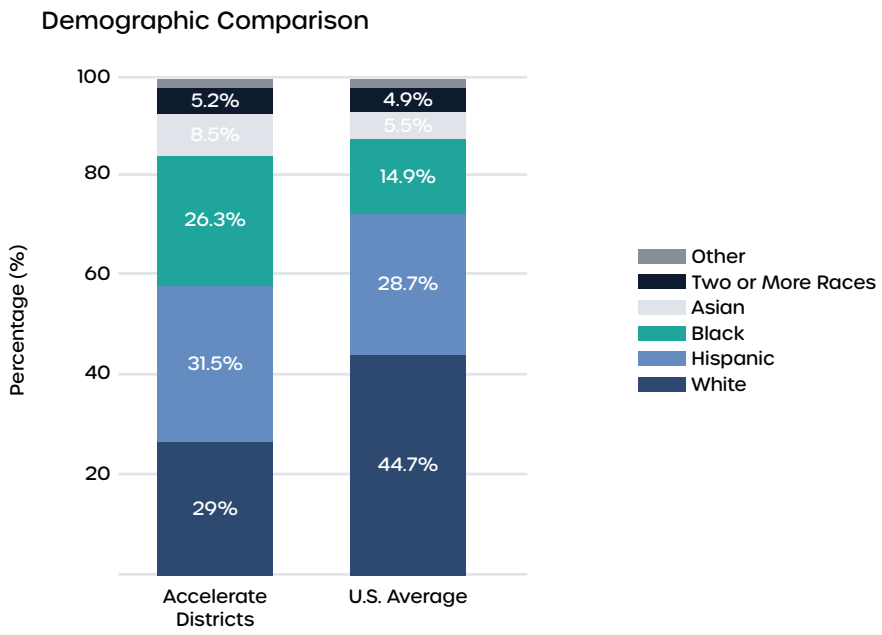
73%	Students of color
83%	Qualify for Free/Reduced-Price Lunch
20%	Have Individualized Education Programs
27%	Classified as English/Multilingual Language Learners

Notes: The states in green contain districts where 2023-2024 CEA grantees reported offering tutoring services using Accelerate-funded dollars. Specific districts are not reported here to preserve grantee privacy.

The tutoring initiatives varied in size and reach. In their Accelerate-supported programs, the grantees had 47 tutors, on average (ranging from 3 to 217 tutors). Grantees reported these tutors served between 28 and 1,520 students with the Accelerate grants, an average of 369 students per tutoring program. In districts that the 23-24 grantees provided tutoring, 73 percent of students, on average, were students of color, 83 percent of students qualified for Free or Reduced-Price Lunch (FRPL), 20 percent had an Individualized Education Program (IEP), and 27 percent were classified as English Language Learners (ELL) or Multilingual Learners (MLL) (Exhibits 2 and 3). Compared to districts nationally, grantees in the portfolio, on average, supported a higher proportion of students of color, students with IEPs, ELLs, and students eligible for FRPL.

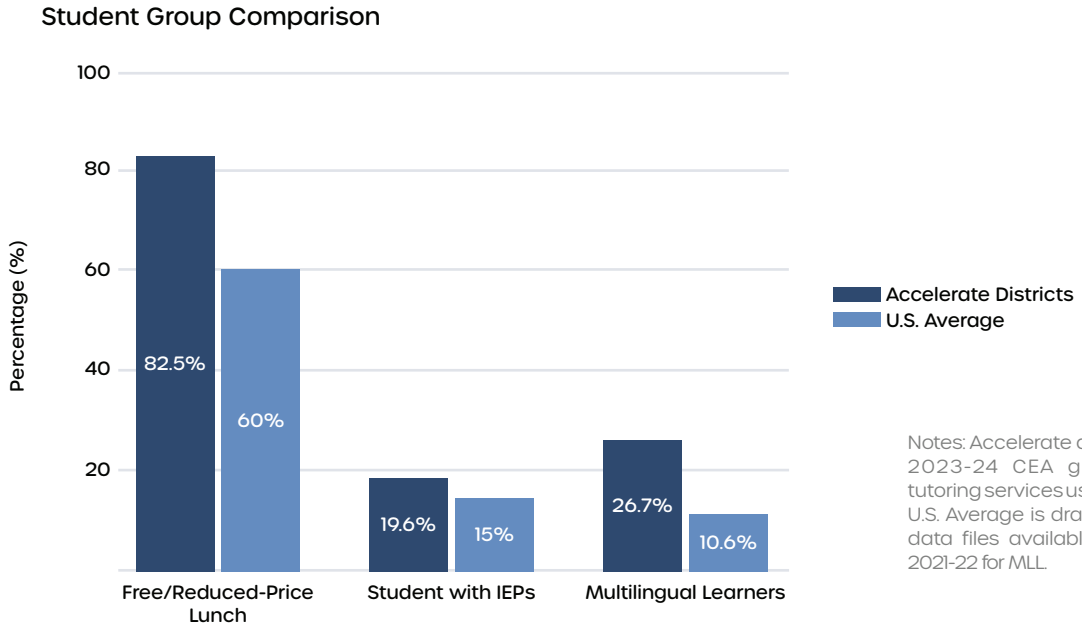
Regarding the dosage of tutoring, grantees intended for students to receive 3.3 tutoring sessions per week, on average, with a range of 1 to 5 weekly sessions, for an average of approximately 14 weeks. The intended session length ranged from 15 to 60 minutes, or approximately 35 minutes, on average. Across the portfolio, grantees reported delivering an average of 70 percent of the tutoring hours they intended to provide.

Exhibit 2. Percentage of students, by race/ethnicity, in Accelerate districts versus all U.S. districts



Notes: Accelerate districts include districts where 2023-24 CEA grantees reported offering tutoring services using Accelerate-funded dollars. U.S. Average is drawn from the most recent CCD data files available: SY 2022-23.

Exhibit 3. Percentage of students, by subgroup, in Accelerate districts versus all U.S. districts



Notes: Accelerate districts include districts where 2023-24 CEA grantees reported offering tutoring services using Accelerate-funded dollars. U.S. Average is drawn from the most recent CCD data files available: SY 2022-23 for FRPL, IEP; SY 2021-22 for MLL.

II
Synthesis of findings for eight selected grantees

This report synthesizes findings from eight of the 33 grantees in Accelerate's 2023-24 CEA cohort.

The report presents findings from two sources: (1) grantees' research studies that examined the impact of their programs on student learning; and (2) interviews with grantees to capture lessons learned from the implementation of their programs. Before presenting findings, we summarize the report's goals, our approach for selecting grantees for inclusion in this synthesis, and the methods for collecting and analyzing interview data.

Report goals. For the eight grantees whose findings we synthesized, this report presents links between the implementation strategies they adopted and the impact on student achievement outcomes. This report has three primary goals:

- Highlight tutoring strategies that support student achievement
- Share considerations for scaling up tutoring
- Describe lessons for how to design and conduct research on the impacts of promising and scalable tutoring models

Selection of grantees for this synthesis. Mathematica selected a subset of eight grantees because they completed well-documented randomized controlled trials (RCTs) or non-experimental matched comparison studies, demonstrated adherence to their program design, and implemented a tutoring model that Mathematica and Accelerate considered to have promise for adoption at scale. We started with the 14 grantees that had a research report available by January 2025 that measured the impact of their programs on student learning using a RCT or matched comparison group design. (Other grantees measured participants' achievement before and after the tutoring but did not include a comparison group of non-tutored students because they were early-stage Innovation grants.) Of these 14 grantees, we excluded one grantee that did not provide enough information to assess its research design and two grantees that implemented a substantially different tutoring model than initially proposed.[1] Finally, we selected eight of the remaining eleven grantees because the model they implemented during their evaluation aligned well with the model they planned to continue offering.[2]

Data sources and methods. The findings in this report are based on the following data sources and methods:

1. **Synthesis of reported findings.** We reviewed grantee evaluation reports and extracted information on research designs, findings on student learning gains, and the amount of tutoring (i.e., dosage) students received.

2. **Grantee interviews.** We conducted interviews with grantees, their evaluation partners, or both to learn about aspects of their implementation experience that might help contextualize student outcomes. During the interviews we also asked about aspects of implementation that grantees and evaluators viewed as potentially influencing the scalability of their tutoring models and their lessons learned from conducting evaluations of their programs. We analyzed the interview data to identify themes across grantees and links between reported student dosage and learning gains.

[1] One grantee had to switch to a different provider, resulting in substantially different tutoring content, and another shifted from a model of supporting districts across a state with implementing tutoring—an explicit scaling strategy—to instead providing tutoring directly.

[2] We did not select the other three grantees because they either decided not to continue offering their model after the study ended or showed limited promise for replication by other organizations.

Interview data collection and analysis

The interviews with grantees and/or evaluators collected information in four key domains: (1) challenges and successes for implementing the tutoring model as planned and at intended dosage; (2) implementation experiences that might help explain student learning outcomes; (3) challenges to scaling and strategies to address them; and (4) lessons from evaluating their programs. We used an interview protocol that covered these four domains for all grantees but customized it for each grantee based on our review of their evaluation report (for example, to probe on the specific patterns of variation in student learning outcomes and surface hypotheses connecting those patterns to implementation experiences).

We analyzed the interview data by first identifying key themes inductively within each predetermined interview domain separately for each grantee. We then identified themes that appeared in multiple grantees' interviews within a given domain.

Because the primary goals of this report are to identify lessons across the eight selected grantees and uncover patterns linking implementation experiences with student learning impacts among those grantees as a group, the report does not identify individual grantees by name. The study team also recommended presenting findings in a de-identified format to encourage grantees to volunteer as much detail as possible about implementation challenges.

The remainder of the report begins by briefly summarizing the grantees' student learning outcomes. It then presents key findings on implementation, considerations for scaling, and lessons on evaluating the impact of tutoring programs before sharing concluding thoughts on upcoming opportunities for further learning.

Photo: Ignite Reading

Student outcome findings across grantees

To ground this report's findings on implementation lessons, this section first summarizes the impact that the eight 2023-24 CEA grantees had on student learning. The eight grantees represent a diverse set of tutoring approaches with study samples and designs that varied widely (Exhibit 4). Grantees' study designs ranged from well-executed RCTs with samples as large as 1,400 students to matched comparison studies or small-sample RCTs with design limitations. The last column in Exhibit 4 shows whether each evaluation employed (a) a research design sufficient to support causal conclusions about program impacts (e.g., a RCT with low attrition) or (b) a research design that may be insufficent to support causal conclusions (e.g., a RCT with high attrition or a non-experimental design).

Program features. Grantees' programs were diverse in terms of subject focus, grades served, mode of delivery, tutor type, group size, and intended dosage. Half of the grantees focused on literacy or reading, while the other half focused on math. Three grantees limited their tutoring to kindergarten or 1st grade, three grantees worked with students in 1st to 6th grades, and two grantees provided tutoring to middle schoolers. The grantees used tutors with varying levels of teaching experience ranging from current college students and non-certified college graduates to paraprofessionals and certified teachers. Most grantees delivered tutoring online, but two provided tutoring in person. The student-tutor ratios ranged from four-to-one to one-on-one. Finally, the intended weekly dosage spanned from 60 minutes per week to 180 minutes per week.

Student outcomes. Four of the eight grantees observed positive, statistically significant impacts on learning among participating students; two of these grantees measured differences in learning outcomes that were substantively large (greater than 0.2 standard deviations [SD]). The remaining four observed differences between participants and non-participants that were not statistically significant. For grantees who observed positive, statistically significant learning gains, we calculated the tutoring efficiency index – the hours of tutoring associated with one additional month of learning – using the method introduced in Kohlmoos and Steinberg (2024). Using this measure, the estimated impacts on student learning translate to efficiency index values ranging from two hours to yield a month of learning, up to 34 hours to yield a month of learning.[3] Of note, none of the program attributes described above reliably predicts which programs measured significant, positive learning improvements. In the next section, we present findings from interviews that surfaced more nuanced details about grantees' implementation experience and their links with student outcomes.

Photo: Ignite Reading

[3] Because there is program-specific variation in both the estimated impacts and average hours of tutoring delivered, the tutoring efficiency measure aims to enable comparisons across tutoring providers implementing tutoring in different schooling contexts, for different content areas, and for different grade levels. There is also variability in the precision of the program-specific impacts and the sample size of the particular implementation, and therefore variability in tutoring efficiency. For example, for the provider with an efficiency index of 2 hours/month of learning, the precision of the estimated impact implies that the efficiency index could range from 1.2 hours to 6.1 hours required to yield a month of learning. For the provider with an efficiency index of 33.8 hours/month of learning, that index could range from 22.9 to 64.5 hours based on the precision of the underlying point estimate.

Exhibit 4. Grantee findings on learning improvements and key program features

Tutoring provider	Learning improvement (SDs)	Subject area Outcome measure	Grade(s) served	Tutor type(s)	Mode	Group size	Intended dosage per week	Average dosage received per week	Tutoring efficiency[a] (hours per month of learning growth)	Study design and strength ● High ◑ Moderate
Positive, statistically significant learning improvements										
Provider 1	0.25* (2:1 model) 0.00 (3:1 model)	Math NWEA MAP	6–8	College students or recent graduates from private company	Online	2:1 or 3:1	100 min (2:1); 150 min (3:1)	65 min (2:1) and 90 min (3:1) over 12 weeks	2.0 (2:1 model) N/A (3:1 model)	● RCT
Provider 2	0.21*	Literacy DIBELS	1	Non-certified adults with 100 hours of Science of Reading training+ practicum	Online	1:1	75 min	70 min over 30 weeks	33.8	◑ Matched comparison
Provider 3	0.12*	Literacy NWEA MAP	1–6	Adults with bachelor's degree	Online	3:1	160 min	90 min for one semester	17.5	● RCT
Provider 4	0.09* (District A) 0.03 (District B)	Math Star Math / NWEA MAP	4–6	Adults with bachelor's degree with 5+ years of tutoring or teaching experience	Online	4:1	180 min	133 min (District A) and 50 min (District B) for one semester	24.7 (District A) N/A (District B)	◑ Matched comparison
Learning improvements that were not statistically significant										
Provider 5	0.12	Literacy DIBELS	2 and 3	Certified educators who are military spouses	Online	4:1	180 min	109 min over 33 weeks	N/A	◑ RCT with high attrition and differences at baseline
Provider 6	0.09	Math iReady	3–7	Trained volunteers and college students	Online	1:1	90 min	45 min over 21 weeks	N/A	● RCT
Provider 7	-0.02	Math iReady	K	Para-professionals and non-teaching staff	In-person	2:1 to 3:1	60 min	22 min over 19 weeks	N/A	● RCT
Provider 8	-0.08	Literacy DIBELS, FastBridge	K	Para-professionals and non-teaching staff	In-person	1:1	75 min	28 min over 36 weeks	N/A	● RCT[b]

Source: Accelerate grantee evaluation reports

* Improvement is statistically significant at $p < .05$. We define strong studies as RCTs with a low level of attrition as defined by the What Works Clearinghouse; and studies with moderate strength as matched comparison designs or RCTs with a combination of deviation from random assignment procedures, high attrition, and significant differences in baseline characteristics.

[a] We measure tutoring efficiency–the number of hours of total tutoring associated with one month of additional learning–following the method established in Kohlmoos and Steinberg (2024), with one adjustment. As Kohlmoos and Steinberg (2024) did, we first translate effect sizes to months of learning using average annual growth reported by Hill et al. (2008). We then measure the average number of hours of tutoring delivered to students in the evaluation sample in which the effect size was measured. This is an adjustment relative to Kohlmoos and Steinberg (2024), because that calculation of the efficiency index used intended dosage rather than average dosage delivered. Using actual dosage delivered means that the efficiency index measures the relationship between the amount of tutoring students actually received and the magnitude of student learning gains.

[b] This school-level RCT had high school-level attrition (58 percent) but random assignment was completed within matched school pairs and the full pair was removed from the analysis sample whenever one member of the pair was removed, so differential attrition was less than 1 percent.

This summary table excludes program-specific cost-related metrics. As of spring 2025, Accelerate grantees are piloting a new cost analysis tool (Kohlmoos and Steinberg, 2025) designed to collect program-specific cost data and to calculate program-specific cost-effectiveness (i.e., return on program investments). Beginning in fall 2025, program-specific cost analysis and the completion of Accelerate's cost analysis tool will be a standard requirement in Accelerate grantmaking process.

DIBELS = Dynamic Indicators of Basic Early Literacy Skills; NWEA MAP = Northwest Evaluation Association Measures of Academic Progress; SD = standard deviation.

Photo: Step Up Tutoring

III
Findings on implementing tutoring

In this section, we describe findings on implementation challenges and solutions.

We describe strategies used by the grantees with positive, statistically significant student learning outcomes as well as lessons from grantees whose evaluations did not find statistically significant evidence of student learning gains. We then describe challenges associated with scaling up tutoring programs and potential solutions. The section concludes with findings on implementing tutoring evaluations.

Overview of findings on implementation, scaling, and research

In their interviews and evaluation reports, the eight tutoring grantees highlighted some common strategies to successfully set up and implement tutoring, scale models, and conduct rigorous research.

- **To establish enabling conditions for tutoring,** build relationships and buy-in with teachers and district and school leaders, identify a tutoring coordinator at each school, support schools to build tutoring into their schedules, and ensure there is physical space for tutoring that allows students to focus.
- **To ensure consistent and high-quality instruction,** offer training tailored to the needs of tutors and use structured or scripted curricula (e.g., high-quality instructional materials).
- **To boost the amount of tutoring that students receive,** provide attendance incentives to districts through outcomes-based contracts, offer stipends to school coordinators and teachers, and arrange for substitute tutors to fill in for tutors who are absent.
- **To make tutoring models easier to scale up,** offer tutoring during academic or flex blocks to ease scheduling challenges, use structured or scripted curricula to maintain quality at scale, and provide a playbook or guide for districts and schools that offers a checklist for them to follow.
- **To address the challenge of conducting rigorous research in schools and districts,** collaborate with districts that are invested in building evidence to inform their decision making and move on if districts do not show interest, invite principals and teachers to help inform the random assignment approach, and provide tutoring at no or low cost to increase participation.

Photo: Ignite Reading

Findings on implementation

The grantees whose programs produced positive impacts on student learning had tutoring programs with different features, but they had common approaches to supporting strong instruction and implementation. These included: (1) establishing the enabling conditions in schools to support their tutoring; (2) providing tutors the supports needed to deliver high-quality instruction; and (3) achieving adequate tutoring dosage. The grantees whose programs did not produce initial evidence of promise confronted challenges in one or more areas of implementation.

1) Establishing enabling conditions that support tutoring

Grantees with evidence of positive student outcomes had key enabling conditions in place, and most worked closely with districts and schools to set up and support the tutoring. The conditions are consistent with the ones identified in Accelerate's synthesis of lessons learned from the first CEA from the 2022–23 school year. We highlight examples of the ways grantees worked to successfully establish the enabling conditions needed to implement their tutoring.

- **Dedicate time to building relationships with district leaders, school leaders, and teachers to support buy-in.** Multiple providers described the importance of investing time to build positive relationships with both district leaders and school building leaders. They also highlighted the important role classroom teachers played in successful tutoring, to understand the needs and progress of students and provide support with tutoring logistics, such as helping students log into their online tutoring session. For example, one of the providers offered training at the beginning of the year to teachers whose students received tutoring. The provider emphasized the importance of creating an engaging and clear training experience as a way to signal a commitment to the school's success and generate teacher support for tutoring.

- **Build the tutoring into the school master schedules.** Most providers discussed the challenges and the need to identify a consistent time for students to receive tutoring during the school day. For example, one provider worked with schools to build their programs into the intervention block, where students would receive small-group tutoring while the rest of the class received whole-group review of previously taught core instruction. This was particularly effective for this provider because the students it aims to tutor are well below grade level in reading. Therefore, the review that they missed while receiving tutoring would have provided them limited learning value. Providers that serve students closer to grade level may benefit from scheduling tutoring during intervention blocks and flex time.

- **Identify coordinators within school buildings who are invested in the program and oversee the implementation of tutoring.** For example, one provider identified tutoring coordinators at each partner school to champion and support implementation of the program at their school. Providing the coordinator with clear guidance on their role as well as compensation for their time played a critical role in supporting delivery of high dosage.

- **Establish a tutoring space where students can focus without interruption.** For example, one provider highlighted the importance of dedicated, separate space for students so that they could learn without distractions and take risks by asking questions they might not be willing to pose in front of the whole class.

Although providers that did not demonstrate significant learning gains also had many of the same enabling conditions in place, they experienced challenges putting these conditions into place in some schools. For example, two providers reported the schools had difficulty finding a quiet space for the tutoring. One of these providers noted that many pull-out tutoring sessions occurred in hallways or an atrium where students were often distracted by peer interactions and noise. In addition, one provider noted that due to scheduling challenges, students were often pulled from their favorite electives to participate in tutoring. This led to students becoming upset and unproductive during the tutoring sessions.

2) Delivering high-quality instruction

All grantees recognized the importance of ensuring that tutors delivered high-quality instruction. The tutoring programs that had positive impacts used a variety of staffing models, but all offered tailored professional learning and high-quality curricular materials. Their experience supports the value of the following strategies:

- **Use evidence-based, scripted curriculum when tutors are not trained educators.** Two literacy tutoring programs that used tutors with no prior teaching experience used scripted curricula aligned with the Science of Reading. Having scripted curricula reduced the ambiguity associated with teaching unscripted lessons that certified teachers are trained to navigate. When programs seek to engage students with specific learning needs such as a learning disability, even if the tutors are certified teachers, a scripted curriculum might help them deliver strong instruction. For example, a provider used a combination of a highly structured curriculum delivered by a certified teacher to address the needs of students with particularly substantial learning needs.

- **Provide professional learning tailored to the needs of tutors and the program model they implement.** One program provided tutoring in groups of two or three students online, with nearly all tutors in the program providing instruction to both group sizes. The tutoring in groups of two students had positive impacts on student learning, despite being offered less frequently, while tutoring in groups of three did not. The grantee provided one possible explanation for this—most tutors had experience providing tutoring for groups of two students but had not been trained or supported to tutor larger groups of students. This suggests tutors should have ample experience or training in the specific model they are expected to deliver.

- **Consider tutoring that delivers direct instruction rather than simply supporting independent work.** One provider whose program did not have positive impacts on student learning supported students as they were working in an adaptive learning platform while the comparison students worked independently in the same platform. In this case, students received support for an activity rather than direct instruction. (This was one of two models offered by this provider.) In contrast, another provider identified a district that had a need for additional instruction in small groups that it could not provide on its own. This provider responded to the superintendent's request to serve their students with dyslexia and other reading needs who would not otherwise have been served with personalized, small-group instruction from certified teachers. In this way, the provider was adding a much stronger contrast to the school's status quo, which could explain why the latter program found suggestive evidence of positive impacts while the former did not.

Photo: KIPP Indy

3) Achieving adequate tutoring dosage

Most grantees did not provide students with as much tutoring as intended, based on their program model, and there was variation across grantees in intended dosage and actual dosage. The number of tutoring hours that grantees intended to deliver ranged from 19 to 99, and the hours each grantee delivered to the average participant ranged from 7 to 60[4]. However, the four grantees whose programs had positive, significant impacts provided students at least one hour per week of tutoring on average (Exhibit 5)[5]. This contrasted with the four grantees whose programs had no significant impacts, three of which provided less than 0.5 hours per week on average. (As shown in Exhibit 6, grantees with positive, significant impacts also tended to provide over 25 hours of tutoring in total, although the relationship between total hours and impacts is less clear since some grantees implemented their programs over a semester and others lasted a full year.) The grantees whose programs had positive impacts shared the following strategies for improving the amount of tutoring students received:

- **Rely on a school coordinator to act as a champion and facilitate logistics.** Multiple tutoring providers noted that it was essential to have a coordinator at the school to ensure students were attending sessions and to address challenges such as technology issues or unexpected scheduling problems. The coordinators were school employees (such as an assistant principal or instructional coach) who served as the point person for the tutoring program. One provider noted that having a single school champion could help benefit an entire school's tutoring implementation, saying "One teacher was really successful at sharing her process" with others in her school. Another provider highlighted the importance of the school coordinator, noting that tutoring attendance suddenly dropped when the school coordinator had an unplanned leave from their role. A third provider formalized the role of the school coordinator. Each "school champion" dedicated up to three hours a week to help with logistics of the online tutoring implementation and served as the liaison with the provider, and in return, they received a stipend to compensate for their time.

- **Offer incentives to schools and districts to encourage student attendance.** One provider used outcomes-based contracting, where districts paid for tutoring only if students achieved pre-specified outcomes, unless tutoring attendance was below a certain threshold. If students did not attend enough tutoring sessions, the district had to pay full price, regardless of the students' outcomes. Another provider with one of the highest dosage levels relied on multiple incentives to support its implementation. For example, districts applied for grants to receive tutoring, and as part of their tutoring grant agreements, schools committed to a student attendance rate of at least 75%. On average, students attended 89% of their tutoring sessions.

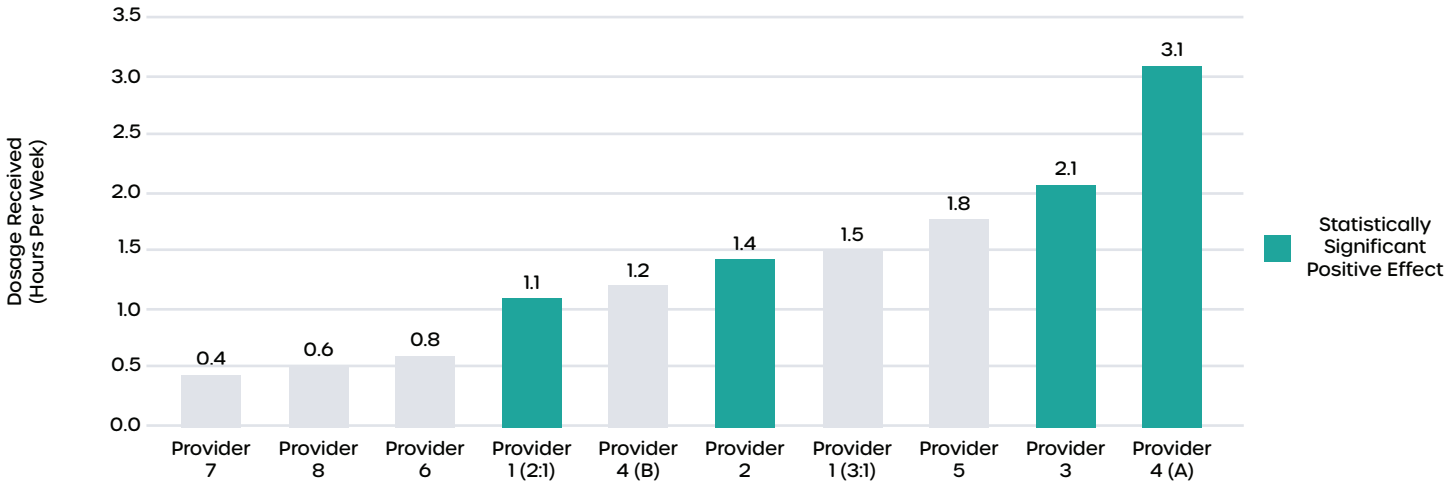
- **Plan for substitute tutors to fill in for tutors who are absent.** Two providers with positive student outcomes had efficient systems for providing replacement tutors when students' primary tutors were absent.

Photo: District of Columbia Public Schools

[4] Some providers offered tutoring over a single semester, some offered over a full year, and one offered tutoring over approximately 19 weeks.

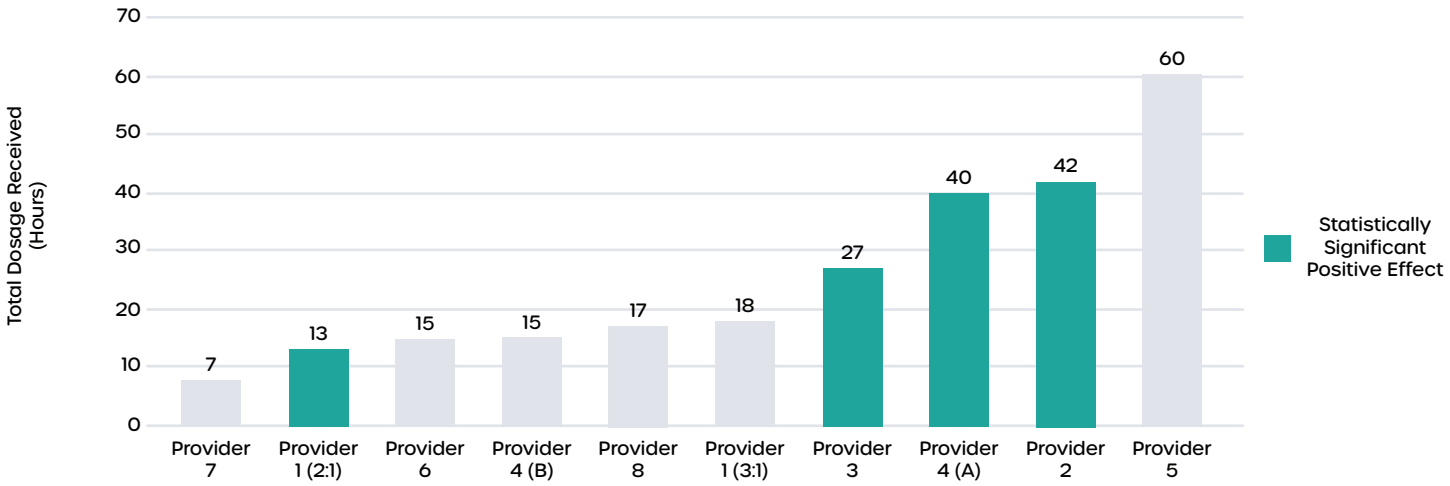
[5] One provider's distinct experiences in two districts underscore the link between dosage and student outcomes. In the district where students received 40 hours of tutoring on average (Provider 4, A in Exhibit 5), they showed positive, statistically significant learning gains relative to comparison students, whereas in the district where students received only 15 hours of tutoring on average (Provider 4, B), the difference in benchmark scores between tutoring recipients and comparison students was small and nonsignificant.

Exhibit 5. Grantees whose programs had statistically significant positive impacts on student learning provided more than an hour of tutoring per week, on average[6]



Source: Accelerate grantee evaluation reports

Exhibit 6. Grantees whose programs had positive, significant impacts tended to provide more than 25 hours of tutoring in total, on average



Source: Accelerate grantee evaluation reports

[6] Two grantees either implemented multiple models or delivered very different levels of dosage in different districts; for these grantees, we reported impacts separately for each model variant. Provider 1 implemented two group tutoring models, one that used a two-to-one student-tutor ratio (2:1) and one that used a three-to-one student-tutor ratio (3:1). Provider 4 measured the impact of their tutoring in two districts where students received very different average dosage levels: District A, where students received approximately 40 hours of tutoring on average, and District B, where students received about 15 hours of tutoring on average.

Photo: Ignite Reading

Several providers that struggled with dosage had issues with scheduling and logistics of the tutoring. Some schools found it challenging to manage the logistics of the tutoring. One provider noted that the "school had limited capacity to manage logistics and staff's ability to get students online. This impacted tutoring attendance." Another challenge was the competing responsibilities of tutors—when tutors had multiple responsibilities, tutoring delivery was less frequent than intended. Two providers used paraprofessionals (paras) in schools to deliver tutoring, and both encountered challenges securing sufficient time from the paras; on average, these students did not receive adequate dosage. For example, in one district, paras were responsible not only for delivering tutoring but also accompanying students to specials, lunch, recess, and the bathroom; supporting activities in the classroom; and serving as an aide to teachers. Using paras as tutors had the benefit of drawing on existing school funding to deliver direct instruction, taking advantage of the existing connections between the teacher and the tutor, and enabling staff to grow their skills as educators. However, both providers noted that teachers were accustomed to having their paras fulfill other duties, like circulate the classroom, so the transition to having paras tutor students was difficult for some teachers. In one district, the paras' contracts were adjusted mid-year to include paid planning time, which provided them time to prepare for tutoring.

IV
Findings on scalability

Scheduling tutoring and ensuring consistent, high-quality instruction were among the challenges that providers faced when seeking to scale up their programs. However, some providers have demonstrated potential solutions to these challenges.

- **Integrate tutoring into the independent practice portion of a long academic block.** To ensure implementation quality and adequate dosage of tutoring, some providers communicate extensively with district and individual school leaders about scheduling tutoring sessions, which requires significant amounts of provider staff time. A simpler way to navigate scheduling, used by other tutoring providers, was to integrate tutoring into an academic block. For example, one provider had virtual tutors work with students for a 15-minute portion of their existing literacy block. Although this approach made scheduling easier, push-in models can raise the risk of distraction from other students in the classroom.

- **Use a structured curriculum and leverage technology to help tutors deliver consistent, high-quality instruction.** When tutoring providers are scaling their programs, it can be challenging to provide the oversight required to ensure that all students receive consistent, high-quality instruction. Providers can use a scripted curriculum—as well as technology—to improve the quality and consistency of tutors' instruction. For example, three providers that utilize paras or non-instructional staff to deliver tutoring use scripted numeracy or literacy curricula and provide tutors with training and ongoing professional development. Providers also can use technology to improve instructors' ability to identify learning gaps. For instance, one provider uses algorithms to identify student learning gaps—a difficult skill for tutors to master. The tutors can then deliver scripted instruction that is specific to each student's learning needs. Another provider that uses college students is considering using generative artificial intelligence to give tutors immediate coaching feedback after each session.

Photo: District of Columbia Public Schools

V
Findings on conducting rigorous studies of tutoring programs

Grantees experienced some challenges implementing rigorous research studies in schools. The most difficult challenge tutoring providers faced in implementing studies was finding district and school leadership who agreed that participating in an RCT was aligned with their strategic priorities. Although random assignment is a fair way to allocate limited resources when there are more students who have a need than those resources can support, there are often concerns about leaving tutoring assignments to chance. As one provider said, "If you want to make a principal hate you, randomize their kids." Without full district, school leader, and teacher support for randomization, conducting rigorous studies of tutoring programs is difficult. For example, if teachers and school leaders perceive that the evaluation prevents students who need tutoring the most from receiving it, schools may provide tutoring to students assigned to the comparison (non-tutored) group or drop out of the study.

Grantees suggested the following solutions to the challenge of developing buy-in for a random assignment study:

- **Identify districts that are invested in building evidence on tutoring.** Districts that focus on using evidence to inform their decisions are more likely to value a rigorous study of a program's effectiveness. For example, for one grantee, the district was eager to build evidence on a math tutoring program because it would inform its district-wide efforts to improve early math achievement. District staff were motivated to learn whether the tutoring program had an impact on student learning. A district administrator told schools that conducting an RCT would allow the district to learn from the effort and "make better decisions for next year". When district administrators spoke with school leaders about the value of an RCT and its alignment to the districts' priorities, schools were more willing to participate in the RCT. When recruiting, grantees suggested casting a wide net to identify districts where tutoring aligns with their strategic vision and moving on if a district signals a lack of interest.

- **Build relationships with school leaders and adapt the study design to their needs.** One provider emphasized the importance of establishing positive, trusting relationships with principals. Another provider emphasized the importance of giving school leaders and teachers the opportunity to inform the approach to randomization. The provider produced an initial list of eligible students after the fall benchmark test and gave teachers two months to prioritize students who should receive the tutoring and be excluded from random assignment. The teachers also identified students who did not need tutoring and were excluded from random assignment. This approach gave teachers agency in the process and improved their buy-in.

- **Provide free or reduced-price access to tutoring.** Two grantees—one district and one tutoring provider—funded the tutoring for schools that participated in the study. The opportunity to receive tutoring with no cost increased the benefit of participation for schools. The provider used a separate funding stream to help cover the cost of tutoring for participating schools and required districts to apply to receive tutoring. Because the provider received more applications than it could fund, it was able to choose which districts would participate.

VI
Looking ahead

This report summarizes key findings on student outcomes from the 2023-24 Call to Effective Action cohort of grantees and draws lessons on implementation, scaling, and conducting impact evaluations from interviews with eight grantees selected from the broader cohort of 33 tutoring providers. A previous 2024 synthesis report on the first CEA cohort's results informed investments in tutoring—including eight randomized controlled trials—that are currently underway as part of the 2024-25 CEA cohort. Similarly, the findings from this report have informed two new grant opportunities through which Accelerate will support rigorous learning about effective, scalable tutoring programs: the 2025 Evidence for Impact (EFI) grant opportunity and the forthcoming Call for Effective Technology (CET) grant opportunity.

Drawing on lessons from this report and the 2024-25 CEA cohort, the EFI opportunity will continue to advance standardized, transparent measurement of tutoring dosage and student outcomes. The EFI opportunity also will support multi-arm randomized controlled trials that rigorously compare different tutoring approaches to continue learning about the specific components that make tutoring programs more and less successful, beyond robust delivery of intended tutoring hours. Through this targeted research approach, Accelerate aims to address critical evidence gaps - particularly around understudied populations like secondary students, multilingual learners, and those with IEPs, as well as program design elements such as tutor type and tutor:student ratios - while generating nuanced insights about what works, for whom, under what conditions, and at what cost.

The CET opportunity will support early-stage, formative research on the implementation, users' experience and learning outcomes of new, tech and AI-enabled learning supplements that show promise but have not yet developed systematic evidence. By explicitly building on the findings from this synthesis, its predecessor, and the Accelerate network, the upcoming grant opportunities will pursue a research agenda grounded in current evidence and tailored to the challenges and opportunities that tutoring providers, researchers, educators, and policymakers have identified as top priorities.

Photo: KIPP Indy

VII
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Photo: KIPP Indy

VIII
Appendix: Tutoring program profiles

Provider 1	Online math tutoring – Grades 6 to 8
Study design and analysis sample	Student-level RCT that included 302 students within a single district.
Student outcomes	Statistically significant increase of **0.25 SD** and a **no impact** of the 2:1 and 3:1 student-tutor ratio models, respectively, on NWEA MAP Math composite scores (benchmark assessments)
Implementation lessons	• Establishing a dedicated point of contact at the school level and a liaison for the school within the provider helped troubleshoot issues and improved implementation.
Research lessons	• In this program, professional development with tutors focused on administering a 2:1 model, which may explain the large difference in effect sizes between the 3:1 model. • Randomizing students within blocks based on baseline achievement helped ensure an even distribution of students across the control and two treatment models.
Implementation context	• Tutoring took place in a single district in Indiana. Selection of students focused on students who were below grade level in math. The provider used a private tutoring staffing company to hire tutors, who were primarily college students taking classes or recent college graduates.
Notes	• This study was an RCT with moderate overall attrition but low differential attrition using intent-to-treat estimates.

Provider 2	Online reading tutoring – Grade 1
Study design and analysis sample	Student-level matched comparison design that included 834 students across seven districts[a]
Student outcomes	Statistically significant increase of **0.21 SD** on Dynamic Indicators of Basic Early Literacy Skills (DIBELS) composite scores (benchmark assessment) compared to the comparison group
Implementation lessons	• Funding the tutoring program for districts, seeking applications to participate, and requiring an attendance commitment can help identify districts that are actively in need of a provider's programming and increase implementation quality. • Providing stipends to teachers to help coordinate tutoring services contributed to high student attendance. • Ensuring substitute tutors are available when the primary tutor is absent can help reduce cancelled tutoring sessions.
Research lessons	• Providing the tutor program to districts for free can help incentivize participation in a research study. The provider received more applications to participate than they could fund, which contributed to selecting districts that they thought would adhere to the study requirements. • Partnering with providers that have technical research capabilities on a research study enables a division of tasks (like data collection) and can facilitate a smoother analysis. • Providing district-specific reports of each district's program implementation can motivate districts to provide richer qualitative data.
Implementation context	• Tutoring took place in 13 districts in Massachusetts. Selection of students focused on students who were below grade level in reading. Tutors are non-certified adults who receive at least 100 hours of training.
Notes	• This study was a matched comparison design with low attrition and demonstrated baseline equivalence using intent-to-treat estimates.

[a] Analysis sample derived from matched comparison design.

Provider 3	Virtual ELA tutoring - Grades 1 to 6
Study design and analysis sample	Student-level randomized controlled trial (RCT) that included 381 students in one district
Student outcomes	Statistically significant gains of **0.12 SD** on Northwest Evaluation Association (NWEA) Measures of Academic Progress (MAP) reading score (benchmark assessment), compared to control group
Implementation lessons	• The student-tutor relationship is important for student engagement and learning. • Support from school leaders and teacher partners are critical for securing good physical tutoring space and full student dosage. • Grantee plans to train teachers in addition to school leaders in future implementation to build stronger buy-in (for example, to ensure students start sessions on time and in a conducive space).
Research lessons	• Successful studies require an extremely hands-on relationship with the district and implementing schools to show investment in school's success. • When recruiting, it is wise to cast a wide net and move on if the district signals a lack of interest rather than trying to change their orientation.
Implementation context	• Tutoring took place in six schools in a rural district in Texas, and selection of students focused on those eligible for Tier II and III interventions. Tutors were adults with bachelor's degrees.
Notes	• This study was an RCT that used an intent-to-treat analysis with low attrition.

Provider 4	Virtual math tutoring – Grades 4 to 6
Study design and analysis sample	Student-level matched comparison design that included 1,657 students across two districts
Student outcomes	A statistically significant gain of **0.09 SD** on the Star Math benchmark assessment in one district with high average dosage (40 hours) and a non-significant gain of **0.03 SD** on the NWEA MAP benchmark assessment in a second district with average dosage of 15 hours, compared to the comparison group.
Implementation lessons	• Working with districts where the tutoring program has been implemented for multiple years enables providers to draw on existing relationships with district and school staff and contribute to improved implementation. • A single teacher champion of the tutoring program at a school can help improve the program's implementation and boost student dosage. • School staff turnover can be a barrier to successful implementation—even in districts where the program is pre-established.
Research lessons	• Partnering with a provider that has an established relationship with the districts helps promote district communication and responsiveness (for example, when making data requests). • Even after more than a year of recruiting districts for an RCT, they had to switch to a non-experimental design, underscoring challenges recruiting for an RCT.
Implementation context	• Tutoring took place in an urban district in Colorado and another district in West Texas. Selection of students focused on those eligible for Tier II and III interventions and included English learners and those with Individualized Education Programs (IEPs). Tutors were adults with bachelor's degrees who had at least three years of tutoring experience.
Notes	• This study was a quasi-experimental design (QED) that demonstrated baseline equivalence and had low attrition. However, the study focused on only a subset of students who received at least 24 hours of tutoring; the magnitude of the impacts is likely higher than it would have been if all students had been included in the analysis.

Provider 5	Virtual literacy tutoring - Grades 2 to 3
Study design and analysis sample	Student-level RCT design in two schools, non-experimental comparison group design in the third school, that included 124 students within a single district
Student outcomes	Non-statistically significant increase of **0.12 SD** on DIBELS scores (benchmark assessment) compared to the comparison group
Implementation lessons	• Matching a tutoring model (for example, a model created for students well below benchmark in reading) to a school's needs can help generate district and school support, improving implementation and potentially yielding greater benefits to student learning. • Strong relationships—from tutor relationships with students to the provider relationships with school and district administration—help support clear communication and address challenges. • Ensuring students have a dedicated, quiet learning space can help minimize distractions.
Research lessons	• Randomizing students into valuable tutoring programs can strain the relationship between the provider and school leaders, but ensuring there is a strong foundation of trust between the provider, district, and schools can help facilitate successful RCTs.
Implementation context	• Tutoring took place across three schools in a single district in suburban Indiana. Selection of students focused on students who were performing well below grade level (below 20th percentile), and often included students with IEPs and English learners. Tutors were certified teachers who were not teaching full time (primarily military spouses).
Notes	• This study was an RCT in which one school used a non-experimental comparison design in its analysis. Due to baseline equivalence not being established, high attrition due to behavioral challenges, and a small sample size, we advise caution when interpreting these results. • The study results were preliminary findings from the first year of a two-year RCT.

Provider 6	Virtual math tutoring – Grades 3 to 7
Study design and analysis sample	Student-level RCT that included 219 students in a single school
Student outcomes	Non-statistically significant increase of **0.09 SD** on iReady Math (benchmark assessment) compared to the control group
Implementation lessons	• Using student incentives, such as gift cards, can help promote attendance at tutoring sessions. • Conducting consistent meetings with the school to solve problems, such as data collection issues, can help improve program implementation. • Embedding tutoring sessions in the school's master schedule can help promote tutoring attendance and avoid situations where students are foregoing an elective (like dance class) to attend a tutoring session. • Establishing dedicated, separate spaces for students to receive tutoring services can help minimize the social stigma of receiving tutoring as an older student.
Research lessons	• Consider studying programs that are established and have longer cycles of continuous improvement so that the study measures a single, static program model.
Implementation context	• Tutoring took place in a single school in an urban district in California. Students in the treatment group were either pulled out of their enrichment (dance, physical education, etc.) to receive Nearpod Math plus tutor support or were provided tutor support during the independent learning portion of their math block, which consisted of all students using Zearn Math. Selection of students focused on students who were below grade level and consisted of majority English learners and a portion of students with IEPs.
Notes	• This study was an RCT with low overall attrition and used intent-to-treat estimates. The study also included a treatment-on-the-treated analysis, detecting an effect size of 0.12 SD, which, though statistically insignificant, is on par with the effect size observed among other virtual tutoring programs. This study had a small sample size and occurred within a single school site, limiting the generalizability of its results. Additionally, the control group received a similar intervention (Zearn) to the treatment group (Zearn + tutor support), resulting in a small contrast in support received by the two groups. Tutors were trained volunteers or college students paid through Federal Work-Study or other scholarship programs.

Provider 7	In-person math tutoring using paraprofessionals – Kindergarten
Study design and analysis sample	Student-level RCT that included 1,069 students in one district
Student outcomes	Non-statistically significant decrease of **-0.02 SD** on iReady Math composite scores (benchmark assessment) compared to the control group
Implementation lessons	• Offering classroom teachers training on the tutoring program can help build support for paraprofessionals' new role delivering direct instruction, thereby increasing the dosage they deliver to students. • Establishing the tutoring program in the school's master schedule helped promote consistent delivery of the program (for example, during the 90-minute math block). • Establishing a data collection system before the tutoring program begins can help track important data that schools may not be used to collecting, such as student-level session attendance.
Research lessons	• Identifying districts that are strategically motivated to implement a tutoring program that aligns with the model the provider offers may help the district commit to an RCT. • Having district administrators set expectations with schools up front about the study requirements of an RCT can help ensure the school has the preconditions for study success (for example, whether the necessary data collection procedures could be put in place). • Providing school leaders with time to make adjustments to the pool of students who are eligible for the program enables school leaders to retain some autonomy and contributes to their likelihood of buying into an RCT.
Implementation context	• Tutoring took place in one urban district in the Mid-Atlantic United States. Selection of students focused on students who were below level on math as identified by a combination of beginning-of-year benchmark assessment scores and teacher feedback and included English learners. Tutors were paraprofessionals.
Notes	• This study was an RCT with low attrition that provided intent-to-treat estimates. The program had some implementation issues with students receiving the intended dosage, which was mostly attributed to paraprofessional staffing issues.

Provider 8	In-person literacy tutoring using paraprofessionals
Study design and analysis sample	School-level RCT that included 1,438 students across three districts
Student outcomes	Non-statistically significant decrease of **-0.08 SD** on DIBELS composite and Fastbridge Early Reading scores (benchmark assessments) compared to the control group
Implementation lessons	• Dedicating ample time and effort ahead of program implementation to help the principals set up school schedules can help maximize student learning time and avoid scheduling interruptions. • Ensuring that paraprofessional staff each have multiple groups of students to tutor made it a larger part of their daily responsibilities, which helped ensure they dedicated the necessary time and identified the physical space to hold tutoring sessions. • Providing incentives for students who finish a cycle of lessons (for example, decodable readers) can generate student excitement for tutoring and learning.
Research lessons	• Working with smaller districts can make it easier to communicate about the study requirements and address challenges as a provider. • Implementing school-level RCTs addresses the challenges of working with principals who are reluctant to randomly select students to receive tutoring.
Implementation context	• Tutoring took place across three districts in Tennessee, Indiana, and North Carolina. Eligibility of student participation differed across the districts, with one providing tutoring to all kindergarten students and two providing tutoring to students below grade level.
Notes	• This study was an RCT with high overall attrition issues due to school dropout (33 of 78 remained at the end of the study) and demonstrated baseline equivalence. The study provided intent-to-treat estimates. Tutors were paraprofessionals or non-instructional staff at the school.