Quarterly Research Note

Accelerate
National Collaborative for Accelerated Learning

Volume 2, Issue 2 December 2025

Introduction

Welcome to the sixth issue of the Quarterly Research Note (QRN), a research brief that reflects Accelerate's approach to learning what educational interventions work, for which students, and under what conditions.

In this issue, we present Accelerate's approach to defining tutoring dosage to inform program implementation and applied research. We then highlight Accelerate's cost analysis tool (first introduced in QRN 1.4) and the recently released version 2.0 of the cost tool that incorporates several new updates to improve its use and usability for researchers, program providers and practitioners.

In this issue's Research Roundup, we profile results from randomized controlled trials (RCTs) of three of Accelerate's Call to Effective Action (CEA) grantees during the 2024-25 school year: Tennessee Score (TNScore); North Carolina Education Corps (NCEC); and Off2Class.

In Looking Ahead, we introduce readers to Accelerate's Evidence for Impact (EFI) and Call to Effective Technology (CET) grantees for the 2025-26 school year. We then preview Accelerate's 2025-26 experimental evaluation of Arkansas' Literacy Tutoring Grant Program (LTGP) in partnership with multiple stakeholders in Arkansas.

Inside this Quarterly Research Note:

Part One A

Defining Tutoring Dosage for Program Implementation and Applied Research

The high-dosage tutoring (HDT) field lacks agreed-upon definitions of tutoring dosage. This definitional ambiguity limits comparability across program models and leads to inconsistency and a lack of reliability when reporting program dosage as part of applied research. In practice, districts and schools procure a certain amount of dosage from tutoring providers, which may or may not align with program design or the amount of tutoring dosage that students ultimately receive in authentic school settings. The amount of dosage that providers commit to offer as part of a district procurement informs both the provider and district/school partners on the tutor capacity necessary to hire and the space and time in the school's schedule necessary to secure. However, the amount of dosage that providers commit to offer will generally differ from the total dosage students actually receive, due to student (and tutor) absences, unforeseen scheduling conflicts, school closures, and other factors. The existence of multiple measures of dosage means that, unless the measures are well defined and distinguished from each other, many analyses that quantify the relationship between tutoring impacts, dosage, and costs will produce results that are not comparable across studies. Thus, ensuring that both providers and schools are operating under the same understanding of tutoring dosage available to students is essential.

In a recently released policy brief, Accelerate aims to standardize tutoring dosage definitions to inject greater clarity into the HDT field and to improve comparability across programs. We propose and define formal definitions for the following four dimensions of tutoring dosage: (i) program dosage, which we define as the total amount of tutoring a student would receive under ideal conditions, assuming full attendance and fidelity to program design; (ii) scheduled dosage, which we define as the amount of tutoring an individual student would receive if they attended all tutoring sessions scheduled by a provider and its district or school partner for a given program implementation; (iii) adequate dosage, which we define as a provider-defined dosage threshold above which providers believe a student would realize substantively meaningful improvements in learning; and (iv) actual dosage, which we define as the amount of tutoring participating students receive (on average) across the implementation period. We then apply these definitions of tutoring dosage to the calculation of a tutoring program's return on time (tutoring efficiency) and resources (cost-effectiveness) in terms of improvements in student learning.

Part One B

Accelerate's Cost Tool: An Update for the Field

In February 2025, Accelerate released the first version of its cost analysis tool, which was designed to support more consistent and rigorous cost analyses across tutoring and educational interventions. In Spring 2025, Accelerate piloted the cost analysis tool with select research partners and grantees conducting randomized controlled trials (RCTs). Following this pilot, and with feedback from tutoring providers and research partners, in September 2025 we released version 2.0 of the cost tool.

Version 2.0 of the cost tool incorporates several new updates to improve its use and usability, including:

- **Excel & Google versions:** We've created an Excel version of the cost tool as a companion to the existing cost tool in Google Sheets.
- **Tutorial video:** The tutorial video provides users with a visual introduction to the cost tool, complementing the existing user guide and tooltips embedded in the cost tool.
- **Scheduled vs Actual dosage:** The tool now distinguishes between scheduled and actual tutoring dosage – improving transparency around program implementation and supporting the calculation of a program's cost-effectiveness that is more aligned with real-world implementation. Scheduled dosage is used to calculate cost-efficiency. Actual dosage is used to calculate tutoring efficiency. Cost-efficiency and tutoring efficiency are both components of cost-effectiveness. You can read more about these metrics in our May 2024 and February 2025 reports.
- **Improved usability:** To improve the overall usability of the cost tool, we have clarified user tooltips, streamlined the calculation of summative metrics (e.g., cost-effectiveness) and planning scenarios, incorporated more complete citations to data sources (e.g., pricing schedules), and refined the presentation of summary statistics (e.g., cost to society in Table 2 and cost to school in Table 3 in the "Outputs – Summary Costs" tab of the cost tool).

Beginning in the 2025–26 school year, program-specific cost analysis will be formally incorporated into program evaluations of Accelerate grantees. Doing so will enable a direct assessment of program-specific cost-effectiveness and will provide greater clarity into the return on investment (in terms of student learning) of each of Accelerate's grantees. Accelerate will continue to refine the cost tool to improve its use and usability for the field by leveraging field-based feedback from our network of providers and research partners. Our goal is to make rigorous cost analysis a standard part of program evaluations to inform the decision-making of education leaders and other key stakeholders.

Part Two

Research Roundup

In this Research Roundup, we describe new findings on the implementation and impact of high-dosage tutoring from experimental evaluations of three Call to Effective Action (CEA) grantees during the 2024-25 school year: Tennessee Score (TNScore); North Carolina Education Corps (NCEC); and Off2Class.

The Impact of Tutoring with Instructionally Aligned Materials on Early Literacy Outcomes

In the 2024-25 school year, a suburban school district in the southeastern United States (Knox County Schools in Tennessee) implemented high-dosage literacy tutoring to students in grades K through 3, aimed at students who scored below the 40th percentile on the universal screener in the beginning of the year. There were 328 eligible students in grades K through 3 that were randomly assigned to receive either instructionally aligned tutoring (with Benchmark curriculum materials) or tutoring as usual with unaligned curricular materials (e.g., Core, Spire, or Voyager) during the intervention block within the school day.

Tutoring began on October 1, 2024 for students in grades 1–3, and in January 2025 for kindergarten students. Tutoring continued through the end of the academic year, with sessions being conducted 5 days per week, for 40-45 minutes per session. Tutoring group sizes varied between 2 to 6 students, with an average size of 3.5 students.

Tutoring was delivered by either a teacher or a paraprofessional. For the instructionally aligned treatment group, district leadership indicated that it was beneficial for the teacher to deliver tutoring since it was consistent with the lessons delivered during core instruction. instruction. Hence, 70% of tutors in the treatment group were teachers, compared to 34% in the control group.

STUDY SNAPSHOT | TN SCORE

PUBLISHED: November 2025
RESEARCH TEAM: Cara Jackson (The Center for Outcomes Based Contracting) and Ayman Shakeel (Abt Global)
STUDY PERIOD: 2024-25 school year
RESEARCH METHOD: Randomized Controlled Trial (RCT)

STUDENT GROUP(S) STUDIED: 328 students in grades K-3 at four elementary schools in a single school district in the Southeast United States were eligible to be randomized to either instructionally aligned tutoring (treatment) or tutoring with supplemental curricula (business-as-usual).

STUDY QUESTIONS:
- To what extent do tutoring groups vary in dosage and tutor qualifications?
- For students who start the year performing below the 40th percentile using aimswebPlus, what is the effect of participating in instructionally aligned tutoring in grades K-3 on literacy outcomes compared to business as usual tutoring?
- How do the effects of instructionally aligned high-dosage tutoring on academic achievement differ by students' prior achievement levels and gender?
- How do the effects of instructionally aligned high-dosage tutoring vary by tutoring group characteristics?

KEY FINDINGS:
- All groups received either 40 or 45-minute tutoring sessions, and met 5 days per week. Tutoring group size varied between 2 to 6 students, with an average group size of 3.5 students.
- Approximately 70% of tutors in the treatment group were teachers, compared to 34% in the control group.
- Students assigned to instructionally aligned high-dosage tutoring performed 0.12 standard deviations higher on the end-of-year aimswebPlus assessment relative to students assigned to business-as-usual tutoring.
- Instructionally aligned tutoring had a greater impact for students performing below the grade-level median, with an effect size of 0.18 standard deviations. The impact was also higher for boys, at 0.22 standard deviations.

KEY TAKEAWAYS:
- Results provide evidence that instructionally aligned tutoring offers a promising pathway to improving student learning in the early grades.

The research team found positive and statistically significant effects of the instructionally aligned tutoring on early elementary literacy. On average, students assigned to the treatment group outperformed the students in the control group by 0.12 standard deviations. This corresponds to an additional 1.3 months of learning. This result highlights the potential of tutoring programs that use instructionally aligned materials to significantly enhance early-grade student learning outcomes.

The research team also conducted exploratory heterogeneity analysis, and found that instructionally aligned tutoring had a greater impact on boys (than on girls), with an effect size of 0.22 standard deviations, suggesting that instructional alignment may help reduce gender gaps in early literacy. Additionally, students who scored below the (within-sample grade-level) median appeared to benefit more from instructional alignment and coherence, with an effect size of 0.18 standard deviations. This pattern indicates that instructionally aligned materials may be especially important for students most in need of additional academic support.

The effect was also larger for tutoring groups with more than three students, reaching 0.19 standard deviations, and was highest for groups of four students, at 0.49 standard deviations. This is likely because the implementation of the aligned curriculum included a peer interaction component. The research team also found that students who received 45-minute tutoring sessions experienced a greater impact, with an effect size of 0.31 standard deviations. However, it is important to note that most of these students were concentrated in a single school that also received additional grade-level instructional coaching and was subject to heightened district oversight. Therefore, the research team cannot conclusively attribute the observed effects solely to session length, as the additional support (or strong school leadership) may have contributed to the improved outcomes.

Finally, there is suggestive evidence that the impact of treatment was greater when delivered by a paraprofessional; however, the estimates were not statistically significant. Insights from district leaders suggest this may have been due to paraprofessionals' focused role. Unlike teachers, who juggle multiple instructional responsibilities and preparation tasks, paraprofessional tutors were dedicated solely to tutoring.

Recruitment, Training, & Support: Impacts of a District-Partnership Tutoring Model to Support Elementary Literacy Skills

North Carolina Education Corps (NCEC), a 2024-25 Call to Effective Action (CEA) grantee, was first launched in 2020 by the North Carolina State Board of Education and the Office of the Governor, with support from the North Carolina General Assembly. Now operating as an independent 501(c)(3) nonprofit, NCEC collaborates with local education agencies (LEAs) to provide in-person, at-school, during the school day, high-impact tutoring support to elementary school students who are performing below grade-level benchmarks in literacy. NCEC serves as an intermediary support to help alleviate the primary pain points associated with high-impact tutoring for LEAs: recruiting and recommending, training and coaching, progress monitoring and evaluating, and finding ways to pay for high-quality, high-impact tutors. NCEC tutors are often retired educators and professionals, parents and caregivers seeking meaningful part-time work, and college students interested in pursuing education or public service as a career. NCEC provides high-quality, two-week preliminary training as well as ongoing coaching and professional development support to tutors in collaboration with LEAs.

In a student-level randomized controlled trial (RCT) led by researchers at the University of Michigan's Youth Policy Lab during the 2024-25 school year, 867 students in grades K-3 across 9 Title 1 schools in a large North Carolina school district were randomly assigned to receive NCEC tutoring or the business-as-usual (BAU) condition. The study aimed to evaluate the effectiveness of NCEC-supported small group literacy tutoring in participating schools. K-3 Students who were below benchmark on the fall 2024 DIBELS assessments in participating school sites were randomly assigned to receive either NCEC-supported small-group tutoring (to which 312 students were randomly assigned) or the BAU instruction (555 students).

The study found that, on average, students randomly assigned to receive the NCEC-supported tutoring services scored approximately four points higher on the end-of-year DIBELS assessment than students randomly assigned to the BAU condition. This impact corresponds with a standardized effect size of 0.15 standard deviations (SD), or approximately 1.5 additional months of learning in early literacy. The impact of NCEC-supported tutoring was even greater for students who attended at least one tutoring session (0.18 SD), or approximately 1.8 additional months of learning in early literacy. Moreover, researchers found that the impact of tutoring was highly concentrated among boys (0.33 SSD).

STUDY SNAPSHOT | North Carolina Ed Corps (NCEC)

PUBLISHED: November 2025
RESEARCH TEAM: Youth Policy Lab at University of Michigan
STUDY PERIOD: 2024-25 school year
RESEARCH METHOD: Randomized Controlled Trial (RCT)

STUDENT GROUP(S) STUDIED: K-3 Students who were below benchmark on the fall 2024 DIBELS assessments in participating schools in a large North Carolina school district. 312 students were randomly assigned to receive NCEC-supported small-group tutoring and 555 students were randomly assigned to the business-as-usual (BAU) condition.

STUDY QUESTIONS:
- What is the impact of access to NCEC-supported literacy tutoring for early elementary students on overall early literacy skills?
- What is the impact of access to NCEC-supported literacy tutoring for student-specific reading subskills targeted by the intervention?
- How does the impact of access to NCEC-supported literacy tutoring vary across student demographic groups?

KEY FINDINGS:
- On average, students randomly assigned to receive the NCEC-supported tutoring services scored approximately four points higher on the end-of-year DIBELS assessment, corresponding to 0.15 standard deviations (SD), or approximately 1.5 additional months of learning in early literacy.

KEY TAKEAWAYS:
- These findings offer promise for the role that intermediaries such as NCEC can play in supporting the implementation of tutoring to support early literacy instruction.

These findings offer promise for the role that intermediaries such as NCEC can play in supporting the implementation of tutoring to support early literacy instruction. These findings also raise additional questions that require further investigation into the potentially differential impact by student gender of in-person, early literacy tutoring.

The Impact of Tutoring with a Foundational Literacy Curriculum on Adolescent Newcomer English Learners

Off2Class, an Accelerate CEA grantee, developed a curriculum to meet the specific needs of adolescent English learners with low literacy. The Off2Class Foundational Literacy curriculum provides students in grades 6–12 with age-appropriate lessons to help them learn English and develop basic literacy skills simultaneously. Acquiring both skills quickly is imperative for progression through middle and high school, where literacy is a prerequisite for acquiring content area skills.

In the 2024-25 school year, Off2Class partnered with Littera Education to deliver the Foundational Literacy curriculum in Richland School District Two in South Carolina in two ways: 1) via their English language development (ELD) teacher (the Teacher-only model); or 2) from an online tutor in groups of 1 to 3 students under their ELD teacher's supervision (the Tutor + Teacher model). Both models call for 30-minute lessons to occur twice weekly for 18 weeks and for students to receive ELD instruction as usual outside of Foundational Literacy lessons. Tutors and teachers received training to implement the curriculum along with detailed instructional guides for each lesson.

A study conducted by Evergreen Analytics aimed to understand the impact of the Tutor + Teacher model on progress toward English reading proficiency through a randomized controlled trial (RCT). Researchers randomly assigned approximately 150 middle and high school English learners with WIDA ACCESS Reading domain scores less than 2.5 to receive Foundational Literacy through either the Tutor + Teacher model (72 students) or the Teacher-only model (74 students). To simplify implementation for teachers whose classes enrolled both eligible and ineligible students, entire class sections were randomly assigned to one of the two models.

STUDY SNAPSHOT | Off2Class

PUBLISHED: October 2025
RESEARCH TEAM: Evergreen Analytics LLC
STUDY PERIOD: 2024-25 school year
RESEARCH METHOD: Randomized Controlled Trial (RCT)

STUDENT GROUP(S) STUDIED: English learners in grades 6–12 with low literacy levels (less than a 2.5 WIDA ACCESS Reading domain score) in 11 Richland Public School District Two middle and high schools in South Carolina, approximately 150 students. Students were randomly assigned to receive Off2Class Foundational Literacy, a curriculum designed for adolescent English learners with low literacy, through one of two models: 1) taught only by their English language development (ELD) teacher (Teacher-only model) or 2) delivered by an online tutor in their ELD classroom setting (Tutor + Teacher model). Students in the Teacher-only model typically received instruction in groups of 4–9, and online tutors worked with groups of 1–3 students for an average student-tutor ratio of 2.2:1. All students received ELD instruction as usual outside the intended dosage of two 30-minute lessons per week for 18 weeks.

STUDY QUESTIONS:
- What is the impact of receiving Off2Class Foundational Literacy with an online tutor on WIDA ACCESS Reading domain scores?

KEY FINDINGS:
- The impact of the Tutor + Teacher model on English reading proficiency was significant, surpassing gains among students in the Teacher-only model by 0.35 standard deviations. This translates to 15 to 19 months of learning relative to national averages for high school and middle school students, respectively.
- On average, students received 618 minutes of tutoring (57% of the scheduled dosage).

KEY TAKEAWAYS:
- Virtual (online) tutoring paired with a specialized curriculum can shorten the time adolescent English learners with low literacy need to achieve English reading proficiency.

The study found that students randomly assigned to the Tutor + Teacher model significantly outpaced the WIDA ACCESS Reading score gains made by students randomly assigned to the Teacher-only model. After accounting for baseline WIDA ACCESS Reading scores and demographic characteristics, students randomly assigned to the Tutor + Teacher model gained 0.35 standard deviations more than their peers assigned to the Teacher-only model, a statistically significant difference ($p = 0.02$). This translates to 17.6 months of learning based on average annual achievement growth as defined by Hill et al. (2008). Because the WIDA ACCESS is an English language proficiency assessment and not an English language arts assessment, it is worth noting that 0.35 standard deviations of student growth represents 15 to 19 months of learning for high school and middle school English learners, respectively, according to national average year-over-year WIDA ACCESS Reading domain gains (Poole & Sahakyan, 2024). This indicates that students assigned to the Tutor + Teacher model should transition out of ELD programs earlier than their peers assigned to the Teacher-only model.

Researchers also examined the implementation of the two models, including dosage, skill acquisition, educator perceptions about Foundational Literacy, and program costs. On average, students assigned to the Tutor + Teacher model received 618 minutes of tutoring, which is 57% of the scheduled dosage. Nevertheless, tutors often covered multiple skills within a single lesson, and 77% of students mastered all the skills in the Foundational Literacy curriculum and advanced to more challenging Off2Class curricula. Additionally, teachers and tutors reported that Off2Class Foundational Literacy was easy to use and useful for teaching basic English skills. The per-pupil program costs to the district were approximately $665, about a third of the per-pupil state and federal funds the district received to support English learners.

These findings offer promising evidence for school districts with similar ELD models. They also provide a platform for further inquiry; indeed, more research is needed on the effectiveness of the Off2Class model in different school and district settings and to assess its potential impact on shortening the time it takes to reclassify newcomer students as English proficient.

Part Three

Looking Ahead

For the 2025-26 school year, Accelerate has awarded 14 grants via two new grant programs - Evidence for Impact (EFI) and Call for Effective Technology (CET), which we first introduced in this section in QRN 2.1 - to improve student outcomes with evidence-based tutoring and technology in classrooms nationwide. The EFI program includes four grantees: Carnegie Learning; Chapter One; Math-A-Matics Tutoring; and Tutored by Teachers. Accelerate has matched each of the four EFI grantees with external research partners to conduct a Randomized Controlled Trial (RCT) to estimate each program's impact on student learning outcomes. The EFI evaluations also aim to better understand which program design features (e.g., group size; modality) may be driving outcomes for students, and at what cost. The CET program includes ten grantees: ALTER Math, a project of the University of Utah; EnlightenAI; Goblins; IMMERSE; LitLab.ai; Paloma Learning; Podsie, a project of Teaching Lab; Quill.org; Third Space Learning; and Varsity Tutors. Accelerate has matched each of the ten CET grantees with external research partners to conduct studies examining the usability and feasibility of these AI- and tech-enabled learning tools in public school classrooms during the 2025-26 school year, as well as to build initial evidence on the potential impact of these models on student learning outcomes. We look forward to working with the grantees and the research teams to continue to identify the personalized learning models and interventions that support student learning.

In 2024, the Arkansas Department of Education (ADE) launched the Literacy Tutoring Grant Program (LTGP), an initiative to provide literacy tutoring outside the normal school day to struggling readers to help them achieve reading proficiency. Notably, take-up of the LTGP by qualified students was low overall and uneven across school districts, leaving many qualified students unserved. Beginning in the 2025-26 school year, the LTGP provides a $1,500 per pupil grant to provide supplemental literacy support via tutoring services to eligible students statewide in grades K-3. Beginning in fall 2025, Accelerate has partnered with state leaders at the ADE, with researchers at the University of Arkansas, and with five geographically diverse Arkansas school districts to launch a multi-arm randomized controlled trial (RCT) of the LTGP. The aim of this RCT is to identify and implement strategies to improve the take-up rate of the LTGP among eligible students, and to assess the extent to which student participation in the LTGP improves early literacy outcomes. Accelerate looks forward to working with our partners in Arkansas to examine the strategies that best increase student participation in the LTGP, and to learn whether (and to what extent) supplemental early literacy tutoring in the after-school hours supports early literacy performance.

We welcome readers to share with Accelerate research studies that examine the design, implementation, and/or impact of tutoring programs and personalized learning initiatives. Please contact Matthew Steinberg, Accelerate's Managing Director of Research and Evaluation, with any research studies you wish to share for potential inclusion in a future issue of the Quarterly Research Note.