J-PAL
ABDUL LATIF JAMEEL POVERTY ACTION LAB
NORTH AMERICA

DESIGNING AN EVIDENCE-BASED TUTORING PROGRAM: A GUIDE TO CORE PRINCIPLES

WHY EVIDENCE-BASED TUTORING

In this guide, tutoring is defined as one-on-one or small group instruction that supplements classroom instruction. An extensive body of research has demonstrated that tutoring programs have consistently large, positive impacts on student learning across a wide range of characteristics, and are particularly powerful when used to accelerate learning for students who are performing below academic thresholds.[1] However, while tutoring can improve student learning across a wide range of program characteristics on average, how a tutoring program is designed matters if we aim to meet the diverse needs of California's student body.

Recent bills passed in California as part of recovery from the COVID-19 pandemic, such as California's COVID-19 Relief and School Reopening, Reporting, and Public Health Requirements Act, provide a unique opportunity. Not only will they enable districts to implement immediate tutoring measures, but also to build long term infrastructure for evidence-based tutoring programs that will continue to provide exceptional accelerated learning opportunities for students who may be facing academic challenges in the future.

WHO THIS GUIDE IS FOR

This guide is written for California's System of Support agencies and local educational agencies (LEAs) who are responsible for designing (or informing the design of) tutoring programs. Its insights are relevant to anyone who wants to understand the evidence-based principles tutoring programs should follow to maximize their potential benefits for student learning recovery.[2]

HOW TO USE THIS GUIDE

We recognize that the goals and circumstances faced by every school and district are different. In each section on a given evidence-based principle, we first point to key recommendations relevant to the largest possible number of districts and students, and then use call-out boxes to highlight

There are a variety of ways you can bring evidence-based tutoring into your district. Depending on your district's capacity and needs, you might consider:

⇒ **Developing an in-house district program** and institutionalize evidence-based tutoring as a long-term service.

⇒ **Modifying existing school-based tutoring programs** to better align with the principles outlined in this guide.

⇒ **Contracting with an external tutoring provider in your district,** for example a community-based nonprofit.

⇒ **Contracting with a regional or national tutoring provider** that is not yet working in your district, for example a private vendor.

[1] Nickow, Andre Joshua, Philip Oreopoulos, and Vincent Quan. (2020). The Impressive Effects of Tutoring on PreK-12 Learning: A Systematic Review and Meta-Analysis of the Experimental Evidence. (EdWorkingPaper: 20-267). Retrieved from Annenberg Institute at Brown University: https://doi.org/10.26300/eh0c-pc52

[2] These core principles are based on J-PAL North America's comprehensive review of 96 rigorous tutoring studies (Nickow et al. 2020) and further informed by the approaches that individual evidence-based tutoring have utilized.

considerations that may only be applicable to a subset of districts. Regardless of who is best suited to manage tutoring on a day-to-day basis in your district, they should plan to operate as closely as possible to these evidence-based principles. If you have questions about how to adapt these recommendations to your context after reviewing this guide, we encourage you to utilize the resources of California's System of Support.

CORE PRINCIPLES OF EVIDENCE-BASED TUTORING

Who Should Provide Tutoring

⇒ ***Teacher or professional (trained and paid) tutors are generally more effective than volunteer, peer, or parent tutors.***

Tutors can generally be divided into three categories: certified classroom teachers, professionals, and volunteers. Professional tutors have received dedicated training designed to enable them to meet certain standards or accountability measures, and are paid for their services, including for time spent in training. Volunteer tutors may also receive training, but generally a lesser amount. The expertise, oversight, and accountability standards associated with paid program employment are likely key factors that contribute to teacher and professional tutor success.

⇒ ***Professional tutors are trained and compensated program employees, but they do not need to be full-time, career professionals – in fact, they are often operating in a temporary or part-time capacity, and can be recruited as part of partnerships with a range of institutions.***

Tutoring programs that rely on professional volunteers do not need to artificially restrict themselves to full time educational professionals. Districts can look to undergraduate students, retirees, community group members and service fellows all as a potential tutoring pool. The key is for tutors to receive a level of training appropriate to the curriculum and pedagogy of the program they are working at. While evidence is still developing on best practices for general tutor training, one of the effective tutoring programs evaluated, Saga Education, has produced a free online coaching platform with virtual modules designed to provide tutors with foundational skills.[3]

Districts with existing relationships with colleges and universities, such as those with an existing tutoring program like CSU Fullerton's College of Education, may want to leverage those partnerships to create or build out their tutoring programs.

In **rural districts** where four-year and graduate institutions may be less plentiful, consider partnering with local two-year colleges and other community institutions such as libraries, service programs managed by religious groups, and community centers (e.g, YMCA). Additionally, virtual tutoring may expand the pool of potential tutors.

Frequency & Duration of Tutoring Sessions

⇒ ***Three sessions per week is the average tutoring frequency found to produce the biggest gains in learning across grade levels***

⇒ ***The average session length associated with evidence-based programs is 30-60 minutes***

Providing two sessions of tutoring is still preferable to providing just one session, but moving from one to two sessions provides only a marginal improvement relative to moving from one to three sessions. One possible mechanism through which tutoring improves learning is by simply providing students who have

[3] While the Saga Education model has been found to be effective through rigorous RCT research, the Saga Coach training itself has not yet been rigorously evaluated by researchers.

fallen behind with more instructional time. Additional focused instruction on a specific content area like math or reading may be what students need in order to catch up. Another potentially important element of tutoring interventions is the human connection generated by consistent tutor/student relationships. Three times a week appears to be the optimal number for facilitating these mechanisms.

Tutor:Student Ratio

- ⇒ ***PreK-1st grade students appear to benefit more from one-on-one (1:1) tutoring.***
- ⇒ ***2nd-5th grade students appear to benefit more from small group tutoring (1:3 or 1:4) rather than paired (1:2) or one-on-one tutoring.***
- ⇒ ***Middle and high school students can benefit from one-on-one, paired, or small group tutoring as long as the tutor:student ratio does not rise above 1:4.***

Younger children may benefit more from the one-on-one connection and bond made with a tutor to fully benefit from the program, while the older elementary school children benefit from customized learning alongside peers. While students in middle and secondary school show more flexibility in the types of tutor:student ratio that they respond to, it is important to maintain the tutor's ability to engage in relationship building and personalized attention by working with a limited number of students.

Where possible, consider adding a fourth or fifth weekly tutoring session for **PreK-1st grade students**. Research has found additional sessions beyond the 3x a week minimum are likely to produce additional learning gains for these students. This trend may be due to the key role repetition plays in early learning and skill development and mastery.

When and Where to Hold Tutoring

- ⇒ ***Wherever possible, tutoring should be incorporated into the fabric of a regular school day, i.e. held on-site and during school hours.***

During-school programs have been found to be nearly twice as effective as those of after-school programs. Researchers have hypothesized that there are several intersecting factors at play; the school setting makes it easier for instructors and program operators to ensure that tutoring actually occurs during the scheduled time and that students show up; presents fewer distractions to tutees; and is more accessible to students and their families because it requires fewer additional steps to access outside of the regular ones necessary to attend school. Study periods represent one chunk of time that could potentially be adapted for dedicated tutoring without subtracting from classroom or break periods.

As recovery from the COVID-19 pandemic continues, **virtual and hybrid instruction** may continue to be a basic fact of our education system. While research on best practices for tutoring in this context is still developing, **for those programs where in-person interaction is not possible,** holding virtual tutoring during school hours is most likely to enable the type of oversight and predictable routine associated with the benefits of regular during-school tutoring. For example, one study conducted in Italy during the 2020-2021 school year found that offering 1:1 virtual tutoring to middle school students while providing the tutors with support and oversight improved both academic and mental health outcomes.[4]

[4] Carlana, Michela, and Eliana La Ferrara. "Apart but Connected: Online Tutoring and Student Outcomes during the COVID-19 Pandemic." HKS Faculty Research Working Paper Series RWP21-001, February 2021. https://www.hks.harvard.edu/publications/apart-connected-online-tutoring-and-student-outcomes-during-covid-19-pandemic

USING ASSESSMENTS TO ENSURE STUDENTS STAY ON TRACK

Given the urgency to accelerate student learning post-pandemic, it is crucial to ensure that tutoring programs are actually impacting student learning as designed. Diagnostic assessments can help pinpoint where a student is in their academic progression before their very first tutoring session, and as they continue to engage in tutoring over the course of the school year. Students without strong foundational skills will struggle to progress; diagnostic assessments can help tutors and schools identify where and why students are lagging and focus accordingly.

Students who are **English Language Learners (ELL)** face dual challenges with accelerated learning in the sense that they are being asked to work on progression not only on a given subject, but also language acquisition. Diagnostic assessments are particularly important for ensuring that students who are ELL get as much as possible out of tutoring, and stay on track academically.

One randomized study found that 1st grade students who are ELL benefited academically from tutoring that was conducted in the same language as students' core reading instruction (English). The program grouped 3 to 5 students for daily 50-minute sessions and provided systematic and explicit instruction in oral language and reading by trained bilingual reading intervention teachers.

ABOUT J-PAL NORTH AMERICA

J-PAL North America is a regional office of the Abdul Latif Jameel Poverty Action Lab (J-PAL), a global network of researchers who use randomized evaluations to answer critical policy questions in the fight against poverty. Our mission is to reduce poverty by ensuring that policy is informed by scientific evidence.

Making tutoring even more effective through research partnerships

We continue to explore open questions related to how to further strengthen evidence-based tutoring. We welcome opportunities to develop partnerships with education leaders who are interested in understanding the effectiveness of new tutoring models. In particular, we are interested in questions of how to increase the cost-effectiveness of tutoring and improve online and hybrid model tutoring programs, as well as tutoring at the middle and secondary school level. If you have a program you would like to evaluate, or if you are interested in learning more about upcoming research opportunities, please reach out to **Education Sector Lead Kim Dadisman** at kdadisman@povertyactionlab.org