



10 Key Policies and Practices for In-School Tutoring

-with strong evidence of effectiveness from high-quality research-

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Increasingly, schools are using in-school tutoring to address achievement gaps, particularly when state testing shows a significant need for improvement in reading and mathematics. Though we often associate the term "tutoring" with individualized, one-to-one instruction, tutoring can be effective with small groups of students with common academic needs, similar to intervention programs operated within response to intervention (RTI) or multi-tiered system of supports (MTSS) frameworks. The difference is that in-school tutoring refers to supplemental academic instruction provided by a range of possible tutors, including intervention specialists, teachers, paraprofessionals, adult volunteers, and peers. When implemented well, such programs show promise in reducing achievement gaps in elementary and secondary schools.

More tutoring is better than less. Research has shown that 30 to 45 minutes of uninterrupted tutoring three or more times per week is necessary to produce noticeable results. Additionally, the quality of tutoring matters. Tutors need the structure of well-designed scheduling, training, programs, and materials to reduce academic struggles. Without these elements, students will not make adequate academic gains.

This document provides research-based guidance to educators interested in adopting new tutoring programs or refining existing ones, drawing on research on effective small-group and individualized academic support programs to improve reading and mathematics across kindergarten to grade 12.

Understand that effective tutoring programs rely on well-designed components implemented by well-prepared teachers, paraprofessionals, and/or volunteers.

High-quality tutoring programs with evidence of effectiveness are designed and implemented to address the greatest areas of academic need within a school. Even highly qualified tutors need the structure of a well-designed program implemented with consistency. Effective tutoring is delivered by tutors with appropriate expertise and preparation, using high-quality instructional materials. The necessary components include identifying students who need tutoring, scheduling, providing effective academic support, monitoring student progress, and managing the program. Insufficient attention to any of these components weakens the tutoring program. Program components and processes must work well within the school context and schedule. Though most research has examined tutoring within school hours, after- or before-school programs can be effective with careful planning, implementation, and monitoring.

Scenario

1

Washington Middle School's beginning-of-the-year data indicate that a group of sixth- and seventh-graders struggle with reading fluency. In addition, many students last year failed the state standardized test in writing. The principal put together a plan to address student need that leverages certified teachers, paraprofessionals, and volunteer tutors. That plan is shown below.

Subject	Students	Tutors	Schedule
Writing	60 students in sixth and seventh grades who demonstrate the greatest need	Nine English language arts teachers and three paraprofessionals who were trained over the summer in evidence- based writing instruction	Small groups of three students twice per week during protected tutoring time
Oral reading fluency	60 students in sixth, seventh, and eighth grades	 Monday and Tuesday Nine science teachers One paraprofessional 10 volunteers Wednesday and Thursday Nine social studies teachers One paraprofessional 10 volunteers Friday 20 volunteers Note: All tutors trained in evidence-based repeated-reading procedures to improve reading fluency	All students twice per week with a variety of teachers and volunteers

Use data to identify students for tutoring and to plan the focus of academic instruction.

Schools use various types of assessment to track student achievement. Using a multistep data-analysis process, educators identify students in need of academic support and determine the most beneficial academic areas to focus on in tutoring. The first step is to examine students' pass/fail status on the state standardized test. Such tests typically give general findings and do not pinpoint specific areas of need. The second step is to use additional screening assessments, administered in the beginning and middle of the school year, to identify students most in need of tutoring and to prioritize areas of greatest need. These screening assessments could be given schoolwide or just to the students who did not meet competency on the previous year's state testing.

Reading, writing, and math screeners are widely available and provide a more detailed picture of specific academic areas. For example, at the elementary level, screening data can identify students experiencing difficulty in foundational reading or math competencies. In middle school, data may indicate a need for support in reading fluency, inference making, or multistep mathematical problem solving. Using data to pinpoint what will be taught during tutoring is essential. Research-based information about screening assessments and tailoring instruction to address student needs can be found on the National Center on Intensive Intervention website (https://intensiveintervention.org).

Elementary Scenario

Every year, students at Gomez Elementary School participate in a short battery of screening assessments at the beginning, middle, and end of the year to identify strengths and needs by grade level in reading and

math, including end-of-year assessments to sum up progress by grade. The principal's goal is for all her students to read on grade level and have a solid grasp of multiplication facts and word problem solving by the end of third grade. The schoolwide MTSS framework is critical to meeting these goals. In a midyear MTSS meeting, the team noticed that many students in first and second grades continued to struggle in reading, with difficulties in decoding and reading fluency. In addition, a large number of third-graders did not meet competency on the multiplication fact and word problems assessment. With



limited staff in place, it would be difficult to provide this many students with support, so the principal and MTSS team developed a plan to leverage tutors to provide additional support focused on key areas of need.

Secondary Scenario

Teachers and administrators at Marshall Middle School are committed to using academic data to drive planning. They plan to implement a tutoring program to address skills that are below grade-level expectations in reading, writing, and mathematics. Using a two-step process, they have identified students most in need of academic tutoring. In the first month of school, English language arts teachers gave screening assessments that included a brief reading comprehension assessment and a writing sample that was scored using rubrics appropriate for each grade level. Math teachers gave a math screening assessment. Additionally, they listed all students who did not meet basic competencies in reading, writing, and mathematics. Students who did not meet criteria on both screening assessments and state competency testing were eligible for tutoring.

Use evidence-based instructional practices and high-quality materials to deliver explicit and systematic tutoring instruction.

Effective tutoring relies on high-quality programs and materials that have documented effectiveness. However, implementation matters: Tutoring programs are effective only when used as intended and delivered with high-quality instructional practices. Therefore, educators must carefully select instructional materials and ensure that tutors deliver instruction using effective practices.

It is important to find instructional programs that have been validated in settings and at age levels similar to the intended use. Also, educators should seek out programs that emphasize the targeted areas of need and are feasible for tutors to implement. Trendy programs may claim effectiveness, but educators should select materials based on documentation of effectiveness. Online resources like the What Works Clearinghouse (https://ies.ed.gov/ncee/wwc) provide information needed to select effective instructional programs. The What Works Clearinghouse focuses on results from high-quality research to answer the question "What works in education?" Choosing a set of instructional practices supported by high-quality research increases the chance that the program will work with students in your school.

Scenario

Based on middle-of-year data, the principal at Eames Elementary School realized that reading fluency was a substantial need among many first- and second-graders. She knew that it was important to choose an evidence-based program if she hoped to improve student outcomes in a meaningful way. She worked with the school's leadership team to select a high-quality program. The principal visited the What Works Clearinghouse and searched for fluency interventions for first-graders, resulting in a list of 11 choices to present to the team. The team noticed that some intervention programs required lengthy and detailed training. Without funds to provide such in-depth training to volunteer tutors, they found three feasible programs and chose one that produced positive results, contained clear lessons, and required little training before being delivered by volunteer tutors.

The team also investigated math programs because many third-graders needed to better understand the multiplication and division processes, basic math facts, and word problems. The team consulted the National Center on Intensive Intervention's Academic Intervention Tools Chart (https://charts.intensiveintervention.org/aintervention) and narrowed down the list to math intervention programs for third-graders, eventually selecting a program specifically designed for tutors.

Form small groups of students with similar academic profiles to address targeted academic needs.

More than ever, today's schools face large numbers of students who struggle with the key academic areas of reading, writing, and mathematics. Tutoring offers a means to mitigate academic weaknesses. However, tutoring does not necessarily mean one-to-one sessions. By grouping students with similar academic needs, tutors can reach more students by using a standardized set of instructional practices. Standardization of tutoring instruction streamlines tutor training, materials preparation for large numbers of students, program monitoring, and the evaluation of students' progress. Informal diagnostic assessments can help tutors pinpoint specific areas of need to facilitate grouping and scheduling.

Evaluate the effectiveness of tutoring or academic support programs and look for ways to improve them by increasing the use of evidence-based instructional practices.

Educators should ensure that the investment of time, personnel, and money for in-school tutoring or an intervention program is producing the desired results. To evaluate the effectiveness of tutoring programs, educators must use various forms of data over time, including student progress monitoring and other assessments, grades, and teachers' reports of student performance. Additionally, surveying parents, teachers, and students may provide useful information for improving program components and procedures. When programs do not produce desired results, educators should consider how to change or add instructional elements, using evidence-based practices.

Scenario

Ms. Barrett, the academic dean at Franklin High School, formed a campus leadership team to monitor and support the school's academic support programs, including a new in-school tutoring program. Midyear, the team reviewed various sources of data to evaluate the impact of the tutoring program. They looked at progress-monitoring data, class grades, and teacher referrals for students who had participated in the program. Based on the midyear evaluation, Ms. Barrett improved the program by adjusting the tutoring schedule and working with the tutoring team to sharpen their practices.

At the end of the year, the team again reviewed student data. They also conducted a brief survey to gather teachers' and parents' perspectives of the tutoring program. This review led to several important recommendations for the upcoming year, including purchasing additional materials, providing additional training for tutors, instilling a school-home communication system, and adjusting the schedule to decrease group size.



Provide student tutors with training, supervision, and support from a knowledgeable educator.

Same-age tutoring (peer tutoring) and cross-age tutoring (older students tutoring younger students) are widely used in schools. Students tutoring students can be effective when carefully implemented and monitored to ensure the desired results. Research has documented the effectiveness of various approaches to peer tutoring and cross-age tutoring in both reading and mathematics in elementary, middle, and high schools.

To be effective, student tutors must be trained in using a standard tutoring



protocol for giving instruction, praise, and feedback. Student tutors must provide clear explanations and show tutees how to complete a task but must also provide ample opportunities for tutees to try it themselves. Feedback must be specific, pointing out what the tutee has done correctly and how to correct errors or improve performance. Using a structured set of instructional practices, older students tutoring younger students can be effective, particularly if the tutor and the tutee are of the same gender. Cross-age tutoring can be academically beneficial for the older tutor, too.

This solution to serving large numbers of students who struggle with math or reading may be particularly helpful in schools with limited resources. However, educators must ensure that such programs have documented effectiveness. Educators may find the What Works Clearinghouse reviews of peer tutoring useful (https://ies.ed.gov/ncee/search/?q=tutoring).

Scenario

Students in Mission Elementary School, a large urban school with limited resources, found that many first-graders struggled with basic decoding and reading simple texts. Other first-graders struggled with number sense and foundational math competencies. In the same school district, the high school offered a career and technical education program focused on teaching. In this program, high school juniors and seniors are required to log 100 hours of instruction with another student. The Mission Elementary School principal coordinated with the high school's career and technical education director to have elementary school content specialists train high school students in a set of evidence-based instructional practices in reading and math. The trained high school tutors' career and technical education teacher superweek for 30 minutes each session. The high school tutors' career and technical education teacher supervised the implementation of the instructional practices.



Protect students' access to core classes by scheduling tutoring that does not interfere.



Tutoring should supplement, not supplant, core instruction. Students who have academic struggles benefit from tutoring that aligns with and supports what they are learning in their classes. Combining full access to core instruction with supplemental intervention can be a powerful way to improve academic outcomes. High-quality tutoring focusing on reading or mathematics enhances students' participation in core classes. School leaders must build schedules that minimize interruptions to core instruction and intervention. A 20-minute module on scheduling is available online (https://bit. ly/MTSS_Scheduling).

Scenario

At Belle Glen Middle School, leaders and teachers decided that every student on campus should have access to some type of academic support during the school day. Students who have identified academic needs participate in a tutoring program to boost their competency in areas of need. Other students choose a class in which they need assistance. Teachers and administrators reworked the master schedule, maintaining 48-minute core class periods and consolidating lunch and an advisory period. During the new lunch/advisory period, students have a 25-minute lunch and then go to their designated tutoring option. The school has organized various options for academic support, including tutors who are retired certified teachers. The tutors work with small groups of students. At right is the seventh-grade schedule to prepare students for eighth-grade algebra I. Similar schedules are used for other areas of academic support.

Period	Times
1	8:20–9:08
2	9:12–9:47
3	9:51–10:39
4 (sixth-grade lunch*)	10:43–11:28
5 (seventh-grade lunch*)	11:32–12:17
6 (eighth-grade lunch*)	12:21–1:06
7	1:10–1:55
8	1:59–2:44
9	2:48-3:35

*Students have 25 minutes for lunch and then move into tutoring locations, allowing for daily supplemental instruction.

8 Ensure that tutors monitor student progress and provide information to school personnel so that adjustments can be made to better address students' needs.

Progress-monitoring assessments conducted at regular intervals provide essential information about tutoring success. Simple progress-monitoring charts or graphs tell tutors, students, parents, and school leaders whether students are making sufficient progress toward goals. When students are making sufficient progress, intervention should advance to new areas of need. When students are not making progress, intervention instruction may need to be intensified. Most experts recommend weekly progress checks. Assessments that are easy to use and focus on areas of need are widely available. A useful chart showing expert review of K–12 progress-monitoring assessments is available through the National Center on Intensive Intervention (https://charts.intensiveintervention.org/aprogressmonitoring).



Provide tutors with high-quality training to work effectively with students.

Tutors must be equipped with the knowledge and skills to provide effective academic support to students. Educational leaders must provide adequate training to tutors that addresses all aspects of their tutoring responsibilities, including how to use the materials, deliver explicit instruction, engage students in tasks, provide effective feedback, and manage student behavior. Additionally, tutors must know how to administer and chart progress-monitoring assessments. Avoid a "onestop-shop" model of isolated training where tutors are expected to deliver new instructional practices after only a couple of hours of training. These methods may lead to an increase in tutor knowledge but typically do not result in improved student outcomes.



Instead, combine an initial workshop-style training with follow-up sessions over time to encourage deep understanding. The initial workshop should include high-quality instructional practices like background on why tutoring is needed, an in-depth explanation of the tutoring lessons, expert models of the practices, practice delivering the lessons with peers, and careful explanation of procedures that will support tutoring (e.g., behavior management).

Supervise and provide ongoing support to tutors as they learn to implement the instructional practices with fidelity.

Initial tutor training is more effective with ongoing supervision and support from a knowledgeable educator or school team. A designated leader should gather tutors periodically to help them learn new instructional strategies, discuss what is going well, and discuss goals for the coming weeks. For example, in follow-up sessions, tutors can use self-captured videos and a guided protocol to reflect on their practice and plan next steps to refine and improve their instruction. These ongoing support sessions inform follow-up training and provide tutors with a social network. Tutors are more effective when they see themselves as vital to the school community, working together to improve students' academic outcomes.

Scenario

Maple Elementary School wanted to create a new tutor training schedule that aligns with evidence from high-quality research. After a thorough review of the research, school leaders developed the following schedule.

Туре	Length	Description	
Initial training	3 hours	Brief explanation of why tutoring is needed	
		 In-depth explanation and high-quality modeling of the tutoring lessons 	
		Practice delivering the lessons with peers	
		• Discussion of how the lessons will work with students	
		• In-depth study of the procedures used for tutoring, including group behavior management and how to gather students from classes	
Reflection using self-captured videos	30 minutes	During the week before the follow-up training, tutors video record one of their sessions and complete a reflection protocol. What they learn from this exercise can contribute to the discussion during follow-up training.	
Follow-up training	1 hour	Held at the beginning of every 6-week grading period, the agenda includes the following:	
		 Reviewing student success with a focus on how tutoring is working 	
		 Reflecting on what went well during the last grading period 	
		 Setting goals to improve the delivery of tutoring services for the coming grading period 	

References

- Baker, S., Gersten, R., & Keating, T. (2000). When less may be more: A 2-year longitudinal evaluation of a volunteer tutoring program requiring minimal training. *Reading Research Quarterly*, *35*(4), 494–519.
- Basma, B., & Savage, R. (2018). Teacher professional development and student literacy growth: A systematic review and meta-analysis. *Educational Psychology Review*, 30(2), 457–481. https://doi.org/10.1007/ s10648-017-9416-4
- DuBois, D. L., Portillo, N., Rhodes, J. E., Silverthorn, N., & Valentine, J. C. (2011). How effective are mentoring programs for youth? A systematic assessment of the evidence. *Psychological Science in the Public Interest*, 12(2), 57–91.
- Garet, M. S., Heppen, J. B., Walters, K., Parkinson, J., Smith, T. M., Song, M., Garrett, R., Yang, R., & Borman, G. D. (2016). Focusing on mathematical knowledge: The impact of content-intensive teacher professional development (NCEE 2016-4010). National Center for Education Evaluation and Regional Assistance.
- Hänze, M., Müller, M., & Berger, R. (2018). Cross-age tutoring: How to promote tutees' active knowledge-building. *Educational Psychology*, 38(7), 915–926. https://doi.org/10.1080/01443410.2018.1444734
- Leung, K. C. (2019). An updated meta-analysis on the effect of peer tutoring on tutors' achievement. *School Psychology International*, 40(2), 200–214. https://doi.org/10.1177/0143034318808832
- Powell, S. R., Berry, K. A., & Barnes, M. A. (2020). The role of pre-algebraic reasoning within a word-problem intervention for third-grade students with mathematics difficulty. *ZDM*, *52*(1), 151–163.
- Ritter, G. W., Barnett, J. H., Denny, G. S., & Albin, G. R. (2009). The effectiveness of volunteer tutoring programs for elementary and middle school students: A meta-analysis. *Review of Educational Research*, 79(1), 3–38.
- Shenderovich, Y., Thurston, A., & Miller, S. (2016). Cross-age tutoring in kindergarten and elementary school settings: A systematic review and meta-analysis. *International Journal of Educational Research*, 76, 190– 210. https://doi.org/10.1016/j.ijer.2015.03.007
- Stevens, E. A., Vaughn, S., Swanson, E., & Scammacca, N. (2020). Examining the effects of a Tier 2 reading comprehension intervention aligned to Tier 1 instruction for fourth-grade struggling readers. *Exceptional Children*, 86(4), 430–448.
- Swanson, E., & Stewart, A. A. (in press). Sustaining literacy practices one, two, and three years after professional development. *Teacher Education and Special Education*.
- Swanson, E., Stewart, A., Stevens, E. A., Scammacca, N., Capin, P., Hamilton, B. J., Roberts, G., & Vaughn, S. (2021). The efficacy of two models of professional development mediated by fidelity on fourth grade student reading outcomes. EdArXiv. https://doi.org/10.35542/osf.io/7kqrt
- Vaughn, S., Wexler, J., Roberts, G., Barth, A. A., Cirino, P. T., Romain, M. A., Francis, D., Fletcher, J., & Denton, C. A. (2011). Effects of individualized and standardized interventions on middle school students with reading disabilities. *Exceptional Children*, 77(4), 391–407.
- Wasik, B. A., & Hindman, A. H. (2011). Improving vocabulary and pre-literacy skills of at-risk preschoolers through teacher professional development. *Journal of Educational Psychology*, 103(2), 455–469. https:// doi.org/10.1037/a0023067
- Wexler, J., Swanson, E., Shelton, A., Kurz, L. A., Bray, L., & Hogan, E. (in press). Sustaining the use of evidence-based Tier 1 literacy practices that benefit students with disabilities. *Journal of Learning Disabilities*.





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