BRIEF

Effective summer programs: Practical guidance for district leaders

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School districts have historically operated summer programs to give students extra learning and enrichment opportunities to promote positive academic and behavioral outcomes. Prior to the pandemic, educators mainly designed these programs to prevent summer learning loss, which typically affects students of color and those from low-income families the most. In the wake of pandemic-related learning disruptions, many districts turned to summer programs to help students to not only mitigate summer learning loss but boost academic recovery.

The popularity of summer programs as a strategy to boost academic recovery has led the Biden Administration to advocate for increased summer learning opportunities in their 2024 Student Achievement Agenda, and for good reason. Research shows that summer programs can be effective—boosting reading and math achievement by .10 standard deviations (SDs). The significant achievement setbacks caused by the COVID-19 pandemic have resulted in achievement declines that by some estimates range in grades 3-8 from .12 to .17 SDs in reading and .16 to .27 SDs in math. Thus, the potential gains from summer programs hold promise for significantly mitigating those gaps.

Despite the potential benefits and policymakers' endorsement of summer programming, recent research suggests that summer programs have a limited impact on post-pandemic academic recovery, with modest gains in math test scores and no impact in reading. This may be partly due to the challenges districts face in implementing academic recovery programs at the scale needed to impact student outcomes. Furthermore, unlike other academic recovery strategies like high dosage tutoring, summer school programs often have a wider range of goals. Some focus solely on academics, like reading and math, while others promote positive behavioral outcomes like student engagement and social-emotional skills. This variation in program design and goals has led to promising but inconsistent evidence about the effectiveness of summer programming.

Given the sunsetting of ESSER funding that provided unprecedented resources to school districts for academic recovery, school districts may need to strategize in allocating scarce resources to address student needs during the summer. This brief summarizes research to highlight what works best in designing effective summer programs. We begin by recommending design features that generally facilitate successful summer programs. We then highlight the efficacy of summer programs for literacy, math and SEL outcomes, showing that well-designed summer programs can meaningfully boost student achievement.

How should school districts design summer programs?

Designing an impactful summer program can be daunting, and challenges related to staffing, scheduling, and student participation can hinder the effectiveness of summer programs. However, districts can overcome these hurdles by following generally recommended design principles, such as providing training and curricular resources to staff and by prioritizing resources that address barriers to student participation. Below, we distill these key design principles into research-based recommendations to help districts create impactful summer programs.

1. **Districts should offer summer programs for a minimum of four weeks.** Programs lasting for greater than three weeks more consistently yield positive outcomes. Given estimates that students require an additional four months of instruction to recover from missed learning opportunities during the pandemic, summer programs of at least one month may be an effective strategy for helping students catch up.

2. **Summer programs should include small-class sizes and targeted instruction.** Across summer program types, studies suggest that small-group or one-on-one differentiated instruction is effective at helping students address academic needs. Traditional instruction is effective if teachers have clear lesson plans and objectives and limited class sizes of 15 students or fewer. Research suggests that targeting specific skills through small-group or one-on-one tutoring is effective at boosting student achievement.

3. **Summer instruction should be delivered by qualified staff**. Summer programs can be successful when staffed by a variety of personnel. Certified, well-prepared teachers are most effective for traditional instruction. For summer programs that include supplemental interventions like tutoring or social/emotional learning (SEL), well-prepared staff from a variety of backgrounds (e.g., college students, volunteers, counselors) can be effective.

4. **Staff should enter summer programs prepared with familiar curricular tools.** Given the short duration of summer programs and limited time for preparation, staff should begin summer programs with curricular tools and lesson plans. Instruction and supplemental interventions like tutoring are most effective when they draw from an evidence-based curriculum, ideally, the same curriculum educators used during the school year.

5. **Relationship-building should be a key component of summer programs.** Multiple studies suggest that enrichment and relationship-building have a positive impact on student engagement in learning. Smaller class sizes and flexibility during the summer allows the opportunity for students to strengthen relationships with classmates and educators.

6. **Summer programs should incorporate enrichment that includes diverse resources.** Given competing summer activities, summer learning should be a fun and engaging place for students. To that end, consider employing strategies that provide students access to resources that may not be available during the school year, including a diverse staff, counselors, field trips, and activities with community youth organizations.

7. **Districts should incorporate culturally relevant activities during the summer.** Summer programs provide a unique opportunity to provide culturally diverse learning opportunities to students. Culturally diverse activities may contribute to increased engagement with learning, motivation, and developing interest in STEM fields.

8. **Summer programs should be free and provide transportation and meals.** To make summer programs more accessible to students from low-income or marginalized backgrounds, programs should include economic considerations like making programs free for students and providing food, along with addressing logistical barriers by providing transportation. Offering such support will help increase participation and, in turn, lead to positive academic outcomes.

9. **Summer programs should prioritize family communication to promote student participation.** Parents play a big role in student participation in summer programs and may not be fully aware of the additional learning opportunities that may benefit their child during the summer. Family engagement efforts including offering parent information sessions and conferences, sending daily text messages, and calling home to discuss absences are effective in promoting summer school participation.

10. **Summer program staff should communicate with families to highlight student achievements and address challenges.** In addition to participation, family communication is vital for reinforcing a positive engagement with school. Even in instances where students may struggle in summer school, daily communication between teachers and families can increase on-time homework completion by 40% and reduce teachers redirecting behavior in the classroom by 25%.

What benefits can districts expect to see from well-designed summer programs?

Understanding the specific benefits that well-designed summer programs can deliver may help district leaders decide where to place their focus. When these programs are tailored to the needs of the targeted student population (whether based on demographic characteristics or acute academic needs related to lingering pandemic impacts), they can be quite effective. Here are some key areas of impact:

Summer programs are especially effective at improving early-grade literacy for low-income students.

- **Summer literacy programs can increase reading achievement by 0.10 SDs.** Summer reading programs have generally been effective in increasing reading achievement in elementary grades. Programs led by certified teachers can see even higher gains, up to .18 SDs in this meta-analysis.

- **Summer literacy programs benefit students from low-income families the most.** The benefits of summer reading programs are 0.28 SDs for low-income students. These students may be at greater risk for summer learning loss because these students often have less access to out-of-school learning resources during the summer. Providing free summer learning opportunities is crucial for leveling the playing field.

Summer programs are effective at boosting math instruction across student characteristics and ability levels.

- **Summer programs can increase math achievement by 0.10 SDs.** These gains are even larger for programs that focus exclusively on math. Notably, math programs are beneficial for students from all socioeconomic backgrounds. The benefits of summer math programs may be greater for grade levels where pandemic setbacks were most pronounced.

- **Summer programs can have positive impacts on math achievement regardless of curriculum foci (remediation versus grade level) and learning activities.** The efficacy of math programs is similar across ability levels (i.e., gifted learners, remediation, etc.) and student characteristics (e.g., family income level).

Summer programs may boost SEL outcomes and students may benefit from participating in multiple summers.

- **At-risk populations benefit from SEL skill development during the summer.** A recent review found that studies of SEL skill development show that programs are highly effective when they target at-risk student populations (e.g., students with disabilities, behavior disorders, ADHD, etc.) and provide content aimed at improving outcomes related to their needs.

- **Program benefits may emerge after students attend for multiple summers.** In one quasi-experimental study, a multiyear middle school summer program with an SEL curriculum and a diverse staff contributed to declines in unexcused absences, chronic absenteeism, and suspensions. Notably, these effects emerge after the second year of participation—suggesting that sustained engagement (e.g., additional instruction and engagement with staff) is necessary for impacts to materialize.

Conclusion

Summer programs, when designed effectively, can make a significant impact on both academic and nonacademic outcomes. Our research-based recommendations provide a strategic framework for districts as they design impactful summer programs. By focusing on targeted outcomes and incorporating key design features, summer programs can be effective both in keeping students from losing ground and in helping students recover from missed learning opportunities during the pandemic. With the sunsetting of ESSER funds, it is crucial for districts to sustain summer recovery programs and incorporate them into our new normal. Investing in well-designed summer programs is a vital strategy for long-term academic recovery and student success.

ABOUT THE AUTHORS

Miles Davison specializes in using quantitative and mixed-methodologies to examine how K–12 intervention policies and programs impact equity in schools. His research is driven by a desire to assist schools in creating optimal learning environments for students. He is particularly interested in understanding how processes and mechanisms associated with school policies ultimately impact student behavioral and academic outcomes. Specifically, his recent work has focused on changes in school disciplinary practices and disparities after the implementation of restorative justice policies. Through this work, Miles has gained a passion for producing research that is actionable and relevant to policymakers and practitioners. Dr. Davison holds a PhD in sociology from the University of California, Irvine.

Ayesha K. Hashim draws on interdisciplinary and mixed-methods research designs to study the impacts of district-level school policies on student learning, as well as the leadership, organizational, and implementation conditions that can explain observed results. Her research covers a range of topics including the integration of technology with standards-based instruction, school choice and accountability, teacher professional development, and COVID recovery. Ayesha's work has been published in *Education Finance and Policy*, *Economics of Education Review*, *Educational Evaluation and Policy Analysis*, *Computers and Education*, *American Journal of Education*, and *Peabody Journal of Education*. Prior to joining NWEA, Ayesha was an assistant professor at the University of North Carolina, Chapel Hill. She completed her PhD in education policy, MA in economics, and master's in public policy at the University of Southern California.

Sofia Postell is a research analyst for NWEA's Research and Policy Partnerships team. She supports a variety of projects concerning academic recovery and measuring trends in student achievement. Sofia received a combined bachelor's degree in computer science and sociology from Northeastern University.

Jazmin Isaacs is a research analyst for NWEA's Research and Policy Partnerships team. Throughout her career, she has been fortunate enough to hone her research and project-based skills in several settings (e.g., academia and higher education, nonprofits, private corporations, etc.). Cumulatively, she has nearly a decade of experience in conducting equity and education-focused research, creating high-impact, data-driven reports and presentations, and engaging in thoughtful data management and analysis work. Isaacs completed a bachelor's degree in economics at Stanford University and received a master's degree in education from the University of Oxford.

Broadly, **Michael Gaddis**'s work provides evidence of inequality in the US related to race/ethnicity, social class, and education. His research has been published in numerous journals. In 2018, he published a book on the experimental method used to investigate discrimination titled, *Audit Studies: Behind the Scenes with Theory, Method, and Nuance*. In 2020, he was named Honorable Mention for the Distinguished Early Career Award by the American Sociological Association's Section on Racial and Ethnic Minorities. Prior to NWEA, He was an associate professor of sociology at UCLA, a Robert Wood Johnson Scholar in health policy research at the University of Michigan, and an assistant professor of sociology and demography at Penn State University. He received a PhD in sociology at the University of North Carolina at Chapel Hill.

Susan M. Kowalski uses quantitative and descriptive approaches to understand how state and district educational policy decisions influence science instruction in the US. Her research includes a wide range of topics, from science curriculum and professional development research to meta-analysis. Susan's work has been published in the *Journal of Research on Educational Effectiveness*, the *American Educational Research Journal*, the *Journal of Research in Science Teaching*, and *Science Education*. Before NWEA, Susan was a senior research scientist and director of research at BSCS Science Learning. She also spent several years teaching high school physics and physical science in Bloomington, MN. She completed her PhD in curriculum & instruction at the University of Minnesota.

Dr. Karyn Lewis is Director of Research and Policy Partnerships at NWEA, where she leads a team of researchers who operate at the intersection of K–12 education research, practice, and policy. Her research interests focus on the interplay between students' academic achievement and growth, their social-emotional development and well-being, and how they experience their school's climate. Prior to joining NWEA, she was a senior researcher at Education Northwest/REL Northwest, where she led a diverse portfolio of applied research, technical assistance, and evaluation projects centered around socialemotional learning. Dr. Lewis is a former data fellow with the Strategic Data Project at the Harvard Center for Education Policy Research. She completed a National Science Foundation funded postdoctoral fellowship at the University of Colorado Boulder and earned a PhD from the University of Oregon in social psychology.

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