Effective Summer Programming

What Educators and Policymakers Should Know

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As many educators and parents know all too well, the summer is a key time in students' social and cognitive development, and it plays an important role in the development of achievement gaps. As a result, summer interventions have the potential to not only mitigate summer learning loss but also reduce persistent achievement gaps.

In our chapter from *The Summer Slide: What We Know and Can Do About Summer Learning Loss*, from which this article is drawn, we reviewed a foundational meta-analysis of summer learning programs conducted by researchers as well as evidence from 25 studies of such programs since 2000. The programs covered in our review included voluntary at-home summer reading programs, voluntary classroom-based summer programs, and mandatory summer programs that students must attend to avoid in-grade retention.

The evidence suggests that many types of summer learning programs have the potential to reduce summer learning losses and perhaps create learning gains. However, implementing a summer program does not guarantee positive effects on students' learning. A key question then is: What factors make a summer learning program effective?

Components of Quality Summer Learning Programs

Small Class Sizes

Research has found that small class size is associated with summer program effectiveness. One study found that summer programs with class size capped at 20 students were more effective than others in

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producing achievement gains.[1] In another study, researchers found no statistically significant relationship between class size and program quality, but they found positive effects when small classes were combined with significant program resources (defined as class sizes of no more than 13, at least four hours of participation per day, and at least 70 hours of total participation).[2] They analyzed 12 studies with enough detail to investigate whether program resources mediated students' learning. Of those 12, the five studies that met these criteria had large statistically significant, positive effects on students' learning, and the seven studies that did not meet the criteria had no statistically significant effect on students' learning.

Other researchers similarly combined instructional hours with class size to test whether more individual attention offered due to smaller classes might improve results.[3] Although they found a positive relationship between the number of hours of instructional time and math achievement, they did not find a relationship when it was further combined with class size. This may be because prevailing class sizes across the five studied districts were all small, ranging from an average of eight to 14 students per teacher. Furthermore, researchers found large positive effects of an intense summer literacy program on students' reading outcomes.[4] The program used daily small-group (three to five children), research-based instruction.

To sum up, programs with small classes and significant resources provide teachers with more time to work individually with students and to create greater opportunities to differentiate instruction based on student needs. Such programs may also be particularly beneficial during the summer, when teachers have much less time to get to know the students in their classrooms.

Aligned to Student Needs

Learning science recommends that in order to maximize the benefit of academic

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experiences, especially in literacy, students' assignments should be well aligned to their interests and needs.[5] Summer learning programs should therefore align instruction to school-year activities, and instruction should be tightly focused on addressing students' needs with high-quality instruction.[6] The findings from the many replications of Project READS,[7] an at-home summer literacy intervention, clearly show that students are not only more likely to read over the summer when books are aligned to their interests and matched to their reading levels, but they are also more likely to comprehend what they are reading, and these comprehension effects persist into the following school year.

The results from Project READS also suggest that sending students books matched to their reading levels and interests over the summer with the expectation that they will read them is not enough. In the absence of a structured school setting, struggling students also need continued support during the summer. For example, researchers tested whether students who were given resources meant to mimic school-year learning opportunities outperformed students who were just given basic prompts to read books over the summer.[8] They found that an approach that included a scaffolded summer reading intervention and prompts to read over the summer increased the amount of time students spent reading and improved their comprehension, relative to students who were either just mailed books home or not given any treatment (e.g., no scaffolding or books).

Finally, the Project READS work also tested whether incentives to read over the summer enhanced students' summer reading habits and comprehension. Researchers tested two different treatments. In the first, students were supplied with books to read over the summer aligned to their skills and interests. In the second, students were given books and points for each book they read (that could

be redeemed for toys, games, etc.).[9] At the end of the summer, the intervention was effective only for motivated students (as measured by baseline surveys), and the use of incentives actually widened the achievement gap between motivated and unmotivated students. As such, it is important not only to align students' work with their interests and ability levels, but also to build in structures to support learning during the summer, especially for at-home programs.

Qualified Teachers

One study found a positive, statistically significant association between prior teaching experience and reading outcomes.[10] Specifically, it found that students who had summer teachers who had just taught either their sending or receiving grade performed better than other students on a fall reading assessment. In order to recruit and hire the right teachers, researchers recommend developing rigorous selection processes to recruit motivated teachers and, to the extent possible, taking teachers' school-year performance into consideration.[11] They also stress the importance of hiring teachers with not only grade-level but also subject-matter experience and, if possible, familiarity with the students.

High-Quality Instruction

In addition to the importance of recruiting qualified teachers, the teachers' instruction of the curriculum is important. In one study, researchers observed and evaluated instructional quality for each classroom in their study.[12] Their analysis found a positive association between quality of instruction and better student performance in reading. (They did not find a relationship between quality of instruction and student performance in mathematics.) Furthermore, researchers examined voluntary and at-home literacy programs that used research-based instruction, such as guided repeated oral reading, that related readings to students' prior experiences and explicitly modeled strategies for students.[13] Programs that included these practices had significantly larger positive effects on students' reading outcomes than programs that did not use such instructional practices.

In efforts to ensure high-quality instruction, researchers recommend

anchoring summer literacy programs in an evidence-based curriculum;[14] providing professional development to teachers;[15] tying small-group instruction explicitly to learning goals;[16] and providing teachers with instructional support, such as coaching, during the program.[17]

Site Culture

Researchers expected that students in more orderly sites would have better outcomes because they and their teachers would be less likely to be distracted by misbehavior.[18] To evaluate student discipline and order in the district programs they studied, they created a scale for each site within each district based on teacher survey data. On the survey, teachers were asked for their observations of student bullying,* physical fighting, and other indicators of orderliness. They found that students who attended more orderly sites outperformed other students on the fall reading assessment.

Policies to Maximize Participation and Attendance

Consistent attendance is crucial not only for school-year learning but for summer learning as well.[19] Researchers did not find differences in program effectiveness between summer programs that did and did not monitor attendance, so tracking attendance, while a good policy, is likely insufficient to increase attendance.[20] To promote consistent attendance, researchers recommend setting enrollment deadlines, establishing a clear attendance policy, and providing field trips and other incentives for students who attend.[21] They also found that it is not necessary to disguise academics to boost attendance: the district with the highest attendance rate in the study ran the most "school-like" program, with the most explicit academic instruction.

Sufficient Duration

Researchers generally distinguish between allocated time (the time on the school calendar for a given content area) and academic learning time (the amount of time

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*For more on bullying, see "Understanding Bullying Behavior" in the Winter 2016–2017 issue of *American Educator*, available at www.aft.org/ae/winter2016-2017/englander.

students spend working on rigorous tasks at the appropriate level of difficulty). Academic learning time is more predictive of student achievement.[22] Furthermore, research also suggests that spaced practice (once a day for several days), as opposed to one long, concentrated lesson (all day long for just one day), appears to be more effective in facilitating learning.[23] When focusing on boosting students' literacy skills, researchers recommend that students receive at least two hours of teacher-directed daily instruction blended between whole-group and small-group (three to five students) lessons and that the program meet regularly during the week (four to five times) for at least five weeks.[24]

Similarly, researchers recommend that school districts plan for programs to run at least five weeks and schedule 60–90 minutes of mathematics per day to maximize effectiveness.[25] Because instructional time on task is reduced due to student absences and inefficient use of time during the day, researchers suggest special efforts to promote consistent attendance, maintain daily schedules, and ensure teachers maximize instructional time in the classroom.

For educators, administrators, and policymakers looking to strengthen their summer learning programs, we suggest they keep the following information in mind. First, research shows that the effectiveness of summer learning programs is inconsistently influenced by students' backgrounds and the grade level of the intervention. This implies that there is no "best" target population of students for summer programming. Furthermore, simply offering a program does not guarantee it will benefit students.

Second, research indicates that for summer programs to be effective, they must be of sufficient duration (i.e., at least five weeks long or 70 hours of academic programming) and achieve consistent student attendance. Students also benefit from individualized and aligned instruction and class sizes smaller than 20 students.

In addition, high-quality instruction (promoted through careful hiring and professional development) by teachers who have recently taught the sending or receiving grade contributes to positive student outcomes, as does providing that instruction in orderly summer sites with low levels of physical fighting or bullying.

It is our hope that this research encourages districts and providers to enact quality components and ensure effectiveness in carefully planning for summer programming.

(Endnotes on page 39)

> **Summer interventions have the potential to not only mitigate summer learning loss but also reduce persistent achievement gaps.**

Effective Summer Programs

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Endnotes

1. Harris Cooper et al., "Making the Most of Summer School: A Meta-Analytic and Narrative Review," *Monographs of the Society for Research in Child Development* 65, no. 1 (2000).

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