

# Research

*For many children, summer is a time for forgetting, but good programs can help*

## What Did You Learn Last Summer?



The last day of school, I wrote in my fifth-grade diary, was “sweet and delicious.”

Free from homework, books, and “teachers’ dirty looks,” the neighbor kids and I crossed a creek and scampered up a steep hill to an abandoned farm where we sprawled in a field and dreamed of a carefree summer. (In junior and senior high, we added to this tradition by smoking forbidden cigarettes.)

But today the prospect of summer freedom is short-lived for many kids. Nationwide, about 5 million K-12 students attend summer schools, some for enrichment and many others for remediation, particularly in reading and math.

In Philadelphia, for instance, nearly 90,000 students—a record number—packed into summer classes in 2004. About one-third of them signed up for enrichment courses in art, computers, and other subjects. But, like students in many other school districts across the country, most showed up because they were ordered to do so.

Last summer, for the first time, the Philadelphia school district ruled that first- through 10th-grade students who failed math, reading, social studies, or science, as well as third- and eighth-graders who had low scores on reading and math standardized tests, must attend summer school.

It was a high-priced initiative—\$18 million for sessions that ran four hours a day, four days a week, for six weeks. But CEO Paul Vallas said he believed the city’s “summer power program” will pull failing students out of their academic slump.

An upstate New York superintendent isn’t so sure. “Our summer school runs seven weeks, so you could say we have school year round,” he told me. Cost is a major concern. The district receives some aid from Title I but pays for such things as transportation, salaries, and supplies from its annual budget.

Has his district’s investment in summer school paid off? “I’m disappointed,” he said. “Our students’ overall achievement gains are very slight.”

**Stopgap summer programs**

Why do some summer schools succeed and others fail? In 2002, the Atlanta-based Southern Regional Education Board studied high school and middle school summer programs in 16 states to find out.

By Susan Black

In a report of the study, David Denton, SREB's director of school readiness, reading, and health, writes that summer school remains an "unfulfilled promise," mainly because most schools treat summer programs as "largely an afterthought." Summer programs often are poorly planned, he writes, with little connection to regular instructional programs.

In addition, the study found "dramatic variations" in the time districts allocate to summer programs. One high school operated a summer program seven hours a day, five days a week, for nine weeks—a total of 315 hours. But another high school's program ran only five hours a day for three days, for a total of just 15 hours. On average, according to the study, summer programs run about 100 hours.

Scheduling, it turns out, is an important factor that shouldn't be left to chance. SREB's study shows that summer achievement is higher in districts where programs operate part of a day for many weeks. Stretching summer school out longer "reduces the gaps" between the regular school year and provides students with more continuity in learning, Denton writes.

Summer schools that succeed in raising student achievement, the study found, have some important additional characteristics:

- High-quality teachers
- Adequate and reliable funding
- Emphasis on reading and math
- Teaching that is innovative and creative
- Program evaluation that focuses on student achievement.

North Carolina's Johnston County school district follows this prescription and "does summer school right," according to Denton. About 250 K-12 students attend the district's Summer Academy. Nearly all students show improvement, and 40-50 percent of them pass the summer courses—a rate equivalent to Chicago's summer program and others a hundred times larger and with more resources.

What else accounts for Johnston County's success? For one thing, the district insists on teaching summer school students in ways they learn best. At the

end of the regular school year, the district requires teachers of failing students to submit a list of their classroom strategies. Specially trained summer school teachers use this information to design individualized plans and rely on different strategies to reach their remedial students.

For another, the district shortens the time between the end of summer school and the start of school in the fall, a factor that helps close learning gaps. Academy sessions run five hours a day, five days a week, for most of the summer, with the last session ending about two weeks before the new school year begins.

### Summer slide

Good summer programs can help stem the academic slide that can occur between the end of one school year and the beginning of the next. But when school reopens, review lessons often take up the first few weeks of instruction. Math and spelling, it turns out, are the subjects in which most kids slide farthest.

A middle school math teacher laments the time it takes to get her eighth-graders ready to learn algebra. "My students need at least a month to review basic math be-

fore we can move ahead," she told me.

Duke University's Harris Cooper, a leading expert on summer learning loss, writes that long summer vacations "break the rhythm of instruction, lead to forgetting, and require a significant amount of review when students return to school in the fall." Students' overall achievement test scores drop by about one month, on average, over summer vacation. But in math computation, he says, students lose more than double that rate—closer to 2.6 months. During summer months, few students practice math and spelling, subjects that require factual and procedural recall, Cooper writes.

In reading, summer loss is especially evident among students from poor families. Over the summer, studies show, many students from middle-class and affluent families gain in general reading achievement, while disadvantaged children fall behind. Students from all income levels show diminished scores in reading comprehension by the end of summer, but the losses are greatest for low-income students.

Cooper suggests that families with adequate economic resources provide

## Summer programs that work

What should you know before crafting a policy and plan for summer school? These research findings, derived from 93 program evaluations, can help improve summer learning:

- Summer school programs that focus on reducing or removing learning deficiencies improve students' knowledge and skills.
- Summer school programs that accelerate learning help students as much as or more than remedial programs.
- Remedial summer programs are more successful when they're run on a small scale.
- Remedial programs tend to produce greater gains in math than in reading.
- Remedial programs are most effective for students in early primary grades and high school and least ef-

fective for students in the middle grades.

- Small-group instruction and individualized instruction result in the greatest learning gains.
- Parent involvement in summer programs results in higher student achievement.
- Summer achievement may diminish over time unless it is reinforced through successive summer programs.
- Summer programs are more successful when they are monitored for attendance and quality of instruction.
- Single-summer remedial interventions do little to prevent the long-term accumulation of learning loss.

Source: "Summer School Programs." Johns Hopkins University: Center for Summer Learning, [www.summerlearning.org/research/sumschool.html](http://www.summerlearning.org/research/sumschool.html).

## Research

more books, trips to libraries, and other opportunities to practice reading. The University of Florida's Richard Allington agrees, noting that the best predictor of summer reading loss is lack of books at home and limited access to library books.

For low-income students, the problem is compounded summer by summer. Allington calculates that by the time low-income students enter middle school, their summer reading losses are equivalent to a two-year achievement gap.

### Tapping into summer

Summer school remains an "untapped resource" says Ron Fairchild, executive director of Johns Hopkins University's Center for Summer Learning. While many schools offer one-shot remedial summer courses, he says, few use summer school to prevent summertime achievement gaps from occurring in the first place.

The Teach Baltimore Summer Academy is one exception. Founded by Matthew Boulay and described by Boulay and Geoffrey Borman in their 2004 text *Summer Learning*, the academy strives to counteract summer learning loss by providing seven weeks of reading and writing instruction to low-income elementary students.

Since it was founded in 1992, the program has served more than 2,100 students and expanded to several Baltimore City public schools. As part of a community service plan, the academy recruits college students, pays them small stipends, and trains them to teach children phonics, vo-

cabulary, and reading comprehension.

The daily schedule begins with an early break, followed by two and a half hours of concentrated reading and writing instruction. Teachers have lunch with their students and then proceed to an afternoon of physical activities; more reading, math, and science; and enrichment lessons such as foreign language and music. In addition, students take weekly field trips to museums and cultural events that teachers integrate into reading and writing lessons.

A 2000 study shows that 350 kindergartners and first-graders who attended summer programs in 11 Baltimore elementary schools outscored 81 percent of nonsummer-school students in the fall. Boulay attributes the program's success to a number of factors, including small classes, emphasis on reading and phonics, and students' regular attendance.

More evidence that schools can stem summer learning loss comes from the BELL Accelerated Learning Summer Program in Boston, New York City, and Washington, D.C.

BELL (Building Educated Leaders for Life) targets disadvantaged K-6 children in low-performing elementary schools in a summer program that runs eight hours a day for six weeks for a total of 240 hours. Certified teachers and trained assistants focus on reading and math in the morning and offer enrichment activities in music, art, sign language, and journalism in the afternoon.

A 2003 evaluation of 343 children showed considerable narrowing of the achievement gap. And it found students gained more than six months of grade-equivalent skills, with the greatest improvement in vocabulary and math concepts and computation. In addition, parents and teachers reported that students had more positive attitudes toward school and learning and that their social skills improved.

Summer programs are by no means an "educational silver bullet," as Matthew Boulay puts it. But programs like Teach Baltimore and BELL's Accelerated Learning Summer Program hold promise for reducing economically disadvantaged children's summer learning loss. Their

greatest strength, Fairchild and Boulay say, is giving struggling students the extra learning time they desperately need.

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