EFP Takeaways

Making the Most of School Vacation: A Field Experiment of Small Group Math Instruction

**Background**

One of educators’ most daunting challenges is to help students who have fallen significantly behind academically. A promising, though expensive, strategy is individualized instruction or tutoring. A more cost-effective option might be to provide small group instruction to students over a week-long vacation period. This approach was adopted by a number of school districts in Massachusetts, and early evaluations of their work suggested positive results.

A new study by Beth Schueler at the University of Virginia in vol. 15, issue 2 of *EFP* extends this previous research via experimental analysis, examining the effects of small group math instruction for struggling students.

**The Study**

This study took place in nine public middle schools in Massachusetts. The schools implemented “vacation academies,” which were week-long intensive small group sessions over spring break. Class size for vacation academies ranged from 5 to 12 students. Teachers were selected via a competitive application process. Over 1,100 students were nominated to participate in the week-long supplemental instruction and were randomly assigned to receive an invitation to a “vacation academy.” Administrative data from two academic years included student demographics, enrollment information, and student scores on standardized tests.

**Findings**

Attendance at the “vacation academies” increased the probability students scored proficient or higher on the Common Core-aligned math exams by 10 percentage points. Analysis indicates positive spillover effects on English Language Arts achievement for students after participating in the “vacation academies.” These effects are also evident in end of course grades for both math and reading. Greater achievement scores were found with teacher specializations, or where teachers rotated through each lesson.

![Math PARCC Performance Levels](image)

After participation in the “vacation academies” students were less likely to face disciplinary measures as measured by out-of-school suspensions. Those participants who were assigned to a single primary teacher for one week of the “vacation academies” had greater reduction in out-of-school suspensions when compared to their counterparts who had teachers rotate through for specific lessons.

These promising results from the “vacation academies” in Massachusetts suggest that intensive, small group instruction can meaningfully benefit students struggling academically. This program is a low-cost, scalable option to help improve student achievement and performance. Other school districts and states should consider adopting similar programs.