Research study yields unexpected conclusion about longer school years

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A five-year randomized study to determine whether kindergarten through third grade students would benefit from an extra 25 days of school was completed with mixed results. The study concluded that students benefited, but only in specific conditions.

The New Mexico StartSmart K-3 Plus Validation Study

was funded by the U.S. Department of Education through an Investment in Innovations Grant, and a group of supporters, including the Annie E. Casey Foundation, J.P. Morgan, Sandia National Laboratories, Kellogg, the Rural School & Community Trust and Pearson and Riverside Publishers. An additional document, the

Supplemental Exploratory Results from the StartSmart K-3 Plus Randomized is also available.

Participating school districts included Albuquerque, Gallup, Gadsden Santa Fe, Roswell, Deming and one-year participation by Las Cruces and Belen. Only schools where at least 70 percent of the students qualified for free or reduced lunches were part of the study.

The University of New Mexico's Center for Education Policy Research (CEPR) worked with Utah State University on the project. UNM CEPR Research Associate Professor Scott Hughes worked directly with the school districts on the study.

In the study, students from kindergarten through the third grade from different schools in a district were randomly assigned to either a control group or an intervention group. Students in the control group attended school during the normal school year. Students in the intervention group started school 25 days before the beginning of the fall term.

All students studied the usual curriculum used at their school. The purpose of the study was to determine whether spending more time in the classroom made a difference in learning skills.

Participation in the study was voluntary, which meant parents were responsible for getting their children in the study up and to school, even if their brothers and sisters or friends were enrolled in school over the summer.

The researchers found most kindergarten students came to class, and as the students got older, they were less likely to show up for the summer classes. About a quarter of the students moved over the course of the study so participation levels fluctuated.

The students were tested in the spring before the end of the regular school year and again just after the start of the regular school year, so the results showed what they learned during the summer session and provide a baseline to measure persistence of effect over the course of the school year.

The best results came with kindergarten students. An evaluator's report completed by researchers from Utah State University, which administered the grant concluded, "We find statistically significant effects of the program on kindergarten readiness in four of the six outcome areas: expressive vocabulary, reading, math and writing. The effect sizes are particularly robust for students on reading outcomes (nearly a third of a standard deviation on the letter-word test) and writing

outcomes (just over a quarter of a standard deviation.)"

They found the effects were smaller for expressive vocabulary and math, and there were no statistically significant effects on social skills or receptive language.

Only 18 percent of the students attended three of the four summers the program was conducted so the researchers had to estimate the program effectiveness.

"After students receive four years of the intervention and area assessed at the beginning of their 4th year of K-12 schooling, we see that students show some gains in reading and math (about a tenth of a standard deviation) as well as in writing (about .15 standard deviations). However, the program does not show statistically significant effects for expressive vocabulary, receptive language or social skills," researchers reported.

New Mexico law give local school boards and administrators great control over their districts. In districts and schools where administrators understood the importance of maintaining students in a classroom with the same teachers for the summer and regular school year, the study showed student progress.

Districts and schools that dispersed students from the summer extended school year program into classes on a regular school year schedule saw little benefit.

In schools where teachers could not be found to commit to the additional 25 days, and a replacement teacher was hired for the summer session, there was less benefit to the students.

Students who speak primarily Spanish at home or in school showed no statistical benefit from the extra time in class.

"If you hold to the model and you are following fidelity with the model with the same teacher in the classroom in summer and for the regular school year, it works," Hughes said.

By implication, in the imperfect world of New Mexico schools, where students in poorer families move frequently, where teachers may not want to teach a 205 day rather than the usual 180 day school year, and where it would take a change of state law to require students to attend school for an extra 25 days, the obstacles to progress may be formidable.

The New Mexico legislature spent approximately $23 million to fund the cost of sending 17,000 students to the program for the 25-day session during the 2014-15 school year.

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