

# Turning “Summer Slide” into “Summer Climb” among Post-First Grade Children in Poverty

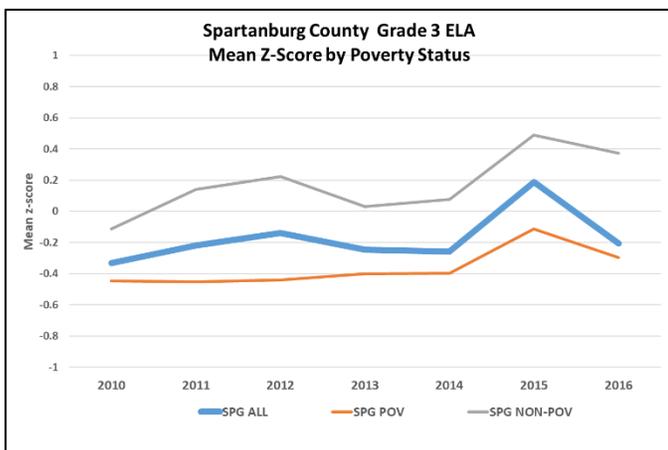
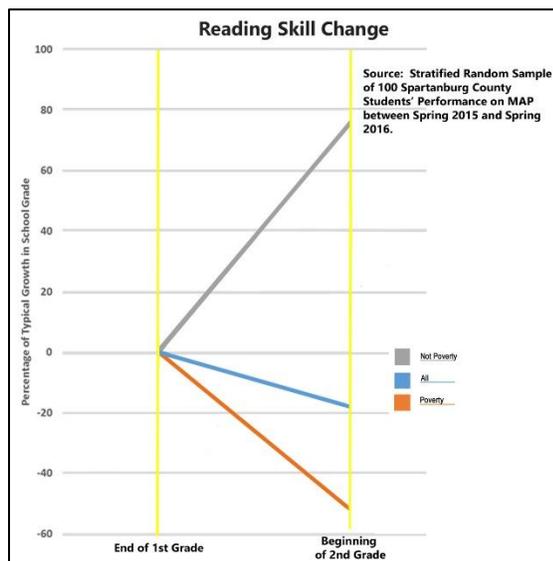
*Cradle-to-Career Outcome Focus: Early Grades Reading*

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**Challenge:** Knowledge and skills developed in school during the early academic years are often diminished during lengthy summer recesses. Research has documented “summer slide” across grade levels and subject areas<sup>1</sup> and its compounding effect upon long-term educational attainment.<sup>2,3</sup> How can we turn “summer slide” into “summer climb” for children in poverty?

**Local Data:** SAM has identified the “slide” phenomenon locally among children beginning as early as the post-first grade summer. Reading Scores (MAP) for end-of-first grade and beginning-of-second grade were compared across a stratified random sample of 100 rising second grade students in Spartanburg County. Analysis revealed the overall impact for summer slide (blue). Further analysis revealed that students in the upper socio-economic group demonstrated substantial reading proficiency gains over the summer (grey) while students in poverty experienced precipitous proficiency loss (red).



Moreover, this summer slide disparity among students in poverty demonstrated between first and second grade carries forward. A longitudinal view of end-of-year third grade standardized testing demonstrates consistent, even expanding, disparity between students in poverty and those not in poverty.

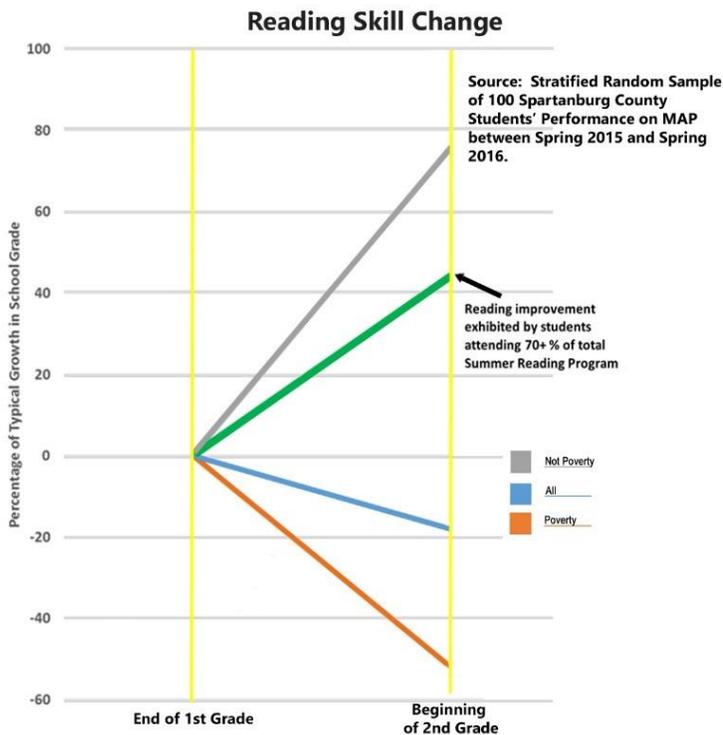
**Hypothesis:** If students in poverty are provided quality instruction during the summer between first and second grade, this slide can be eliminated or reversed.

**Intervention:** Summer reading camps were planned and conducted in multiple school districts across Spartanburg County during the summer of 2017. Camp structures and curricula were determined by each participating district with the stipulation that rising second graders in poverty were to be served. Analysis of intervention results focused on identifying the design and structural variables that yielded the greatest impact on skill retention/loss.

1. <https://www.brokings.edu/research/summer-learning-loss-what-it-is-and-what-can-we-do-about-it/>
2. New York Times, Feb 9, 2012, Education Gap Grows Between Rich and Poor, Studies Say. Sean F. Reardon, Stanford University, Whither Opportunity? Rising Inequality and the Uncertain Life Changes of Low-Income Children.
3. Video: <https://youtu.be/Ahhhj2wsskdM>



**Data Collection and Analysis:** Both qualitative and quantitative data were collected. During the camps, instructional activities were observed by SAM staff to aid in identifying differences in implementation. Following the camps and after fall testing, student performance, demographic and attendance data were gathered and analyzed. Analytical methods included correlational analysis and means testing.



**Findings:** A total of 65 rising second grade students in poverty participated in the summer reading camps. Based on the analysis of student and program data, several factors were identified as strongly related to the reduction of summer slide in reading among the participants. While overall, students participating in the camp continued to lose proficiency, the loss was significantly less than with the baseline group.

The strongest variable influencing summer slide reduction was "regular attendance," defined as students attending 70% or more of the scheduled camp. At that level and beyond, students in poverty averaged a positive growth from spring to fall, approaching the summer climb rate of students not in poverty. Below the 70% attendance rate, students lost some proficiency, though not as much as non-participants. The differences in proficiency changes are reflected in a two-tailed p-value of 0.000175, a statistically significant difference. This effect is illustrated in Figure 3 presenting the reading performance changes as percentages of prior skill attainment.

Other variables, including program length and instructional approaches, did not strongly correlate with summer slide elimination. Likely, the minor differences in these variables across programs explain the absence of significant differences.

**Implications:** Based on the results of the 2017 summer slide intervention pilot, the opportunity for students in poverty to engage in quality reading instruction during the summer recess not only ameliorates loss of reading proficiency but actually accelerates proficiency near the levels of students not in poverty. Regular attendance most likely explains the gain. Following the continuous improvement model, the intervention will be implemented again with the following additional stipulations:

- Incentives for regular student attendance
- Compensation bonuses for teachers for each student eliminating/reversing summer slide
- Minimum enrollments for rising second graders to maximize intervention impact and increase study group

**SAM Partners Engaged in Research:** Spartanburg School Districts 1, 2, 3, 4, 6, and 7; StriveTogether; SAM Early Grades Reading Collaborative Action Network (CAN) Members: Dr. John Stockwell; Dr. Glen Carson; Argyll Brewton (Dist.7); Marquice Clark (Dist. 7); Heather Witt, United Way of the Piedmont

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**Media Coverage:** News Article: [www.goupstate.com/news/20170609/reading-programs-seek-to-prevent-summer-slide](http://www.goupstate.com/news/20170609/reading-programs-seek-to-prevent-summer-slide)



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