



Learning to Read: Growth in the School Year and Summer Loss

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Notes to the reader for interpreting figures:

NCE = Normal Curve Equivalent score
NAI = Needs Additional Intervention

AGL = At Grade Level
NSI = Needs Substantial Intervention

Findings

Students participating in the South Carolina Reading First (SCRF) Initiative showed increases in student achievement during the school year and substantial losses in achievement over the summer months. (Figure 1)

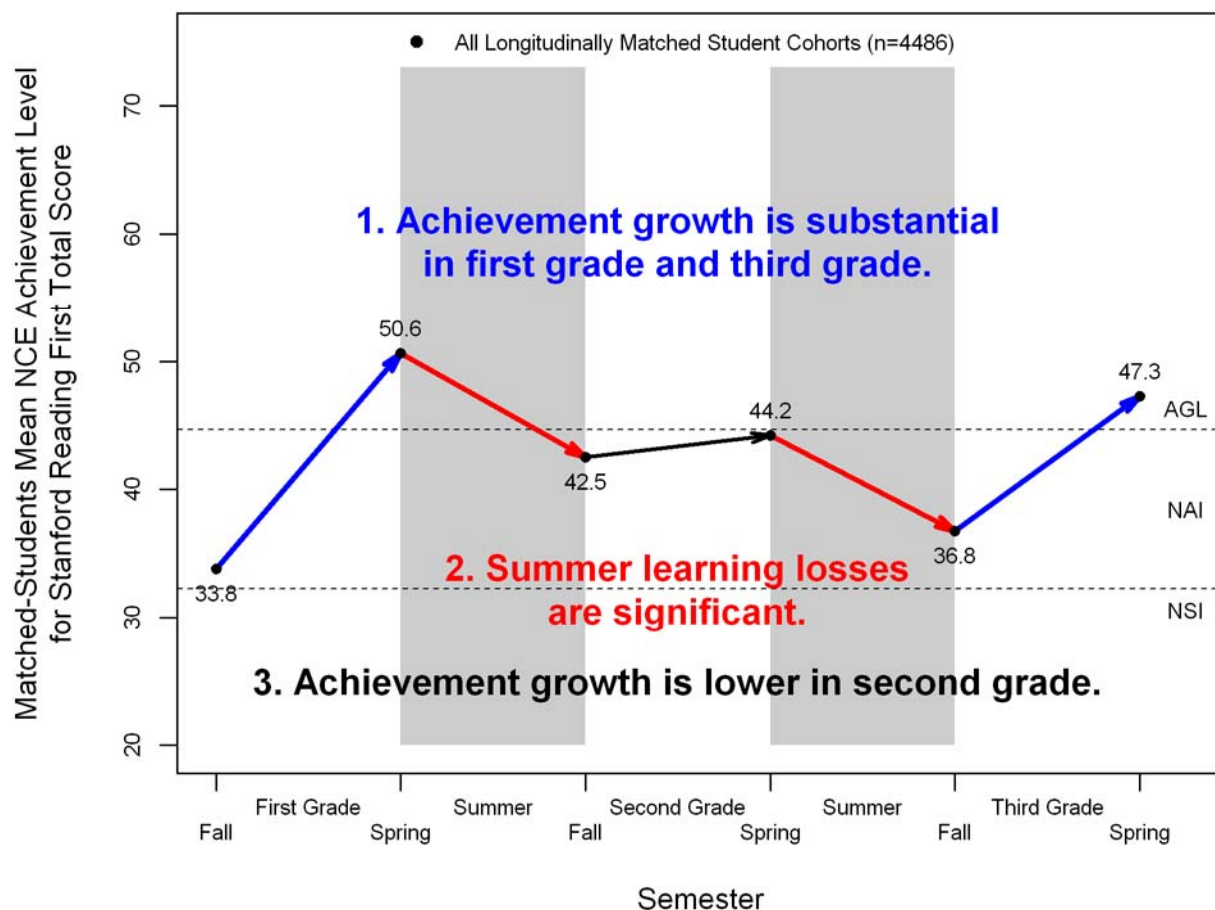


Figure 1. Pattern of seasonal learning for students in the South Carolina Reading First Initiative

Students at all performance levels at the beginning of first grade experienced academic year performance gains and summer learning losses (Figure 2).

- Students starting first grade at grade level (AGL) made lower average gains in first grade than students who initially scored in the needs additional intervention (NAI) or needs substantial intervention (NSI) categories. These AGL students also showed greater summer losses between first and second grade than students who started the school year in the NAI or NSI categories.

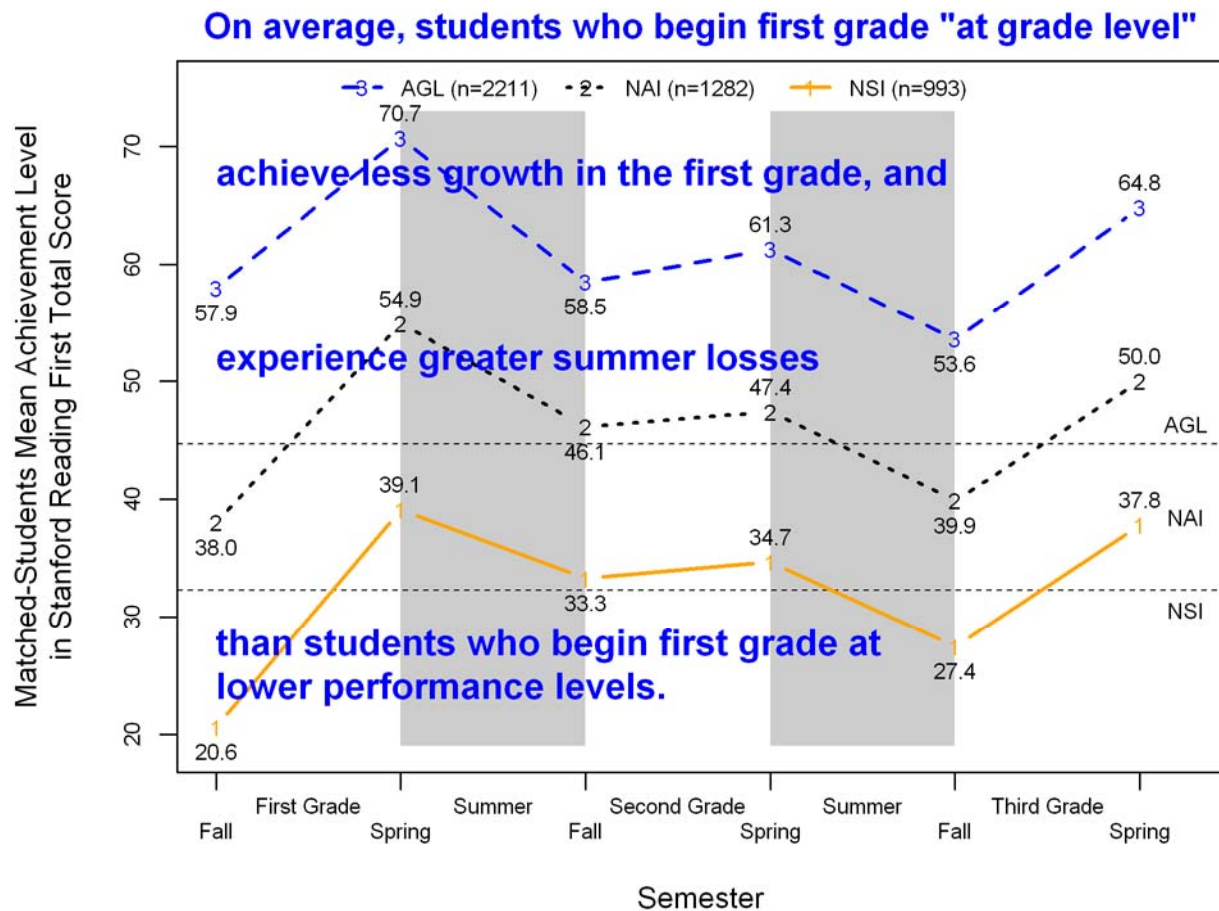


Figure 2. Mean NCE scores by students' initial performance level in first grade.

All subgroups of students experienced the same general pattern of academic-year gains and summer losses, but substantial quantitative differences occurred between subgroups of students (Figure 3).

- Males, minority students, and students of low socioeconomic status (SES) performed consistently lower than other subgroups of students.
- Students' achievement growth was severely hindered when several risk factors were present. For example, low-SES African American males had the smallest achievement gains during the school year and demonstrated the greatest summer learning loss.

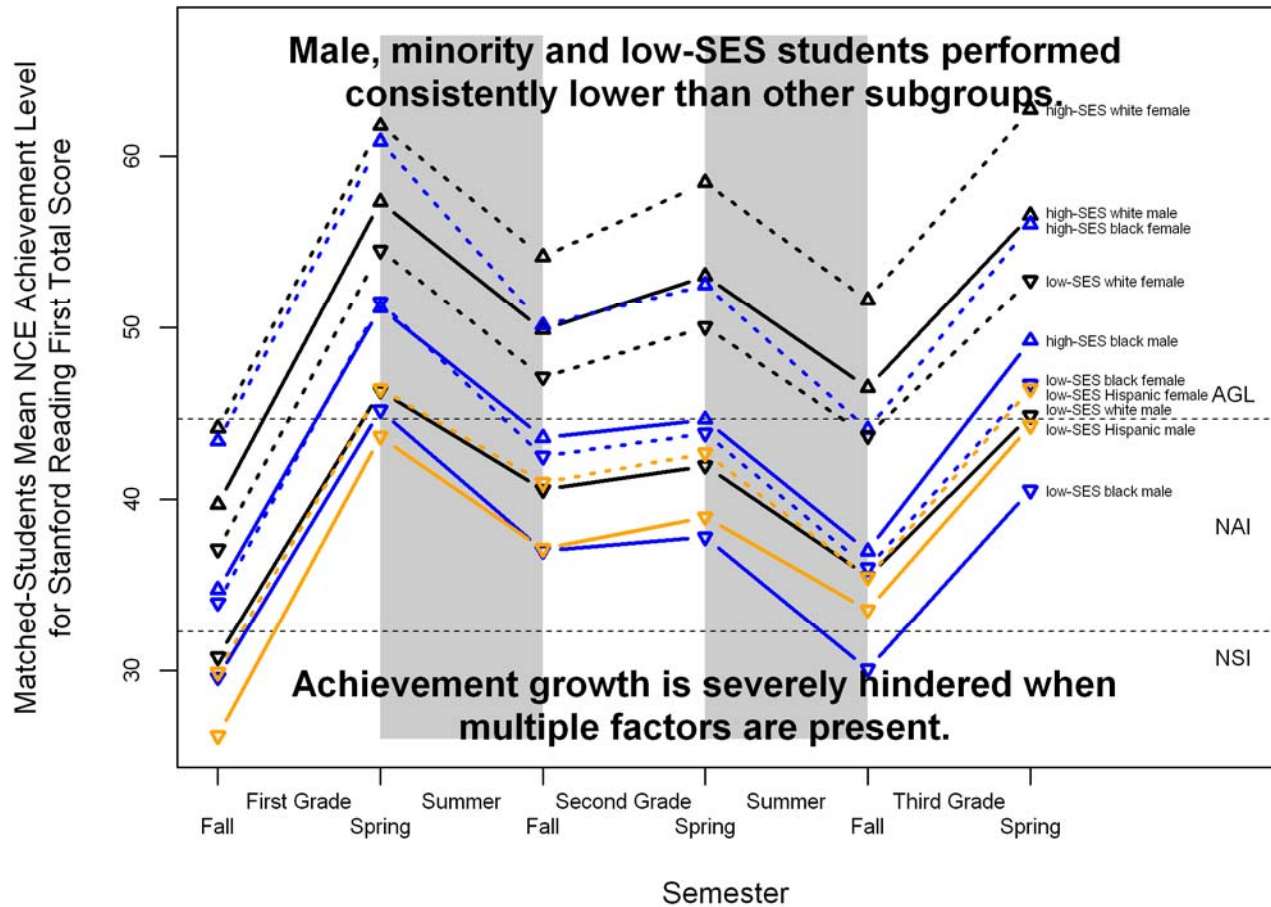


Figure 3. Mean student NCE scores by gender, ethnicity, and SES.

Background

The South Carolina Educational Policy Center and the Office of Program Evaluation in the College of Education at the University of South Carolina were the evaluators for the SCRF Initiative that was implemented from 2004 to 2010. The SCRF Initiative provided four critical program elements to schools with large populations of at-risk students:

1. **professional development to teachers** in research-based reading instruction, as well as using feedback from student assessments to make data-driven decisions and guide instruction,
2. **school literacy coaches** to assist teachers and administrators with implementing research-based instructional strategies and lead on-going professional development sessions,
3. **interventionists** to identify underachieving readers and facilitate small-group and one-on-one interventions, and
4. **leadership structures**, such as School Intervention Teams and School Leadership Teams, at the school and district level to build the capacity to support sustainable coordination of interventions.

The student sample for this study consisted of students in SCRF schools who participated in the Initiative during three consecutive years in the first, second, and third grade ($n=4,486$). Four longitudinally matched cohorts of students received SCRF services from 2004 to 2010 and had both fall and spring scores on the student achievement test. To measure student achievement, the evaluators used the Stanford Reading First (Stanford RF) assessment, a vertically-equated, nationally-normed test that permits both meaningful growth assessments over time and comparisons to a nationally representative sample. Because comparisons with the national norm group for the Stanford RF were of interest, normal curve equivalent (NCE) scores were used in this study.

Implications for Policy and Practice

This study provides several implications for improving policy and practice including:

- While the findings of school-year achievement gain and summer loss are consistent for the population of students in grades one through three who received SCRF services, these results cannot be generalized to all students in the state. Additional analyses should be performed using other assessment data such as Measures of Academic Progress (MAP), which are utilized by many districts and administered more than one time per year in a range of grade levels.
- Student reading achievement should be measured at least twice each year to assess growth within grades as well as between academic years. The first measurement should take place early in the school year to capture possible seasonal learning patterns. The assessment should be vertically equated to ensure that meaningful growth determinations can be made to track progress at an individual student level.
- Future reading programs should incorporate research-based strategies or programs to mitigate summer loss in student reading achievement, particularly for at-risk students. Many of South Carolina's students could achieve higher levels of reading performance if they did not have to overcome significant summer achievement losses each year.

Contact

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