# Secret Stories® Study:
Kindergarten, Georgia

Study Summary

The case study teacher implemented Secret Stories® in their kindergarten class in rural Georgia in the fall of 2018. The efficacy of Secret Stories® was monitored in this case study using a pretest/post-test model, based on the DIBELS® assessment. **A mean effect size of 1.89 was found for this case study**, suggesting a very high magnitude of effect for Secret Stories®.

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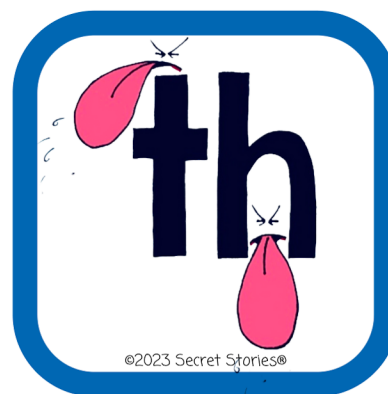
The results of this case study were extremely high with 'super' effect sizes above 2 for multiple effects, including letter identification and sounds which showed the highest effect size at 3.1. Not only did this class show tremendous growth, the average student outperformed the DIBELS® projected score by almost 20%. Additionally, nearly all students (94%) exceeded their end-of-year phonemic awareness goals, and half doubling their phonics/decoding goals. Similarly, nearly all students (94%) exceeded end-of-year Nonsense Word Fluency goals as well. In fact, the class average growth for Nonsense Word Fluency (23) was more than double the typical growth (10) by the end of the year.

Product Description

Secret Stories® is a multisensory, neuroscience based approach to fast-tracking phonics skills for reading that can be used alongside any reading or phonics curriculum. Rooted in the science of reading and aligned with early brain development, Secret Stories® uses familiar schemas to help children make sense of the sounds letters make together, along with embedded mnemonic images to help them remember for independent reading and writing.
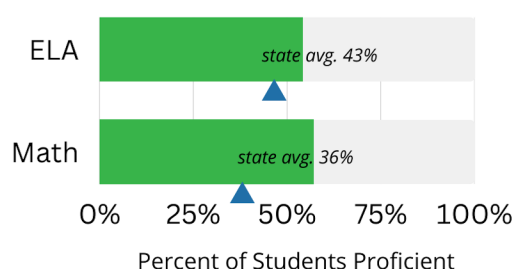
School Setting

The case study school is a slightly above average-performing school for the state, with 54% of students achieving grade-appropriate reading levels. The majority of students are Caucasian, with a sizable minority of Black students. 53% of students are from low-income families.
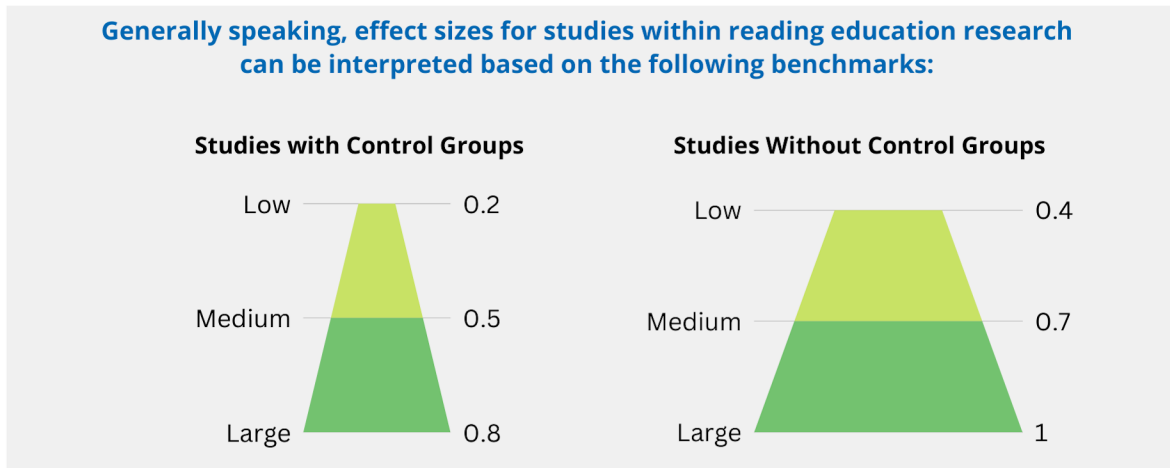
Figure 1: Enrollment by Ethnicity

Two or more races 3%
Other 2%
Black 25%
White 67%
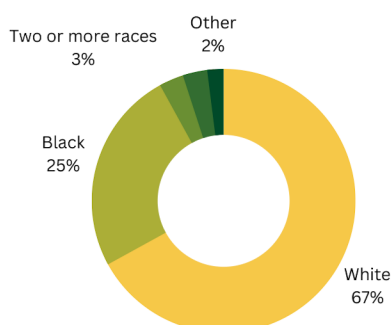
Source: nces.ed.gov

Figure 2: District Summary Ratings

ELA — state avg. 43%
Math — state avg. 36%

Percent of Students Proficient

Methodology

Efficacy of Secret Stories® was measured using a *Hedge's G* calculation on the change from pretest to post-test DIBELS® scores. There were 18 students within the sample, although one student was absent during the Decoding subtest. All effect sizes were independently calculated by a second writer to ensure data integrity.

Generally speaking, effect sizes for studies within reading education research can be interpreted based on the following benchmarks:

Studies with Control Groups		Studies Without Control Groups	
Low	0.2	Low	0.4
Medium	0.5	Medium	0.7
Large	0.8	Large	1

Key Findings

Effect sizes above 2 are considered "super effect sizes." As this study showed effect sizes above 2 for multiple effects, it should be seen as persuasive evidence for the efficacy of Secret Stories®. Letter identification and sounds showed the highest results in this study with an effect size of 3.1. Nearly all students (94%) exceeded their end-of-year phonemic awareness goals, and half doubling their phonics/decoding goals. Similarly, nearly all students (94%) exceeded end-of-year Nonsense Word Fluency goals as well. In fact, the class average growth for Nonsense Word Fluency (23) was more than double the typical growth (10) by the end of the year.

Figure 3: **Comparison of Students' Projected and Actual Growth on DIBELS®**
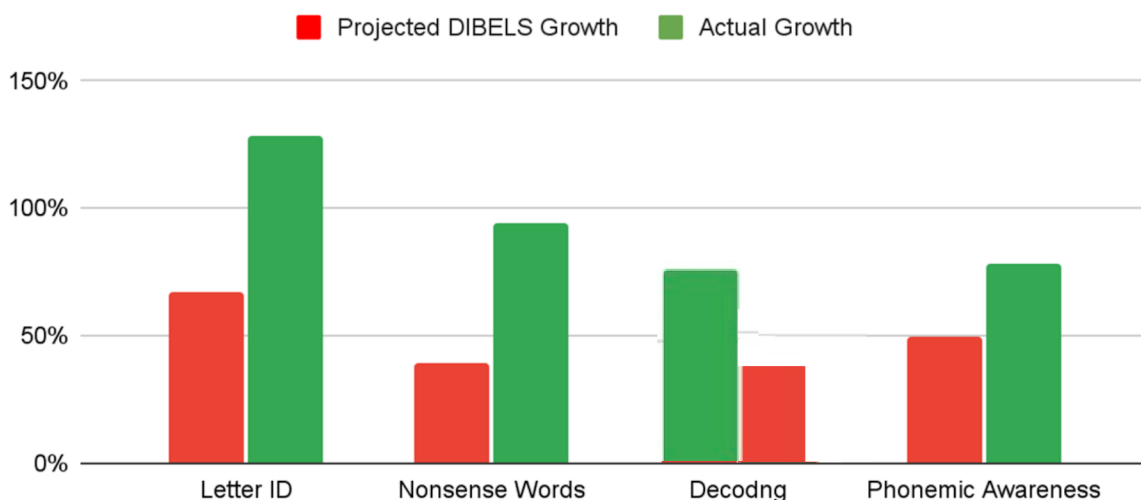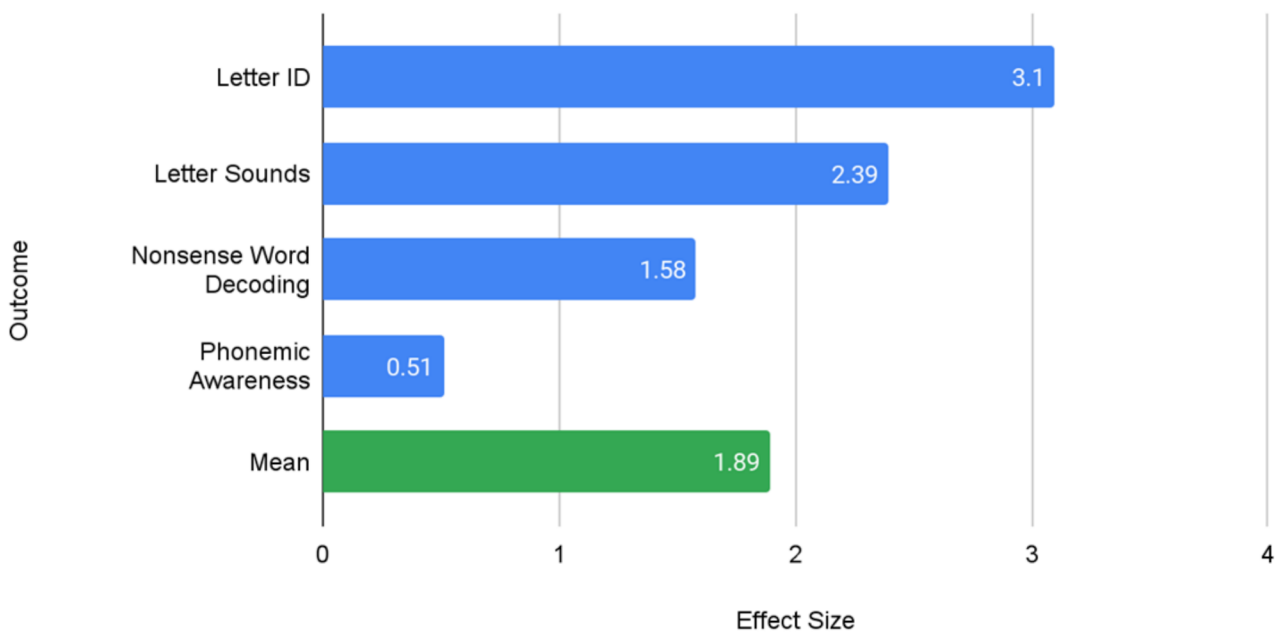
Table 1: DIBELS® Mean Score Comparison from Fall to Spring

DIBELS Scores	Fall Mean	N	Spring Mean	N	Effect Size (Hedge's g)
Letter ID	21.94 (13.38)	18	60 (11.07)	18	3.1
Phonemic Awareness	50.94 (13.84)	18	58.22 (14.27)	18	0.51
Nonsense Word Decoding	37.55 (10.06)	18	61 (18.36)	18	1.58
Decoding	21.17 (8.43)	17	45.66 (11.74)	18	2.39

Figure 4: **Effect Sizes on DIBELS®**

Conclusion

While the results of this study were extremely high, they are likely higher than they would have been if the students were compared to a control group. Effect sizes above 2 are considered to be "super effect sizes." As this study showed effect sizes above 2 for multiple effects, it should be seen as persuasive evidence for the efficacy of Secret Stories®. Additionally, the results of this study suggest that Secret Stories® promotes significant growth on multiple skills needed for early literacy development.

Research Limitations

This study report was written and analyzed via secondary data analysis, as the authors did not design the study. Fidelity of implementation of Secret Stories® could not be verified with this study.

Ethics Agreement

This case study was written by an independent firm on behalf of Secret Stories®, under a contractual agreement that all results would be published, regardless of outcomes and that no data would be withheld from said firm. All data and methods were independently checked by a third party education research firm not associated with Secret Stories®, or the writers of this report.

Independent Verification

Learning Experience Design (LXD)
Research & Consulting
a division of Charles River Media Group, LLC

This case study was written by an independent analyst on behalf of Secret Stories who verified the results.
All reports were also independently reviewed by Learning Experience Design Research, a third-party education research firm.