# Secret Stories® Case Study: Kindergarten, Idaho

## Study Summary

The case study teacher implemented Secret Stories® in their Kindergarten classroom in rural Idaho in the fall of 2022. Pre-test scores were taken in the fall for the MAP® test and post-test scores were taken in the spring. Post-test results were compared to the projected results of the MAP® software to evaluate the efficacy of the Secret Stories® tool. **The treatment class outperformed their projected MAP® scores by a Hedge's g effect size of 1.35**, suggesting a large effect for Secret Stories®.


While the school averages only 57% of students meeting grade level expectations,100% of the treatment class reached grade level or above, with 77% of students exceeding grade level expectations by one or more grade levels in reading. Additionally, the class average was 16% ahead of the national average for MAP® scores. This is especially impressive considering that none of the students knew any letters or sounds at the beginning of the school year.

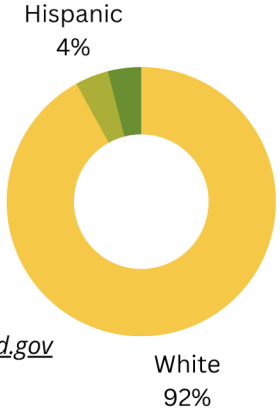
## Product Description

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

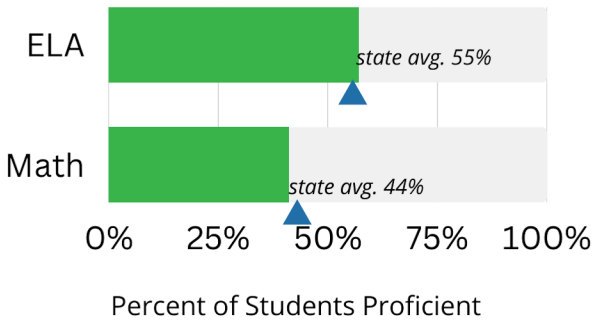
The case study school is located in rural Idaho. 92% of its population is Caucasian. It is an average-performing school. On average the school has 17 students for every teacher.

***Figure 1*: Enrollment by Ethnicity**




*Source: nces.ed.gov*

***Figure 2*: District Summary Ratings**

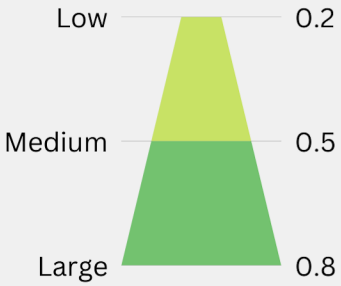


# Methodology

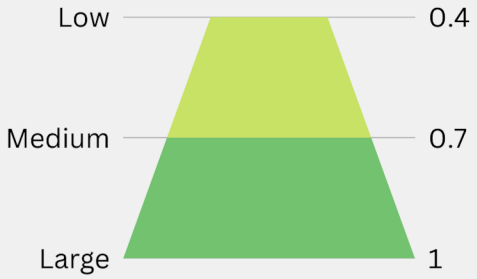
The primary test used in this study was MAP®. All comparisons were made with this test. MAP® assesses students on their reading skills, including letter ID, decoding, and phonemic awareness. An effect size was calculated by comparing the difference with the projected scores and actual post-intervention scores. The effect size was calculated using *Hedge's G*. The effect size was independently calculated by a second writer, to ensure integrity and then reviewed by an independent third-party research firm.

**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**




# Key Findings

***Table 1*: Student MAP® Reading Scale Scores**

| Group | Post Mean | Standard Deviation | N | Effect Size (Hedge's g) |
|---|---|---|---|---|
| **Treatment** | 162.8 | 5.31 | 22 | |
| **Projected** | 155.64 | 5.20 | 18 | 1.35 |

***Figure 3*: End-of-Year Reading Levels for Secret Stories® Kindergarten Class**

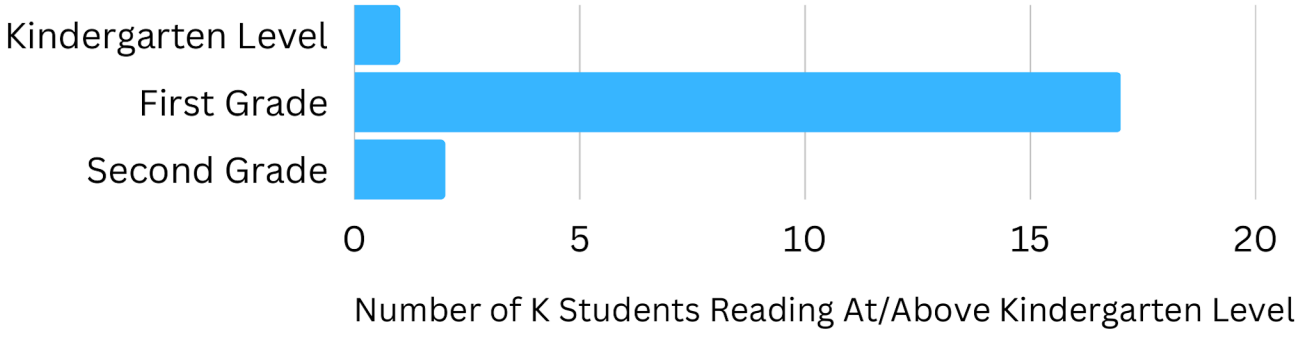
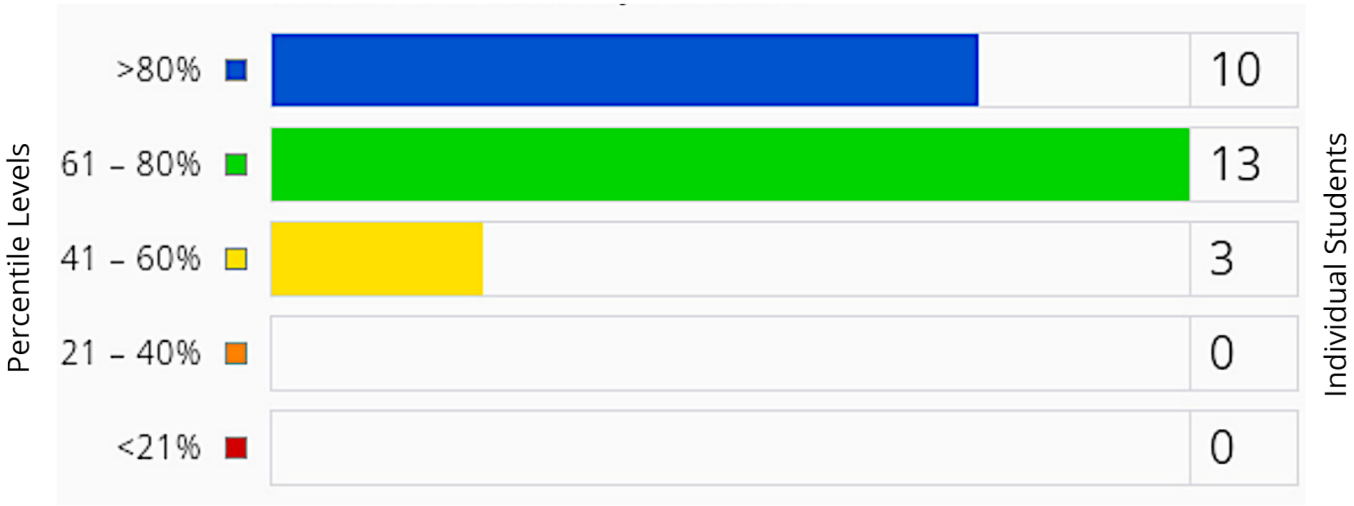


***Figure 4:*** **Student MAP® Percentile Scores**




## Conclusion

This analysis showed a very high effect size for student reading scores, suggesting a high level of efficacy for Secret Stories®. At the beginning of the year, none of the students in the treatment group knew any of their letter names or sounds. By the end of the year, 15 out of 18 students beat their projected score and the class average was 16% ahead of the national average for MAP® scores. 17 out of the 22 kindergarten students were reading at a grade 1 level or higher, with 2 students reading at a grade 2 level (Figure 3). The treatment teacher also noted a wide disparity between the majority of students' "projected growth" in the fall and their "observed growth" made (which for many, was extreme). The school averages 57% of students meeting grade level expectations, whereas in this class, 100% of students reached grade level or above, and 77% of students exceeded grade level expectations.

## References

NWEA Research. (2020). Comparative data to inform instructional decisions. Retrieved from <https://teach.mapnwea.org/impl/MAPGrowthComparativeData.pdf>.

## 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
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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.