SAVVAS
LEARNING COMPANY

iLit Research Overview

Evidence of Effectiveness

A Summary of the Results 2013-2015 Longitudinal Efficacy Study

Overview

Savvas strongly believes that its programs should be proven through scientific research to increase student achievement. As such, it contracted with the independent research group Gatti Evaluation to conduct a longitudinal randomized, control trial of its *iLit* literacy program. This study was conducted in 7th grade classrooms over the 2013-14 school year and in 8th grade classrooms during the 2014-15 school year. This report summary presents an excerpt of findings from the final report, including the evaluation design and methods, a description of program usage and implementation, student performance results, and a discussion of the findings of results. The full results of the report are available upon request.

Study Design and Research Questions

The purpose of this study is to assess the longitudinal effectiveness of the *iLit* literacy program in helping students attain critical literacy skills and to document usage and implementation of the *iLit* program. The study employed an experimental randomized, control trial research design. That is, students within each research school were randomly assigned to either use the *iLit* program with their students (also referred to as the "treatment" group) or to continue using their current school literacy program (also referred to as the "comparison" condition).

The study addressed the following overarching evaluation questions:

1. Do middle school students receiving core literacy instruction from the *iLit* program over the course of the initial and second school year of implementation demonstrate a significant improvement in achievement?
2. Do middle school students receiving core literacy instruction from the *iLit* program over the course of the initial and second school year of implementation demonstrate a significant improvement in achievement over otherwise similar students in classrooms using their current literacy programs and methods (i.e., not fully digital)?
3. Do students receiving *iLit* instruction demonstrate positive attitudes toward reading and literacy instruction?
4. How are teachers implementing the *iLit* program and how can this information inform program revisions and best practices?
5. How did teachers and students react to the *iLit* program?

Participants and Setting

Gatti Evaluation recruited six schools to participate in the study, including schools in AZ, CA, CO, MI, NJ and NY. The study schools were members of public school districts located in suburban and urban areas. The final study sample included 250 students from 19 classes. The study sample demonstrated considerable variation in ethnicity and socioeconomic status as evidenced by eligibility for free or reduced lunch status. Figure 1 presents the sample demographics broken out by *iLit* and comparison students.

Figure 1: Site Demographics

iLit RCT 2013-14 Sample Demographic Information								
Group	Grade	Student Count	Not English Proficient	Free/Reduced Lunch	Percent Caucasian	Percent Hispanic	Percent African American	Other or No Information
Whole Sample								
iLit	7	128	23%	77%	23%	53%	19%	5%
Comparison		122	28%	81%	20%	61%	15%	4%
Arizona District								
iLit	7	25	36%	100%	0%	100%	0%	0%
Comparison		29	28%	100%	3%	97%	0%	0%
California District								
iLit	7	17	6%	65%	18%	47%	6%	29%
Comparison		10	0%	60%	10%	60%	10%	20%
Colorado District								
iLit	7	11	0%	9%	91%	0%	9%	0%
Comparison		9	11%	11%	89%	11%	0%	0%
Michigan District								
iLit	7	20	0%	70%	80%	0%	20%	0%
Comparison		18	0%	72%	83%	11%	6%	0%
New Jersey District								
iLit	7	11	0%	73%	9%	27%	55%	9%
Comparison		11	0%	100%	0%	36%	55%	9%
New York District								
iLit	7	44	43%	91%	0%	73%	27%	0%
Comparison		45	56%	87%	0%	73%	22%	5%

Measures

Multiple measures were used to assess student achievement, program implementation, and student attitudes.

Evaluators selected the Group Reading Assessment and Diagnostic Evaluation (GRADE) to measure changes in student literacy skills because of its broad visibility and acceptance in the field and high technical merit. The GRADE is a standardized, norm-referenced assessment that is group-

administered. It offers parallel forms, with Form A administered within one month of the start of school and Form B administered within one month of the conclusion of school. The GRADE is not a timed test, but generally takes 50 – 90 minutes to complete. The GRADE offers an overall Literacy score, as well as four subtests; Vocabulary, Sentence Comprehension, Passage Comprehension, and Listening Comprehension. The GRADE was administered three times during the school year. Form A was administered in the fall and spring and Form B was administered mid-year.

In order to measure program implementation and teacher perceptions, evaluators collected data through observations, surveys, and interviews with literacy teachers. Literacy teachers (treatment and comparison) also completed weekly implementation logs. This information provided researchers with a detailed data source on what was occurring in treatment and comparison classrooms in terms of literacy instruction, and allowed researchers to identify areas of overlap in terms of content taught and activities. The biannual classroom observations and interviews or focus groups with classroom teachers provided critical insight into the nature of use and the effectiveness of the literacy materials used with treatment and comparison students.

Additionally, student academic attitude surveys were administered in the fall and spring of the study year. The survey was developed by Gatti Evaluation, and included questions related to general literacy attitude, confidence, motivation, and self-perceived aptitude.

Student Performance Results

Results for *iLit* Students

Almost a quarter (i.e., 24.7%) of those students starting the study, did not remain in the study until the end of the second school year. To best guarantee the results of the study would be unbiased, the data analyses incorporated the Multiple Imputation (MI) method. The advantage of MI is that when the mechanism causing the non-response is the same for both the observed and un-observed data (i.e., ignorable non-response, missing at random) MI produces unbiased and consistent pooled results, including estimates for standard errors and confidence intervals.

Year 1 Results

Students using *iLit* achieved gains in reading achievement after one year of program implementation. All *iLit* students in grade 7 experienced statistically significant gains on the GRADE Total test, Vocabulary, Sentence Comprehension, Listening Comprehension and Total Comprehension tests.

Gains are represented as percentile ranks for an *iLit* student scoring above the average baseline score. *iLit* students gained 11 percentiles on the GRADE Total test and 14 percentiles on the Vocabulary test after one year of using *iLit*. Additionally, *iLit* students gained 8 percentiles on the Total Comprehension, 10 percentiles on the Sentence Comprehension, 31 percentiles on Listening Comprehension and 5 percentiles on Passage Comprehension.

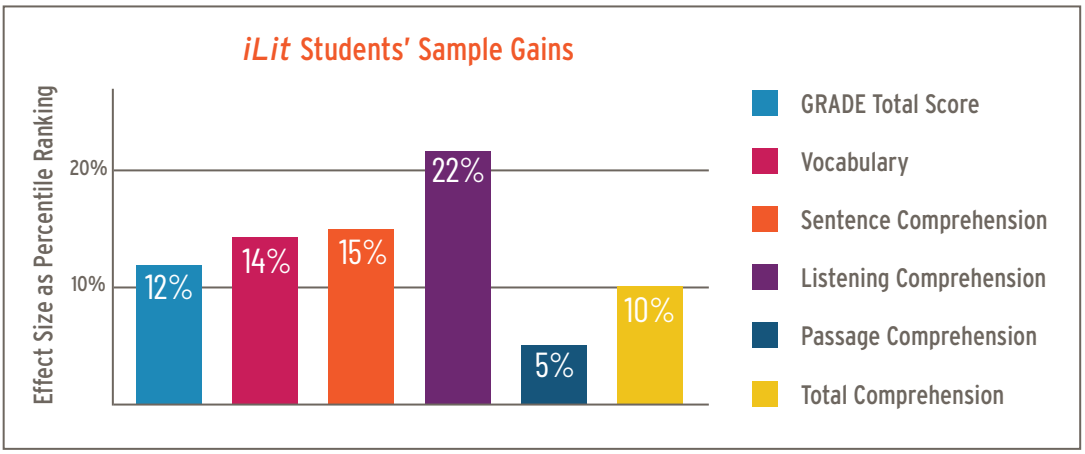
Year 2 Results

Students using *iLit* achieved gains in reading achievement after two years of program implementation. The gains increased in size during the second year of implementation for GRADE Total, Vocabulary, Sentence Comprehension and Total Comprehension. All *iLit*

students in grade 8 experienced statistically significant gains on the GRADE Total, the four subtests (i.e., Vocabulary, Sentence Comprehension, Listening Comprehension and Passage Comprehension), and on Total Comprehension. Statistically significant gains were seen for GRADE Total test (which combines Reading Comprehension and Vocabulary), Vocabulary, Sentence Comprehension, Listening Comprehension, and Total Comprehension.

Gains are represented as percentile ranks for an *iLit* student scoring above the average baseline score. *iLit* students gained 12 percentiles in GRADE Total test and 14 percentiles in Vocabulary after two years of use. Additionally *iLit* students gained 15 percentiles in Sentence Comprehension, 22 percentiles in Listening Comprehension, 5 percentiles in Passage Comprehension and 10 percentiles in Total Comprehension. (See Figure 2).

Figure 2. *iLit* Student Gains



Results for *iLit* Compared to Control Students

Year 1 Results

Evaluators conducted analyses to examine how *iLit* students performed in comparison to students using other reading programs. Results showed that 7th grade *iLit* students performed as well as their peers using other reading programs on the GRADE Total test, Vocabulary, Sentence Comprehension, Passage Comprehension, and on Total Comprehension. Students using *iLit* from high implementing classes performed as well as comparison students on all achievement outcomes.

Additionally, results indicated *iLit* students statistically significantly outperformed their peers using other reading programs on Listening Comprehension. The average *iLit* students gained 7 percentiles more than the average comparison student on the Listening Comprehension test. Conversely, comparison students statistically significantly outperformed *iLit* students from medium implementing classes in Sentence Comprehension. The average comparison student gained 4 percentiles more than the average *iLit* student on the Sentence Comprehension test.

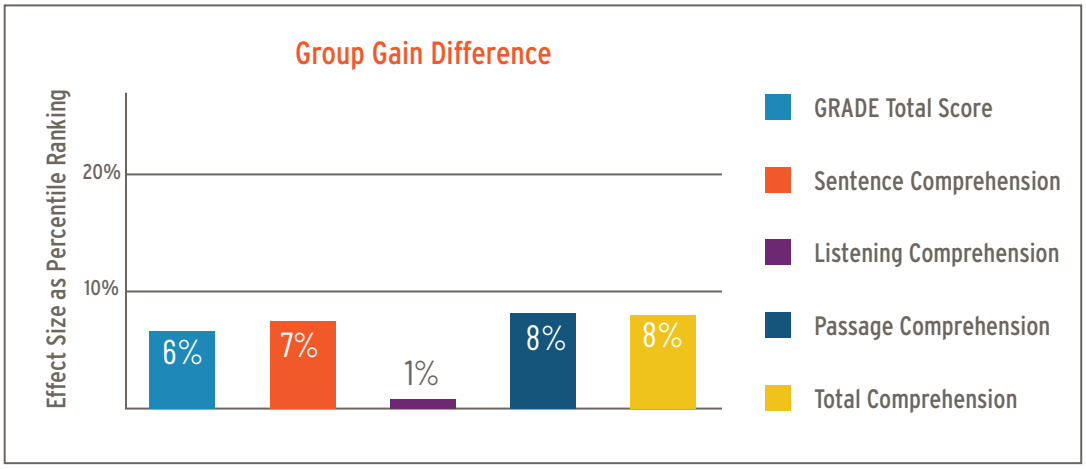
Year 2 Results

Evaluators also conducted analyses to examine how *iLit* students performed in comparison to

students using other reading programs after two years of implementation. Results showed that 8th grade students using *iLit* made greater gains than their peers using other reading programs on the GRADE Total test, Vocabulary, Sentence Comprehension, Listening Comprehension, Passage Comprehension and Total Comprehension. On the Grade Total test, Sentence Comprehension subtest, Passage Comprehension subtest and Total Comprehension test, *iLit* students statistically significantly outgained their comparison peers by the end of two school years.

The average *iLit* student gained 6 percentiles more than the average comparison student on the GRADE Total test, 7 percentiles more than the average comparison student on the Sentence Comprehension test, 8 percentiles more than the average comparison student on the Passage Comprehension test and 8 percentiles more than the average comparison student on the Total Comprehension test. (See Figure 3).

Figure 3. Gain Difference Between *iLit* and Comparison Group



iLit Implementation

In Year 1, the average daily use of *iLit* was 97 minutes of daily literacy instruction. On average, 70 full lessons were completed over the course of the school year by *iLit* teachers. The most common used components included Work time which was implemented 99.81% of the time, Read Aloud Think Aloud which was implemented 99.55% of the time, Vocabulary which was implemented 99.34% of the time, and Whole Group Instruction which was implemented 98.48% of the time. The End of Unit Performance Assessments were utilized 99.81% of the time.

In Year 2, the average daily use of *iLit* decreased to 80 minutes of daily literacy instruction. On average, 66 full lessons were completed over the course of the school year by *iLit* teachers. The most common used components in Year 2 were Work Time which was implemented 90.12% of the time, Read Aloud, Think Aloud which was implemented 90.12% of the time, Vocabulary which was implemented 89.87% of the time and Whole Group Instruction which was implemented 87.87% of the time.

The *iLit* teachers implemented the *iLit* program with fidelity both years of the study. Observers rated each *iLit* teacher's program implementation twice over the course of the school year. During these observations *iLit* teachers were rated on general classroom indicators and usage of specific program components. Teachers that met expectations on the indicators and component usage were deemed

medium implementers. Teachers that were rated high implementers were characterized by consistently exceeding expectations on the indicators and component usage. Five *iLit* teachers were meeting expectations and considered medium implementers. Three *iLit* teachers consistently exceeded expectations and were considered high implementers.

Participant Feedback

Student Attitudes

In addition to providing evidence of efficacy, Gatti Evaluation investigated other outcomes associated with use of the *iLit* program.

When *iLit* students were surveyed as to their opinions of the program, the majority demonstrated an overall positive attitude toward the *iLit* program. Several notable themes emerged, including: 85.9% of students reported they "definitely" or "sometimes" preferred *iLit* to their previous English class, 81.7% reported *iLit* was "definitely" or "sometimes" more interesting, and 41.3% wanted to continue using *iLit* next year. In Year 2, there was a decrease in students overall attitude towards the *iLit* program as they became accustomed to using the program.

Teacher Attitudes

The teacher response to the *iLit* program was overall positive. The *iLit* teachers reported that *iLit* was easy to implement, well-paced, and they liked the daily components of the lessons. Additionally the majority of *iLit* teachers, 67%, reported the program's content was appropriately difficult and personalized and 83% of teachers reported *iLit* had adequate skills practices and progress monitoring. Approximately half the teachers would recommend *iLit* to a colleague.

Teachers were also asked how students were engaged with iLit. Over half the teachers, 78%, reported that students were engaged with the program through iPad use, interactivity, lesson presentations, and the vast library of independent reading. It was, however, reported that teachers felt student motivation did decrease as the school year progressed. One teacher commented, *"iLit is an amazing program. I have been teaching for 16 years and it is the most engaging, comprehensive program that I have come across."*

Conclusion

This study indicates that *iLit* is effective at significantly increasing student literacy achievement and that students in high implementing classrooms performed similarly to their comparison peers. The *iLit* teacher and students using *iLit* reported satisfaction with the program. In particular, most teachers found the program very engaging for students and would recommend *iLit* to colleagues. In sum, scientific research indicates that the *iLit* program is an effective and useful program for both teachers and students.

About Academic and Product Research at Savvas

Savvas Academic & Product Research team conducts formative and summative research that directly informs the development of K-12 instructional programs. The mission of this team is to provide Savvas product developers with learner-centered insights and scientific data to drive the development of effective, industry-leading learning solutions.

About Gatti Evaluation, Inc.

Gatti Evaluation was founded in 2003 to provide assistance in researching current topics in education and biomed. Gatti has extensive experience managing and consulting on large research projects for Fortune 500 companies and major academic institutions. Gatti researchers hold advanced degrees in Research Methods and Education. They also collaborate with numerous hand-picked, world-renowned researchers, practitioners, and academic research centers.