

SuccessMaker® Reading Evidence of Effectiveness

A Summary of the Randomized, Control Trial Conducted by Gatti Evaluation, Inc.

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SuccessMaker Reading Summative Research Overview

Pearson Digital Learning strongly believes that its programs should be proven through scientific research to increase student achievement. As such, it contracted with independent research group Gatti Evaluation, Inc., to conduct a randomized, control trial of its *SuccessMaker Reading* program. The study was conducted in 3rd, 5th, and 7th grade classrooms over the 2010-11 school year. This report summary presents the evaluation design and methods, an assessment of program usage and implementation, student performance results, and a discussion of findings.

Study Design and Research Questions

The purpose of this study was twofold. The primary goal to conduct rigorous research to support the assertion that *the SuccessMaker Reading* program effectively increases students' English language arts achievement, specifically vocabulary, comprehension, and fluency, as well as academic attitudes. The second goal of the study was to collect information on teacher and student attitudes toward specific features and aspects of the *SuccessMaker* program. The study employed an experimental randomized, control trial research design. That is, teachers within each research school were *randomly assigned* to either use the *SuccessMaker Reading* program with their students (also referred to as the "treatment" group) or to refrain from using the *SuccessMaker Reading* program (also referred to as the "comparison" condition). Teachers assigned to the comparison condition did not regularly use a computer-based adaptive reading program.

The study addressed the following overarching evaluation questions:

1. Do students using the *SuccessMaker Reading* program demonstrate a significant improvement in achievement over their non-*SuccessMaker* counterparts?
2. Do students using the *SuccessMaker Reading* program demonstrate more positive attitudes toward reading and reading instruction when compared to non-*SuccessMaker* counterparts?
3. How did teachers and students react to the *SuccessMaker Reading* program?
4. How was the *SuccessMaker Reading* program implemented, and how are teachers using program reporting to monitor progress and inform instruction?

Participants and Setting

Gatti Evaluation recruited eight school districts to participate in the study, including schools in Arizona, California, Indiana, Kansas, Michigan, Missouri and Texas. The final analytic sample was comprised of 80 classrooms and 1,711 students. The study schools were members of public school districts located in suburban and urban-fringe areas. The study sample demonstrated considerable variation in ethnicity, socioeconomic status as evidenced by eligibility for free or reduced lunch status, and English language learner status, as well as a wide range of reading achievement levels as evidenced by previous year state reading assessment data. Figure 1 presents the full study sample demographics broken out by school.

Figure 1. SuccessMaker Reading Study Sample Demographic Information

District	Group	Grade	Student Count*	% One Grade Equivalent Below**	% Not English Proficient	% Reduced Lunch	% Caucasian	% Hispanic/ Native American	% African American/ Caribbean	Other Ethnicity or No Information
Arizona District 1	SM	3	55 (97%)	15%	0%	27%	94%	4%	2%	0%
	Comparison		49 (91%)	18%	0%	16%	92%	4%	2%	2%
	SM	5	48 (84%)	6%	0%	35%	90%	4%	0%	6%
	Comparison		52 (88%)	8%	0%	35%	87%	12%	0%	1%
Arizona District 2	SM	7	58 (94%)	38%	3%	64%	40%	43%	14%	3%
	Comparison		31 (91%)	61%	19%	65%	29%	55%	13%	3%
California District	SM	3	48 (96%)	10%	4%	0%	50%	4%	2%	44%
	Comparison		25 (100%)	0%	0%	0%	40%	8%	0%	52%
	SM	5	54 (93%)	2%	0%	2%	46%	6%	0%	48%
	Comparison		55 (93%)	9%	0%	5%	42%	7%	5%	46%
Indiana District	SM	3	36 (100%)	19%	0%	47%	100%	0%	0%	0%
	Comparison		41 (100%)	27%	0%	24%	98%	0%	0%	2%
	SM	5	21 (96%)	38%	0%	43%	90%	0%	0%	10%
	Comparison		17 (85%)	29%	0%	47%	100%	0%	0%	0%
Kansas District	SM	3	36 (97%)	8%	0%	14%	81%	8%	3%	8%
	Comparison		37 (97%)	16%	0%	14%	89%	5%	0%	6%
	SM	5	45 (100%)	11%	0%	11%	87%	7%	0%	0%
	Comparison		24 (96%)	8%	0%	0%	96%	0%	0%	0%
	SM	7	34 (100%)	15%	0%	15%	85%	12%	3%	0%
	Comparison		34 (100%)	18%	0%	21%	88%	9%	0%	3%
Michigan District	SM	3	47 (89%)	62%	2%	74%	40%	2%	43%	15%
	Comparison		25 (93%)	56%	0%	60%	48%	0%	44%	8%
	SM	5	30 (100%)	43%	0%	87%	40%	0%	50%	10%
	Comparison		28 (93%)	46%	7%	67%	25%	0%	54%	21%
	SM	7	140 *83%	33%	1%	67%	44%	1%	43%	12%
	Comparison		110 (73%)	41%	0%	69%	33%	2%	51%	14%

Figure I. SuccessMaker Reading Study Sample Demographic Information (Cont'd.)

District	Group	Grade	Student Count*	% One Grade Equivalent Below**	% Not English Proficient	% Reduced Lunch	% Caucasian	% Hispanic/ Native American	% African American/ Caribbean	Other Ethnicity or No Information
Missouri District	SM	3	41 (95%)	12%	0%	0%	85%	5%	2%	8%
	Comparison		20 (95%)	10%	0%	0%	100%	0%	0%	0%
	SM	5	36 (92%)	8%	0%	0%	91%	3%	6%	0%
	Comparison		18 (90%)	0%	0%	0%	89%	0%	0%	11%
	SM	7	22 (88%)	5%	0%	0%	95%	0%	0%	5%
	Comparison		23 (93%)	0%	0%	0%	100%	0%	0%	0%
Texas District	SM	3	89 (87%)	35%	4%	69%	17%	67%	13%	3%
	Comparison		69 (92%)	23%	14%	78%	16%	68%	9%	7%
	SM	5	108 (83%)	41%	26%	87%	7%	88%	4%	1%
	Comparison		105 (91%)	23%	35%	83%	5%	89%	5%	1%

*Percents within parentheses next to student counts indicate the percent of students tested at baseline that were also tested at the end of the school year.

**Study sample was broken out by baseline GRADE national norm cutoff score for 1.0 grade equivalent below grade and month at the time of testing.

Measures

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

Statistical analyses were performed on students' gain scores (i.e., end-of-year raw score minus beginning-of-year raw score) for the GRADE, AIMSweb and Reading Academic Attitude Survey at each grade level. Results compared the *SuccessMaker* users to the comparison group. Results were broken out and analyzed for separate levels of three key demographic variables (i.e., ethnicity, gender, meal status). Students' English language learner (i.e., ELL) status was also collected but results were not broken out and reported by ELL status because there were very few students designated as ELL (i.e., 5%).

Results were also calculated for a group of lower achieving students at each grade level. These students scored at baseline one grade equivalent below their current grade level. Further, the performance for the comparison group was compared to four blocks of program usage (i.e., block 1 = 1 to 9 hours, block 2 = 10 to 19 hours, block 3 = 20 to 29 hours, block 4 = 30 or more hours).

Students responded to self-report questions on a reading academic attitude survey regarding general reading attitude, confidence, motivation, and self-perceived aptitude. Further, students in *SuccessMaker* classrooms were surveyed as to their opinions on several aspects of the program.

In addition to the assessment battery, qualitative data collection methods, including program reports, teacher surveys, daily lesson logs, classroom

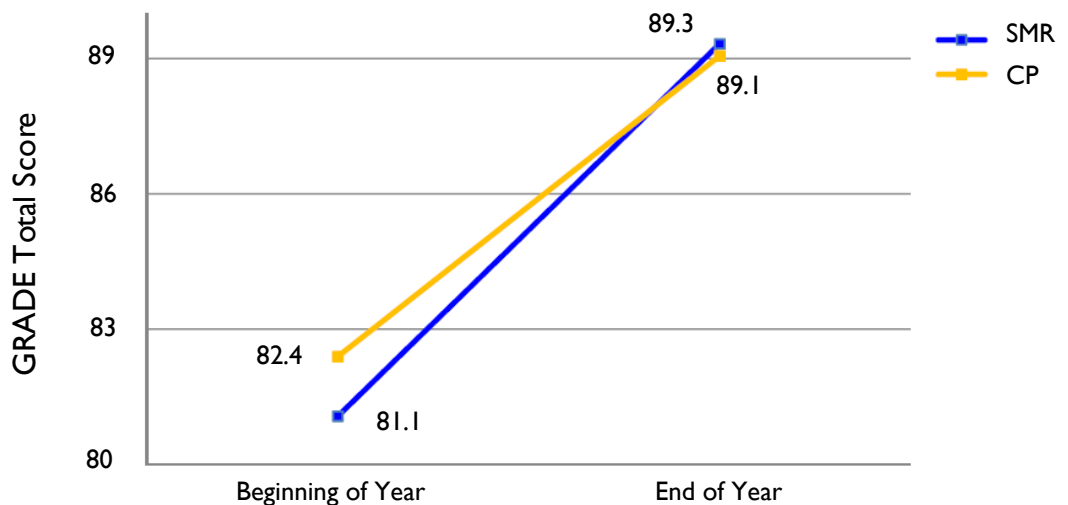
observations, as well as, teacher notes from electronic correspondences, were also employed. Teachers were routinely asked for their opinions throughout the school year. Weekly lesson notes were collected for both *SuccessMaker* and comparison classes. Cumulative usage reports and program implementation logs were regularly collected from *SuccessMaker* users. All study classrooms were observed twice during the school year teaching routine reading lessons and *SuccessMaker* teachers were further interviewed as to their opinions regarding the program. All this data was compiled and content analyzed to determine teacher attitudes and performance, as well as to illuminate the various ways teachers and students interact with the program.

Student Performance Results

Results for SuccessMaker Reading versus Comparison.

Evaluators conducted analyses to examine how *SuccessMaker Reading* students performed in comparison to students using print supplemental reading programs. Results showed positive effects of the *SuccessMaker Reading* program with program users statistically significantly outperforming the comparison group students on the GRADE in all three grade levels. In Figures 2 through 4, the mean gain scores on the GRADE for the three study grades is graphed after adjusting for differences in baseline student and classroom characteristics.

Figure 2. Third Grade Reading Achievement Gains



After adjusting for student & classroom characteristics, 3rd, 5th & 7th grade *SuccessMaker Math* users out scored their comparison group counterparts by 17.5% (SE=2.19%), 10.0% (SE=2.72%) and 9.8% (SE=2.23%) respectively.

Figure 3. Fifth Grade Reading Achievement Gains

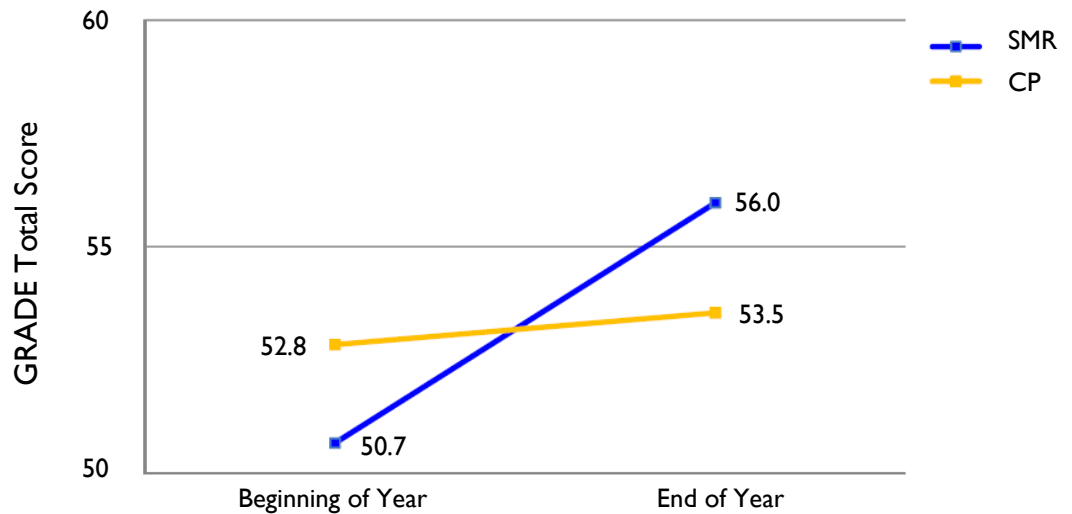
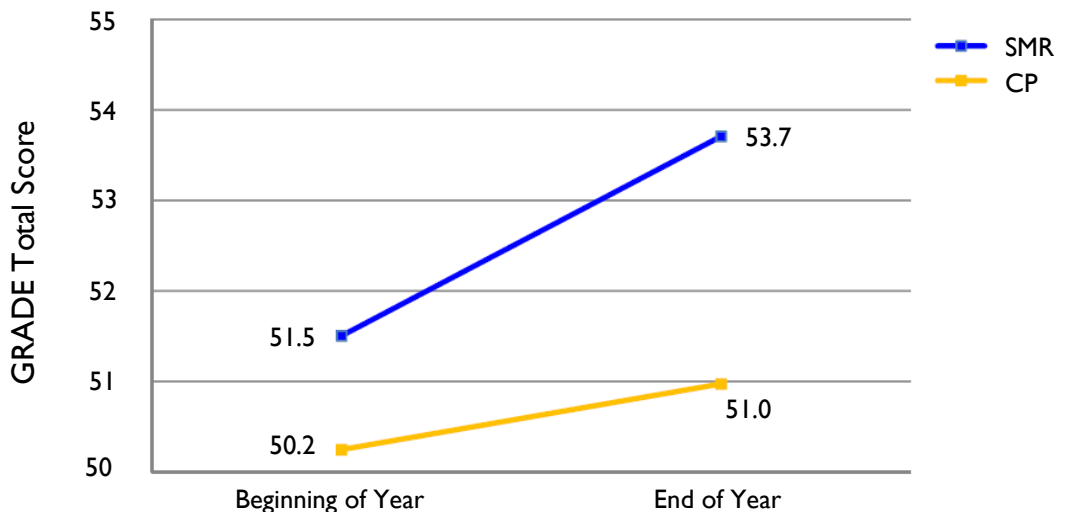


Figure 4. Seventh Grade Reading Achievement Gains



SuccessMaker students in 3rd, 5th, and 7th grade saw large statistically significant gains on the GRADE from the beginning to the end of the school year. In addition, *SuccessMaker* students in 3rd, 5th, and 7th grade statistically significantly outperformed their comparison group counterparts on the GRADE Total score.

Across all grade levels, *SuccessMaker Reading* students also had significantly larger gains on the subtests of sentence and passage comprehension. At 7th grade, a significant effect in favor of *SuccessMaker Reading* was also found on the vocabulary subtest. The only two instances when the comparison group outperformed the *SuccessMaker* students

was on the Word Reading subtest at 3rd grade, and the AIMSweb fluency scale at 5th grade.

The *SuccessMaker* students at 3rd grade did, however, outperform the comparison group on the AIMSweb fluency scale (i.e., words read correctly). It should be noted this basic measurement of accuracy and pacing for oral reading is most appropriate as an outcome for early elementary grades when judging the efficacy of the *SuccessMaker Reading* program. In the *SuccessMaker Reading* program, accuracy and pacing for oral reading is emphasized most in 2nd and 3rd grade. Accuracy and pacing is minimized at 5th grade and not included in the program at all in 6th through 8th grade.

Results for SuccessMaker Reading Users versus Comparison by Subpopulations

When the data was broken out for student subpopulations, results indicated that the subpopulations of Hispanic and low SES really benefited from *SuccessMaker Reading*. Specifically, 3rd grade Hispanic, male, and low SES *SuccessMaker* students all statistically significantly outperformed their comparison group peers on the GRADE. Similarly, 3rd grade lower-achieving, African American, female, and low SES *SuccessMaker* students saw moderate sized gains over the comparison group in fluency.

Hispanic and low SES *SuccessMaker* 5th grade students statistically significantly outperformed their comparison group peers on the GRADE. Conversely, for all subpopulations except African-American and lower-achieving students, the comparison group outgained the *SuccessMaker* students in fluency.

In all 7th grade subpopulations, *SuccessMaker* students statistically significantly outperformed their comparison group peers on the GRADE and saw moderate to large effects. In fluency, though the whole sample did not show a statistically significant difference, the African-American and Hispanic comparison students had somewhat greater gains.

Participant Feedback

Student Attitudes

SuccessMaker Reading students at 3rd and 5th grade demonstrated statistically greater gains in their academic attitudes than their comparison group counterparts. These effects were also seen in several at-risk populations.

When students were surveyed at the end of the school year as to their opinions on several aspects of the program, 96% of 3rd grade, 85% of 5th grade, and 78% of 7th grade students indicated they liked using the *SuccessMaker* program.

Similarly, the users found the learning activities and stories engaging. Ninety-five percent of 3rd grade students responded that they liked the

characters and animation. Finally, the majority of 5th (i.e., 73%) and 7th (i.e., 64%) grade users reported the video hosts as being helpful to them while using the program.

Teacher Attitudes

“SuccessMaker is a very engaging, interactive program that is differentiated for students’ achievement levels.”

– Seventh Grade Teacher

“It’s easy to not give them [higher kids] the attention that they need, so I really appreciate when the program gets harder and they say that it is difficult because they are finally being challenged. This is great.”

– Interventionist

“I don’t have to re-assess students to find out where their gaps are, SuccessMaker already tells me.”

– Seventh Grade Teacher

“I think the animation is great. It captures [the students’] attention right away. I see them laughing and it keeps them engaged.”

– Interventionist

“There have been times when they run across something in SuccessMaker that I’ve already taught and there are other times when the program will teach them something that is totally new and they’ll either bring it back to the classroom or when I go to teach that thing they’ll say ‘Oh, I already know this from Success Maker!’ which is great.”

– Third Grade Teacher

Opinions about the program were systematically collected from teachers during focus group sessions. Thirty-six of the 37 *SuccessMaker* teachers were available to participate in the focus group sessions providing extensive insight into teacher and student experiences with, and attitudes about, the *SuccessMaker Reading* program.

The teacher response to the program was overwhelmingly positive. Teachers felt that the program was a welcomed and successful addition to their print curriculum for many reasons including interactivity, differentiated content, immediate feedback, and student engagement. Most teachers felt the initial placement was satisfactory for the majority of students and that the adaptive motion through the content worked well. The occurrence of students being initially placed too high or too low was rare, and the custom course feature allowed teachers to easily rectify the situation.

The program’s reporting feature was also well-received by the teachers. Most teachers expressed an appreciation for a program that explicitly demonstrates student progress such as the *SuccessMaker Reading* program. Teachers also liked the progress-reporting feature that monitored the students’ motion through the program.

Teachers believe that their students like using the program. Teachers were tremendously positive about their students’ interactions with the program and felt that the program successfully engaged and motivated students to become better readers. A majority of teachers felt that the program challenged both their special needs and higher achieving student population. Teachers also felt the *SuccessMaker* program was more engaging and challenging than previous printed and computer-based supplements, helpful for ELL students and struggling readers, and an overall good educational investment.

Additionally, teachers indicated that the content of the *SuccessMaker Reading* program is generally aligned with their current curriculum. Most teachers felt the program reinforces skills already learned in the classroom, and also teaches students reading skills or concepts they have not yet learned in class. Teachers felt that the program’s scaffolding feature positively challenged their students to become better readers and that the *SuccessMaker Reading* program provided other valuable resources to assist users. Such assistance proved to be motivational for struggling readers and included the glossary, clip art, read-to-me and roll-over audio features, as well as custom courses.

Conclusion

The study sample included sizable portions of the type of at-risk students that would benefit from a well-conceived and implemented reading intervention, specifically; Hispanic, African American, low SES, and lower achieving. Teachers came up with creative solutions to get all students on the program each week, overcoming packed classroom lesson plans and filled computer lab schedules and firmly believed that their students liked using *SuccessMaker Reading* and felt that the program made the learning process more fun for students. A majority of students reported positive attitudes towards the program as well as more positive academic attitudes than non-users.

The achievement data implies that students using *SuccessMaker Reading*, including at-risk students, can be more successful in vocabulary, comprehension and fluency when receiving 16 hours or more on the program over their first school year using the program. Further, it appears users can be more successful the more they use the program.

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 larger 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. Learn more at www.GattiEval.com.

To learn more about the *SuccessMaker* program or to access the full report, visit us at www.SuccessMaker.com.