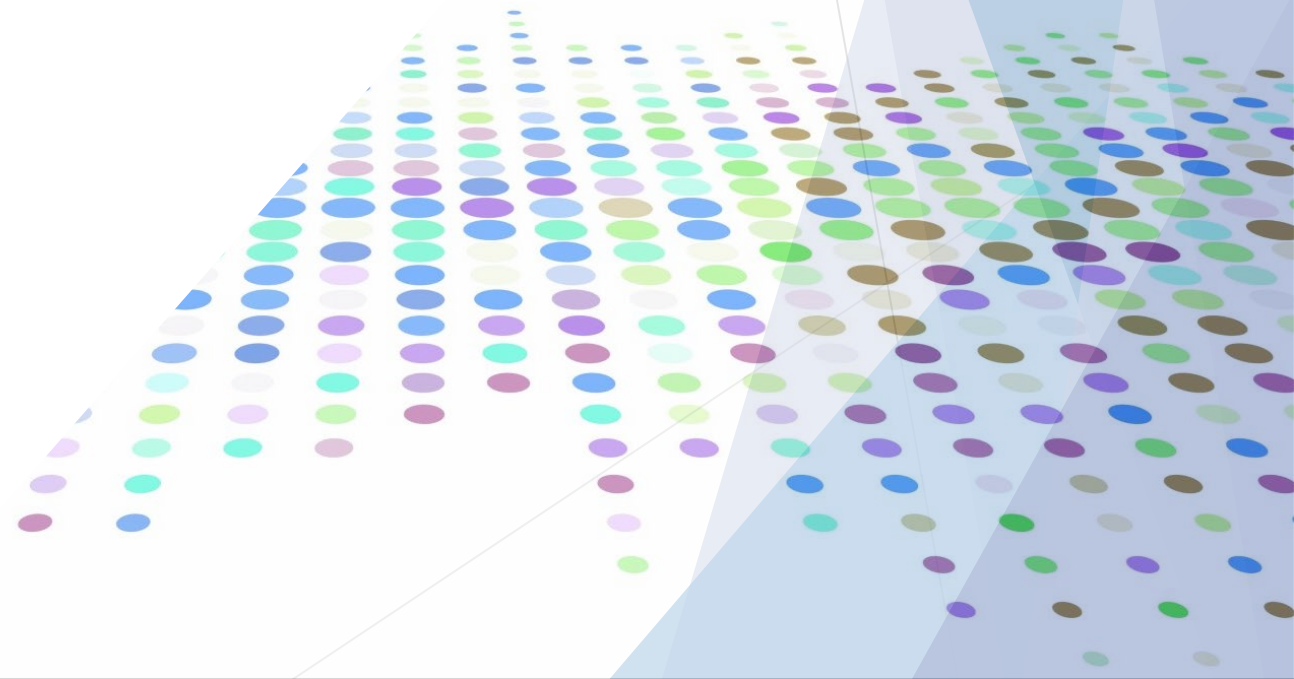


Achieve 3000

Ashley Funchess



Background

- ▶ Achieve3000 is an online differentiated literacy program providing standards-based content. It was designed to accelerate student reading comprehension, fluency, writing proficiency, and vocabulary development using nonfiction informational text.
- ▶ The results of the LevelSet assessment are then applied to each student's academic profile so they can receive grade-appropriate lessons containing readings, activities, and built-in formative assessments.
- ▶ Stretch lessons are available for teachers.





Background in the School District of Osceola County

- ▶ The School District of Osceola County (SDOC) has utilized Achieve3000 in grades 6-8 since the 2013-2014 school year. It was expanded to high school during the 2018-2019 school year.
- ▶ In 2017 an internal district program evaluation was conducted. This evaluation concluded that Achieve3000 had little impact ($d = 0.07$) with regards to FSA ELA gains (Seabolt & Pierce, 2017). In 2020 another internal district program evaluation was conducted. This evaluation concluded that Achieve3000 had an effect size of $d = .14$ with regards to increasing FSA ELA scores for students who used the program with fidelity compared to students who did not (Pierce, 2020).
- ▶ In the 2022-2023 school year, 9,361 students in grades 6-12 utilized the program in the School District of Osceola County for the full year in school (as defined by the state of Florida school accountability system).



Purpose

- ▶ The purpose of this evaluation was to examine the effectiveness of Achieve3000 in increasing literacy.

Research Questions



What perceptions do teachers have of Achieve3000?



What percent of students are using Achieve3000 with fidelity?



Does usage of Achieve3000 predict increases in Lexile scores for students in grades 6-12?



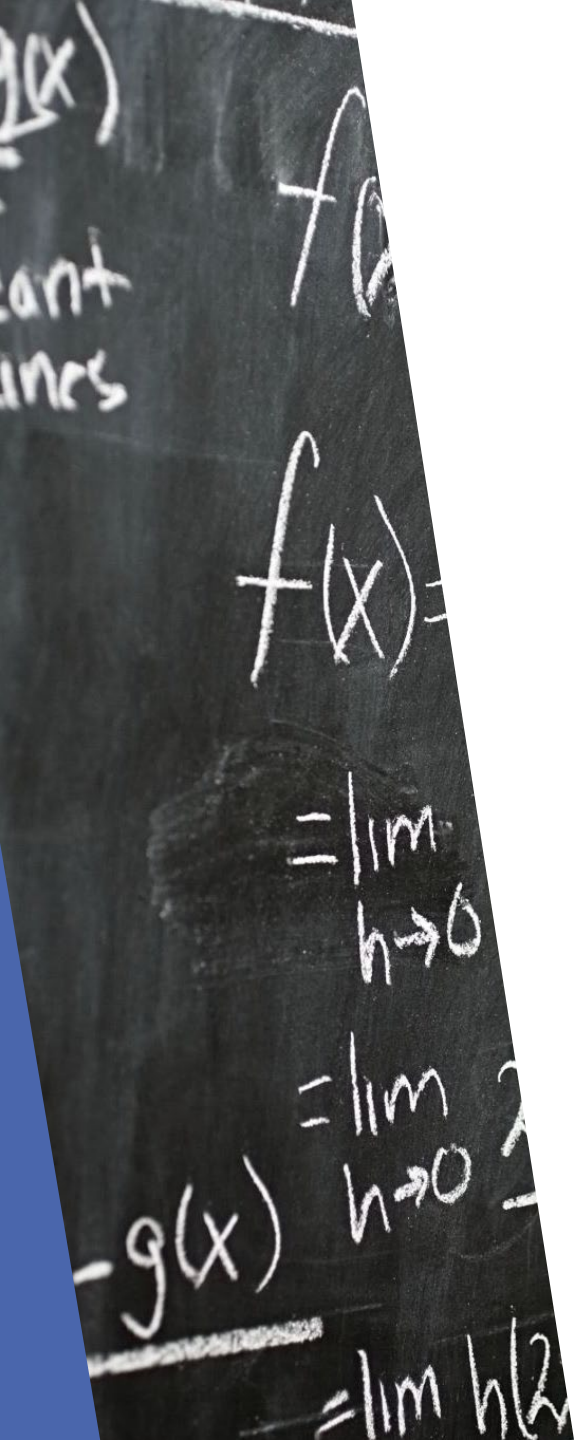
Does usage of Achieve3000 predict higher FAST ELA test results for students in grades 6-8?



Is there a return on investment of Achieve3000?

Methodology

- ▶ Regression analyses were run to determine if Achieve3000 predicted Lexile growth and FAST ELA scores. Regression analysis first started by calculating intraclass correlation coefficients to determine if multilevel modeling regarding either schools or teachers were warranted. In all cases, multilevel models were not warranted with the largest intraclass correlation coefficient being 2.5%.



Teacher Perceptions

- ▶ Survey responses were examined regarding ease of use, alignment to standards, and overall quality of Achieve3000. Overall, 71 participants responded (41% response rate).

Stuvey Statement	% Participants Who Agreed
Achieve3000 is a good use of instructional time.	89
Achieve3000 is aligned to the standards I'm required to teach.	86
Students are engaged and on-task while participating in Achieve3000.	66
Students enjoy using Achieve3000.	44
The initial training I received prepared me to use Achieve3000.	71
I continue to get the support and training I need to use Achieve3000.	72
Students' reading levels have increased from using Achieve3000.	83
Achieve3000 is helping to prepare my students for the end-of-year state assessment (PM 3) or to earn a concordant score.	76
Achieve3000 fulfills a need that other programs the District uses do not.	72
Achieve3000 is superior to other programs I have previously used.	65

Fidelity Use

► The measure of fidelity was defined as completing an average of two or more activities per week and having a first-time assessment score average of 75% or greater. This definition of fidelity is consistent with measures used in the 2017 evaluation, 2020 evaluation, and information provided by Achieve3000.

Grade	Total Count of Students	Percent Who Used Achieve3000 with Fidelity
6	2137	8
7	1908	8
8	2252	10
9	1515	6
10	1488	11
11	43	5
12	17	0
All	9360	9

Fidelity Continued

Stuvey Statement	% Participants who Often/Always Use the Following
View Achieve3000 reports	93
Use data in Achieve3000 reports to change instruction	59
Grade and/or provided feedback to the Thought Question during the 5th step of the 5-Step Literacy Routine	42
Used the Stretch Lessons after the 5-Step Literacy Routine	37

Survey responses indicated that while 93% of teachers use reports often, other components such as the thought question and stretch lessons are used less regularly by over half of teachers.

Lexile Increases

- ▶ Program hours in Achieve3000, pre-test Lexile scores, race, ELL status, ESE status, gifted status and days absent statistically significantly predicted Lexile score changes $F(9, 9318) = 93.828, p < .001$.
- ▶ Ethnicity, and gender did not significantly predict Lexile score changes.
- ▶ Closer examination of b weights reveals that for every one hour increase in usage of Achieve3000 a .023-year increase in Lexile growth was observed. In other words, usage of Achieve3000, on average, for 43 hours would be needed to result in one year of Lexile growth.
- ▶ Standardized Beta weight of program hours in Achieve3000 was .21 indicating a small effect.

FAST ELA Scores

- ▶ Regressions for 6th, 7th, and 8th grade FAST ELA were computed separately.
- ▶ For the 6th grade model, pre-test Lexile scores, ethnicity, gender, ELL status, ESE status, gifted status, and days absent were statistically significant predictors of FAST ELA $F(9, 2087) = 227.49, p < .001$.
 - ▶ Program hours in Achieve3000 and race were not significant.
- ▶ For the 7th grade model, program hours in Achieve3000, pre-test Lexile scores, ethnicity, race, gender, ELL status, ESE status, and gifted status were statistically significant predictors of FAST ELA $F(9, 1863) = 216.399, p < .001$
 - ▶ For every one hour increase in usage of Achieve3000 a .106 increase in FAST ELA was observed. In other words, usage of Achieve3000, on average, for 9.4 hours would be needed to result in one scale score increase of FAST ELA. Program hours had a standardized Beta coefficient of .065 indicating a small effect.
- ▶ For the 8th grade model, pre-test Lexile scores, ethnicity, gender, ELL status, gifted status, and days absent were statistically significant predictors of FAST ELA $F(9, 2204) = 264.129, p < .001$.
 - ▶ Program hours in Achieve3000, race, and ESE status were not significant.

ROI COSTS

- ▶ The cost of Achieve3000 licenses and training was \$407,345.93 for the 2022-2023 school year.
- ▶ The average salary for teachers in Osceola County is \$35 per hour with 19.79% benefits rate. This results in a salary of \$41.93 per hour. Based on a 182-day school year and 173 teachers for one hour per day, the amount of money in teacher salaries is \$1,320,208.
- ▶ The monthly cost of Internet was \$336 per school. Twenty-five schools used Achieve3000 for 10 months during the 2022-2023 school year. This results in an Internet cost of \$84,000. Combining the license, teachers, and Internet result in a cost of \$1,811,554 for Achieve3000.
- ▶ **Total cost of \$1,811,554**

ROI Benefit

- ▶ The School District of Osceola County received a base per-pupil expenditure of \$8,629 (FLDOE, 2021). The Edgenuity program evaluation found the cost of one hour of instruction in a secondary school classroom to be approximately \$6.77 (Maddock, 2023). Students spend approximately 148.6 hours in Tier 1 reading instruction, so it would take approximately \$1006 in employee wages to remediate a student who was a one year behind.
- ▶ Achieve3000 data reports include the change in reading grade level. Based on this metric, students in the 2022-2023 school year gained 11,540 years of learning. Hours of learning was a metric provided in Achieve3000 and to some extent is designed to measure growth in the program. However, a regression analysis was conducted to control for other factors and isolate the impact of Achieve3000. This model found that Achieve3000 could be found to be associated with 38% of the yearly Lexile growth. Taking 38% of the 11,540 years of learning and multiplying it by \$1006 results in \$4,411,511 avoided by using Achieve3000.

ROI

Cost: \$1,811,554

Benefit : \$4,411,511

BCR : 2.45

ROI 145%

Conclusion

- ▶ Statistical results indicated Achieve3000 had a small effect with regards to increasing Lexile scores and a small effect in seventh grade with increasing FAST ELA scores. Statistical tests did not reveal an effect with regards to increasing FAST ELA scores in sixth or eighth grades.
- ▶ Achieve3000 had a large positive return on investment.
- ▶ Teacher survey results and usage data reveal that the program is not being used to its fullest potential with only a small portion of students using Achieve3000 with fidelity and less than half of teachers reporting grading thought questions or utilizing stretch lessons often.

Program/Project:

Achieve 3000

Responsible Party:

Level	Program Objective(s)	Measures	Data Collection Method/Instruments	Data Sources	Timing	Responsibilities
1	Reaction and Planned Action Positive reactions Insight of teacher perceptions of program Insight of teacher's perception of how students view the program Suggestions for improvement	Average rating of a 4 or higher on a 5 point scale of extent of agreement	Questionnaire	Teachers of students using Achieve3000	During Program	Researcher
2	Learning Reading Comprehension Literacy Skills	First time pass rate of 75% on Achieve3000 activities	Achieve3000 module scores	Students (grades 6-12)	During Program	Researcher
3	Application/Implementation Teacher application of key components of Achieve3000 Students spend time in the program	Average rating of a 4 or higher on a 5 point scale of component usage frequency Complete on average two Achieve3000 activities a week Program Hours	Questionnaire Achieve3000 usage data	Teachers of students using Achieve3000 Students (grades 6-12)	During Program	Researcher
4	Business Impact Increased Lexile scores/growth in academic grade levels in Literacy Increased ELA state testing scores	Increase student literacy grade level to average one year per student (61% increase). Increase percent of students on grade level on the state ELA test by 20%	Lexile scores from Achieve3000 State testing scores (FAST ELA)	Students (grades 6-12) Students grades (6-8)	End of school year End of school year but results released months later	Researcher
5	ROI 0% ROI	Comments				

Data Items (Usually Level 4)	Methods for Isolating the Effects of the Program/ Process	Methods of Converting Data to Monetary Values	Cost Categories	Intangible Benefits	Communication Targets for Final Report	Other Influences/ Issues During Application	Comments
Lexile score growth (converted to grade level for ROI)	<ul style="list-style-type: none"> Mathematical Modeling- Regression analysis to control for other variables 	Use Lexile score grade level equivalent metric to convert to a time growth measurement that will measuring the amount of learning. This can be converted to cost avoided by using the cost of money provided for one student.	<ul style="list-style-type: none"> Program Training/salary/ stipends Teacher salary Internet 	<ul style="list-style-type: none"> Engagement Enjoyment 	<ul style="list-style-type: none"> District leaders School board members 	<ul style="list-style-type: none"> There are other factors such as starting score (is controlled for) that influence results. Possible school and teacher impacts. A multilevel model may be warranted. 	