Independent Evidence-Based Research Proves Child Outcomes

90-Day study with PK/K students using Letters alive®

Independent Study by Tamra Ogletree, PhD
Dr. Ogletree has a PhD in Language and Literacy and a Certificate in Interdisciplinary Quantitative Research from the University of Georgia.

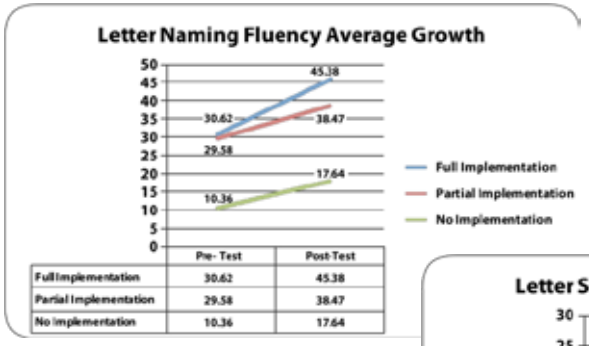
A study by
UNIVERSITY of West Georgia

48% **48% increase in letter naming fluency**
This was a 2x gain over non-users.

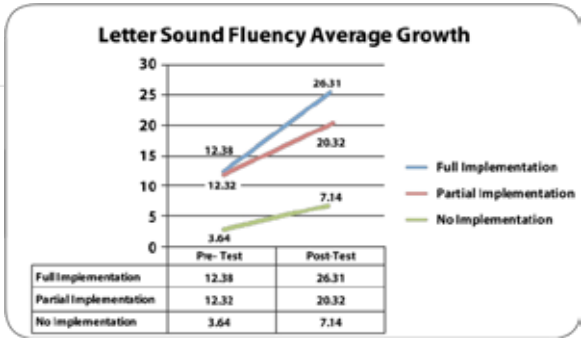
112% **112% increase in letter sound fluency**
This was a 4x gain over non-users.

Highlights from study

- ☑ 48% increase in letter naming fluency
- ☑ 112% increase in letter naming fluency
- ☑ Classroom management problems decreased
- ☑ Student engagement increased
- ☑ Recorded voice in the program negates effect of regional pronunciation, which provided the most benefits for ELL students



	Pre-Test	Post-Test
Full Implementation	30.62	45.38
Partial Implementation	29.58	38.47
No Implementation	10.36	17.64



	Pre-Test	Post-Test
Full Implementation	12.38	26.31
Partial Implementation	12.32	20.32
No Implementation	3.64	7.14

Interview with EdTech Show Daily

STUDY SHOWS AUGMENTED REALITY PROGRAM HELPS KIDS READ

An interview with Dr. Tamra W. Ogletree, PhD in Language and Literacy, Certificate in Interdisciplinary Qualitative Research from the University of Georgia.

ESD: You have done independent research on the effectiveness of using 3D augmented reality products in the classroom, Letters alive. Can you tell us, in your own words, what Letters alive is and how you came to conduct this study?

TO: *Sure. Letters alive is a supplemental reading program to teach early literacy skills via augmented reality. I was first introduced to this program actually by happenstance. It was a training event about how to use a new piece of equipment that had been placed in classrooms on campus. At the end of the training, the presenter knew that my area of teaching was in literacy education. She demonstrated for me and a couple other participants the Letters alive program that was still being beta tested. This was my first introduction to using augmented reality for literacy instruction. I was fascinated by the program and the possibilities that this program might have in the area of literacy instruction. I saw this as a possibility for use especially with English Language Learners and at risk learners.*

ESD: What were the major impacts on student achievement that you were able to measure?

TO: *Well, as a researcher, I usually don't get too excited about the findings from the numbers, but in this case, I literally jumped up and down at the results. The achievement scores by students who had full implementation to the program increased by 48 percent over their pre-test scores on the letter naming fluency and an increase of 112 percent on the letter sound fluency.*

ESD: How would you compare student engagement using Letters alive to the kind of engagement we would expect from other technologies, such as student response systems or interactive whiteboards?

TO: *Our observational data showed that students were more actively engaged in the lessons when using Letters alive than during other lessons using interactive whiteboards.*

Classroom management problems decreased as a result of the students being actively engaged, as well. Response time to questions increased too.

ESD: Were there any specific skills that improved using Letters alive more than others?

TO: *Oh, yes! Letter sound fluency was increased exponentially.*

ESD: We talked about the impact that Letters alive has on students. Did you observe how it might have helped teachers?

TO: *Yes. As I mentioned earlier, a finding from the research involved student engagement. The teachers who were part of the study were surprised at how students who typically had attention difficulties were consistently engrossed in the program. The students responded to the animals because of the sound and visual stimulation.*

Another added benefit was that the computer played a recorded voice for the sound of the letter instead of the teacher. Using the computer assisted voice gives the teacher an alternative pronunciation that negates the effects of regional pronunciations. This had the most benefit for the ELL students.