

# Kindergarten Students' Alphabetic Knowledge - First Trimester Study

The Kindergarten Cohort group was comprised of 1,388 kindergarten students from Quail Valley Elementary, Menifee California; Golden Rod Elementary, Kerman, California; Alta Vista Charter School, Auburn, California; all elementary schools in Ohio County School District, Hartford, Kentucky and in four elementary schools in the Putnam City School District, in Oklahoma City, Oklahoma.

## Demographics

Grade Level	Kindergarten	Ethnicity	%
Population	1,388	African American	6
Boys/Girls	50% / 50%	Asian	2
Assessment Instrument	Z-BRA3	Caucasian	54
Reduced-cost Lunch	68%	Latino/Hispanic	34
ELL	13%	Other	2

Kindergarten

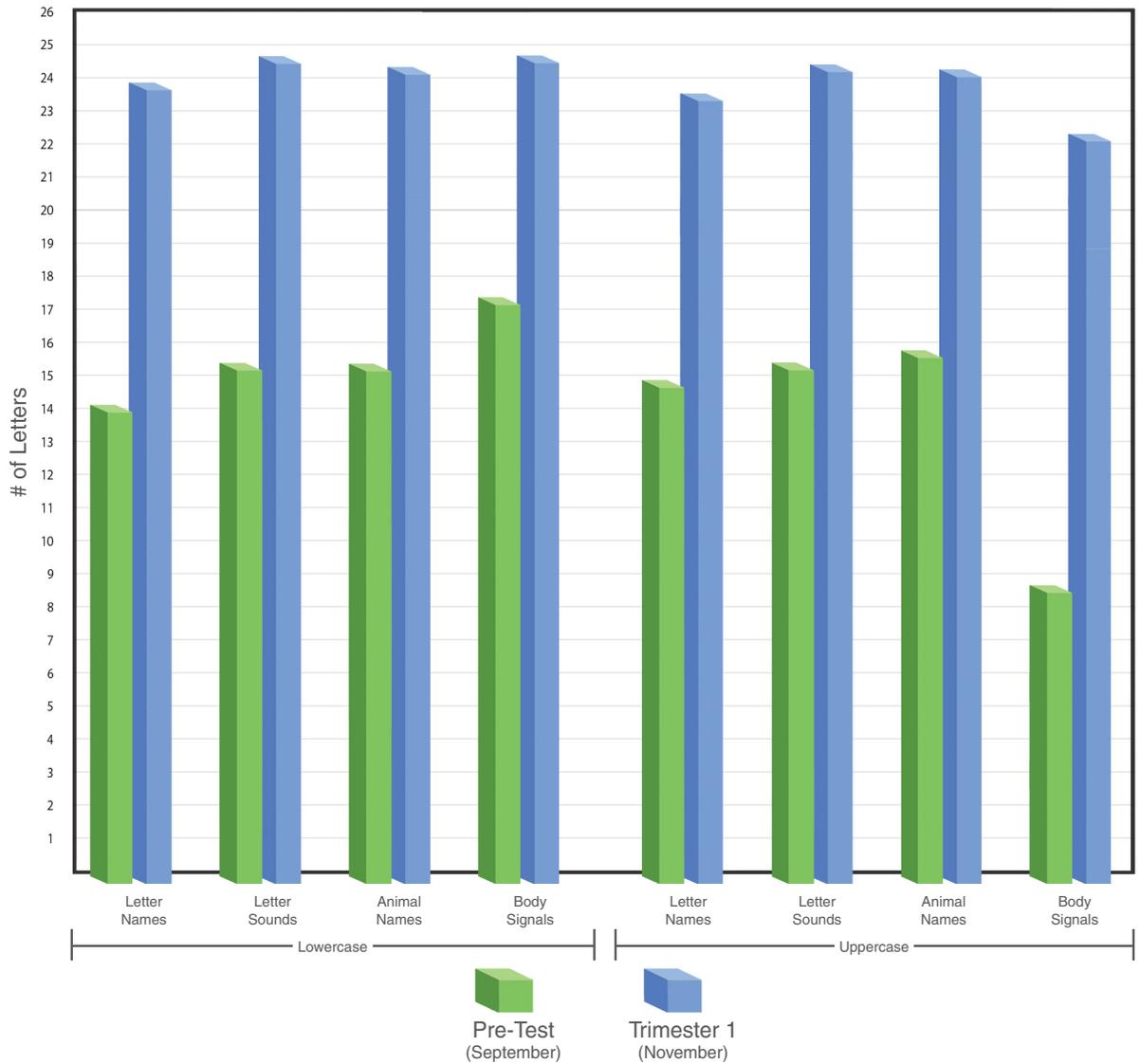


Figure 1. Lowercase and Uppercase Alphabetic Proficiency for Kindergarteners, 2014-2017.

## Methodology and Test Instrument

This cohort included students from the 2014-2015, 2015-2016 and 2016-2017 school years. Students were not duplicated in multiple cohorts. *The Zoo-phonics Basic Reading Assessment (Z-BRA3)* test instrument was used to assess alphabetic knowledge of lower- and uppercase letters (letter shapes, names, and sounds, Alliterative Animal Names and Body Signals).

Teachers in the study were credentialed to teach in their home state and were trained in the methodology and curriculum of the *Zoo-phonics Multisensory Language Arts Program*. At the outset of this study, teachers, aides, and principals agreed to use the *Zoo-phonics Program* with fidelity.

Data were collected during the first two weeks of school and at the end of the first trimester in November. The mid-November assessment was used to test the hypothesis that students using the *Zoo-phonics Multisensory Language Arts Program* learn lower- and uppercase alphabets within the first trimester of kindergarten and reach mastery during this period.

## Findings

Consistent and significant growth in lower- and uppercase letter shapes, names, sounds, Alliterative Animal Names and Body Signals is evident. The mean scores for upper- and lowercase measures were about 24 letters in each category with the exception of nearly 22 uppercase Body Signals. Figure 1 indicates that many students arrived in kindergarten knowing at least some of the alphabet. Many students from the Ohio County School District and Putnam School District had earlier exposure to *Zoo-phonics* in Head Start and/or preschool or through contact with older siblings.

By the end of the first trimester (November), mean scores on all measures indicated significant growth with proficiency levels approaching mastery in both lower- and uppercase alphabets. High achievement in letter shape, name recognition and sound knowledge are preparatory to early reading while strong skills in the Animal Alphabets, Alliterative Animal Names and Body Signals gave students key learning strategies for sound blending, segmenting, reading, spelling and writing words. Notably, students from all demographic groups and starting points achieved high levels of proficiency, indicating that the *Zoo-phonics Multisensory Language Arts Program* is an effective approach for all students.

## Conclusion

The use of the *Zoo-phonics Multisensory Language Arts Program* in an array of diverse kindergarten classrooms, over a three-year period resulted in significant findings. Nearly 1,400 students demonstrated that strong and rapid learning of the lower- and uppercase alphabets occurred during the first trimester of kindergarten. Students reached high levels of alphabetic proficiency while concurrently gaining skills including sound blending, segmenting, word formation and reading. Students were fully prepared to engage in early reading activities within the first three months of school regardless of preschool attendance or not. This study demonstrated that all children, regardless of Socio-Economic Status (SES) and any other demographic characteristics can learn the lowercase and uppercase alphabets quickly and easily in a novel, fun, physical, and playful way.



**For more information view the full study at:**

<http://www.zoo-phonics.com/research>



# Kindergarten

