

## STAR Testing - Kindergarten 2016 - 2017

In the 2016-2017 school year, a cohort of 317 kindergartners, attending 6 rural elementary schools in Ohio County School District, Hartford, Kentucky, were used in this study.

### Demographics

Grade Level	Kindergarten	Ethnicity	%
Population	317	African American	2
Boys/Girls	50% / 50%	Asian	1
Assessment Instrument	Standardized Test for Reading Assessment (STAR) Early Literacy	Caucasian	90
		Latino/Hispanic	7
Reduced-cost Lunch	68%	Other	0
ELL	1%		

# STAR Testing Kindergarten

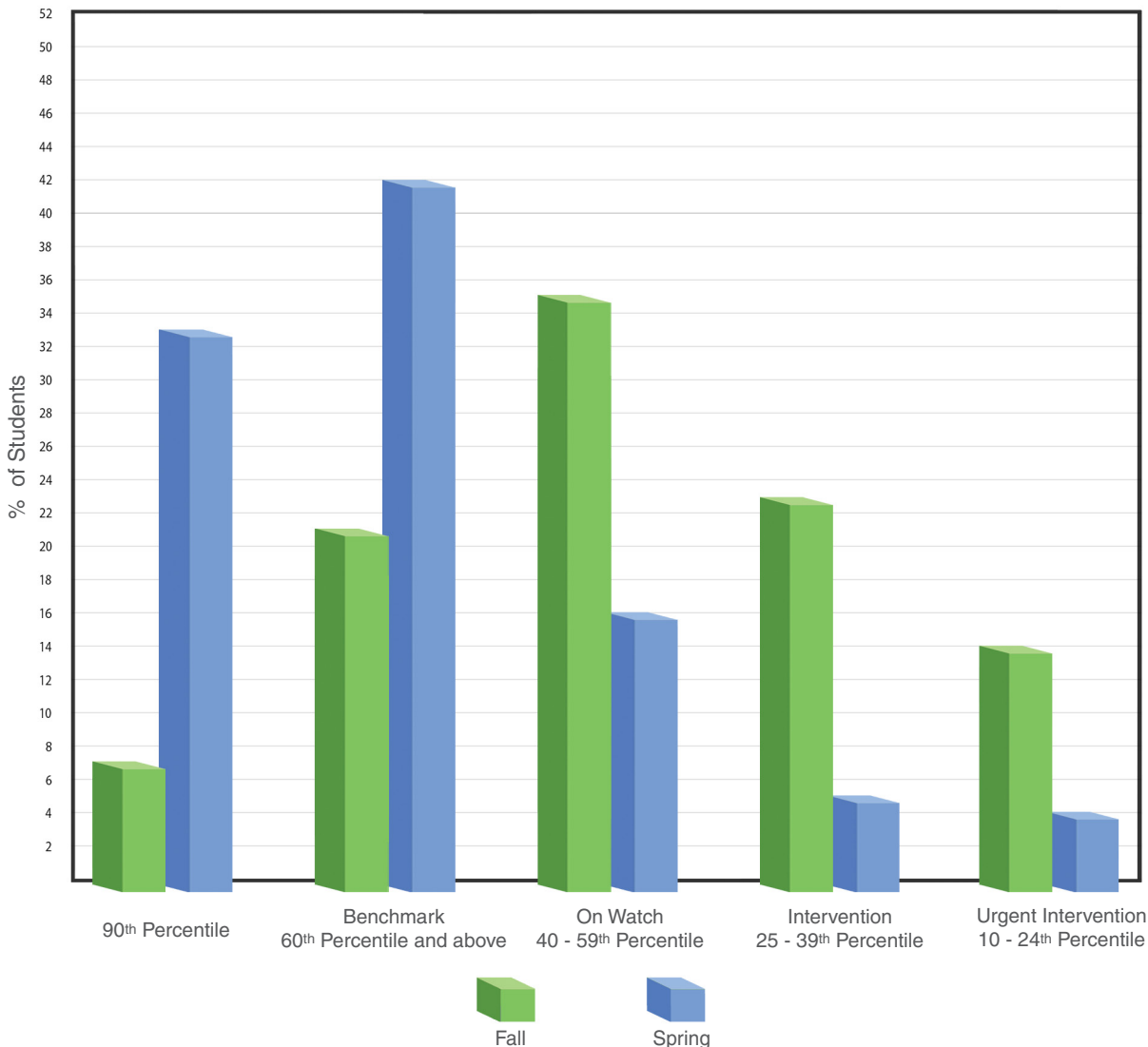


Figure 1. Kindergarten STAR Fall and Spring Results. STAR Early Literacy results organized by category to determine proficiency and identify students in need of interventions and growth, fall-to-spring.

## Methodology and Test Instrument

This cohort included 317 students in the 2016-2017 school year. Teachers in the study were credentialed to teach in their home state and were trained in 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.

The STAR Early Literacy assessment was administered to all enrolled students at the beginning of the school year in August and again in May, regardless of any needed interventions.

## Analysis

A General Linear Model with Repeated Measures was used to determine proficiency levels and gains between assessment periods for this cohort.

- Data from the 2016-2017 school year were compared for six schools using a pre-post analysis of STAR Early Literacy scores. Scores for all schools were aggregated for analysis.
- The scores were divided into five classifications based upon scaled scores for each assessment period. Each classification was defined by a range between 300 and 900.

Students were grouped by normed percentile rankings corresponding to five classification levels. Ohio County School District administration set the benchmark at the 60th percentile because they wanted to raise the standards and student performance in their schools. This is higher than the “default benchmark” established by STAR, which is set at the 55th percentile. The “On Watch” category was set between the 40th and 59th percentiles and the two Intervention categories were set below the 40th percentile.

## Findings

The use of the *Zoo-phonics Multisensory Language Arts Program* in an array of diverse kindergarten classrooms resulted in significant findings. STAR Early Literacy assessment results demonstrated strong and rapid learning of the kindergarten literacy skills.

Figure 1 indicates that in the spring, 75% of the cohort scored at or above the District’s established benchmark. Significantly, 33% of this cohort scored at or above the 90th percentile, up from 7% in the fall. About 15% remained below the benchmark between the 40th and 59th percentiles in the On Watch category. Another 10% of students were in the two Intervention categories, indicating that a small number of students have special learning needs and will require additional support.

## Conclusion

This study demonstrated that significant growth can occur in all groups and the majority of the students in this cohort advanced to the next category over the course of the year. The growth from 7% above the 90th percentile in the fall to 33% in the spring indicates that many students have excelled with the *Zoo-phonics Multisensory Language Arts Program* and because of the Program, the percentage of students requiring interventions has dropped from 34% to 9%.

This cohort 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, reading and writing. 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, etc. 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>



AN INDEPENDENT  
RESEARCH STUDY

STAR Testing  
Kindergarten

**Zoo-phonics®**  
The Multisensory Language Arts Program