



# *Super Why! Summer Camp 2016*

Early Learning Coalition



WFSU Education and Outreach  
10-3-2016

## EXECUTIVE SUMMARY

WFSU's Education and Outreach Department collaborated with the Early Learning Coalition (ELC) to provide *Super Why!* early literacy camps at four Leon County Voluntary Pre-K (VPK) sites during July 2016. By way of experiential mediation, young campers viewed *Super Why!* episodes, participated in hands-on activities and practiced various early literacy skills. Young campers were exposed to and practiced letter identification, phonics, word recognition, vocabulary, basic sentence reading and determination of the central idea in *Super Why!* episodes. Across the four sites, campers' literacy knowledge grew in all areas, with strong increases in Phonics, Vocabulary Knowledge, Sentence Reading and Comprehension of the Main Idea.

## BACKGROUND

The importance of early literacy learning is well established (Adams, 1990; National Association for the Education of Young Children, 1998). Children who enter kindergarten with strong oral language skills, an awareness of the concepts of print and an emerging knowledge of the alphabetic principle are much more successful as beginning readers than their counterparts who are less prepared. Students who become proficient readers in the primary years are likely to experience success in other academic areas as they journey through school. Often, the children who struggle the most with obtaining early literacy skills are those from high-needs settings.

A primary purpose of the Corporation for Public Broadcasting (CPB) is to deliver educational programming especially for high-needs children. With *Sesame Street* as the ground-breaker in children's media, CPB has a well-respected history and reputation of providing literacy-based television content for America's preschoolers (PBS, 2016; Jennings, Hooker & Linebarger, 2009). Through the CPB's PBS Kids *Ready To Learn* initiative, the US Department of Education supports the development not only of educational television programs, but also funds outreach and resources designed specifically to support literacy development of preschool aged children. In addition to literacy, the current PBS Kids *Ready To Learn* initiative highlights Science, Technology Engineering and Mathematics (STEM).

Central to the *Ready To Learn* initiative is the research-based practice of *experiential mediation* (Piotrowski, Jennings & Linebarger, 2013). Experiential mediation augments the benefits of educational television by using program content as a springboard for related, off-screen learning activities. During learning sessions, children view an educational episode and then participate in related and engaging literacy and/or STEM activities. These activities are intentionally designed to facilitate *transfer* from on-screen to off-screen applications.

WFSU has implemented the *Super Why!* summer learning program with great success since 2008. During the month of July 2016, WFSU's Education Outreach department oversaw the implementation of four *Super Why!* summer camp curriculum at Voluntary Pre-K (VPK) centers throughout Leon County, Florida: New Enrichment Center, Kids Village, Horizons Unlimited, and Life Deliverance Ministry Academy. By way of experiential mediation, campers viewed *Super Why!* episodes, participated in hands-on activities and practiced early literacy skills. This document reports the results of the ELC-funded *Super Why!* camps.

## SUPER WHY! TELEVISION SHOW AND SUMMER CAMP

### The Show:

*Super Why!* is designed for a target audience of ages three through six and focuses on early reading skills. Educational content and story narrative are tightly woven together: Plots are problem-based and often revolve around classic storybook tales, featuring characters Alpha Pig, Wonder Red, Princess Presto, and Wyatt (accompanied by his dog Woofster), who use the imaginary world found in books to help solve typical challenges faced by children of this age. Each of these “Super Readers” uses a specific skill to help solve the problems they encounter, focusing on letter identification, letter sounds, rhyming, decoding, spelling, or reading comprehension.

### The Camp:

Driven by what we know about effective early literacy instruction along with recommendations for educational technology for preschoolers, the *Super Why!* camp is hands-on, engaging, and addresses multiple components of early literacy (National Association for the Education of Young Children/Fred Rogers Center, 2012; National Association for the Education of Young Children, 1998). Each week of camp is focused on the letters, sounds, word families, vocabulary, word identification and sentence reading featured within three episodes of *Super Why!*: *The Three Little Pigs*, *Hansel & Gretel: A Healthy Adventure*, and *Around the World Adventure*.

Campers start each day of the week by viewing the supporting episode. Throughout the day they become “Super Readers” by donning character masks, playing games, and working on crafts that reinforce the key literacy skills emphasized in that week’s story. Because STEM learning is central to PBS KIDS’ mission this year, we also partnered with the University of Florida’s IFAS Extension Office to incorporate a new grow-and-taste science activity into the Healthy Adventure curriculum. By the end of each week, the students have identified the Super Letters, planted “letter gardens” as well as their own radishes, created their own dictionaries, and more, all the while gaining confidence in their literacy skills.

### Teacher Training:

In June, the WFSU Education and Outreach staff conducted *Super Why!* trainings at New Enrichment Center, Kids Village, Horizons Unlimited, and Life Deliverance Ministry Academy. Lasting approximately 2 hours, the trainings included an overview of the camp’s history, previous successes and goals, a screening of a *Super Why!* episode, and a detailed walk-through of each day’s learning activities, complete with examples of games to be played and projects to be made by the children.

## PARTICIPANTS

Thirty-seven rising kindergarteners participated in this assessment.

Site	Participants
Kids Village	17
New Enrichment	11
Horizons Unlimited	1
Live Deliverance Ministry Academy	8
<b>Total</b>	<b>37</b>

## ASSESSMENT AND PROCEDURE

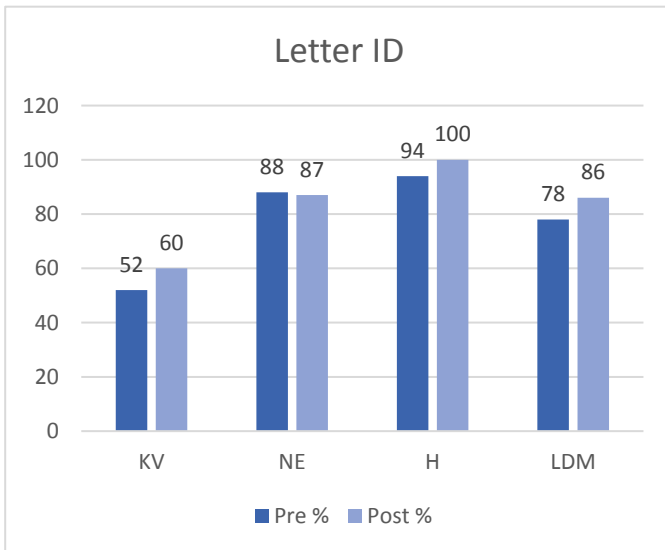
To measure children's pre-existing reading knowledge and subsequent growth, we used a one-on-one assessment tool. Adapted from an earlier version provided by Out of the Blue Enterprises, the assessment is comprised of six sub-tests based on skills embedded in the *Super Why!* episodes and the camp activities. Fifty-one items covered a wide range of early literacy skills.

The sub-tests consist of

- Letter ID
- Letter Sounds
- Phonics
- Word Recognition
- Vocabulary
- Sentence Reading
- Comprehension of Main Idea

Prior to the *Super Why!* camp, WFSU Education and Outreach staff visited each center and pre-assessed the campers individually. This Pre-Assessment included all of the items that the campers would encounter in the subsequent post-measures. Once the camp began, students were assessed at the end of each week's activities for a total of three post assessments. Using developmentally appropriate testing materials, children pointed to and/or verbalized their responses. Interactions with the children were intentionally positive and game-like.

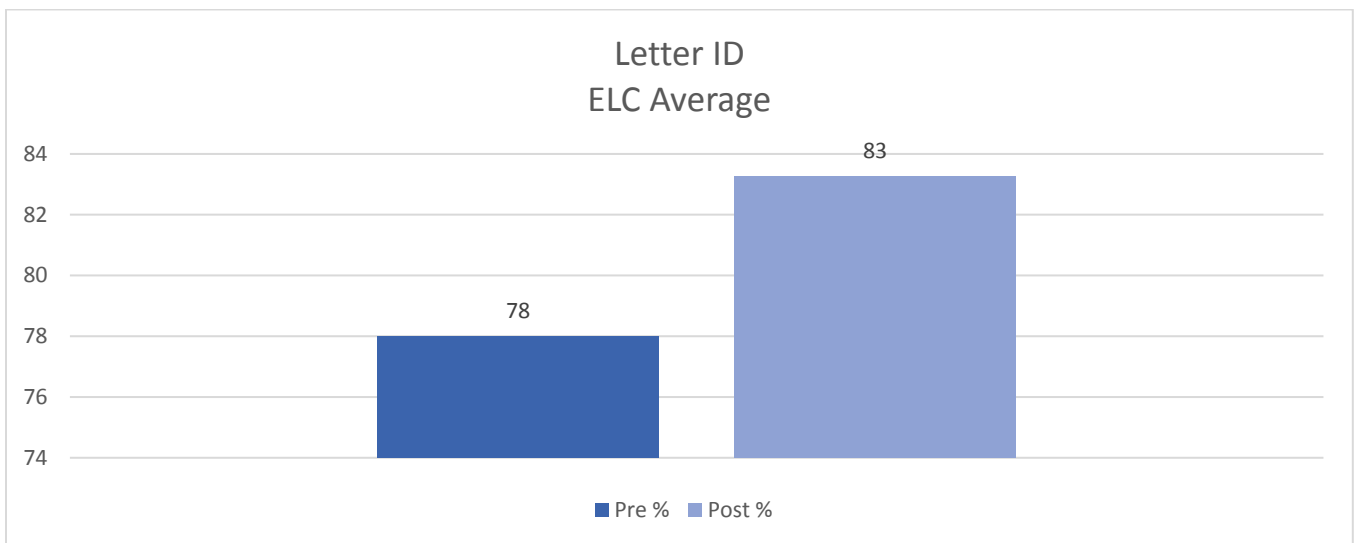
## RESULTS



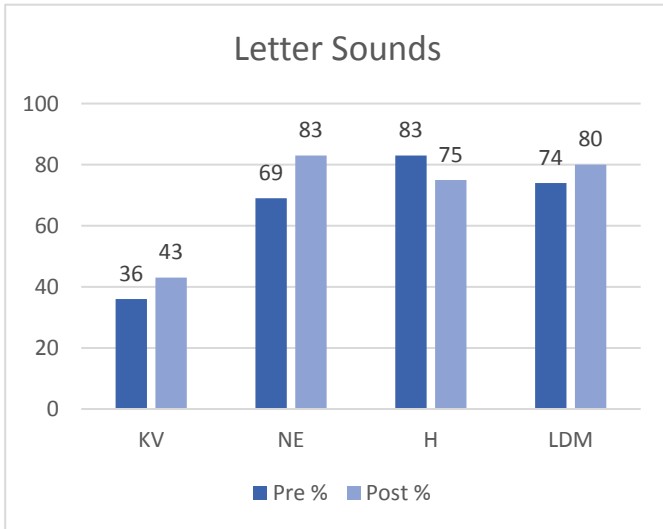
### Letter Identification:

On the Letter Identification subtests, campers were shown letter cards and were asked to name the letters.

Many of the campers possessed strong letter identification knowledge before the camp started. *ELC students increased their ability to identify letter names by five percent.*



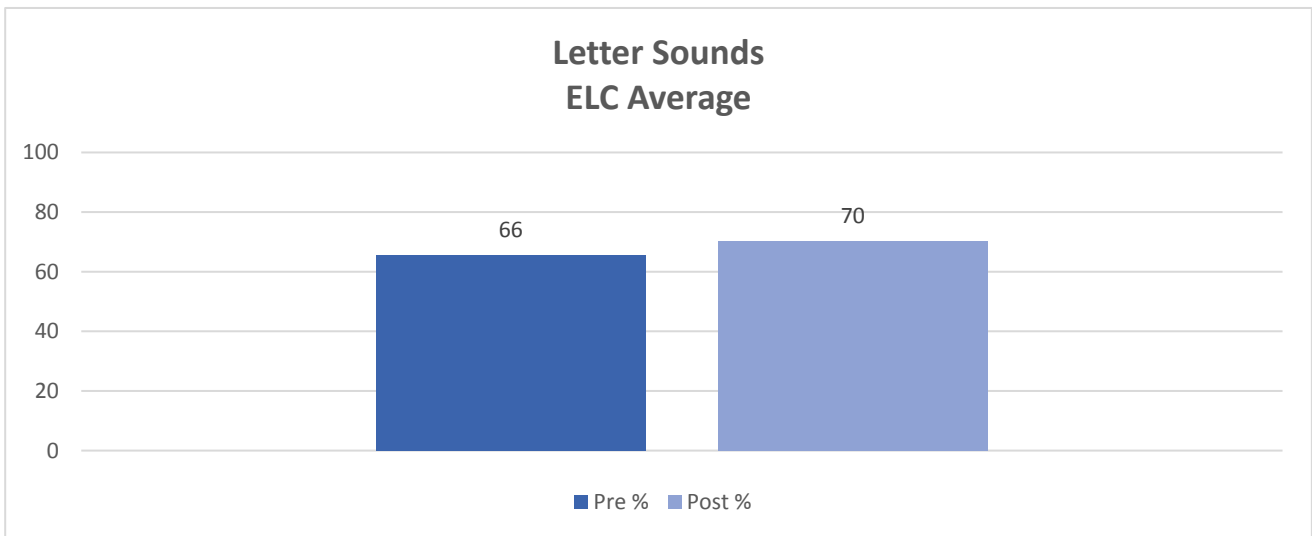
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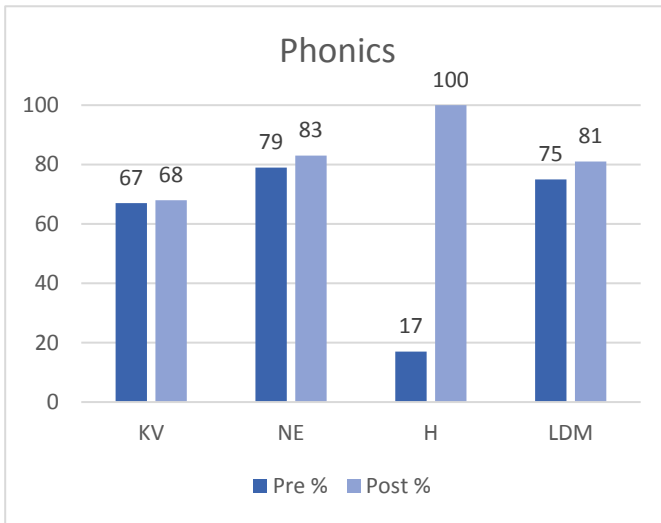
### Letter Sounds:

On the Letter Sound subtests, campers were shown certain letters and were asked to verbalize the sound made by each.

*Campers improved their ability by four percent.*



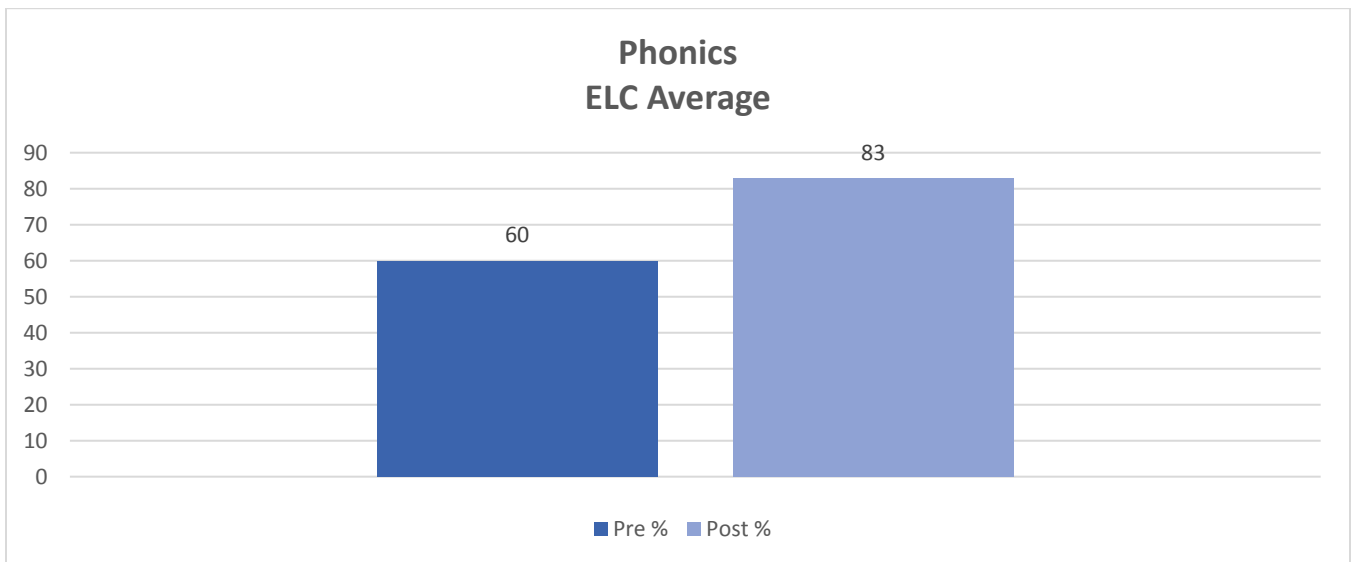
## RESULTS



### Phonics:

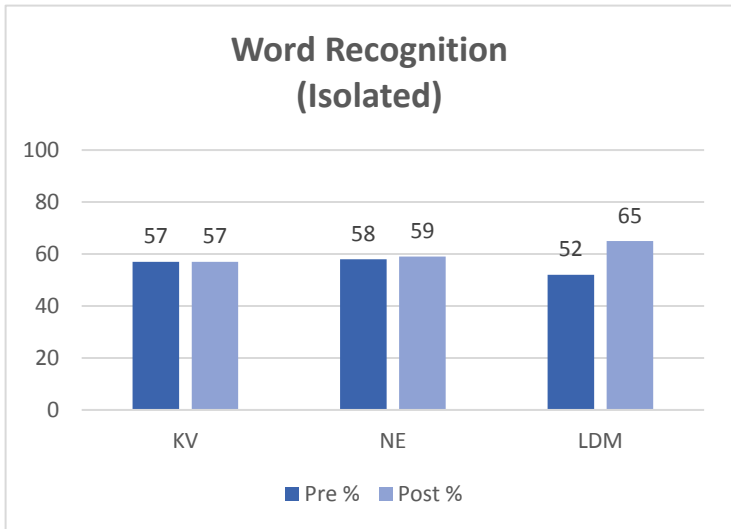
Phonics skills were assessed by having campers identify the appropriate onset, or beginning letter, for a given rhyme, or word family. For example, a picture of a ball was shown along with a card:  ALL . Campers selected the appropriate beginning letter (W, B, or T) to make the word "BALL."

*ELC campers' phonetic ability improved 23 percent.*





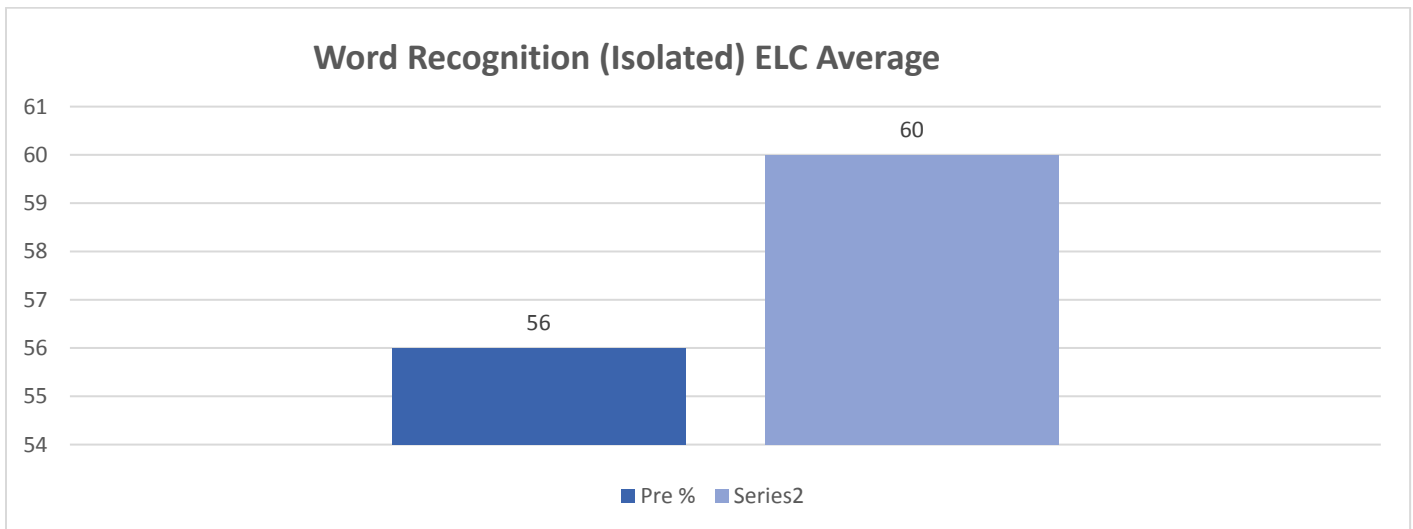
## RESULTS



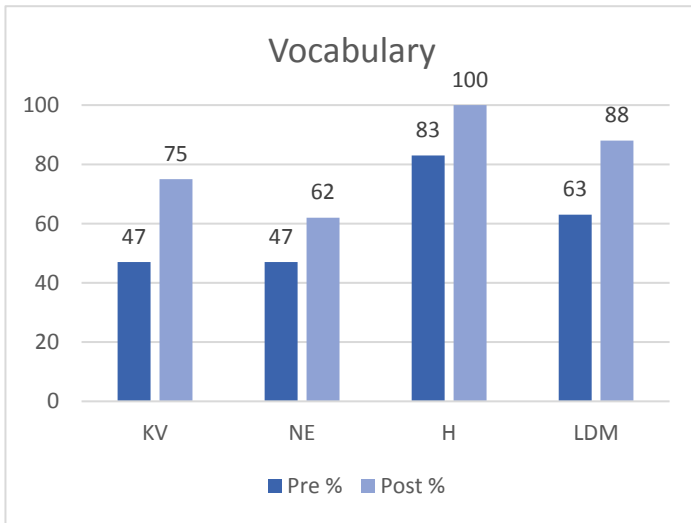
### Word Recognition:

For the Word Recognition task, campers were shown word cards displaying three isolated words with similar features. Students were asked to identify a given word spoken by a WFSU staff member. (Due to a testing anomaly, data from the single participant at Horizons Unlimited was not included in this sub-test).

*Campers increased their ability to identify single words by 4%.*



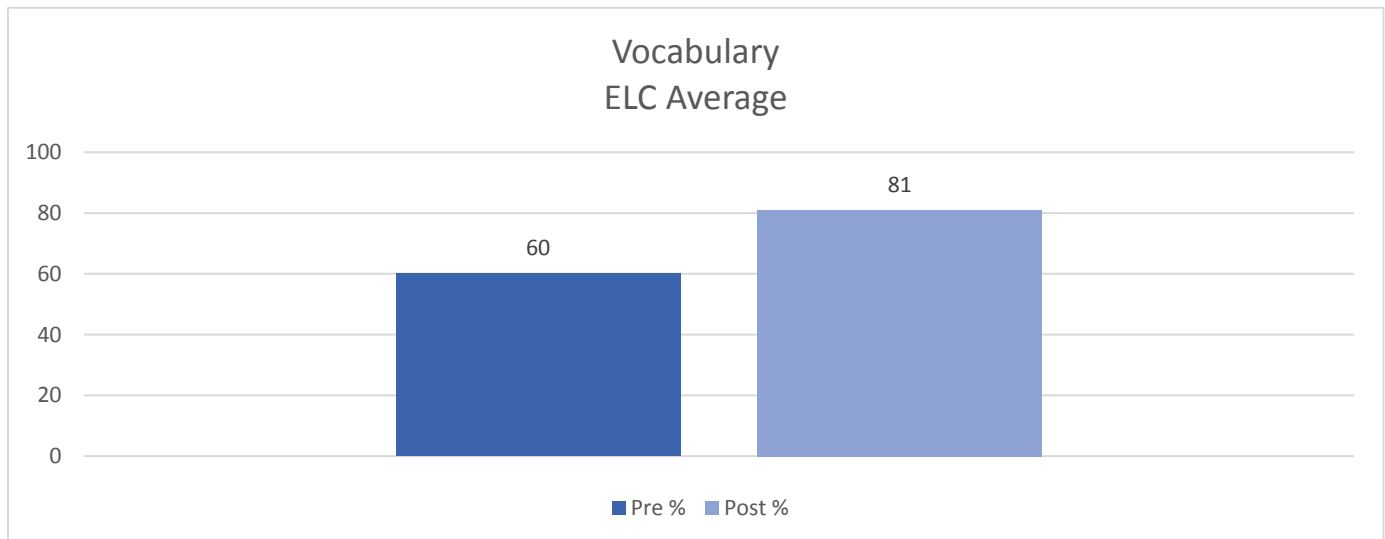
## RESULTS



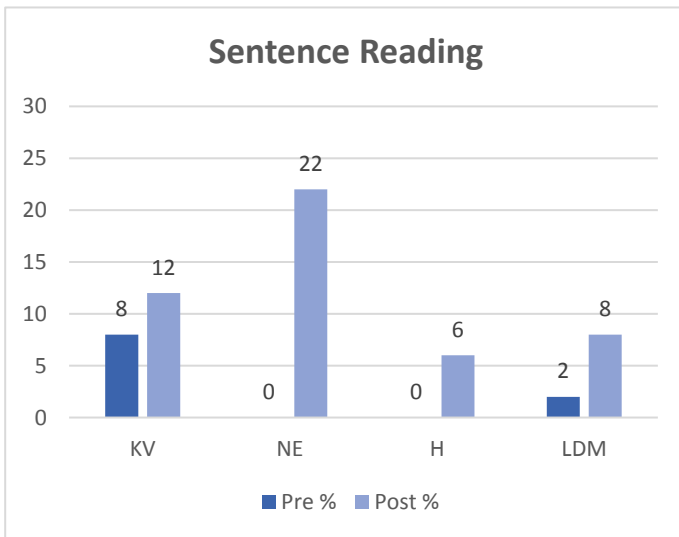
### Vocabulary:

To assess vocabulary growth, campers were asked to tell which of three words was the best response to a given meaning. Word cards and reading support was provided.

*ELC campers increased their understanding of the featured vocabulary by 21%.*



## RESULTS

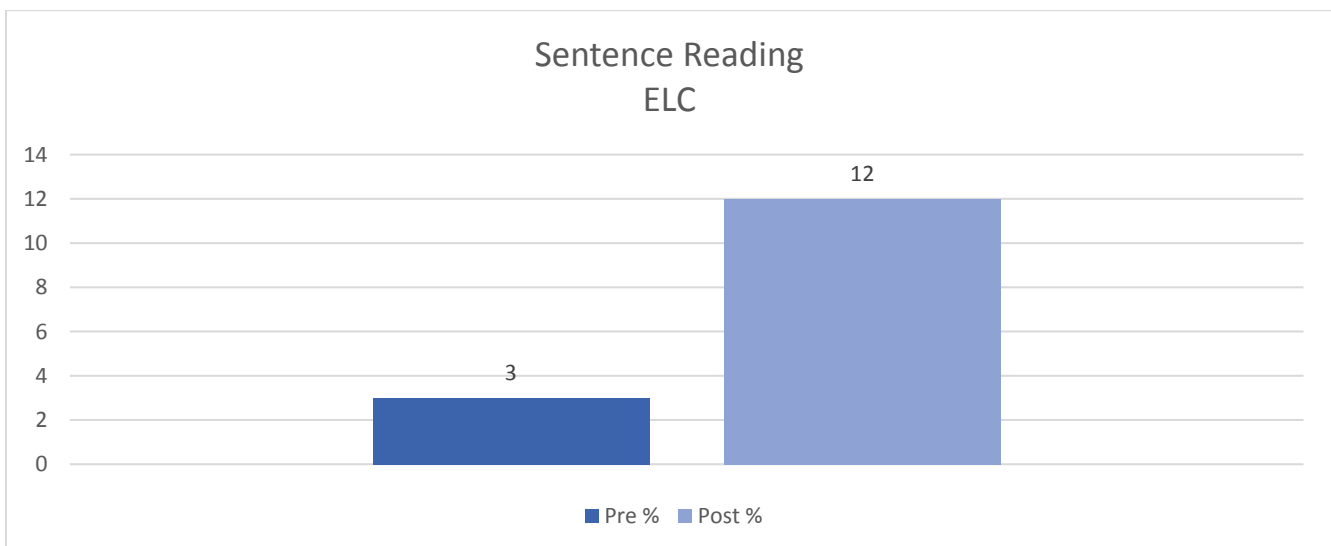


### Sentence Reading:

In all *Super Why!* episodes, main character Wyatt interacts with viewers to read and manipulate simple sentences. For instance, in Week 1 children see the sentence “There once was a small good wolf,” and are asked to read along with Wyatt as the words are highlighted. With guidance from Wyatt, children strengthen pre-literacy skills such as spoken-to-written-correspondence, left-to-right directionality, sight-word development and fluency. During our assessment sessions, WFSU staff showed

campers short sentences to measure their ability to apply sentence reading skills in an off-screen setting.

Most pre-kindergarteners are rarely able to read sentences, and this subtest was by far the most challenging. However, sentence reading is one of four areas where ELC campers demonstrated their strongest growth, with *an increase of nine percent in three weeks*.



## RESULTS

### Comprehension of Key Ideas:

*Super Why!* episodes deliver two forms of content: narrative and educational (Fisch, 2004). The educational content, such as the sound made by a given letter, is embedded within the plot line or narrative of the characters' adventure. Along with the more explicitly taught educational content (e.g., letters, sounds and spelling), WFSU Education and Outreach wanted to include an assessment of campers' comprehension of the *narrative* component of the *Super Why!* episodes.

Site	% Increase
Kids Village	21
New Enrichment	45
Horizons Unlimited	33
Live Deliverance Ministry Academy	25
<b>Average</b>	<b>31</b>

We queried campers to see if they were able to apply the main idea of episode narratives when they were questioned about episode topics. For instance, in the Week 2 (*Hansel and Gretel: Healthy Adventure*), the witch suffers from a lack of energy due to her diet of cookies and candy. In pre and post assessments campers were asked: "What happens if a person doesn't eat healthy foods?" While practically every child demonstrated background knowledge in the pre-test (e.g., "you will get cavities," or "you will get sick"), several campers exhibited a refined

understanding the effect of poor nutritional choices after participating in Week 2 activities, with responses such as "[they will] run out of energy" or "get tired."

*ELC children refined their understanding of key ideas by 31%.*

## SUMMARY AND CONCLUSION

The process of learning to read does not occur as a linear progression. Early skills such as letter knowledge or phonics are necessary for optimal development, but they do not have to be mastered before growth can occur in other areas. For instance, a child who does not know all of her letters can still learn word meanings and comprehension strategies. Conversely, a child may be able to identify many or all of the 26 letters of the alphabet, but may not have a strong oral vocabulary necessary for learning new words or comprehending age-appropriate spoken language. Given the complexity of learning to read, and their highly individual experiences, it is not surprising that preschoolers exhibit a wide range of early literacy abilities.

Prior to the *Super Why!* camp, ELC campers demonstrated varying abilities across the six areas in the assessment. After participation in the *Super Why!* camp, they each exhibited a forward progression in skills. In particular, the *Super Why!* program was especially effective in increasing campers' Phonics, Vocabulary, Sentence Reading, and Comprehension abilities.

In three of the four sites, ELC campers demonstrated a good grasp of letters and letter sounds at the beginning of the camp. Supported by their teachers and the *Super Why!* curriculum, the children were able to leverage their existing letter skills to show growth in other areas:

- Campers were able to use their emerging **Phonics** skills (+23%) to help them identify more words in the challenging **Sentence Reading** task (+9%), which signals a real-time view of beginning reading development.

Additionally, ELC campers bolstered their oral language and conceptual knowledge:

- Campers' **Vocabulary** knowledge was strengthened (+21%) because of the varied ways in which the words are presented in the camp curriculum. The varied presentation and repetition helped children make and reinforce connections between words and their meanings, which will in turn support spelling as well as comprehension development.
- **Main Idea Comprehension** of the narrative in the *Super Why!* episodes was strengthened (+31%), giving children more background knowledge upon which to draw as they encounter new ideas in text.

*Overall, ELC campers' abilities increased 14% across all seven categories and 21% in the areas of strongest growth.*

Rather than emphasize just one aspect of early literacy, *Super Why!* is a comprehensive early reading program that allows for growth within and across several different areas. ELC children clearly benefitted from this engaging, hands-on and comprehensive approach to early literacy instruction, with the strongest growth in Phonics, Vocabulary, Sentence Reading and Comprehension of Main Ideas.

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