

Carroll County Ferst Foundation for Childhood Literacy 2015

Statistical Data Analysis

Below for talking points regarding the study.

Please use this in accurately communicating the findings.

- 1) The Participants are exact matches between name and birthdate of Carroll County School System students with the FERST Foundation database AND who were enrolled in the FERST program for 5 or more years. The number of participants who met this criteria is 60. (We may go back and hand match some of the names as there were just slight differences in birth dates or slight differences in spellings of names. These were not included. We only included exact matches for this first study.) We were unable to obtain Carrollton City GKIDS scores at this time - but will continue to try to secure this information and rerun the study.
- 2) A larger percentage of children who participated in the FERST program performed at or above expectations on the GKIDS at the end of Kindergarten, compared to students who were not part of the FERST program.
- 3) When looking at specific items on the GKIDS, there were significant differences on 5 specific items related to early reading readiness skills. In other words, FERST participants did perform at a higher % (met or exceeded standard) on 5 literacy items than children who did not participate in the program.

To come up with a number that is easily understood, the odds ratios were calculated for each of the five measures of reading and language literacy that indicated a difference between FERST and non-FERST students. Based on these statistics, **it is fair to say that FERST program participants are 1.84 - 3 times more likely to perform at or above expectations than students who do not participate in the FERST program.**

Or, if you want to talk about the odds one measure at a time, all of these statements are correct:

Compared to non-FERST participants, FERST students are 1.84 times more likely to meet or exceed expectations for asking and answering questions about key details in a text, retelling familiar stories, and identifying characters, settings, and major events in a story with prompting and support.

Compared to non-FERST participants, FERST students are 2.35 times more likely to meet or exceed expectations for demonstrating a basic knowledge of one-to-one letter-sound corresponds by producing the primary or many of the most frequent sounds for each consonant and associating the long and short sounds with the common spellings for the five major vowels.

Compared to non-FERST participants, FERST students are 2.95 times more likely to meet or exceed expectations for reading common high-frequency words by sight.

Compared to non-FERST participants, FERST students are 2.40 times more likely to meet or exceed expectations for capitalizing the first word in a sentence and the pronoun "I" and to recognize and name end punctuation.

Compared to non-FERST participants, FERST students are 3.00 times more likely to meet or exceed expectations for writing a letter or letters for most consonant and short-vowel sounds and spell simple words phonetically.

- 4) Another interesting data, there were no differences between demographic groups in the FERST participants, which may suggest that the FFCL program contributes to "leveling" the playing field for children within these 5 items by the end of Kindergarten. - ie. suggesting demographic characteristics were not a factor.

For example, significant differences on all five outcomes were found between boys and girls who did not participate in FERST, but no differences between boys and girls were found for FERST participants. Further, significant differences were found on four of the five outcomes between Caucasian and non-Caucasian students who did not participate in FERST, but no similar differences were observed for FERST participants. This indicates that the program helps to "level" the playing field by the end of kindergarten.