Harrison County Community Foundation

Pre-K Pilot

2016 Mid-Year Data Summary



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Harrison County Community Foundation Pre-Kindergarten Pilot

# Mid-Year Data Summary February 2016

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# I-STAR KR Assessment

The I-STAR KR assessment tool is a comprehensive observational record of a child’s functional capacities across the following areas of development: reading and language, math and quantitative reasoning and social and emotional development. Teachers observe students carefully to determine function level.

Reading and Language

The assessment includes eight English and Language Arts components. Kindergarten readiness is indicated by scores between 6 and 7, depending on the module. The average score across all eight modules on the pre-test was 3.22. On the mid-year test the average score across all eight modules was 4.05. Students exhibited significant improvement in all eight modules and in the reading and language category as a whole.

Figure : Reading and Language Total Means

|  |  |  |
| --- | --- | --- |
| **Reading and Language Total Means** | **Pre-Test** | **Mid-Year** |
| **Full Data** | **25.64** | **32.39** |
| **Paired Samples** | **25.70** | **32.40\*** |

\*Denotes significance of *p*<.001

Figure : Reading and Language Subject Paired Samples T-Test Means

|  |  |  |
| --- | --- | --- |
| **ISTAR KR Reading and Language Subject Scores** | **Pre-Test Mean** | **Mid-Year Mean** |
| **Reading and Language Total** | **25.70** | **32.40\*** |
| Phonological Awareness | 3.33 | 3.95\* |
| Print Concepts, Phonics, and Word Recognition | 2.97 | 3.82\* |
| Informational Texts | 3.10 | 3.91\* |
| Literature Texts | 2.84 | 3.80\* |
| Writing Standards | 2.72 | 3.50\* |
| Language Conventions | 3.05 | 4.18\* |
| Comprehension and Collaboration | 3.50 | 4.26\* |
| Presentation of Knowledge and Ideas | 4.21 | 4.97\* |

\*Denotes significance of *p*<.001

# Math and Quantitative Reasoning

Kindergarten readiness in the math categories is measured at a score of 6. The average test score on the pretest across all six modules was 2.99. On the mid-year test the average score across all six modules was 3.73. Students exhibited significant improvement in all six modules and in the math and quantitative reasoning category as a whole.

Figure : Math and Quantitative Reasoning Total Means

|  |  |  |
| --- | --- | --- |
| **Math and Quantitative Reasoning Total Means** | **Pre-Test** | **Mid-Year** |
| **Full Data** | **17.83** | **22.34** |
| **Paired Samples** | **17.86** | **22.34\*** |

\*Denotes significance of *p*<.001

Figure : Math and Quantitative Reasoning Subject Paired Samples T-Test Means

|  |  |  |
| --- | --- | --- |
| **ISTAR KR Math and Quantitative Reasoning Subject Scores** | **Pre-Test Mean** | **Mid-Year Mean** |
| **Math and Quantitative Reasoning Total** | **17.86** | **22.34\*** |
| Counting and Quantity | 3.01 | 3.70\* |
| Algebraic Thinking | 2.81 | 3.67\* |
| Time | 2.92 | 3.54\* |
| Location | 3.42 | 4.08\*\* |
| Length, Capacity, Weight, and Temperature | 2.95 | 3.57\* |
| Geometry | 2.84 | 3.79\* |

\*Denotes significance of *p*<.001

# Social and Emotional Development

The average test score on the pretest across all six modules was 3.20. On the mid-year test the average score across all six modules was 3.75. Students exhibited significant improvement in all six modules and in the social and emotional development category as a whole.

Figure : Social and Emotional Development Total Means

|  |  |  |
| --- | --- | --- |
| **Social and Emotional Development Total Means** | **Pre-Test** | **Mid-Year** |
| **Full Data** | **19.06** | **22.50** |
| **Paired Samples** | **19.12** | **22.50\*** |

Averages using only those for whom we had both pre and mid-year scores were virtually the same as those for the full data set (including individuals with only one of the two assessments).

\*Denotes significance of *p*<.001

Figure : Social and Emotional Development Subject Paired Samples T-Test Means

|  |  |  |
| --- | --- | --- |
| **ISTAR KR Social and Emotional Development Subject Scores** | **Pre-Test Mean** | **Mid-Year Mean** |
| **Social and Emotional Development Total** | **19.12** | **22.50\*** |
| Sense of Self and Others | 3.35 | 3.72\* |
| Manages Emotions | 3.23 | 3.86\* |
| Interpersonal Skills | 3.60 | 4.20\* |
| Responsibility | 3.24 | 3.91\* |
| Problem Solving | 2.83 | 3.46\* |
| Approaches to Learning | 2.92 | 3.36\* |

\*Denotes significance of *p*<.001

Appendices

The ISTAR KR assessment instruments offer progressive responses within each assessment item. As you read these tables, understand that the percentages reflect the highest level achieved for the student and that the difficulty or skill level increases as you move down the table. Students represented lower in the table have demonstrated all of the skills listed above the item the teacher marked as their highest level of achievement or ability. This means that on the pre-test you may have more in the first few items and fewer in the latter items and on the mid-year you may see no numbers in the first few items and more in the later items. In the case of “no evidence” a 0% means that everyone showed evidence of skills, but for items at the opposite end of the spectrum, a 0% means no students have reached that skill level.

# Appendix A: Language and Reading, Full Frequency Percentages

Figure : ISTAR KR Phonological Awareness

|  |  |  |
| --- | --- | --- |
| **Phonological Awareness** | **Pre-Test (n=137)** | **Mid-Year (n=127)** |
| **Mean** | 3.30 | 3.94 |
| 1. No evidence | 0.0% | 0.0% |
| 1. Responds to sounds in the environment | 18.2% | 0.8% |
| 1. Produces a variety of sounds | 37.2% | 23.6% |
| 1. Produces and blends the sounds of letter patterns into recognizable words | 40.9% | 56.7% |
| 1. Compares sounds of different words | 3.6% | 18.1% |
| 1. KG Standards: Distinguishes sounds within words (to be mastered by end of KG) | 0.0% | 0.8% |
| 1. 1st Grade Standards (to be mastered by end of 1st grade) | 0.0% | 0.0% |

Note: Figures represent progressive skill attainment levels with “1” indicating no-evidence of skill and “7” being the highest level of skill. Please read the note at the beginning of Appendix A that explains how to read cells with no data.

Figure : ISTAR KR Print Concepts, Phonics and Word Recognition

|  |  |  |
| --- | --- | --- |
| **Print Concepts, phonics and word recognition** | **Pre-Test (n=137)** | **Mid-Year (n=127)** |
| **Mean** | 2.94 | 3.81 |
| 1. No evidence | 1.5% | 0.0% |
| 1. Responds to familiar pictures | 28.5% | 3.1% |
| 1. Labels familiar pictures | 45.3% | 22.8% |
| 1. Recognizes familiar symbols | 24.1% | 65.4% |
| 1. Compares, combines, and orders letters and letter sounds | 0.7% | 7.9% |
| 1. KG Standard: Recognizes that letters make words and words make sentences (to be mastered by the end of KG) | 0.0% | 0.0% |
| 1. 1st Grade Standard (to be mastered by end of 1st grade) | 0.0% | 0.8% |

Note: Figures represent progressive skill attainment levels with “1” indicating no-evidence of skill and “7” being the highest level of skill. Please read the note at the beginning of Appendix A that explains how to read cells with no data.

Figure : ISTAR KR Informational Texts

|  |  |  |
| --- | --- | --- |
| **Informational Texts** | **Pre-Test (n=136)** | **Mid-Year (n=127)** |
| **Mean** | 3.10 | 3.92 |
| 1. No evidence | 0.0% | 0.0% |
| 1. Engages with a book | 19.1% | 3.9% |
| 1. Imitates proper handling of books | 54.4% | 13.4% |
| 1. Distinguishes print from pictures | 24.3% | 69.3% |
| 1. Orients to print in books | 2.2% | 13.4% |
| 1. KG Standard: Chooses reading activities for meaning (to be mastered by end of KG) | 0.0% | 0.0% |
| 1. 1st Grade Standard (to be mastered by end of 1st Grade) | 0.0% | 0.0% |

Note: Figures represent progressive skill attainment levels with “1” indicating no-evidence of skill and “7” being the highest level of skill. Please read the note at the beginning of Appendix A that explains how to read cells with no data.

Figure : ISTAR KR Literature Texts

|  |  |  |
| --- | --- | --- |
| **Literature Texts** | **Pre-Test (n=137)** | **Mid-Year (n=127)** |
| **Mean** | 2.84 | 3.80 |
| 1. No evidence | 1.5% | 0.0% |
| 1. Reacts to a story or event | 28.5% | 3.9% |
| 1. Identifies details from a story or picture | 55.5% | 30.7% |
| 1. Talks about characters and settings | 13.9% | 48.0% |
| 1. Retells familiar stories | 0.7% | 16.5% |
| 1. KG Standard: Comprehends and responds to stories (to be mastered by end of KG) | 0.0% | 0.8% |
| 1. 1st Grade Standard (to be mastered by end of 1st grade) | 0.0% | 0.0% |

Note: Figures represent progressive skill attainment levels with “1” indicating no-evidence of skill and “7” being the highest level of skill. Please read the note at the beginning of Appendix A that explains how to read cells with no data.

Figure : ISTAR KR Writing Standards

|  |  |  |
| --- | --- | --- |
| **Writing Standards** | **Pre-Test (n=137)** | **Mid-Year (n=127)** |
| **Mean** | 2.73 | 3.50 |
| 1. No evidence | 0.0% | 0.8% |
| 1. Intentionally makes marks or scribbles | 40.1% | 8.7% |
| 1. Associates writing with purpose | 46.7% | 32.3% |
| 1. Creates writing with the intention of communicating | 13.1% | 55.9% |
| 1. Produces recognizable writing that conveys meaning | 0.0% | 2.4% |
| 1. KG Standard: Gathers ideas for writing for a purpose (to be mastered at the end of KG) | 0.0% | 0.0% |
| 1. 1st Grade Standard (to be mastered by end of 1st grade) | 0.0% | 0.0% |

Note: Figures represent progressive skill attainment levels with “1” indicating no-evidence of skill and “7” being the highest level of skill. Please read the note at the beginning of Appendix A that explains how to read cells with no data.

Figure : ISTAR KR Language Conventions

|  |  |  |
| --- | --- | --- |
| **Language Conventions** | **Pre-Test (n=137)** | **Mid-Year (n=127)** |
| **Mean** | 3.07 | 4.18 |
| 1. No evidence | 0.0% | 0.0% |
| 1. Grasps writing tools | 36.5% | 3.9% |
| 1. Imitates specific writing strokes to make a picture | 22.6% | 4.7% |
| 1. Copies specific writing marks | 38.7% | 60.6% |
| 1. Approximates writing strings of letters | 2.2% | 30.7% |
| 1. KG Standard: Writes from left to right spacing letters correctly (to be mastered by end of KG) | 0.0% | 0.0% |
| 1. 1st Grade Standard (to be mastered by end of 1st Grade) | 0.0% | 0.0% |

Note: Figures represent progressive skill attainment levels with “1” indicating no-evidence of skill and “7” being the highest level of skill. Please read the note at the beginning of Appendix A that explains how to read cells with no data.

Figure : ISTAR KR Comprehension and Collaboration

|  |  |  |
| --- | --- | --- |
| **Comprehension and Collaboration** | **Pre-Test (n=137)** | **Mid-Year (n=127)** |
| **Mean** | 3.49 | 4.26 |
| 1. No evidence | 0.7% | 0.0% |
| 1. Responds to cues in the environment | 13.9% | 0.0% |
| 1. Responds to familiar gestures and words | 31.4% | 12.6% |
| 1. Follows a familiar verbal or signed direction | 44.5% | 51.2% |
| 1. Follows unfamiliar direction | 8.8% | 33.9% |
| 1. KG Standard: Follows directions with steps and descriptors (to be mastered by end of KG) | 0.7% | 2.4% |
| 1. 1st Grade Standard (to be mastered by end of 1st grade) | 0.0% | 0.0% |

Note: Figures represent progressive skill attainment levels with “1” indicating no-evidence of skill and “7” being the highest level of skill. Please read the note at the beginning of Appendix A that explains how to read cells with no data.

Figure : ISTAR KR Presentation of Knowledge and Ideas

|  |  |  |
| --- | --- | --- |
| **Presentation of Knowledge and Ideas** | **Pre-Test (n=137)** | **Mid-Year (n=127)** |
| **Mean** | 4.20 | 4.97 |
| 1. No evidence | 0.0% | 0.0% |
| 1. Uses gestures or sounds to communicate | 4.4% | 0.8% |
| 1. Uses single words to communicate | 21.2% | 2.4% |
| 1. Uses two-word phrases or signs | 30.7% | 24.4% |
| 1. Uses simple phrases and sentences with simple grammatical rules | 38.0% | 44.9% |
| 1. Uses varied grammar in expression | 5.8% | 26.8% |
| 1. KG Standard: Shares information and ideas to describe, explain, predict (to be mastered by end of KG) | 0.0% | 0.8% |
| 1. 1st Grade Standard (to be mastered by end of 1st grade) | 0.0% | 0.0% |

Note: Figures represent progressive skill attainment levels with “1” indicating no-evidence of skill and “8” being the highest level of skill. Please read the note at the beginning of Appendix A that explains how to read cells with no data.

# Appendix B: Mathematics and Spatial Reasoning, Full Frequency Percentages

Figure : ISTAR KR Counting and Quantity

|  |  |  |
| --- | --- | --- |
| **Counting and Quantity** | **Pre-Test (n=137)** | **Mid-Year (n=127)** |
| **Mean** | 3.0 | 3.7 |
| 1. No evidence | 0.0% | 0.0% |
| 1. Demonstrates awareness of the presence of objects | 27.7% | 5.5% |
| 1. Identifies more | 51.1% | 36.2% |
| 1. Uses numbers to compare | 15.3% | 44.1% |
| 1. Names and orders quantities | 5.1% | 11.0% |
| 1. KG Standard: Describes relationships between numbers and quantity (to be mastered by end of KG) | 0.7% | 3.1% |
| 1. 1st Grade Standard (to be mastered by end of 1st grade) | 0.0% | 0.0% |

Note: Figures represent progressive skill attainment levels with “1” indicating no-evidence of skill and “7” being the highest level of skill. Please read the note at the beginning of Appendix A that explains how to read cells with no data.

Figure : ISTAR KR Algebraic Thinking

|  |  |  |
| --- | --- | --- |
| **Algebraic Thinking** | **Pre-Test (n=138)** | **Mid-Year (n=127)** |
| **Mean** | 2.81 | 3.67 |
| 1. No evidence | 1.4% | 0.0% |
| 1. Manipulates objects for a purpose | 31.2% | 3.9% |
| 1. Matches objects and sets | 54.3% | 32.3% |
| 1. Makes a set of objects smaller or larger | 10.9% | 57.5% |
| 1. Follows models of addition or subtraction situations | 2.2% | 5.5% |
| 1. KG Standard: Describes the application of addition and subtraction to situations (to be mastered by end of KG) | 0.0% | 0.8% |
| 1. 1st Grade Standard (to be mastered by end of 1st grade) | 0.0% | 0.0% |

Note: Figures represent progressive skill attainment levels with “1” indicating no-evidence of skill and “7” being the highest level of skill. Please read the note at the beginning of Appendix A that explains how to read cells with no data.

Figure : ISTAR KR Time

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Time** | **Pre-Test (n=138)** | | **Mid-Year (n=127)** | |
| **Mean** | 2.88 | 3.54 | |
| 1. No evidence | 1.4% | 0.8% | |
| 1. Anticipates a routine | 27.5% | 6.3% | |
| 1. Uses vocabulary to identify events in a routine | 54.3% | 40.9% | |
| 1. Sequences events | 14.5% | 41.7% | |
| 1. Uses measuring vocabulary for time | 2.2% | 10.2% | |
| 1. KG Standard: Uses measuring units for time (to be mastered by end of KG) | 0.0% | 0.0% | |
| 1. 1st Grade Standard (to be mastered by end of 1st grade) | 0.0% | 0.0% | |

Note: Figures represent progressive skill attainment levels with “1” indicating no-evidence of skill and “7” being the highest level of skill. Please read the note at the beginning of Appendix A that explains how to read cells with no data.

Figure : ISTAR KR Location

|  |  |  |
| --- | --- | --- |
| **Location** | **Pre-Test (n=138)** | **Mid-Year (n=127)** |
| **Mean** | 3.41 | 4.08 |
| 1. No evidence | 0.0% | 0.0% |
| 1. Demonstrates an awareness of location of objects | 15.9% | 3.9% |
| 1. Identifies location | 39.9% | 14.2% |
| 1. Follows directions involving location | 34.1% | 55.1% |
| 1. Communicates with location words | 8.7% | 23.6% |
| 1. KG Standard: Uses prepositions to describe location (to be mastered by end of KG) | 0.7% | 3.1% |
| 1. 1st Grade Standard (to be mastered by end of 1st grade) | 0.7% | 0.0% |

Note: Figures represent progressive skill attainment levels with “1” indicating no-evidence of skill and “7” being the highest level of skill. Please read the note at the beginning of Appendix A that explains how to read cells with no data.

Figure : ISTAR KR Length, Capacity, Weight and Temperature

|  |  |  |
| --- | --- | --- |
| **Length, Capacity, Weight and Temperature** | **Pre-Test (n=136)** | **Mid-Year (n=127)** |
| **Mean** | 2.96 | 3.56 |
| 1. No evidence | 0.7% | 0.0% |
| 1. Explores measurement attributes | 24.3% | 1.6% |
| 1. Distinguishes between big and little, hot and cold | 52.9% | 47.2% |
| 1. Differentiates gradients of size and weight | 22.1% | 44.9% |
| 1. Uses common measuring tools in correct context | 0.0% | 6.3% |
| 1. KG Standard: Makes direct measurement comparisons (to be mastered by end of KG) | 0.0% | 0.0% |
| 1. 1st Grade Standard (to be mastered by end of 1st grade) | 0.0% | 0.0% |

Note: Figures represent progressive skill attainment levels with “1” indicating no-evidence of skill and “7” being the highest level of skill. Please read the note at the beginning of Appendix A that explains how to read cells with no data.

Figure : ISTAR KR Geometry

|  |  |  |
| --- | --- | --- |
| **Geometry** | **Pre-Test (n=137)** | **Mid-Year (n=127)** |
| **Mean** | 2.85 | 3.79 |
| 1. No Evidence | 0.7% | 0.0% |
| 1. Explores attributes (e.g. shape, size, color) | 29.2% | 2.4% |
| 1. Matches same attributes | 59.1% | 35.4% |
| 1. Matches opposites | 6.6% | 44.1% |
| 1. Sorts and patterns by one attribute | 4.4% | 17.3% |
| 1. KG Standard: Sorts and patterns by more than one attribute (to be mastered by end of KG) | 0.0% | 0.8% |
| 1. 1st Grade Standard (to be mastered by end of 1st grade) | 0.0% | 0.0% |

Note: Figures represent progressive skill attainment levels with “1” indicating no-evidence of skill and “7” being the highest level of skill. Please read the note at the beginning of Appendix A that explains how to read cells with no data.

# Appendix C: Social and Emotional Development, Full Frequency Percentages

Figure : ISTAR KR Sense of Self and Others

|  |  |  |
| --- | --- | --- |
| **Sense of Self and Others** | **Pre-Test (n=138)** | **Mid-Year (n=127)** |
| **Mean** | 3.35 | 3.72 |
| 1. No Evidence | 0.0% | 0.0% |
| 1. Demonstrates self-awareness | 17.4% | 5.5% |
| 1. Demonstrates independence | 38.4% | 33.9% |
| 1. Engages with others | 36.2% | 44.1% |
| 1. Demonstrates respect for self and others | 8.0% | 16.5% |

Note: Figures represent progressive skill attainment levels with “1” indicating no-evidence of skill and “5” being the highest level of skill. Please read the note at the beginning of Appendix A that explains how to read cells with no data.

Figure : ISTAR KR Manages Emotions

|  |  |  |
| --- | --- | --- |
| **Manages Emotions** | **Pre-Test (n=138)** | **Mid-Year (n=127)** |
| **Mean** | 3.23 | 3.86 |
| 1. No Evidence | 2.2% | 0.0% |
| 1. Expresses a variety of emotions | 23.9% | 3.1% |
| 1. Responds to a variety of emotions | 33.3% | 24.4% |
| 1. Manages emotions with adult assistance | 29.7% | 55.9% |
| 1. Uses strategies to manage emotions | 10.9% | 16.5% |

Note: Figures represent progressive skill attainment levels with “1” indicating no-evidence of skill and “5” being the highest level of skill. Please read the note at the beginning of Appendix A that explains how to read cells with no data.

Figure : ISTAR KR Interpersonal Skills

|  |  |  |
| --- | --- | --- |
| **Interpersonal Skills** | **Pre-Test (n=137)** | **Mid-Year (n=127)** |
| **Mean** | 3.61 | 4.20 |
| 1. No Evidence | 0.0% | 0.0% |
| 1. Interacts with caregiver | 9.5% | 0.0% |
| 1. Engages in parallel play | 30.7% | 13.4% |
| 1. Interacts with others | 49.6% | 53.5% |
| 1. Engages in cooperative interactions | 10.2% | 33.1% |

Note: Figures represent progressive skill attainment levels with “1” indicating no-evidence of skill and “5” being the highest level of skill. Please read the note at the beginning of Appendix A that explains how to read cells with no data.

Figure : ISTAR KR Responsibility

|  |  |  |
| --- | --- | --- |
| **Responsibility** | **Pre-Test (n=138)** | **Mid-Year (n=127)** |
| **Mean** | 3.19 | 3.91 |
| 1. No Evidence | 1.4% | 0.0% |
| 1. Recognizes steps in familiar routines | 24.6% | 6.3% |
| 1. Follows familiar routines | 37.0% | 19.7% |
| 1. Follows rules | 27.5% | 50.4% |
| 1. Applies rules to situations | 9.4% | 23.6% |

Note: Figures represent progressive skill attainment levels with “1” indicating no-evidence of skill and “5” being the highest level of skill. Please read the note at the beginning of Appendix A that explains how to read cells with no data.

Figure : ISTAR KR Problem Solving

|  |  |  |
| --- | --- | --- |
| **Problem Solving** | **Pre-Test (n=137)** | **Mid-Year (n=127)** |
| **Mean** | 2.8 | 3.46 |
| 1. No Evidence | 0.7% | 0.0% |
| 1. Initiates an action to get a desired effect | 35.0% | 13.4% |
| 1. Uses trial and error to manipulate objects | 49.6% | 36.2% |
| 1. Searches for possible solutions | 12.4% | 41.7% |
| 1. Finds alternative strategies and solutions | 2.2% | 8.7% |

Note: Figures represent progressive skill attainment levels with “1” indicating no-evidence of skill and “5” being the highest level of skill. Please read the note at the beginning of Appendix A that explains how to read cells with no data.

Figure : ISTAR KR Approaches to Learning

|  |  |  |
| --- | --- | --- |
| **Approaches to Learning** | **Pre-Test (n=138)** | **Mid-Year (n=127)** |
| **Mean** | 2.93 | 3.36 |
| 1. No Evidence | 0.7% | 0.0% |
| 1. Demonstrates curiosity | 23.2% | 10.2% |
| 1. Sustains attention to preferred activities | 60.9% | 37.0% |
| 1. Sustains attention to a challenging activity | 13.0% | 37.0% |
| 1. Applies creativity to activities | 2.2% | 4.7% |

Note: Figures represent progressive skill attainment levels with “1” indicating no-evidence of skill and “5” being the highest level of skill. Please read the note at the beginning of Appendix A that explains how to read cells with no data.