## JCPS/Kentucky Science Center 2012-2013 After-School Enrichment Pilot Program Highlights

WHO: Fourth grade students from five JCPS elementary schools. Students scoring in the range of high novice to low proficient in reading were targeted for the intervention.

WHAT: Six after-school sessions occurred weekly throughout March and mid-April with a culminating event at the Kentucky Science Center (KSC) for all students enrolled in the schools and their families. Each session lasted 90 minutes at each school from 4pm to 5:30 pm and was led by a KSC educator. Sessions used an inquiry-based framework for instruction and demonstration. Math and language arts content, aligned with the Common Core standards, were integrated into the program.

WHY: \#1: The KSC students did significantly better on the 2013 K-PREP assessment in reading and science than a matched control group. The KSC group showed a significant advantage in reading and science scale scores, reading growth, and science performance category scores. The table below shows that the KSC group also outperformed the district in having fewer novices and more proficient /distinguished scoring students in reading and science. The KSC group outperformed the state in every performance category for science.

| 2013 K-PREP PERFORMANCE CATEGORY DISTRIBUTIONS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| READING | $N$ | NOVICE | APPRENTICE | PROFICIENT | DISTINGUISHED |
| KSC | 52 | 28.8\% | 25\% | 25\% | 21.2\% |
| Control | 52 | 48.1\% | 26.9\% | 19.2 \% | 5.8\% |
| JCPS GRADE 4 | 7,259 | 34.3\% | 21.6\% | 28.6.\% | 15.8\% |
| State GRADE 4 | 50,360 | 26.9\% | 24.4\% | 33.1\% | 15.6\% |
| SCIENCE* | $N$ | NOVICE | APPRENTICE | PROFICIENT | DISTINGUISHED |
| KSC | 52 | 3.8\% | 30.8\% | 44.2\% | 21.2\% |
| Control | 52 | 13.5\% | 48.1\% | 32.7\% | 5.8\% |
| JCPS GRADE 4 | 7,259 | 12.8\% | 28.8\% | 36.5\% | 21.8\% |
| State GRADE 4 | 50,360 | 7.5\% | 24.1\% | 40.8\% | 27.7\% |

*Significant difference between KSC and control group, pvalue = . 004
\#2: In every case, the KSC groups outperformed their school in proficient/distinguished rates for science.
2013 K-PREP PERFORMANCE CATEGORY DISTRIBUTIONS BY OVERALL SCHOOL (in parenthesis)

| SCIENCE | $\boldsymbol{N}$ | NOVICE | APPRENTICE | PROFICIENT | DISTINGUISHED |
| :--- | :---: | :---: | :---: | :---: | :---: |
| KSC | 52 | $3.8 \%$ | $30.8 \%$ | $44.2 \%$ | $21.2 \%$ |
| SCHOOL 1 | 10 | 0 | $40 \%$ | $50 \%$ | $10 \%$ |
|  | $(101)$ | $(34.7 \%)$ | $(34.7 \%)$ | $(21.8 \%)$ | $(8.9 \%)$ |
| SCHOOL 2 | 11 | 0 | 0 | $36.3 \%$ | $(24.1)$ |
|  | $(79)$ | $(24.1 \%)$ | $(41.8)$ | $30 \%$ | $(10.1)$ |
|  | 10 | $20 \%$ | $50 \%$ | $(25.8 \%)$ | $0 \%$ |
| SCHOOL 4 | 11 | $(25.8 \%)$ | $(46.2 \%)$ | $45.5 \%$ | $(2.2)$ |
|  | $(113)$ | $(8.8 \%)$ | $36.4 \%$ | $(35.1 \%)$ | $18.2 \%$ |
|  | 10 | 0 | $30 \%$ | $(17.7 \%)$ |  |
| SCHOOL 5 | $(110)$ | $(13.6 \%)$ | $(36.4 \%)$ | $(36.4 \%)$ | $(13.6 \%)$ |
|  |  |  |  |  |  |

Please refer to the full Evaluation Report for a complete description of the pilot program, evaluation methodology, and specific statistics for all outcomes.

