

Lincoln Foundation – Executive Summary

2012 Math & Science Summer Program

Program Description and Participants

- ❖ “The Lincoln Foundation's summer Math & Science Program provides students entering grades 9-12 a unique educational opportunity which prepares them for their next level of science and mathematics courses. Activities include hands on experience and field trips. The program's environment promotes and encourages challenging work, self-reliance, and scientific inquiry. The program also provides a curriculum for students who are preparing to study science, mathematics, and engineering at the collegiate level. The program is in partnership with Jefferson County Public Schools and the University of Louisville College of Arts and Sciences.” (Lincoln Foundation Website)
- ❖ There were 80 participants that completed the four-week program at the University of Louisville.

Evaluation Results

- ❖ **Attendance** - Of the 80 students there were 23 participants (29%) that were present 100% of the days. An additional 33% missed 2 days or less.
- ❖ **Knowledge Growth** - 65 participants completed both the pre- and post-tests. There was a statistically significant ($p < .001$) gain from the pre-test to the post-test. The average gain was approximately 7.5%. Approximately 77% of the participants made gains.

❖ Pre-test Average (Number Correct) :	❖ 34	❖ Math Pre-Test (% correct)	❖ 56%
❖ Post-test Average (Number Correct):	❖ 39	❖ Math Post-Test (% correct)	❖ 68%
❖	❖	❖ Science Pre-Test (% correct)	❖ 45%
❖ <u>Percent of Students Making a Gain</u>	❖	❖ Science Post-Test (% correct)	❖ 48%
❖ GOAL	❖ 75%	❖	❖
❖ All Participants (65 students)	❖ 77%	❖	❖

- ❖ **Survey Feedback** – The statements that had the highest percentage of participants mark “agree” or “strongly agree” were: 1) “I believe my participating in the Math & Science Program will help in my math classes this upcoming year” (92%), 2) “The Math & Science Program contributed to my understanding of how our decisions impact the environment” (89%), 3) “The Math & Science Program

Summary

Primary Goal 1: Of all students who attend, at least 75% will indicate an increase on the post-test as compared to the pre-test.

Outcome 1: Of the 65 students that completed both the pre- and post-tests, 77% made a gain from the pre-test to the post-test. This goal is met.

Primary Goal 2: 70% of students will indicate knowledge growth in math and science concepts as measured by a retrospective survey.

Outcome 2: 48% of the students indicated an overall knowledge growth in math and 55% of the students indicated an overall knowledge growth in science. Although this goal was not met, there was an approximate 5% increase in both areas when compared to 2010.

	TOTAL #
<u>Gender</u>	
Female	33
Male	47
<u>Race/Ethnicity</u>	
African-American	62
White	14
Other/Multi-Racial	0
Asian	2
Hispanic	2
<u>Grade (2011-2012)</u>	
7 th	2
8 th	38
9 th	15
10 th	9
11 th	4
Unknown	12

Recommendations

- 1) Continue focusing on attendance. This year's attendance was up significantly from previous years.
- 2) Since there was a minimal science gain, further investigation may be warranted since the science field trips were so highly rated by the students.
- 3) Keep the field trips, especially the UPS field trip (highly rated), these were consistently rated positively.
- 4) Although there were a large number of students that felt compelled to come by parent/relative/program, a larger number participated in order to prepare for their futures.
- 5) Continue getting students from a cross section of schools. This year over half of the JCPS middle and high schools had at least one participant.