Lincoln Foundation – Executive Summary
2010 Math and Science Summer Program

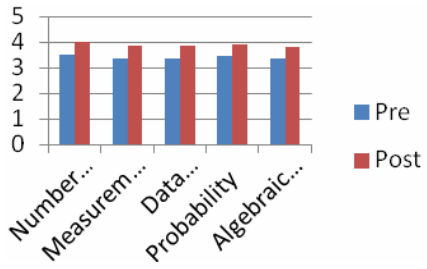
Program Description and Participants

- "The Lincoln Foundation's summer Math and 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)
- The participants were from 19 high schools (16 public, three private), 17 middle schools (all public), and 1 combined (public).
- There were 87 participants that participated in the four-week program at the University of Louisville.

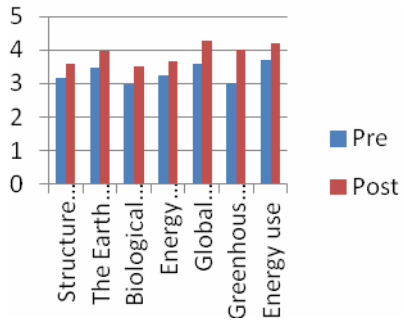
Evaluation Results

- **Attendance -** The attendance rate was 80% for summer 2010. The majority (64%) attended at least 16 days and 19 students were present for all 20 days.
- **Knowledge Growth -** 64 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 6%. Approximately 67% of the participants made gains. Attendance was a statistically significant ($p<.05$) predictor of gains (i.e. the more days in attendance, the larger the gain).

Math



Science



- **Survey Feedback -** 1) The statements that the participants agreed with the most were the ones dealing with community, the impact of personal decisions on the environment, and understanding the role of math and science in the "real world." 2) The students consistently perceived themselves as growing in all of the primary areas of math and science. 3) The participants were very positive about the UPS staff and project.

	TOTAL #
Gender	
Female	40
Male	46
Race/Ethnicity	
African-American	79
White	4
Multi-Racial	2
Asian	1
Free/Reduced Lunch	
Free/Reduced Lunch	47
Paid	35
Unknown	4
Grade (2009-2010)	
7th	2
8th	45
9th	18
10th	14
11th	3
Unknown	4

Commendations

The primary outcomes include:

- Of the 64 students that completed both the pre- and post-tests, 66.7% made a gain from the pre-test to the post-test.
- On a self-report, 44% of the students indicated an overall knowledge growth in math and 51% of the students indicated an overall knowledge growth in science.

Recommendations

The recommendations are:

- Try to increase the number of students that take both the pre-and post-tests,
- Continue working on increasing participant attendance,
- Consider focusing curriculum to fewer topics, and
- Try incorporating more interactive activities.