

2009 Math & Science Summer Program

Global Warming: Climate Change and the Impact on Kentucky



Program Description and Participants

- The program took place on the University of Louisville Campus for 4 weeks in June 2009 and served a total of 94 students.
- The program represents a partnership with numerous stakeholders and includes service learning group work, mentoring, and hands-on learning.
- The program promotes and encourages challenging work, self-reliance, and scientific inquiry while explicating how content knowledge can be applied to address current day challenges related to the human impact on global warming.
- 32 JCPS middle/high schools were represented by participants. Four private schools were also represented.

	Percent
Gender	
Male	49%
Female	51%
Race/Ethnicity	
African American	88%
White	1%
Asian	4%
Latino	5%
Other	1%
Lunch Status	
Free/Reduced	64%
Paid	36%
Grade	
Rising Eighth	52%
Rising ninth	29%
Other	19%

Evaluation Results

- **Attendance:** The average attendance rate during the program was 82% representing a *sizeable increase* from last year (57%).
- **Instructors:** Approximately 81% of participants rated their science instructors as good or excellent.

"The UofL honors students were insightful and helpful in our service project."
- **Knowledge Growth:** Participants indicated statistically significant growth in knowledge of all math and science concepts taught. The knowledge growth is also reflected in the WYSP content test scores. The average post test score increased significantly from the pre-test.

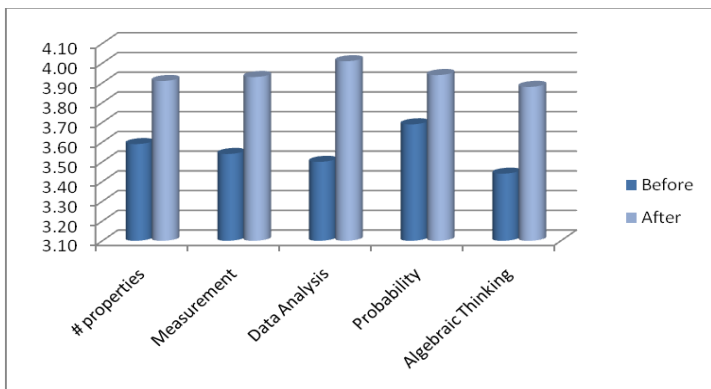
- 80% said the program contributed to their understanding between the math & science skills learned and their use in the "real world".

Commendations

- Notable increase in knowledge growth of math and science concepts on 2 different measures (retrospective survey and pre-post content test).
- Very positive survey results on self reported impact of the program on participants.
- Evidenced by the evaluation results, program challenges were significantly improved:
 - Increased program attendance rate
 - Increased number of male participants
 - Increased number of schools represented

Recommendations

- Continue current strategies to increase program attendance and male participants.
- Increase pre and post test response rates.
- Increase focus on math instruction; incorporate more hands-on engaging activities.



- **Increased Awareness:** Nearly all of the participants agreed that the program contributed to their awareness and understanding of (1) how to make a difference in the community, (2) how our decisions impact the environment, and (3) other people and their views.