Survey Response Before and After the 2010-2011 GEM Project

UNIVERSITY OF NEBRASKA

The Girl Empowerment and Mentoring (GEM) for Computing Project 2010-11

- 68 participants (80)
- 15 schools
- 13 teams
- 8 mentors
- 5 judges

2009-10 statistics
- 26 participants (40)
- 12 schools
- 8 teams
- 6 mentors
- 5 judges

2008-09 statistics
- 40 participants (80)
- 12 teams
- 12 mentors
- 4 judges

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I am confident in my computer science knowledge and abilities.
I am motivated to learn more about computer science/technology.
Women certainly are logical enough to do well in computer science.
I see computer science as something I will rarely use in my daily life.
I will need computer science for my future work.
Studying computer science is just as appropriate for women as for men.
Understanding the subject matter of this project is important to me.
Females are as good as males at computer science.
Knowing computer science will help me earn a living someday.
I want to learn about computer science because it is a useful and necessary subject.
After completing this project, I expect to take more CS or programming or IT courses.
It makes sense that there are more men than women in computer science.
I would like to major in computer science or computer engineering when I go to college.

Strongly disagree
-2

Disagree -1

Neutral 0

Agree 1

Strongly agree
2

Intro Survey
Exit Survey
Program Overview

The GEM Project aims to inspire middle and high school girls towards computing in post-secondary education by encouraging female middle and high school students to learn about IT and computing via three important activities:

1. working with a “Big Sister” at UNL who will mentor the participants,
2. working in a team with female students from other schools, and
3. investigating the use of IT and computing in real-world applications.

The contest allows students to learn from their mentors about life as a CS student at UNL, learn how to work as a team with peers, and learn how to investigate a technical topic and write cohesively and engagingly about their findings.

Essay topics are restricted to describing an application of their choice (e.g., CGI in movies) and the in-depth discussion of the CS paradigm(s) underlying the application. GEM mentors work with teams to help them choose an application, identify the CS paradigms, and facilitate the investigation. Essays are judged on a variety of criteria and winning teams are awarded prizes and scholarships.

Local School Visits

• Visited three middle schools this Spring 2011
• A 5-slide presentation on Computational Thinking
• A magic show based on NCWIT’s CS Unplugged’s Odd/Even Parity Activity
• A sorting game based on NCWIT’s CS Unplugged’s Sorting Network Activity
• Q&A session with mentors about life in CS and in college
• Logical puzzles (4 questions with prizes)
• Take home handouts on Image Analysis and Text Compression, based on CS Unplugged’s program-in-a-box

Shadow-A-Mentor Days

• 7 separate Shadow-A-Mentor Days
• A GEM participant visited campus and followed her mentors to class, and other locations such as the library, union, computer lab, and have lunch together

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