

2016

STRIDE

Southeastern Transportation Research,
Innovation, Development and Education Center

Final Report

Empowering Girls in Science and Engineering

(Project TO # UAB013)



Author: Virginia P. Sisiopiku, Ph.D., University of Alabama at
Birmingham

August 2016



STRIDE Project UF-EIES-1200009-UAB TO13

Empowering Girls in Science and Engineering

Virginia P. Sisiopiku, PhD

UNIVERSITY OF ALABAMA AT BIRMINGHAM
BIRMINGHAM, AL

Southeastern Transportation Research, Innovation, Development, and Education Center
Gainesville, FL

<http://www.stride.ce.ufl.edu/>

U.S. DOT DISCLAIMER

The contents of this report reflect the views of the authors, who are responsible for the facts and the accuracy of the information presented herein. This document is disseminated under the sponsorship of the U.S. Department of Transportation's University Transportation Centers Program, in the interest of information exchange. The U.S. Government assumes no liability for the contents or use thereof.

ACKNOWLEDGMENT OF SPONSORSHIP

This work was sponsored by a grant from the Southeastern Transportation Research, Innovation, Development, and Education Center (STRIDE) at the University of Florida. The STRIDE center is funded through the U.S. Department of Transportation's University Transportation Centers Program.

TABLE OF CONTENTS

TABLE OF CONTENTS.....	IV
LIST OF TABLES	V
LIST OF FIGURES	V
ABSTRACT.....	VI
EXECUTIVE SUMMARY	VII
CHAPTER 1: INTRODUCTION	1
Background.....	1
Objectives and Scope.....	1
CHAPTER 2: PROJECT APPROACH	3
Overview	3
Promotion and Outreach	3
Event Activities.....	5
Project Evaluation.....	8
CHAPTER 3: IMPLEMENTATION AND ACCOMPLISHMENTS.....	9
Attendance	9
Impact	11
Technology Transfer.....	13
CHAPTER 4: SUMMARY AND CONCLUSIONS	14
REFERENCES	14
APPENDIX A: PRE- AND POST-EVENT SURVEY RESPONSES	15
APPENDIX B: STEWARDSHIP REPORT	25

LIST OF TABLES

Table 1. UAB 2016 Girls in Science and Engineering Event Schedule	5
---	---

LIST OF FIGURES

Fig. 1. 2016 UAB Girls in Science and Engineering Day Flyer	4
Fig. 2. Student Activities at the UAB 2016 Girls in Science and Engineering Day	6
Fig. 3. Participants and Volunteers at Work	7
Fig. 4. Sample Certificate of Participation	8
Fig. 5. Event Registration by Grade	9
Fig. 6. Event Participants by Grade	10
Fig. 7. Event Participants by School.....	10
Fig. 8. Map of Selected Schools in Attendance	11

F

ABSTRACT

Analysis of 2010 US Census Bureau data shows that the engineering workforce is predominantly male. Men engineers account for 88% of the workforce and women only for 12%. Minority women are even more severely underrepresented with only 4% of the engineering workforce being female minorities. Introducing girls to women in science and technology and exposing to STEM opportunities can have a profound effect on their appreciation of the fields and encourage them to consider STEM related careers.

On May 7, 2016, the University of Alabama at Birmingham (UAB) with support from STRIDE and American Association of University Women (AAUW) offered the UAB Girls in Science and Engineering Day at UAB, an event promoting STEM careers with hands on workshops for introducing middle school girls to engineering. The event provided a variety of experiential learning opportunities that engaged students in planning, design, and problem solving, promoted student creativity and teamwork, and provided a fun and positive experience.

This report summarizes event activities and lessons learned. Overall, the event was very successful and the feedback from the participants was overwhelmingly positive. The activities undertaken in this project can serve as a model that other Universities can replicate to empower young students in becoming engineers and pursuing transportation engineering as a career choice.

EXECUTIVE SUMMARY

Earlier research has established that high quality workshops and programs offered at K-12 can effectively promote engineering education [Cunningham, 2009] and have positive implications for the future of science, technology, engineering, and mathematics (STEM) education [Katehi et al., 2013]. Research shows that engineering education for K-12 students is greatly beneficial toward improving student learning and achievement in science and mathematics, increasing awareness of engineering and the work of engineers, boosting youth interest in pursuing engineering as a career, and increase the technological literacy of all students [National Academy of Engineering and National Research Council, 2009]. As a result, the number of programs exposing children to engineering profession is growing but the majority of students still do not have sufficient exposure [Schunn, 2009].

Special attention should be given to exposing female students in K-12 to STEM disciplines as women remain underrepresented in the engineering workforce. More than half of all persons graduating with bachelor's degrees are women, but according to the US Census Bureau, only 12 percent of engineers are women. Pointing more girls toward careers in science and math will help boost the ranks of female engineers, as will breaking down institutional barriers, providing careers support, and implementing better strategies for recruiting and retaining women.

Answering this call, the University of Alabama at Birmingham (UAB) organized the 2016 UAB Girls in Science and Engineering Day, an event promoting STEM careers with hands on workshops for introducing middle school girls to engineering. The event aimed at helping girls to appreciate the many exciting opportunities that lie within the science and engineering fields and fighting preset stereotypes leading to low participation of women in engineering occupations. Over 50 faculty and student volunteers provided a variety of experiential learning opportunities through 12 different workshops focusing on science and engineering topics including rehabilitation robotics, neuroscience, chemistry, civil engineering, environmental engineering, electrical engineering, and materials science. The workshop engaged over 110 middle school girls from the Birmingham, AL region in planning, design, and problem solving, promoted student creativity and teamwork, and provided a fun and positive experience.

The event was very successful and the feedback from the participants was extremely positive. A survey conducted at the end of the event revealed that 98 percent of the participants gained at least one new scientific career or role model, 96 percent said the event improved their confidence in a science setting and 93 percent of the girls in attendance said they found out about new careers in science and engineering. The activities undertaken in this project can serve as a model that other Universities can replicate to empower young female students in becoming engineers and pursuing transportation engineering as a career choice

CHAPTER 1: INTRODUCTION

Background

Oftentimes young women grow up not realizing their potential for success in male dominated professional fields. Exposing young girls to science and engineering during middle school and high school years helps change such perceptions and help recruit more bright female students to STEM fields in general and transportation engineering in particular.

The UAB Girls in Science and Engineering Day program aims at inspiring middle school girls to consider careers and fields of study in science and engineering, and helping eliminate gender disparity in science, technology, engineering, and math career paths. The project expands K-12 engineering workforce development and outreach efforts at the University of Alabama at Birmingham (UAB) that introduce engineering as a career to female students and promote STEM education to female students.

The event offers a unique opportunity for girls to gain exposure to content and career areas that they otherwise may not have the opportunity to explore within other learning environments. The structure of the event puts female role models from UAB and the Birmingham community in close working proximity to participants through group hands on activities. This encouraging atmosphere offers inspiration to girls in their consideration of STEM career possibilities. The small group structure also acts to improve girls' confidence through the creation of a positive collaborative working environment. This is of critical importance when considering the hesitations and obstacles that many girls, especially those from underrepresented backgrounds, often face when considering these careers.

Objectives and Scope

The objective of this project is to expose Alabama middle school girls to science and engineering through engaging, interactive activities. Participants have opportunities to explore engineering and science careers and interact with faculty and professionals in engineering and science-related fields through hands-on workshops, presentations, and other activities. The ultimate goal is to educate students about the importance of engineering and ignite an interest in considering transportation engineering as a career path.

The event was offered free of charge to local 6-8th grade girls. An extensive advertisement campaign took place to bring awareness and encourage students to register. Transportation was also provided to students between the various buildings where activities took place. Arrangements

were made with the Birmingham Educational Foundation to bus in students from one Birmingham school.

The event was held at the UAB campus on a Saturday on May 7, 2016 from 8:30-3:30. Over 50 female UAB students and faculty volunteers from STEM areas, as well as leaders in the community, led workshops exposing girls to sciences and engineering through exciting, hands-on activities and assisted with the event logistics. After check-in, participants were split into three groups, and rotated through three different science, and engineering workshops. Each activity engaged the girls and encouraged them to think independently and critically about the subjects at hand.

The project expanded K-12 engineering workforce development and outreach efforts at the University of Alabama at Birmingham (UAB) that introduce transportation engineering as a career to students and their families.

CHAPTER 2: PROJECT APPROACH

Overview

This STRIDE project enabled collaboration between various groups within the UAB campus and other organizations in an effort to support K-12 engineering workforce development and outreach. UAB undergrad students, graduate students, and faculty from across campus volunteered their time and provided enthusiastic support for the event.

A number of activities were undertaken as part of this project in order to:

- a. Coordinate activities and prepare for the event (Pre-event);
- b. Facilitate the program activities (Event delivery); and
- c. Follow-up (Post-event)

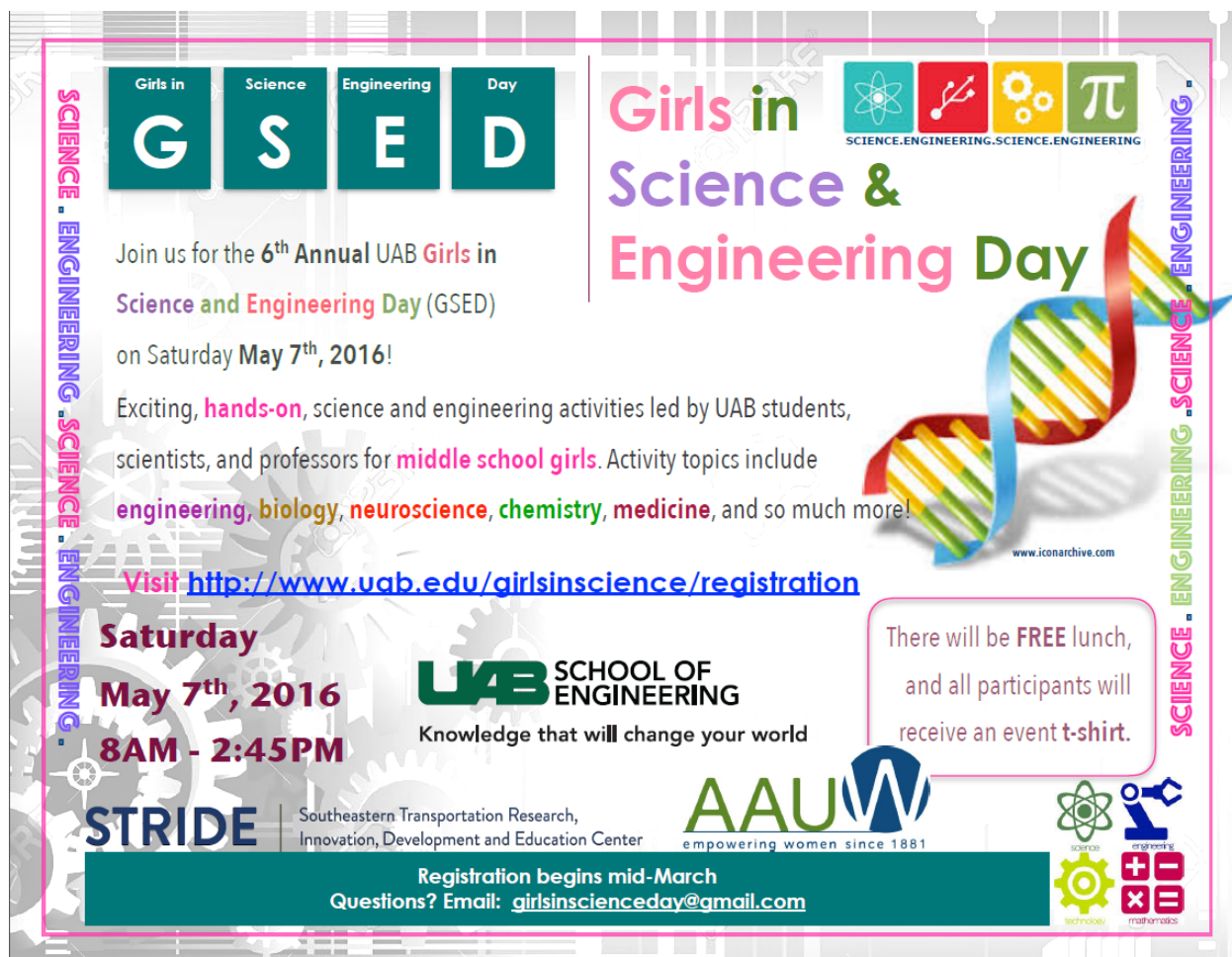
Pre-event activities focused on pre-event logistics such as contacting local student groups and professional organizations and obtaining commitment for participation, meeting with professional organizations and student chapter representatives to plan activities, setting event dates and reserving space, developing materials for event advertisement and management of logistics, fundraising, event advertising and participant registration, obtaining necessary materials for the hands-on workshops, and signing up volunteers (speakers and helpers).

Event delivery activities involved setting up for the event, training volunteers on their expected roles and responsibilities, welcoming participants, completing scheduled activities, dismissing participants and cleaning up.

Post event activities focused on analyzing survey responses, sharing the experience from the planned event with others through poster presentations and newsletters and documenting activities undertaken in the project in a report according to STRIDE requirements. A stewardship report (see Appendix B) was developed and forwarded to sponsors along with “thank you” letters.

Promotion and Outreach

Our promotion techniques included advertising in the UAB newsletter and promoting the event on the UAB engineering website as well as youtube channel. We also placed flyers around campus to elicit volunteers and sent out an email to all graduate students at UAB asking for volunteers. Fig. 1 shows the flyer developed and used for this purpose.



The flyer is titled "Girls in Science & Engineering Day" and features a large graphic of a DNA double helix on the right side. The text is arranged in a clean, modern layout with various fonts and colors. The event is scheduled for Saturday, May 7th, 2016, from 8 AM to 2:45 PM. It is organized by the UAB School of Engineering and STRIDE. The flyer includes a registration link, a list of activity topics, and a note about free lunch and t-shirts. Logos for UAB, AAU, and various scientific fields are also present.

Girls in Science & Engineering Day

Join us for the 6th Annual UAB Girls in Science and Engineering Day (GSED) on Saturday May 7th, 2016!

Exciting, **hands-on**, science and engineering activities led by UAB students, scientists, and professors for **middle school girls**. Activity topics include **engineering, biology, neuroscience, chemistry, medicine**, and so much more!

Visit <http://www.uab.edu/girlsinscience/registration>

Saturday May 7th, 2016 8AM - 2:45PM

UAB SCHOOL OF ENGINEERING
Knowledge that will change your world

STRIDE | Southeastern Transportation Research, Innovation, Development and Education Center

AAU | empowering women since 1881

There will be **FREE** lunch, and all participants will receive an event **t-shirt**.

Registration begins mid-March
Questions? Email: girlsinscienceday@gmail.com

Fig. 1. 2016 UAB Girls in Science and Engineering Day Flyer

To encourage students in the community to register for the event, we placed flyers at local community centers and public libraries and sent an informational email to local middle school principals and science teachers. We also placed information about the event on our event facebook page and event website. We partnered with the Birmingham Education Foundation to attend their after school events and advertise the event to parents and students at local schools. In order to help overcome transportation difficulties we organized a charter bus to pick up students from their middle school and bring them to the event as well as drop them back off. We also went into classrooms to speak to students about registering for the event. Reaching out to students by speaking to them in their classrooms was also a helpful strategy. Given the wide variety of schools represented by overall registrants, we feel we gained adequate visibility in the local community.

Event Activities

The event was held in UAB's School of Nursing building, with some workshops taking place at other reserved locations on UAB's campus. After a check-in light breakfast, and an introduction, the participants were split into 12 groups and met their group leaders for the day. Each group rotated through three different workshops throughout the day, two scheduled before lunch and one afterwards. Each participant typically attended one workshop in the health sciences, one in engineering or technology, and one in the applied sciences. Workshop areas and topics included:

- Forensic Science
- Reptilian Biology
- Heart dissection and pathology
- Civil Engineering
- Neuroscience
- Physical Therapy
- Electrical Engineering
- Medical Suturing
- Material Science
- Chemistry
- Environmental Engineering
- Rehabilitation Robotics

Lunch was provided at noon and followed with a presentation by Dr. Lori McMahon, Professor of Neuroscience and Dean of Graduate School at UAB. Dr. McMahon addressed perceived barriers for women in STEM and encouraged participants to defy misconceptions and reach their full potential. Representative activities of the event are depicted in Figs. 2 and 3. After the presentation, the third workshop was completed and all the girls regrouped in the Nursing Building for closing statements and a group activity that involved also drawing of prizes for event participants. A certificate of completion was provided to all participants (Fig. 4).

Table 1. UAB 2016 Girls in Science and Engineering Event Schedule

8 – 9:00 am	Participant check-in, light breakfast, and event introduction: Participants receive schedules for the day, nametags, welcome, orientation with small group
9:15 – 10:30 am	Workshop 1 – Participants break into smaller groups for a workshop in a math, science, or engineering subject.
10:45 – 12 pm	Workshop 2 – Participants break into smaller groups for a workshop in a math, science, or engineering subject.
12:15– 12:45 pm	Lunch; Presentation
1 – 2:15 pm	Workshop 3 – Participants break into smaller groups for a workshop in a math, science, or engineering subject.
2:30 – 2:45 pm	Closing statements, group activity
2:45 pm-3:30 pm	Participant pick-up and volunteer clean-up



Fig. 2. Student Activities at the UAB 2016 Girls in Science and Engineering Day



Fig. 3. Participants and Volunteers at Work

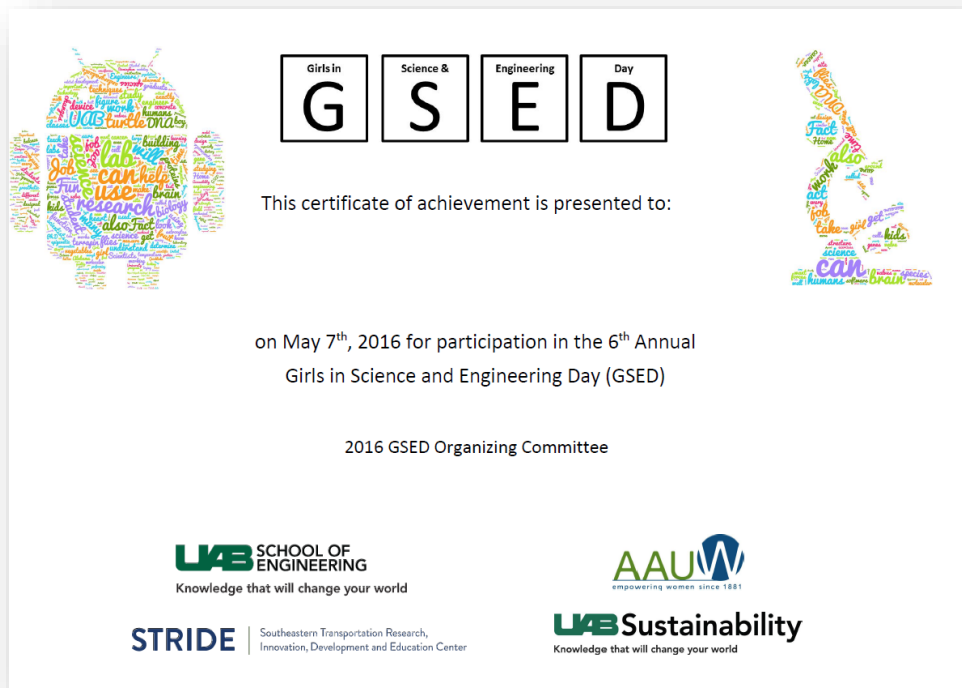


Fig. 4. Sample Certificate of Participation

Throuout the day, the girls had opportunities to learn about women famous for their work and research, and to discuss the benefits and challenges of pursuing a career in engineering and sciences with their workshop leaders and other volunteers.

Project Evaluation

The primary mode of evaluation was pre- and post-event surveys administered to the participants. The pre-event survey questionnaire was handed out at registration and addressed girls' current attitudes towards STEM, their likelihood of considering a career in STEM, current role models in STEM, and gender stereotypes. The post-event survey, administered at the end of the day, included similar questions to determine whether the participants had a shift in attitudes and perception of STEM fields. The post-event survey also included a global rating of the day on a 10 point scale (0=horrible to 10=excellent), and free text space for suggestions, comments, and ideas for improvement.

CHAPTER 3: IMPLEMENTATION AND ACCOMPLISHMENTS

The UAB Girls in Science and Engineering Day took place on Saturday, May 7, 2016. Utilizing technology and classrooms at the UAB campus, the program successfully engaged middle school girls from Alabama schools in science, technology, engineering, and math (STEM) activities.

Attendance

We initially planned for approximately 120 participants but opened 180 spots for registration as we are aware that often participants register but do not show up at free events. We had a total of 173 girls that registered online for the 180 spots available, which shows we were at 96% capacity at registration. About 110 girls actually attended the event. Thus, our retention rate from the online registration to the actual event was about 61%.

Fig. 5 shows the distribution of registrations by grade and Fig. 6 summarizes attendance data by grade. Among the event participants, 6th graders comprised the largest group of attendees, at 40% and 8th graders comprised the least at 25%. 6th graders also had the lowest rate of absenteeism, where as 8th graders had the highest rate. Only 35% of 6th graders were absent, where as 47% of 8th graders were absent.

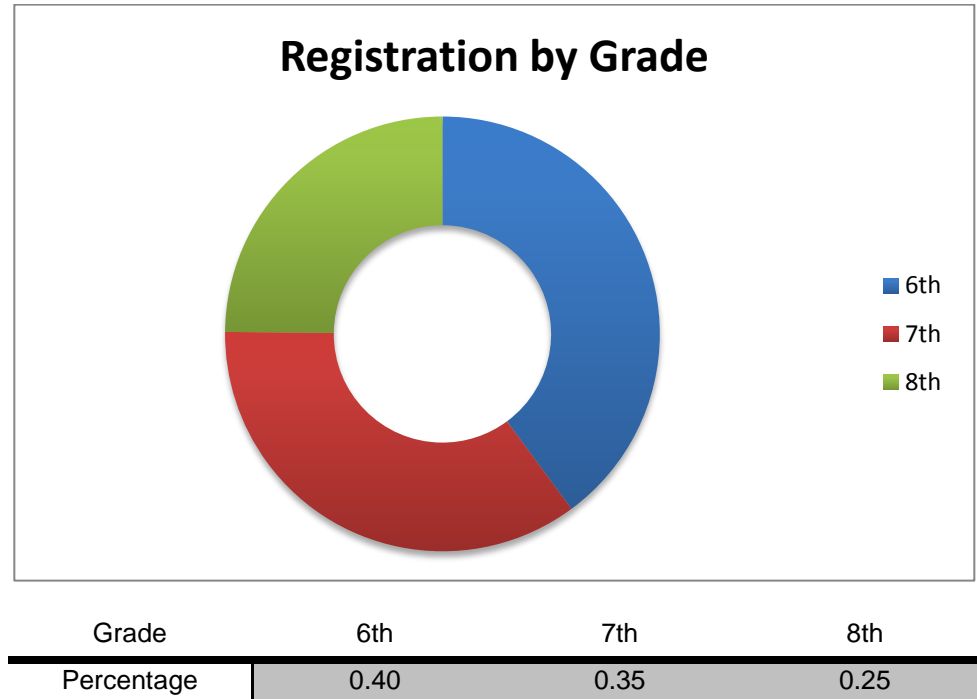


Fig 5. Event Registration by Grade

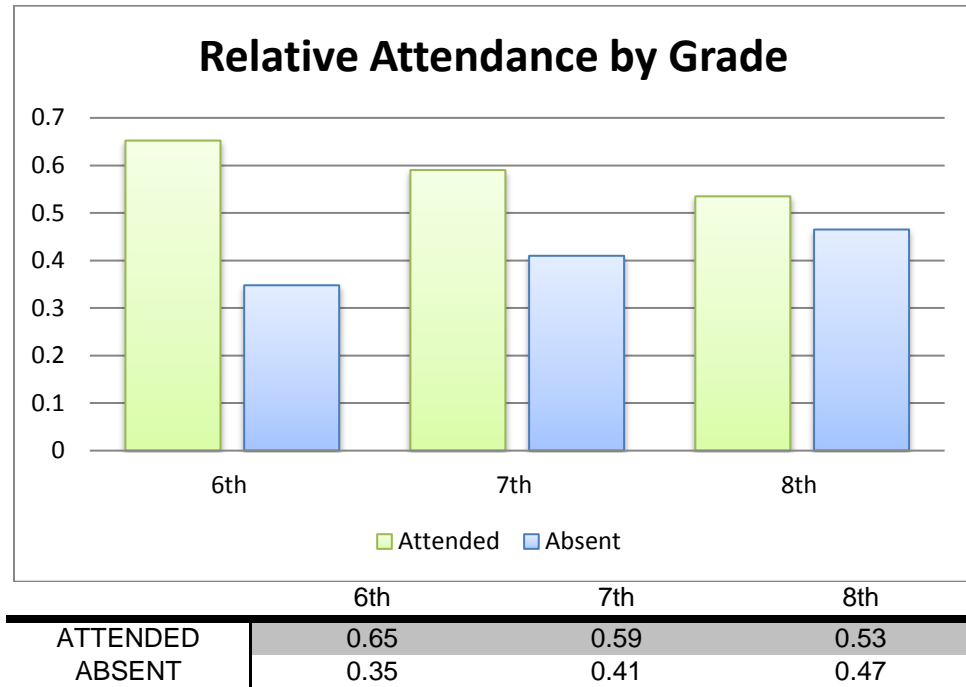


Fig. 6. Event Participants by Grade

As a result of a great campaign to bring awareness of the event, there were 44 different schools represented at the 2016 UAB Girls in Science and Engineering Day event. Fig. 7 summarizes attendance data by school and Fig. 8 displays the location of participating schools on a map. The furthest school was located 70 miles away from UAB.

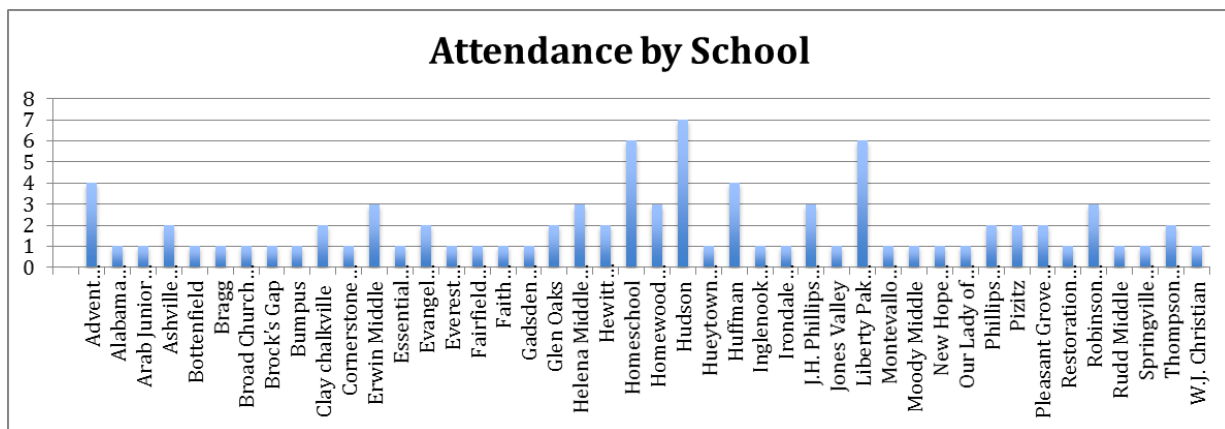


Fig. 7. Event Participants by School

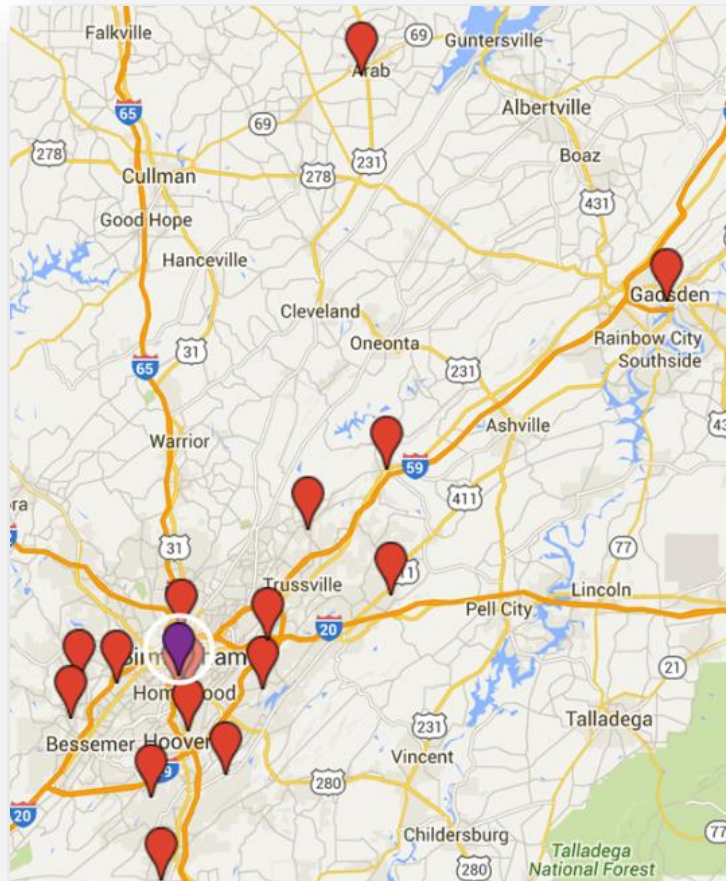


Fig. 8. Map of Selected Schools in Attendance

Our initiative with providing transportation to Hudson K-8 resulted in the highest rate of attendance for the school, with 7 students showing up. Our partnership with the non-profit College Admissions made possible resulted in at least six students showing up from the inner city, Fairfield area. Six students from Liberty Park, a suburban school outside of Birmingham, also attended. We also had at least five homeschool students in attendance. There were also a few more rural areas that attended, such as Gadsden and Arab, that were approximately one hour away from Birmingham.

Impact

We developed pre-event and post-event surveys to measure the effectiveness of the program. A detailed analysis of survey responses is provided in the Appendix. Below we provide a summary of the most important findings from the assessment

Measuring Scientific Skills and Confidence

- Each workshop met the requirement for interactive activities
- 96% of participants learned a new scientific concept
- Before the event, 85% said they liked challenging assignments in school. 87% wanted to be involved in STEM extracurricular. This indicates that a majority of our participants are interested in science/engineering as a discipline.
- We saw a 23 percentage point increase in the way the girls viewed their own ability to understand concepts in science.
- We also saw a 14.2 percentage point increase in girls who felt confident in asking questions and working with peers in science
- These findings suggest that exposure to scientific concepts, exploration, and meeting female role models has the ability to increase confidence in STEM settings. Given the effect of stereotype threat and the lack of self-esteem that often accompanies girls in middle school, these findings are incredibly important.

Lack of Support

- The pre-event survey noted that only 73% of girls believed that their teacher(s) and/or parent(s) have suggested they consider a career in science. 95% noted their parent(s)/teacher(s) support their academic interests.
- Before the event, only 72% of the girls said they had at least a few (greater than 4) women role models. 91% of the girls felt like they gained a scientific or career role model after the event.

Career Outlook

- In the pre-event survey, 25% of the girls did not have a good idea of the types of future jobs available to me in the science and engineering. 82% said they know at least one adult who can help find more information about careers in science and engineering.
- After the event, 93% said that they feel like they will be able to more easily find information about careers in science and engineering. 91% said they were exposed to new careers.
- 95% of the girls planned on attending college.
- Before the event only 73% were strongly considering a career in science and engineering. After the event, 90% said they are considering a career in science and engineering.

General attitudes about girls/women in STEM

- Before the event, only 80% strongly agreed that girls are as capable as boys in areas of science and engineering. By the end of the event, the percentage rose to 89%.
- Before the event, 79% thought that girls are well suited for jobs in science and engineering. After the event, 89% held that belief.
- This is significant because it shows that events like this that focus on exposure and role models can shift preconceptions that these girls have about women in STEM in general.

Measuring enjoyment:

- 97% of the girls said they enjoyed today's events
- 96% would recommend GSED to a friend next year.
- Selected post-survey comments:
 - "I'll try to come back next year. This year was awesome!"*
 - "No comment. Except one: Amazing Experience"*
 - "GSED will inspire many more people because it really did inspire me."*
 - "#Girlsrock"*

Technology Transfer

A presentation about the activities undertaken in this project was delivered at the National Conference for College Women Student Leaders that took place in College Park, Maryland on June 1-4, 2016. Moreover, information about the UAB 2016 Girls in Science and Engineering event were featured in the STRIDE Spring 2016, the UAB School of Engineering webpage, and the ALSITE newsletter.

CHAPTER 4: SUMMARY AND CONCLUSIONS

The Girls in Science and Engineering Day event was designed to inspire and empower Birmingham-area middle school girls to learn about science and engineering subjects and fields and encourage them to pursue successful careers in engineering. The event was organized by students and faculty women in engineering and sciences who served as role models to 110 participants, providing proof that there should be no limitations for women when it comes to career choices. Not only the event benefited the girls who participated but also brought together undergraduate/graduate students, faculty, and local professionals who worked collaboratively to deliver the event.

The event was very well received by participating students as evidenced by the positive feedback received from student participants. A survey conducted at the end of the event revealed that 98 percent of the participants gained at least one new scientific career or role model, 96 percent said the event improved their confidence in a science setting and 93 percent of the girls in attendance said they found out about new careers in science and engineering.

The activities undertaken in this project can serve as a model that other Universities can replicate to empower young female students in becoming engineers and pursuing transportation engineering as a career choice. This is important given the fact that women are still severely underrepresented in the engineering workforce, with significant implications for women's financial security, economic growth, and global innovation.

REFERENCES

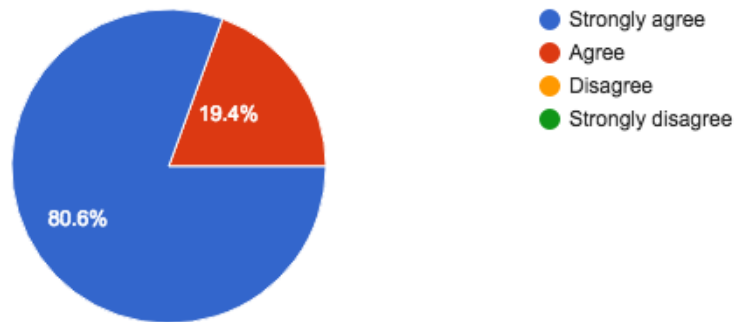
- Cunningham C. (2009), "Engineering is Elementary". The Bridge, National Academy of Engineering.
- Katehi L., Pearson, G., and Feder, M. (2013), "The Status and Nature of K–12 Engineering Education in the United States". The Bridge, National Academy of Engineering.
- National Academy of Engineering and National Research Council (2009), "Engineering in K-12 Education: Understanding the Status and Improving the Prospects". Washington, DC: The National Academies Press.
- Schunn, C. (2009), "How Kids Learn Engineering, The Cognitive Science Perspective". The Bridge, National Academy of Engineering.

APPENDIX A: PRE- AND POST-EVENT SURVEY RESPONSES

PRE – EVENT SURVEY:

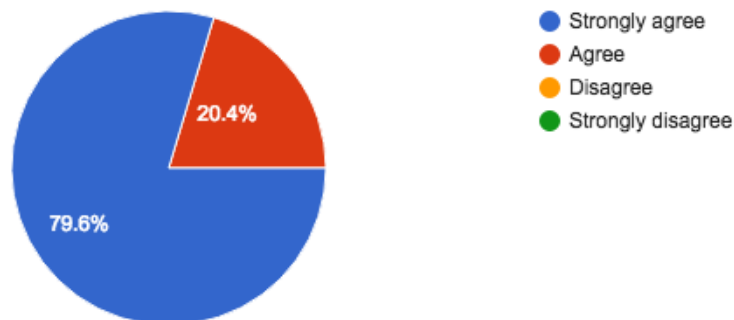
1. Believe that girls are as capable as boys in areas of science and engineering

(108 responses)

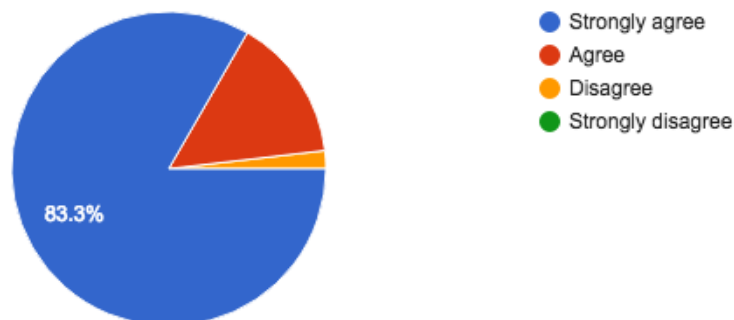


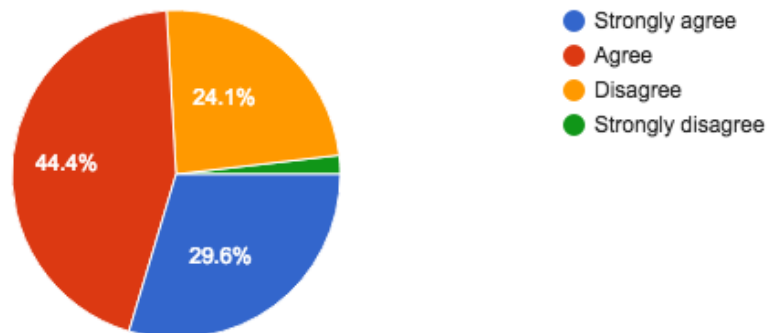
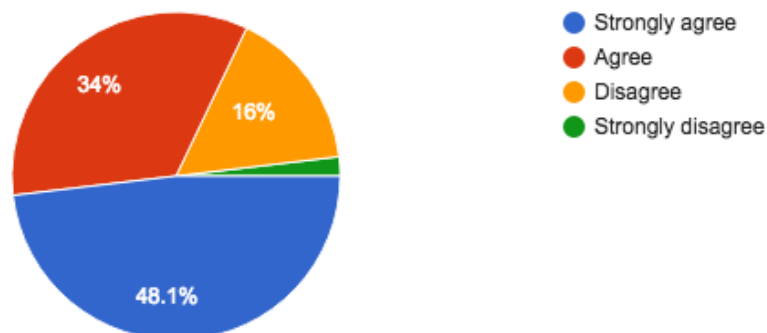
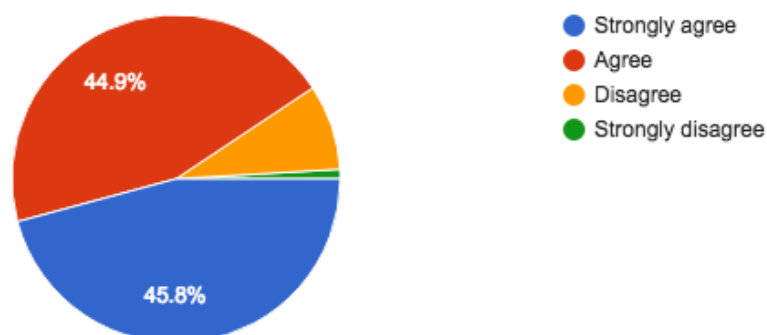
2. Believe that girls are as well suited for jobs in science and engineering

(108 responses)

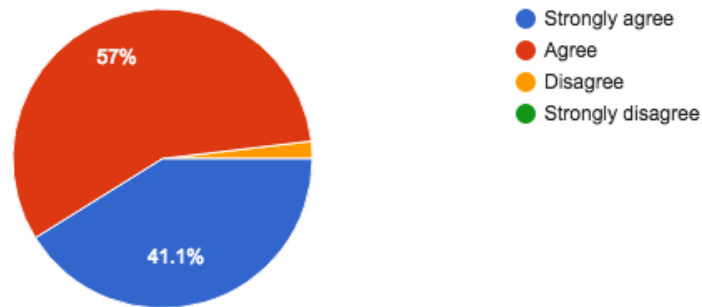


3. I plan to attend collage (108 responses)

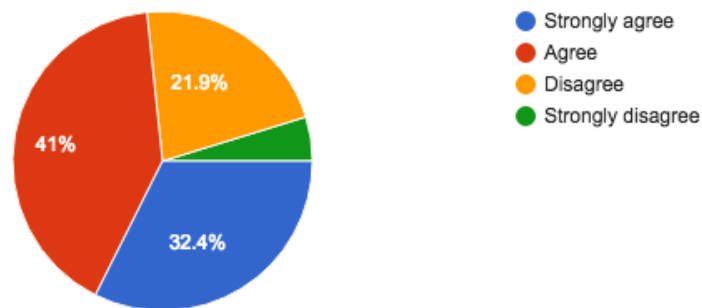


4. Considering career in science or engineering (108 responses)**5. I know at least one adult who can help me find more information about careers in science and engineering (106 responses)****6. I feel confident in asking questions and working with my peers in science classes (107 responses)**

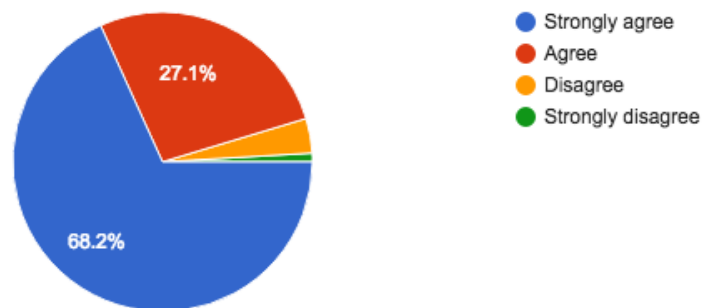
7. I feel confident in my ability to understand concepts in science
(107 responses)



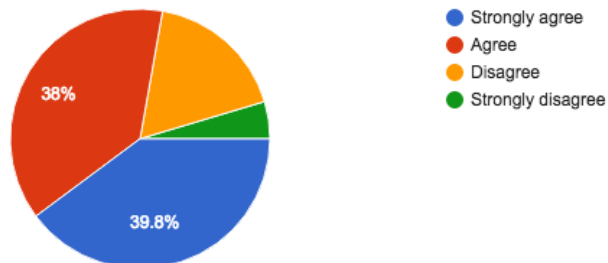
8. My teacher(s) and/or parent(s) have suggested I consider a career in science
(105 responses)



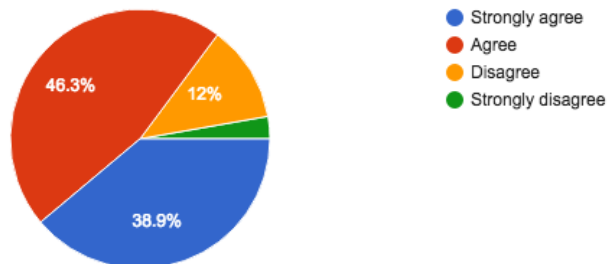
9. I feel like my parent(s)/teacher(s) support my academic interests
(107 responses)



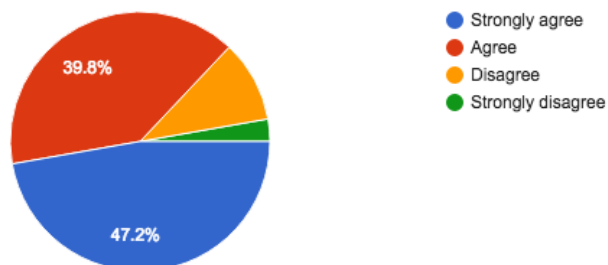
10. I have a good idea of the types of future jobs available to me in the science and engineering
(108 responses)



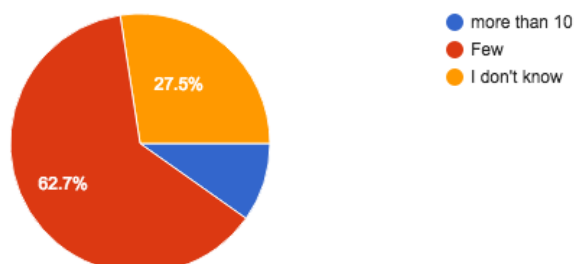
11. I like to be given challenging assignments in school (108 responses)



12. I want to be involved in more science, math, and engineering extra circulars
(108 responses)

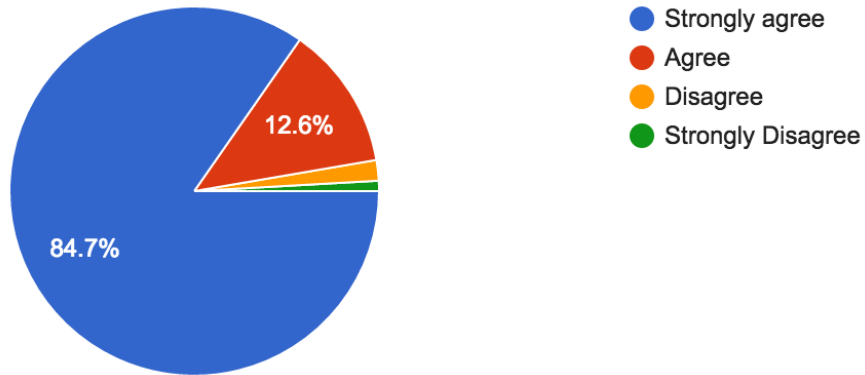


How many woman role models (102 responses)

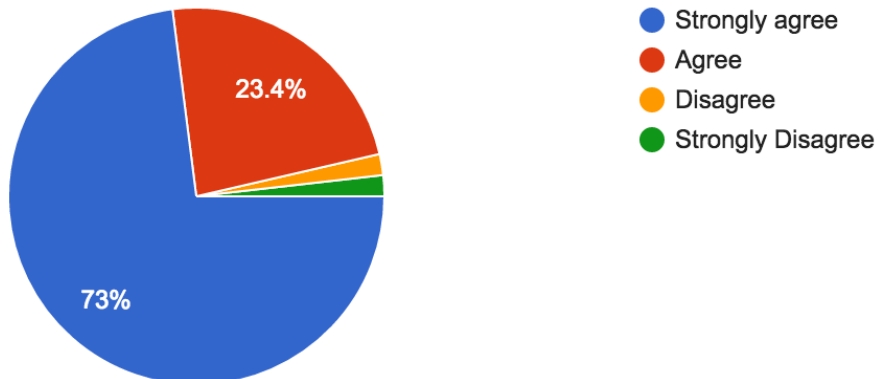


POST-EVENT SURVEY RESPONSES

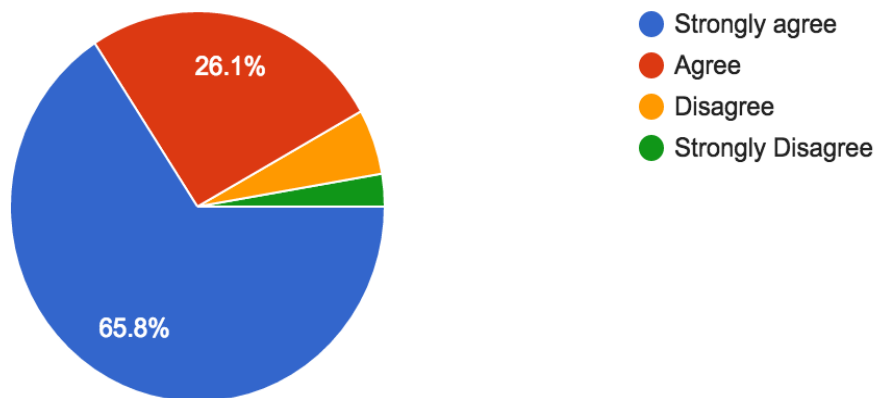
1. I enjoyed today's activities



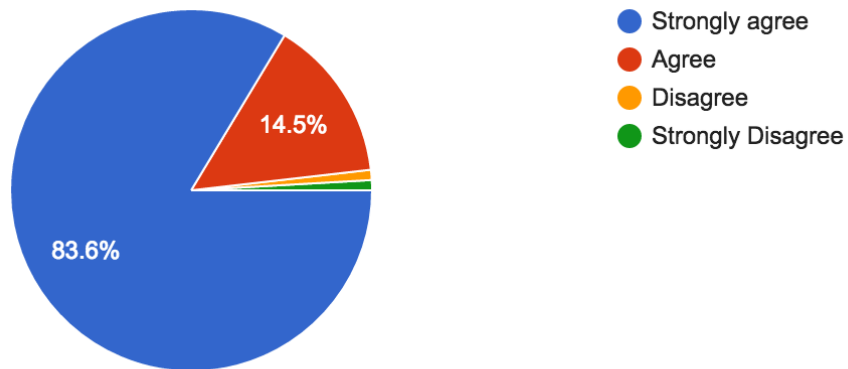
2. I learned a new scientific concept



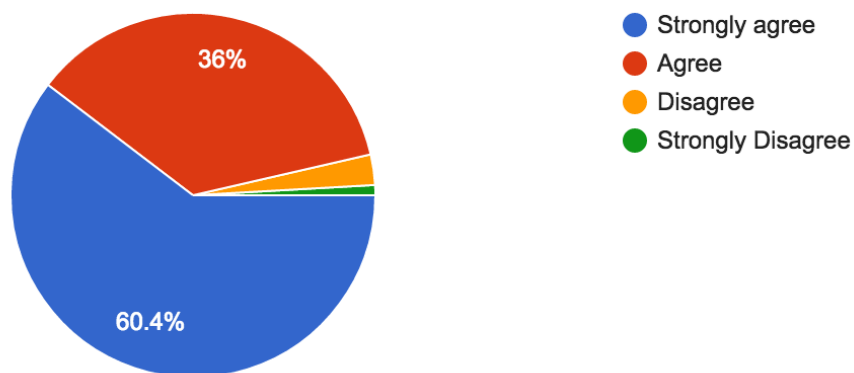
3. I gained at least one scientific/career role model



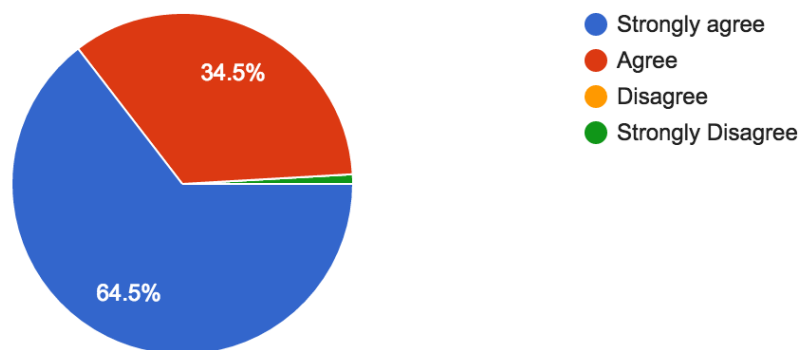
4. My group leader was engaging and helpful



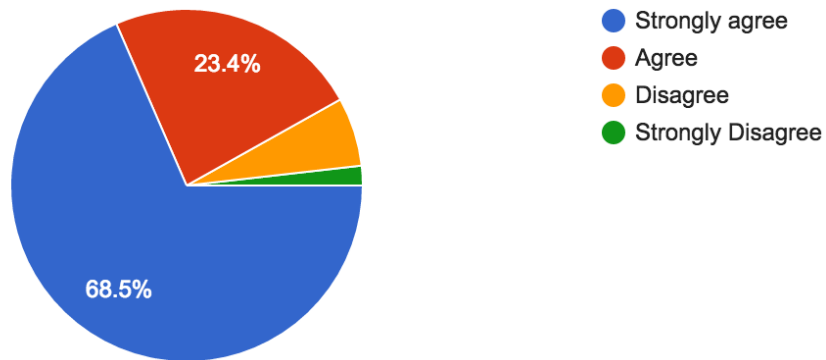
5. Today's activities helped improve my confidence when working with my peers in a science setting



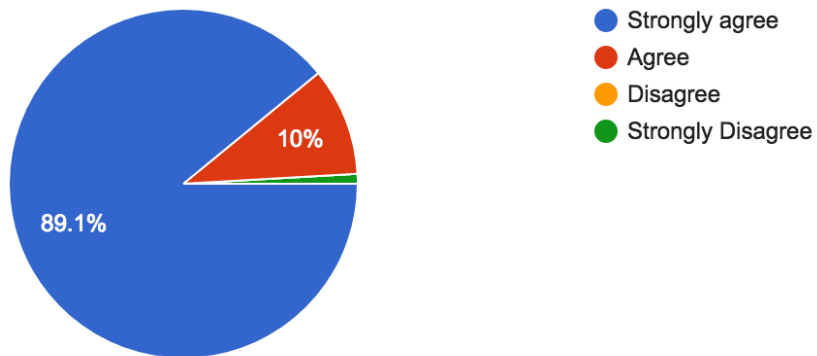
6. Today's activities made me confident that I am capable of understanding scientific ideas



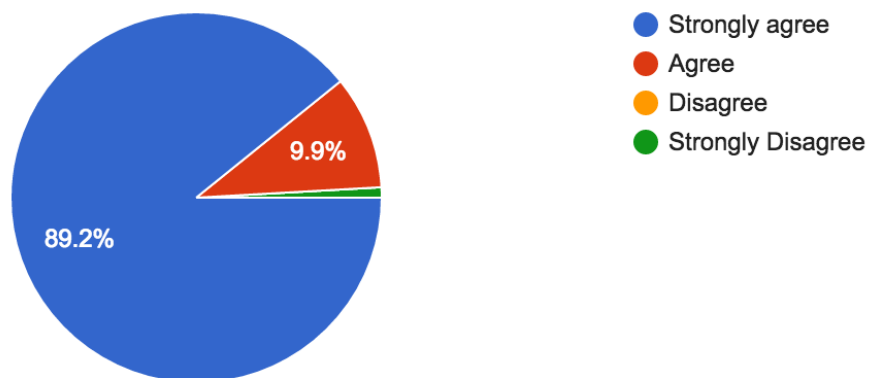
7. Today's activities exposed me to careers in science/engineering which I was not previously aware of



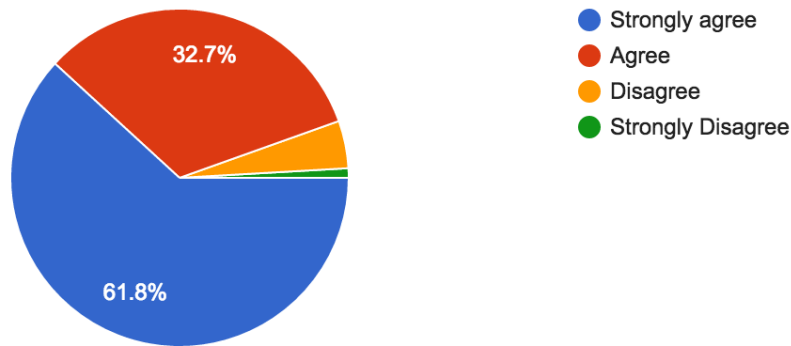
8. I believe that girls are as capable as boys in areas of science and engineering



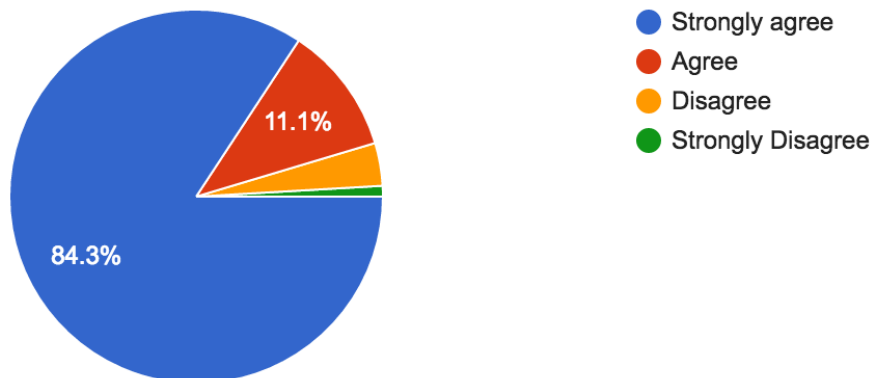
9. I believe that girls are well suited for jobs in science and engineering



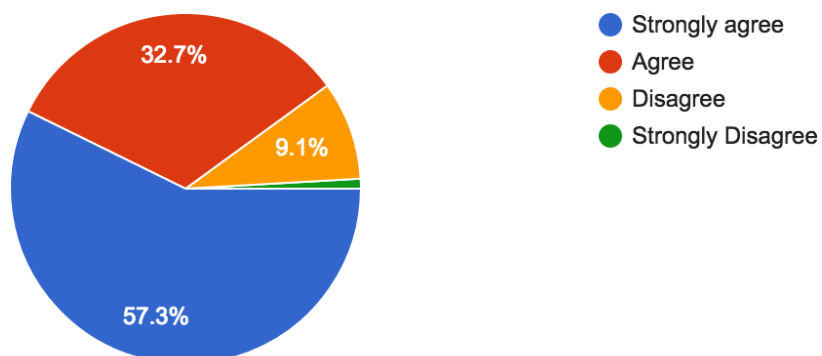
10. After today, I feel like I will be able to more easily find information about careers in science and engineering



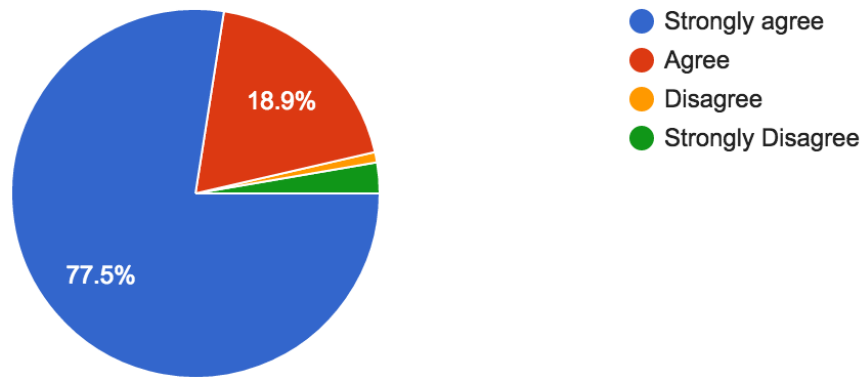
11. I plan to attend college



12. I am currently considering a career in science and engineering



13. I would recommend GSED to a friend



APPENDIX B: STEWARDSHIP REPORT

2016 Girls in Science & Engineering Day (GSED)

GSED is a free program to engage Alabama middle school girls in STEM activities through interactive workshops created by UAB faculty and students



6th Annual GSED Highlights:

Measuring Our Success

- 170** Girls registered for the 2016 Girls in Science and Engineering Day
- 45** Different schools had students that attended
- 50** STEM-related leaders volunteered to lead workshops & students helped during the event
- 12** Different workshops: rehabilitation robotics, neuroscience, chemistry, magnetism, medical sutures, dissection, reptilian biology, forensics, civil engineering, environmental engineering, material science, and electrical engineering
- 98%** Of participants said they gained at least one new scientific or career role model
- 96%** Of participants said the event helped them improve their confidence in a science setting
- 93%** Of girls said they were exposed to new careers in science and engineering



It Takes a Community Effort

GSED was held on May 7th, 2016. Utilizing the technology of classrooms provided by the Nursing Building, School of Health Professions, Business and Engineering Complex, MPAD, and Volker Hall, UAB successfully hosted over 100 girls this year. The girls got involved in a wide variety of workshops, where they participated in exciting, hands-on activities such as:

- Building magnets while learning about MRI
- Creating water filtration systems and structures to stabilize water balloons
- Dissecting sheep hearts and learning how to suture
- Examining crime scene evidence

The program also provided female role models in STEM fields. Each group of 12 girls was paired with a workshop leader and two UAB students in STEM fields such as engineering, biology, or medicine. Dr. Lori McMahon, Dean of the Graduate School at UAB, spoke at lunch. She addressed her inspirations to pursue a PhD in STEM and answered questions from the students.

The UAB Girls in Science in Engineering Day was conceived as an opportunity to introduce local middle school girls, especially those from disadvantaged backgrounds, to the exciting world of STEM.

Thank you!

Your partnership and support of the 2016 Girls in Science and Engineering Day made the event possible. You gave something to help inspire the next generation of scientists and engineers. We appreciate all that you do to strengthen this University's commitment to breakdown the barriers in accessing education.

For more ways to help, questions, or comments, please contact Dr. Virginia Sisiopiku at vsisiopi@uab.edu