

**Girls Exploring Science, Engineering & Technology Event
March 10, 2006**



***Girls Exploring Science,
Engineering & Technology
Event
March 10, 2006***

hosted by
The Society of Women Engineers (SWE) Rocky Mountain Section
Lockheed Martin
Junior Achievement of Rocky Mountain, Inc.
and
Agilent Technologies

Summary of Success
Final Report
June 17, 2006



LOCKHEED MARTIN
We never forget who we're working for™

 **Junior
Achievement**

 **Agilent Technologies**

Girls Exploring Science, Engineering & Technology Event Final Report

FACT SHEET

WHAT:

The fourth annual *Girls Exploring Science, Engineering & Technology* event, designed to stimulate and encourage girls in 6th and 7th grade to pursue careers in science, engineering and technology, included motivational speakers, hands-on workshops, volunteer mentors and educational exhibits and was hosted by Lockheed Martin, Junior Achievement, Agilent Technologies, and the Society of Women Engineers – Rocky Mountain Section.

WHEN: Friday, March 10, 2006 from 9:30 a.m. to 1:15 p.m.

WHERE: The Colorado Convention Center in downtown Denver

WHY:

We want to encourage girls to pursue careers or interests in science, technology, engineering, and math (STEM) because:

- Only 4% of Colorado girls specify engineering as a career interest on SAT tests
- A scant 1% of girls in Colorado indicate an interest in a computer science career
- Women make up 46% of the Colorado labor force but only 26% in technical fields
- Women account for only one in five undergraduate engineering students and make up only 10% of the nation's engineering workforce

WHO:

- 1207 6th and 7th grade girls attended
- 167 adult chaperones (parents and teachers) and 189 volunteers attended
- 66 public and private schools were represented from 25 different school districts
- Denver Public Schools students made up 31% of total attendees, Archdiocese of Denver 14% and Adams County 13%
- Over 40% minority participants
- Exhibit Booths showcased 19 exhibitors from higher education, community/professional organizations and governmental/educational entities

HOW:

- 28 organizations and individuals contributed \$84,490 to cover direct expenses
- Corporate partners and other organizations provided in-kind services valued at over \$38,000
- Sponsors included:
 - ◆ Agilent ◆ Ch2MHill ◆ Junior Achievement of Rocky Mountain, Inc. ◆ Lockheed Martin
 - ◆ Raytheon ◆ Society of Women Engineers ◆ Washington Group International
 - ◆ Accenture ◆ Holmes Roberts & Owens ◆ Hewlett Packard ◆ Merrick & Company
 - ◆ Xcel Energy Grant ◆ American Council of Engineering Companies (ACEC) of Colorado
 - ◆ Rocky Mountain Section American Water Works Association (RMSAWWA)
 - ◆ Ball Aerospace ◆ Colorado School of Mines ◆ Coors ◆ ForeRunner Corp.
 - ◆ IBM ◆ IEEE ◆ Innovative Construction Solutions, Inc. ◆ Jacobs Engineering
 - ◆ KST Data ◆ LARABAR ◆ Leonard Rice Engineers ◆ Scanlon Consulting Services, Inc.
 - ◆ SECOR International Inc. ◆ Technically Speaking, Inc.

IMPACT:

- See Survey Statistics Sheet (below)

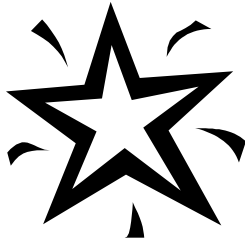
MEDIA COVERAGE:

- Media Advisory and Press Release issued by Raytheon
- Press Release issued by Lockheed Martin
- Follow-up article in the April issue of SWE Magazine
- Internal Corporate sponsor communiqués
- SWE and SWE-RMS web sites

AWARDS:

- 2005 Xcel Energy Foundation Grant
- 2004 Society of Women Engineers Corning Career Guidance Incentive Grant Honorable Mention
- 2003 Corning and Exxon Mobil Career Guidance Program Awards

Quotes from Participants ...



"I learned about all the opportunities girls have in engineering and how [companies] are depending on us to come and work for them. I had so much fun and I also learned a lot too." - **Fala, Student**

"...what a fabulous time the girls from Nativity of Our Lord had...we talked for more than an hour when we returned to school about what they did, what they learned, what was the coolest thing, what new jobs they found...the list goes on and on. It was a tremendous opportunity, and we hope to be included again next year! Thanks so much."

- **Susan Miller Polednik, Middle School Math, Nativity of Our Lord**

"Thanks to what I did at the conference I'm thinking about trying to get a job at Raytheon when I'm older. I give a big thanks to the GESET crew for teaching me so much." - **Valerie, Student**

"Well, in the middle of the last class of the day, I had six very excited girls burst into my room. They all had a fantastic time at the GESET conference today. ... it was a roaring success."

- **Robert Depew - St Vrain K12 Teacher**

"To remain competitive as a nation, we must encourage our children to embrace math, science and technology. Through this innovative program, Colorado is opening new windows of opportunity for our middle school girls to explore, and plan for, an exciting future filled with possibilities."

- **Jane Norton, Lt. Governor Colorado**

"Thanks for all you do for our students! Again an awesome event! I cannot begin to tell you how excited my girls were about math and science when they got back to school." - **Cathy Rowley, Professional School Counselor, Greenlee ECE K-8**

"...girls do start to lose interest in Science and therefore math in the middle school years and things like this are a great way to spark the enthusiasm. Having it for girls only is actually a good thing so they don't feel intimidated or obliged to act "dumb". I'll look into it for next year again."

- **Chitra Seshan - St. Vrain K12 Teacher**

"...Another hit and thanks for doing all you do! Thanks!!" - **Sharon Woolfolk, Lockheed Martin**

"...I think the GESET event was extremely worthwhile. The volunteers did a fabulous job organizing it. Thank you very much. I am thrilled to see that companies and organizations have taken a strong interest and supporting role in this kind of event. I told several parents from other schools about it... Thank you again!"

- **Karen Phelan, Morey Middle School Parent**

Survey Statistics Sheet

95

Percent of girls who would like to come back to GESET next year

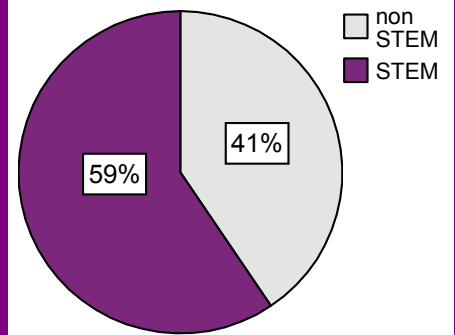
93

Percent of girls who will tell other girls to attend GESET next year

59.4

Percent of girls want a job in a STEM related field when they grow up

What do you want to do when you grow up? Career Fields



53

Percent of girls said they want to be like one of the presenters they saw at the GESET

60

Percent of girls who said being at the GESET made them want to take STEM high school classes

75

Percent of girls said learning about career possibilities was 'important' or 'very important'

What the girls have to say:

"Everyone was nice, interesting, and very knowledgeable. I want to be just like them."

"Thank you so much for a wonderful day! It is good to have a "Girls Day"!"

84

Percent of girls who said learning about new things is 'important' to 'very important'

98.8

Percent of adults said hands on activities were 'important' or 'very important'



Girls Exploring Science, Engineering & Technology Event Final Report

EXECUTIVE SUMMARY

SUMMARY OF SUCCESS

The fourth annual *Girls Exploring Science, Engineering & Technology (GESET)* event was a huge success. Highlights are summarized below. Planning details and statistics are included in this report.

Confirmed registrations totaled 1207 6th & 7th grade girls, filling all available spaces for attendees. In addition, there were 167 chaperones in attendance with the girls. These statistics are very gratifying for the 2006 event, as we increased available capacity by 33% and funding by 92%. We were filled to capacity for the fourth straight year, although the demand indicated there would have been more registrants if there had been additional slots available.

Fundraising efforts by the planning committee raised \$85,090 from 28 organizations and individuals. Expenses totaled \$68,341. Approximately \$15,000 of funding was received after the registration deadline, thus registration was capped based on funding available at that time. Carry over funds will help cover deposits for the April 10, 2007 event. Several companies, including Raytheon, Lockheed Martin and Agilent Technologies, provided in-kind services valued at over \$38,000.

The complete list of hosts, sponsors, and in-kind contributors includes: Agilent; Ch2MHill; Junior Achievement of Rocky Mountain, Inc.; Lockheed Martin; Raytheon; Society of Women Engineers; Washington Group International; Accenture; Holmes Roberts & Owens; Hewlett Packard; Merrick & Company; Xcel Energy Grant; American Council of Engineering Companies (ACEC) of Colorado; Rocky Mountain Section American Water Works Association (RMSAWWA); Ball Aerospace; Colorado School of Mines; Coors; ForeRunner Corp.; IBM; IEEE; Innovative Construction Solutions, Inc.; Jacobs Engineering; KST Data; LARABAR; Leonard Rice Engineers; Scanlon Consulting Services, Inc.; SECOR International Inc.; and Technically Speaking, Inc.

Over 167 volunteers provided invaluable support to the event mostly as guides, and as coordinators and support staff. The planning committee consisted of individuals from the hosting organizations.

Nineteen exhibitors shared information about programs or resources for girls. The exhibitors included: SWE-RMS; Junior Achievement; Lockheed Martin; Raytheon; Raytheon Math Moves You; CABPES; CSM Women in Science, Engineering and Mathematics; Bits, Bytes & Bots; Future City; Colorado MESA; CU - Women In Engineering Program; Multi-Purpose Engineering Program (CU); American Council of Engineering Companies of Colorado; Girl Scouts - Mile Hi Council; UCAR Windows to the Universe; Science From CU – A Science Discovery Program; IBM; University of Denver; Denver Zoo.

A survey was provided at the conclusion of the event. Full survey results are included in a separate Survey Addendum. In summary, relative GESET event content, over 83% of the girls indicated they want to take more science, engineering, and technical classes, more than 79% said that they learned what high school classed to take to enter science, technology, engineering, and math (STEM) fields, and 76% of the girls responded that they want a job in a STEM field as a result of GESET. In response to questions specific to the event itself, close to 95% of the girls indicated that they would like to return to GESET next year, and 93% said they will tell other girls to attend next year.

This annual event is repeated each March-April to support National Engineers Week and the *Introduce a Girl to Engineering* Program. The hosts have already agreed to again co-host the event in 2007, as well as setting higher goals for fundraising and sustained attendance. In addition, the program will be expanded to provide more training and information for the adult attendees.

Girls Exploring Science, Engineering & Technology Event Final Report

In comparison with the 2005 event, in 2006 we:

- ✓ Increased funding by 93% (\$85,090 vs. \$44,000) and increased in-kind donations by 27% (\$38,000 vs. \$30,000).
- ✓ Increased attendees by 48% (1207 vs. 818) due to new venue and increased funding.
- ✓ Increased chaperones by 67% and volunteers by 26%.
- ✓ Increased the number of exhibitors by 58%.
- ✓ Received event coverage in press releases by Raytheon and Lockheed Martin, and a follow-up article in the April issue of SWE Magazine.

THE ISSUE

Girls of today are presented with gender biases and stereotypes that sometimes steer them away from careers or interest in the fields of math, science, engineering, computers and technology. We are working to change those perceptions. A coalition of organizations and businesses has come together to provide a space for girls to explore, to question, to do, and to learn. The girls walk out of this event inspired by the wonders of technology, and inspired by the incredible people who hold positions in those fields today. The girls learn about careers that support the very communities in which they live and improve our quality of life.

Participants in the workshops experienced hands-on lessons in everything from forensic science and simulations for living and working in space, to creating websites and constructing and programming computer robots made of LEGOS. (A complete list of workshops is included at the end of this report.)

Consider today's imperative:

The U.S is in the middle of an undergraduate enrollment surge; however rates of enrollment in emerging economies and populations are growing even faster at startling rates. For example, in China, rates are expanding at ten times those in the U.S. and 2/3 of Chinese students earn math, science and engineering degrees compares to about 1/3 of American students. (Source: Business-Higher Education Forum)

Over the decade ending in 2008, jobs requiring science, engineering, and technical training will increase by over 50%, representing a rate four times faster than overall job growth – as predicted by the U.S. Department of Labor. By 2008, approximately six million job openings will exist for scientists, engineers and technicians.

With women representing only 9% of American engineers, there is a significant opportunity – an actual necessity – to expand, as well as diversify, the talent pool. This event represents a commitment on the part of the volunteers and sponsors to take action that directly impacts increasing the student pipeline in science, engineering, and math.

“GESET provides a unique opportunity to see and experience hands-on glimpses into a number of exciting jobs and career fields,” said Sandra Scanlon, P.E., president of Scanlon Consulting Services, Inc., and GESET event chair. “Jobs in these career fields are significantly increasing over coming years, and there is a growing need for diverse and qualified talent to continue the path of innovations we enjoy today. Having coordinated this event four times now, it still amazes me how energizing it is to work with these girls. They are so eager to learn about the opportunities available to them. It is equally satisfying to work side-by-side with tireless educators to get the message out that math and science are important for numerous careers facing future generations.”

For additional discussion and statistics on this issue, please see GESET Summary of Success Final Reports from 2003, 2004 and 2005 available from our website, www.swe-rms.org.

Girls Exploring Science, Engineering & Technology Event Final Report

EVENT DETAILS

There were three components to the event: The **Welcoming and Opening Remarks** set the stage for what the girls could expect to accomplish and enjoy throughout the day. Three **Interactive Workshops** focused on hands-on activities and demonstrations of various areas of science, engineering and technology. Lastly, at **Lunch** everyone convened for closing remarks and door prizes. Each student received a tote-bag full of information on careers in science, engineering and technology; information on necessary courses to take in high school; scholarship and career guidance information from local minority and engineering organizations; as well as pens and other give-aways.

EVENT MISSION

To combine female 6th & 7th grade students, parents, teachers, and counselors with science, engineering and technology professionals in order to create a unique learning experience for all involved and to get pre-college students excited about math, science, engineering and technology.

EVENT OBJECTIVES

- Introduce female middle school students (middle school as defined by each school district) to real world aspects of science, engineering and technology and to the many diverse fields available.
- Give female middle school students, their parents, teachers, and counselors a chance to interact with engineering and technical professionals to show engineering and technology is fun.
- Introduce networking and mentoring basics to female middle school students.
- Introduce students, parents, teachers, and counselors to the local organizations within the science, engineering and technology community and the programs and resources available.
- Provide an opportunity for local companies, their employees, and the community to come together and support students to succeed in math and science.

IMPACTS / EXPECTED RESULTS

The overall goal of the event was to introduce science, engineering and technology careers to girls who may not otherwise be exposed to role models in these careers. Additionally, the importance of math and science were explained and presented as “cool” subjects in school.

The whole event served as a source of information on science, engineering and technology for a group of students who may not have much contact with engineers or scientists, and in particular women in those fields. This will also give us a chance to expose teachers and counselors to the fact that women can become engineers and scientists, and hold jobs in technology fields. Interacting with industry can provide them with information on what courses students need to take in order to pursue a science, engineering or technology career.

SPONSOR OBJECTIVES

- Stress the importance of math and science classes in middle and high school, in order to prepare for a college major that can lead to a well-paying and fulfilling job.
- Give the students and professionals a chance to learn and practice mentoring, which will hopefully encourage engineers, especially women, to attain high levels of professional achievement and to become role models.
- Feed the science, engineering and technology employment pipeline.

Sponsorships were solicited from 2006 event supporters and local companies. Our senior level sponsors were: Agilent; Ch2MHill; Junior Achievement of Rocky Mountain, Inc.; Lockheed Martin; Raytheon; Society of Women Engineers; and Washington Group International. Our junior level sponsor was Accenture. Sophomore sponsors included: Holmes Roberts & Owens; Hewlett Packard; Merrick & Company; and Xcel Energy Grant. Our freshman sponsors were: American Council of Engineering Companies (ACEC) of Colorado; Rocky Mountain Section American Water Works Association (RMSAWWA); Ball Aerospace; Colorado School of Mines; Coors; ForeRunner Corp.; IBM; IEEE; Innovative Construction Solutions, Inc.; Jacobs Engineering; KST Data; LARABAR; Leonard Rice Engineers; Scanlon Consulting Services, Inc.; SECOR International Inc.; and Technically Speaking, Inc.

Girls Exploring Science, Engineering & Technology Event Final Report

The sponsorship opportunities offered are illustrated in Appendix A.

ATTENDEE SURVEYS

A survey was provided at the conclusion of the event. Full survey results are included in a separate Survey Addendum. In summary, relative GESET event content, over 83% of the girls indicated they want to take more science, engineering, and technical classes, more than 79% said that they learned what high school classes to take to enter STEM fields, and 76% of the girls responded that they want a job in a STEM field as a result of GESET. In response to questions specific to the event itself, close to 95% of the girls indicated that they would like to return to GESET next year, and 93% said they will tell other girls to attend next year.

The Alliance for Technology, Learning, and Society (ATLAS) Evaluation and Research Group at the University of Colorado at Boulder helped again to refine our surveys from last year. In addition, they administered the surveys and tabulated the results. The major findings and recommendations will be very helpful to improve this event and provide even more targeted workshops and information to encourage girls to explore science, engineering and technology careers as well to enroll in more math and science classes.

The ATLAS Evaluation and Research Group at the University of Colorado at Boulder conducts research on increasing under-represented groups in Information Technology (IT) disciplines. The ATLAS Evaluation and Research Group, coordinated the surveys and analysis for the *Girls Exploring Science, Engineering & Technology* event for the third straight year. They are the recipients of two National Science Foundation grants to study 1) curricular programs of study in higher education, in particular, the nature of learning environments in different curricular programs and 2) the types of messages and methods that can successfully persuade middle school girls to participate in computing programs of study.

The ATLAS Evaluation and Research Group at the University of Colorado at Boulder provides multidisciplinary curricular, research, and outreach programs that integrate information technology with a wide variety of disciplines and people, both inside and outside the University. They also founded the National Center for Women and Information Technology, in collaboration with the Anita Borg Institute (formerly Institute of Women in Technology), a number of universities, corporations, and the Girl Scouts of the USA (among others). (<http://www.ncwit.org>) The Society of Women Engineers has a memorandum of understanding with the Girl Scouts of the USA to support outreach activities geared towards math, science, and engineering. The ATLAS Evaluation and Research Group and the GESET planning committee are continuing discussions on a potential longitudinal study to analyze influences on young girls related to the pursuit of STEM careers.

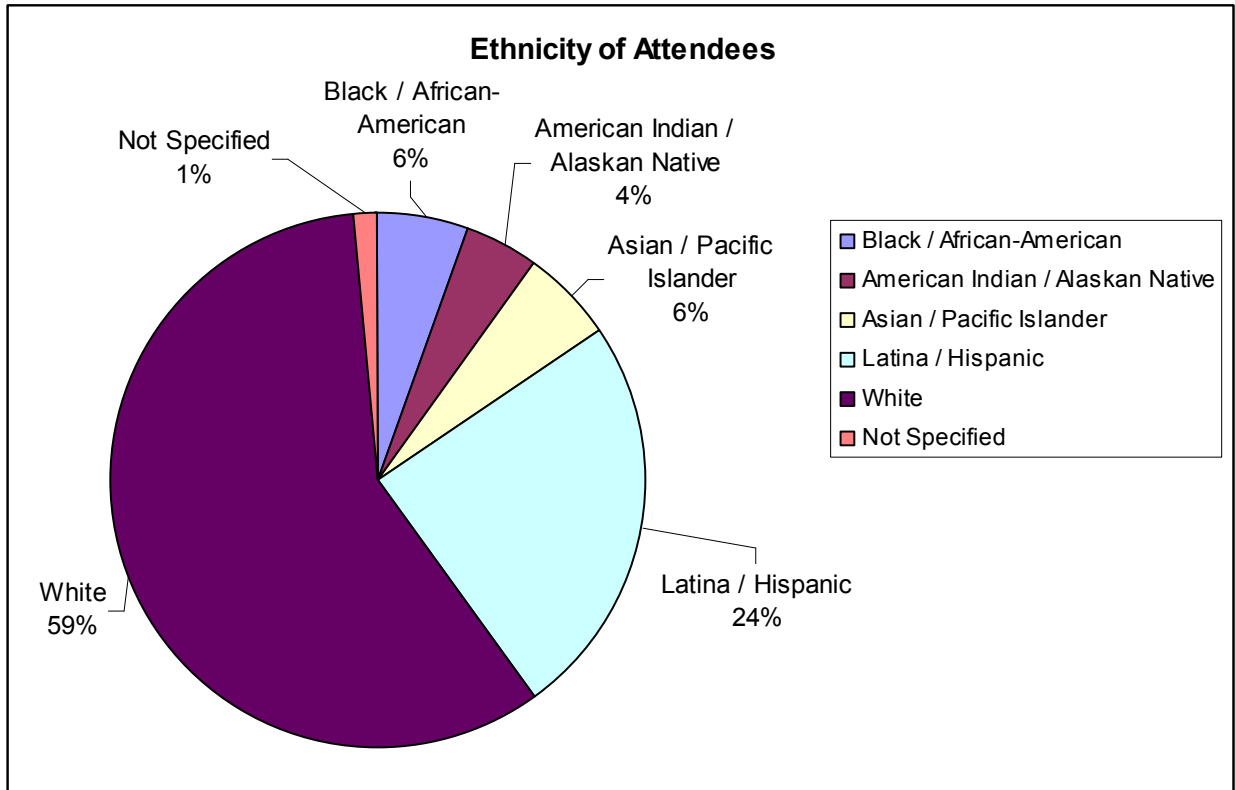
REGISTRATIONS

Registration in 2006 used a new on-line registration system from the one implemented in 2004. While registrations were recorded on a first-come first-served basis through the on-line system, the system also collected the student's 1st-10th choices of workshops. This allowed the registration team to slot students into workshops such that all students participated in at least one of their top 2 choices, and at least two of their top five choices.

The new system also allowed registration to be closed when event capacity was reached. While registration was stopped at 1200 registrants, the rate of registration indicated that demand was commensurate with the overwhelming amount of desire shown in each of the past three years. This year's event represented an increase of approximately 400 registrants, due to the move to a larger venue and increases in funding.

Of the students who responded, 40% specified a demographic other than white. This information was voluntary, and as such we did not receive demographic information from 1% of attendees.

Girls Exploring Science, Engineering & Technology Event Final Report



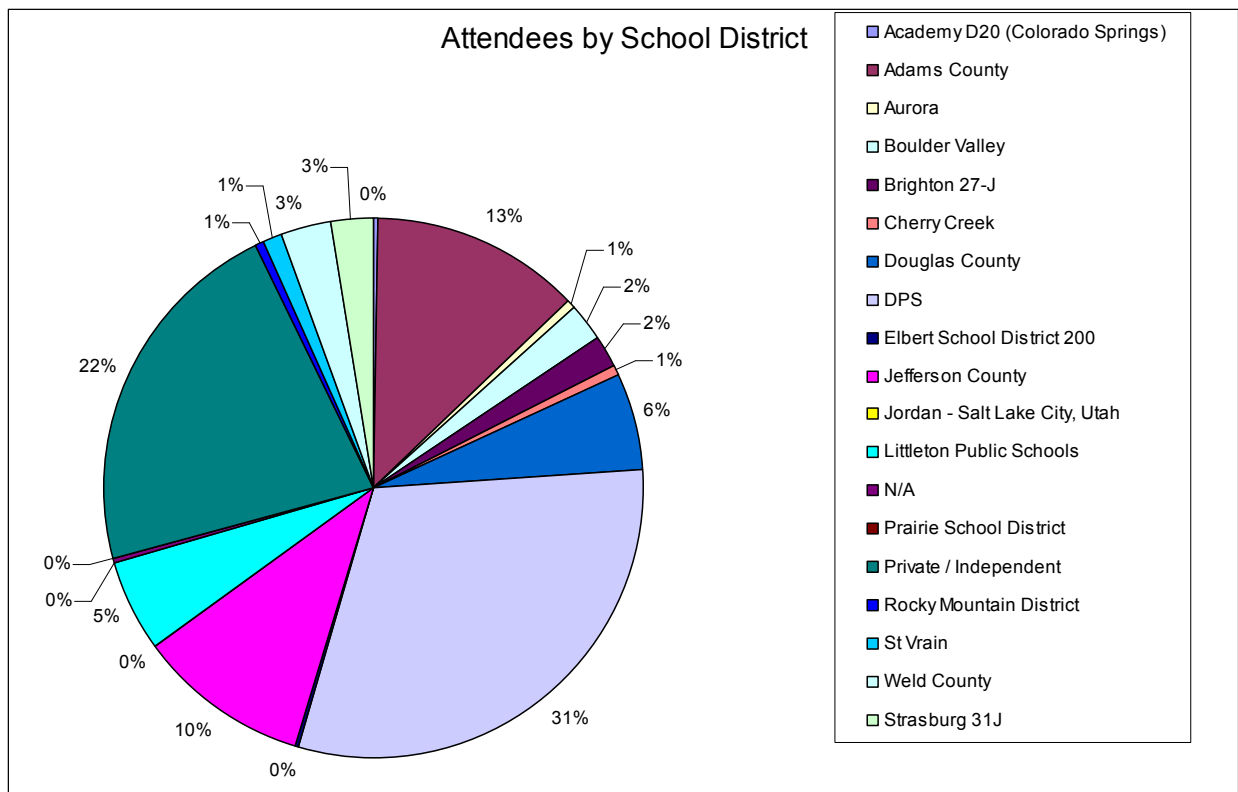
Compared to the Race/Ethnicity of Colorado school children, Latina/Hispanic girls and African-American girls were under-represented. Compared to the demographic makeup of Denver Public Schools, white girls were over-represented, while Latina/Hispanic and African-American girls were under-represented.

By comparison, in 2005 we had over 46% specify a demographic other than white and demographics for 8% of the 2005 attendees were unknown.

Of the 1207 student attendees representing more than 66 different schools from 19 districts or groups, 31% were from students in the Denver Public School (DPS) system. Private / Independent schools represented 22%, Adams County represented 13%, and Jefferson County represented over 10% of the attendees. The remaining 15 school districts or groups that attended each had between 1 and 6%. Of those attending, 53% were 7th graders and 35% were in 6th grade, with the remainder being 11% 8th graders and 1% 5th graders.

By comparison, in 2005, we had 818 girls from over 33 schools. While DPS schools made up over 49% of the attendees in 2005, this year's event timing conflicted with the Colorado Student Assessment Program (CSAP) test preparation, causing a decrease of 18% in DPS participation in 2006.

Girls Exploring Science, Engineering & Technology Event Final Report



FUNDING AND BUDGET

In comparison with the 2005 event, in 2006 we:

- ✓ Increased funding by 93% (\$85,090 vs. \$44,000) and in-kind donations by 27% (\$38,000 vs. \$30,000)
- ✓ Increased attendees by 48% (1207 vs. 818)
- ✓ Increased chaperones by 67% (167 vs. 99)
- ✓ Increased volunteers by 26% (189 vs. 150)
- ✓ Increased the number of exhibitors by 58% (19 vs. 12)
- ✓ Received event coverage in press releases by Raytheon and Lockheed Martin, and a follow-up article in the April issue of SWE Magazine.

We do not charge any admission to this event. We rely solely on sponsors, in-kind donations, and volunteers.

Hosting the event at the convention center included increased expenses for items not required in previous years when the event was held at a hotel. We had to include subcontracts for security, show management, and fire safety and medical personnel. The catering contractor as well as the show management contractors worked very close with us to control expenses, especially in the areas of food and audio/visual. Budget planning for next year will be easier and more accurate having this year under our belt. In addition, both vendors have offered to work with us again next year and have already offered us discounts based on our non-profit status as well as repeat business.

We were once again able to secure donated plastic tote bags therefore, allowing us to eliminate bags from the budget. We will continue to seek sponsorship for this item in the future. The bags are necessary for the girls to take home information handouts and giveaways from sponsors.

Girls Exploring Science, Engineering & Technology Event Final Report

The budget included coffee for the volunteers and chaperones this year, in response to comments from adult surveys from past years and as a way of thanking the numerous volunteers and chaperones for their time and efforts.

The thirteen LEGO Mindstorm™ robotic kits owned by GESET were put to good use again in workshops during the event this year.

PROGRAM SCHEDULE

Friday, March 10, 2006

- 8:45 a.m. – 9:30 a.m. Check-in / Information for all participants
- 9:30 a.m. – 9:50 a.m. Welcome / Opening Remarks
- 9:55 a.m. – 12:30 p.m. Workshops including hands-on demonstrations and activities
 - 9:55 a.m. – 10:40 a.m. Various 45 minute workshops
 - 10:50 a.m. – 11:35 a.m. Various 45 minute workshops
 - 11:45 a.m. – 12:30 p.m. Various 45 minute workshops

OR (depending on assigned workshops)

- 9:55 a.m. – 11:05 a.m. Various 70 minute workshops
- 11:10 a.m. – 12:20 a.m. Various 70 minute workshops
- 12:30 p.m. – 1:15 p.m. Lunch / Closing Remarks / Door Prizes.

The event was opened by GESET Event Chair and SWE representative, Sandra Scanlon, with a welcome, brief discussion of logistics for the day, and an introduction of Lt. Governor Norton. Lt. Governor Norton spoke to the participants highlighting the importance engineering, science and technology career fields through examples from constructing buildings and roads, and developing technology, space vehicles and satellites, to solving crimes and bio-medical engineering. She also mentioned that jobs in these career fields are expanding over coming years, and there is a growing need for diverse and qualified talent to continue the path of innovations we enjoy today. Lt. Governor Norton discussed how GESET provides a unique opportunity to see and experience hands-on glimpses into a number of exciting jobs and career fields during the interactive event and encouraged the girls to ask questions and learn. She closed her remarks by suggesting the broad potential in these girls to pursue an inspiring and thrilling future in science, technology, engineering, and math fields – and that it can be rewarding and fun. This was a motivating kick-off for the 2006 event.

The Lt. Governor was followed by Linda Brisnehan, representing Lockheed Martin, who engaged the girls with questions about the reason for being here today and encouragement for the future of girls in science, engineering and technology careers. Next, Mary Petryszyn from Raytheon took a few moments to recognize the dedicated and extraordinary commitment of Sandra Scanlon – discussion that Sandra's fourth year in chairing the GESET event has generated outstanding growth of the event's sponsorship and participation. Petryszyn presented Sandra Scanlon with a plaque on behalf of the GESET planning committee. Finally, Melissa Canaday, Junior Achievement, made remarks that encouraged and enthused the girls to enjoy the day's program and provided instructions for where to proceed next, how to navigate through the day and when to return to the ballroom.

This year's event also featured lunch speakers. Patty Keck, Ch2MHill, provided brief remarks addressing areas the girls learned more about in the workshops and connecting the importance of taking appropriate math and science in high school to prepare for the future. She then introduced the next speaker, Jean Mooney, representing one of GESET's host Agilent, for a few positive words of endorsement of the GESET event and to lead door prize announcements, drawing of tickets, and distribution of prizes. She was assisted by Sandra Scanlon, who then provided closing remarks and farewell. A description of the 43 different workshops presented is included at the end of this report.

EXHIBITS

In order to provide an avenue for the chaperones to learn about local organizations within the science, engineering and technology community, an exhibit area was again provided.

Girls Exploring Science, Engineering & Technology Event Final Report

There were 19 exhibitors this year, including the following organizations:

◆ American Council of Engineering Companies of Colorado ◆ Bits, Bytes & Bots ◆ Colorado Association of Black Professional Engineers and Scientists (CABPES) ◆ Colorado Math Engineering and Science Achievement (MESA) ◆ Colorado School of Mines – Women in Science, Engineering and Mathematics ◆ Colorado University – Women In Engineering Program ◆ Denver Zoo ◆ Future City ◆ Girl Scouts – Mile Hi Council ◆ IBM ◆ Junior Achievement ◆ Lockheed Martin ◆ Colorado University – Multi-Purpose Engineering Program ◆ Raytheon Company ◆ Raytheon Math Moves You ◆ Science From Colorado University – A Science Discovery Program ◆ Society of Women Engineers – Rocky Mountain Section ◆ UCAR Windows to the Universe ◆ University of Denver

HANDOUTS / GIVEAWAYS

The following items were sent home with each attendee: a 26-page “Explore Engineering Activity Book” complete with answers (this activity book was created by a SWE-RMS member and printed by Raytheon); “Three Cheers to Engineers,” a popular student brochure reprinted from Girls' Life magazine, provided by Agilent; brochures listing what courses to take in high school; descriptions of various engineering disciplines; websites listing career guidance and scholarship information; and various trinkets from sponsors (notepad, pens, pencil, highlighters); a SWE Facts brochure. The chaperones each received the same items, as well as participant certificates for each girl from Raytheon.

To encourage the girls (and adults) to complete the post-event surveys, door prizes were offered. The door prize drawing was held at the end of the event and included: 3 picnic game backpacks and 2 vests sponsored by Raytheon; four daily passes to Elitches Gardens sponsored by Leonard Rice Engineers; 5 laptop cases, 4 water bottles, 2 stuffed animals, 1 key chain, 1 hat & t-shirt, 2 CD cases, 1 ID holder, and 2 t-shirts sponsored by Colorado School of Mines. Several other small items from Raytheon and Lockheed Martin were given away as well as T-shirts and tote bags. Two nano iPods from KST Data were given out as the grand prizes.

VOLUNTEERS

Our volunteer coordinator this year was new, and continued the tradition of recruiting and coordinating an excellent turn-out of 2006 event volunteers. She used her skills in the human resources career field to manage a detailed process to coordinate the 189 GESET volunteers. Our previous volunteer coordinator, who moved out of state, gave guidance and support to make the transition smooth.

The goal for the event was to provide one mentor (or guide) for every 10 girls. Volunteer support is an opportunity for the sponsoring companies to flourish. The majority of our volunteers come from the major sponsors. We had enough volunteers come forward that we were able to achieve our desired 10:1 ratio. Usually, events or organizations struggle to recruit enough volunteers. Our success with volunteers is one more indicator of the power of this event and the desire by individuals and companies to encourage more girls to pursue math and science and ultimately feed the employment pipeline.

The majority of our volunteers came from Lockheed Martin, with 93 volunteers, Agilent with 39, and Raytheon with 20. SWE-RMS provided 15 volunteers, Accenture and Merrick & Company each provided 7 and Washington Group International provided 6. The following companies also provided volunteers the day of the event: Arapahoe County Water and Wastewater Authority; Ball; Black & Veatch; Buckhorn Geotech, Inc.; Burns & McDonnell; CEC Member, Colorado School of Mines; Coors Brewing Company; Denver Public Schools; Gambro BCT, Inc.; HDR Engineering; IBM; IEEE; Independent Consultant, Integra Engineering; J.E. Dunn Construction; Junior Achievement; Leonard Rice Engineers; Omitron, Inc.; Pinyon Environmental Engineering Resources, Inc.; Pioneer Astronautics; Qwest; Regis University; Scanlon Consulting Services, Inc.; Sellards & Grigg, Inc.; Society of Women Physicists; Spiral of Life Coaching; Sun Microsystems; TCB; TDA Research; Technically Speaking, Inc.; The Engineer Network; University of Northern Colorado; Urban Drainage and Flood Control District; US Bureau of Reclamation.

Some individuals who volunteered did not specify whether their company was sponsoring their participation or whether they took the day off as personal time, and therefore we were unable to account for their participation by company. Workshop presenters volunteered their time for the event and are listed separately in the workshops descriptions below.

Girls Exploring Science, Engineering & Technology Event Final Report

WORKSHOPS

The following 43 workshop descriptions were provided to the attendees:

Analyzing Aquatic Ecosystems

Ryan Knight, Education Outreach Coordinator and Jennifer Lemmond, Education Outreach Specialist, Denver Zoo, www.denverzoo.org/outreach

This workshop introduces students to applied science by providing an opportunity to learn about aquatic ecosystem management and conservation through a hands-on water quality lab and close encounters with live animals.

Ryan has a BS in zoology and molecular genetics from Ohio State University, MS in environmental science from the University of Colorado and works in environmental/science education. Jennifer graduated from Colorado State University with a BS in biological sciences and develops and delivers educational programming for all age groups.

Around the World in Seconds

Channing Sparks, Lucia Phillips, Laurie Alzheimer, Tiffany Garrett, Becky Casselberry, Lockheed Martin Space Systems Company, www.lockheedmartin.com

Participants view a space video and participate in an interactive satellite system to learn about rockets, satellites, and space shuttles.

Presenters are all recent graduates from universities nationwide with degrees in fields such as aerospace engineering, chemical engineering, and computer science. All grew up interested in science and math and now, with technical degrees, apply their interests to the world of space.

Beginning Photoshop

Dan Cornell and students from Smoky Hill High School

Explore the world of enhancing photographs with Adobe's Photoshop software and learn how to turn ordinary photos into extraordinary keepsakes.

Dan has taught for more than 15 years and enjoys working with students who, in turn, work with other students to learn more about computer technology.

Build a Robot!

Kristen Jensen, Educator, Denver Museum of Nature & Science, www.dmns.org

Workshop includes a short introduction to robotics and how/why they are used in space exploration. Students work in small groups to decide where in space they would send a robot and build a robot with motors and moving parts.

Kristen has an undergraduate degree in anthropology and works as the Camp-In Coordinator at the Museum, developing curriculum and teaching everything from art to space science.

Catch a Thief

Presented by Agilent Technology Employee Volunteers, www.agilent.com

Agilent Technology works to inspire minds and enrich lives in local communities by supporting programs that increase student interest and achievement in science. Workshop volunteers are technical and support employees.

This workshop encourages students to use their investigative and problem solving skills to solve a crime. Using paper chromatography, they reveal the underlying composition of four suspects' pens and a ransom note to identify a criminal.

Girls Exploring Science, Engineering & Technology Event Final Report

Chemical Reactions: Ions, Electrons and Polymers – Oh My!

Shannon Burglin-Greivel, Research Scientist, Colorado School of Mines, www.mines.edu

This first course in chemical reactions explores hydrolysis, electrolysis and photolysis in addition to oxidation reactions. Students will set up a miniature electrolysis apparatus to conduct an experiment and observe a photolysis to make a polymer.

Influenced in high school by female math and science department chairmen, Shannon pursued engineering courses with heavy math and science emphasis. An early patent in electrodeposition led to graduate studies and a Ph.D. at the Colorado School of Mines.

Chemistry and Crime

First Lieutenant Kolin Newsome, Assistant Professor, United States Air Force Academy, www.usafa.af.mil

Students will use various chemical techniques including gel-electrophoresis, paper chromatography, density gradients and colorimetric assays to solve crimes.

Lieutenant Newsome teaches in the department of chemistry at the United States Air Force Academy.

Dirty Water Treatment

Jennifer O'Brien, Carollo Engineers, www.carollo.com

Workshop focuses on water sources, testing and different aspects of water treatment. It includes hands-on activities with testing and filtering dirty water.

Jennifer is a graduate of Clarkson University and holds a masters degree in civil engineering from the University of Colorado at Boulder. She works on a variety of projects involving water and water treatment.

Dive into Athletic Training

Courtney Smith, Athletic Trainer, Denver Public Schools, www.dps.org

Explore the world of sports medicine and learn about protective taping & bracing, injury prevention, treatment and rehabilitation. Practice taping and bracing each other.

Athletic training classes in high school motivated Courtney who later obtained degrees in Math, Chemistry and Computer Science. She added athletic trainer classes from Metro State College and now has National Board Certification.

Eggstraordinary Landers

Paul Engola, Program Manager and Tanya Apel, Procurement Specialist, Lockheed Martin Space Systems Company, www.lockheedmartin.com

Learn how to “drop out of space” and land on a distant object without crashing into the surface. Explore landing methods available and create your own “eggstraordinary landing” craft and test it against all that are created to find the best lander.

Paul earned his bachelor's degree in aeronautics and astronautics from Massachusetts Institute of Technology, masters at the Georgia Institute of Technology and a second masters in business administration from Stanford. Tanya has a bachelor's degree in biology and chemistry from Blackburn College.

Electronic Matching Game

Presented by Agilent Technology Employee Volunteers, www.agilent.com

Agilent Technology works to inspire minds and enrich lives in local communities by supporting programs that increase student interest and achievement in science. Workshop volunteers are technical and support employees.

Girls Exploring Science, Engineering & Technology Event Final Report

Electronic Matching Game enhances the student's knowledge of circuits and electrical flows. Each student constructs a game to serve as an electronic checker for matching correct questions and answers.

Exploring Space with JPL and NASA

Barbara Sande, Senior Staff Engineer, Lockheed Martin Space Systems Company, www.lockheedmartin.com

Discuss the fundamentals of space exploration including current programs and the whys and hows of getting there. Participants will do interactive quizzes, race as Mars Rovers and build paper models of a Cassini spacecraft.

Barb has a bachelors degree in electrical engineering and masters of business administration degree from the University of Colorado.

Fire Behavior and Investigation

Scott Thornton, Mike Gonzoles, Greg Sheehan, Firefighters, Denver Fire Department

Three part workshop addresses fire behavior – the science of fire, fire investigation – arson and accidental starts, and equipment for fire service – how and why equipment is used on the fire ground. The girls will try on equipment to experience its weight and learn how it is used.

The firefighters have a total of 26 years experience with fires. Besides fighting fires, Scott helps new hires, Mike instructs at the Fire Academy and Greg shares his long experience as a firefighter.

Food Safety, Nutrition and Allergies

Sandra Perryman, Sales Relief Representative, US Foodservice, www.usfoodservice.com

Students investigate the transfer of germs, using "glow germ" and a UV light to see how rapidly germs on hands will spread. They investigate food safety learning about safe food preparation.

Sandra has a BA in Dietetics from the Indiana University of Pennsylvania and a Master of Public Health Education from the University of Northern Colorado.

Forensic Science with a Feminine Touch

Amy Beatty, Katie Lobato, Sheri Murphy, Laboratory Agents, Colorado Bureau of Investigation, www.cbi.gov

Students investigate a mock crime scene, gather and test evidence in the pursuit of a suspect. They learn about the education and training that is required to be a laboratory agent and other careers in forensic science.

Amy specializes in clandestine drug laboratories and has worked as a forensic chemist.

Geographic Information Systems

Robb Menzies, GIS Specialist, Denver Public Schools, www.dps.org

This workshop demonstrates a few of the uses of Geographic Information Systems and a wide variety of careers in industries using GIS. Students will explore websites to learn more about using GIS.

Robb is Denver Public Schools' GIS specialist. Additionally, he has worked with GIS in environmental engineering companies.

Glider Competition

Valerie Scott, First Officer, United Airlines, www.united.com

Explore the world of a female airline pilot by learning about becoming one and the joys and travails of traveling internationally. Participants will build and launch gliders to learn more about the science of flight.

Girls Exploring Science, Engineering & Technology Event Final Report

Valerie Scott has a BS from Southern Illinois and is a certified accident investigator for the Airline Pilots Association.

GPS – It's all about Time

Dr. Alison Brown, President and CEO, NAVSYS Corporation, www.navsys.com

Students learn about the basic principles of operation of the Global Positioning System and how math and physics are used to calculate a location from GPS satellite signals. They will examine some GPS equipment and learn about applications.

Alison holds engineering degrees from Cambridge, Massachusetts Institute of Technology and Ph.D. University of California at Los Angeles. She is the founder and CEO of NAVSYS Corporation.

Gumdrop Domes & Paper Bridges: Engineers Solve Problems!

Debra Lasich, Executive Director and Lauri Stankewicz, Graduate Assistant, Women in Science, Engineering and Mathematics at the Colorado School of Mines, www.mines.edu/Academic/affairs/wisem/

Students will have the opportunity to use engineering techniques to build two different kinds of structures exploring the world of civil engineering using everyday materials.

Deb has a BS in sociology from Kearney State College and a Masters of Community and Regional Planning from the University of Nebraska-Lincoln. Lauri is a graduate assistant for the WISEM program and holds a degree in civil engineering from the Colorado School of Mines.

Hands-on Space Rocks

Suzanne Traub-Metlay, Education Programs Manager, Fiske Planetarium at the University of Colorado, Boulder, <http://fiske.colorado.edu>

This workshop examines meteorites which can be pieces of other planets, moons or asteroids that have landed on Earth. Participants learn to differentiate them from Earth rocks and examine them much more closely.

Suzanne has a BA in history and science from Harvard and Ph.D. in geology from the University of Pittsburgh. Teaching is her passion and she coordinates educational opportunities for college undergraduates as well as K-12 students and teachers.

Heart and Lung Dissections: An Inquiry Approach

Leslie Newell, School Programs Coordinator, Denver Museum of Nature & Science, www.dmns.org

Students are introduced to the use of dissection as a tool to learn about anatomy and physiology. Groups will determine a dissection method, dissect either a sheep's heart or a sheep's lung and evaluate the results.

Leslie has a BA in biology and teaching. She has been a public school secondary science teacher for seven years.

Hydrogen Fuel Cell Model Car Workshop

Linda Lung, Education Program Manager, National Renewable Energy Laboratory, www.nrel.gov

Each workshop team will build a model hydrogen fuel cell car to understand the hydrogen economy and how a fuel cell works. They can make design changes which are reflected in the car's performance.

Linda has a BA in social works and psychology from Colorado State University. She manages the Department of Energy's Office of Science which oversees many educational programs.

In a New Light – The Color of Weather and Climate

Teri Eastburn and Tim Barnes, Educators, National Center for Atmospheric Research, www.windows.ucar.edu

Girls Exploring Science, Engineering & Technology Event Final Report

The workshop builds upon students' familiarity with color to expand their knowledge of light, especially as it relates to the study of weather and climate. They will explore the nature of light, atmospheric optics, climate change and technological tools utilizing light for atmospheric research.

Teri has an undergraduate degree in developmental psychology from the University of California at Santa Barbara and a masters degree in human development.

In the Dog House

Nora Brooks, Architect, Larsen Architects, www.larsenarchitects.com

Participants will explore the world of architecture by designing and building a dog house from construction paper or cereal boxes.

Nora is a licensed architect who was introduced to her future career when she took drafting classes in high school. She has a degree in Environmental Design from the University of Colorado and a masters in architecture from the University of Washington in Seattle.

Let's Build a Bridge!

Laura Conyers, GEI Consultants, www.geiconsultants.com and Kristin Hildahl, URS Corporation, www.urscorp.com

Exploring the world of civil engineering, participants learn about building bridges – different kinds and how each works. Participants design, build, and test their bridges made of paper and paper clips to determine how much weight they will support.

Both women are registered professional engineers in the State of Colorado and hold degrees in civil engineering. Laura is a water resources engineer and Kirstin works in roadway design.

Light, Polarization and Liquid Crystals

Fred Gluck, Instructor, Science from CU at the University of Colorado, www.colorado.edu/sciencediscovery

The science of light, polarization and liquid crystals is illustrated. Through interactive demonstrations and high tech visual displays, students learn how common liquid crystal devices such as displays in calculators, digital clocks and laptop computers function.

Fred has degrees in applied mathematics, computer science and electrical engineering. He teaches for the Science Discovery program and volunteers in Boulder's public schools to tutor students in math and science.

Marco Polo: Using Your Ears to See

Presented by Lisa Aldrich, Systems Engineer, Raytheon Integrated Defense Systems and other Raytheon Employee Volunteers from Colorado Springs, Rhode Island, and Massachusetts, www.raytheon.com

Participants will learn how a submarine locates objects underwater using sound and measuring angles to determine the bearing of another submarine in the ocean.

Lisa has a bachelor's degree in electrical engineering from Michigan Technological University and is pursuing a master's degree from the University of Rhode Island. She is responsible for systems requirements and test engineering.

Math Moves U

Ann Morrell, Terri Matthews, Roxann Burney, Raytheon, www.raytheon.com

Participants learn about cool jobs that use math, do some fun math puzzles and explore a web site where they can win prizes and scholarships.

Ann has bachelor and masters degrees in mathematics from Brigham Young University and does test and systems engineering work.

Girls Exploring Science, Engineering & Technology Event Final Report

Paleoclimatology: Super Cool and Really Hot Science!

Lisa Gardiner and Randy Russell, Science Educational Designers, University Center for Atmospheric Research, www.windows.ucar.edu

Paleoclimatologists collect clues to decipher what Earth's climate was like in the past. They may study tree rings, fossils, ancient pollen grains, or the ice on Greenland and Antarctica to learn about climate history. Workshop participants will work with tree rings.

Lisa holds a BA in geology and a PH.D. in paleoecology. She develops science activities and curriculum for K-12 classrooms. Randy has a BS in astrophysics, an MS in aerospace engineering and a PH.D. in educational systems development. He develops interactive multimedia and web pages for earth and space science education.

Peanut Butter and Jelly Robot

Carita Watson, Karen Gilleland, Annamarie Valdez, Dr. Joan Mitchell, Kathy Anderson, Kathryn Pirie, Mindy McGeehan, and Karen Eldredge, IBM Corporation, www.ibm.com

Participants work as a programming concepts team by writing instructions for a robot to make a peanut butter and jelly sandwich. One team member plays the robot to execute instructions.

All presenters are college graduates with a wide range of degrees in fields which include: computer science, finance, materials engineering, physics and information technology. Collectively, they work in communications, programming, research, software testing, administration, finance and system support.

People and Pollution

Kalie Nye, Project Engineer, Secor International Inc., www.secor.com

Participants learn about various types of pollution in the environment, discuss the effects of Hurricane Katrina, and do a soil and groundwater sampling activity.

Kalie has a bachelor's degree in civil engineering with an environmental option from Michigan State University, and works with soil and groundwater monitoring and cleanup.

Programming with Lego Robots

Stacey Fornstrom, Thomas Jefferson High School and Sherrie Clapp, North High School, www.computermagnet.com

Learn how to modify and program a robot to obey your every command by working with Lego Mindstorm robots. Create a program, download to the robot and test your work.

Stacey and Sherrie both teach in the Denver Public School System. They have more than 18 years of combined industry experience and 12 years teaching experience.

Prosthetics and Orthotics

Mandy Myers, Certified Prosthetist, Audubon Orthotic and Prosthetic Services

Workshop includes an introduction to basic biomechanic principles of human gait such as ground reaction forces, moments and pressure. Girls will examine orthotic and prosthetic devices and learn about various treatments for different conditions.

Mandy graduated from Northern Arizona University with a mechanical engineering degree and was certified in prosthetics at California State University in Dominguez Hills.

Rocket Science 101

Barbara Kontogiannis, Production Support Engineering Manager, Lockheed Martin Space Systems Company, www.lockheedmartin.com

Workshop focuses on rockets including their production in Denver and transport to Florida for launching. Participants will build and launch paper rockets to find whose goes the furthest.

Girls Exploring Science, Engineering & Technology Event Final Report

Barb holds a bachelor's degree in mechanical engineering and a masters in aeronautics and astronautics from Stanford.

Scavenger Hunt

Angie Blackwell, Senior IT Manager, Junior Achievement, www.jacolorado.org

This workshop introduces girls to the basics of computer operation. They will learn a few of the basic parts of a computer and what they do and then proceed to take the computers apart to discover which major component is missing.

Angie has a BA in history from Colorado College and has done coursework at several local community colleges in order to maintain and repair a computer network servicing 25 people.

Solar Quiz Circuit Boards

James Bosch, Education Specialist, National Renewable Energy Laboratory, www.nrel.gov

Students will have an opportunity to use photovoltaic cells to capture light energy and convert it to electricity to make simple circuits.

James holds a BA in Biology and MA in Environmental Education and has experience in outdoor and environmental education, energy and horticulture.

Speech Language Pathology

Lisa Treviso, Clinical Speech Pathologist, University of Colorado Hospital, www.uch.edu

This overview explores swallowing, cognitive, and speech disorders. Interactive videos show patients with different speech and swallowing disorders; helpful exercises will be tried. A tracheostomy and how it functions will be demonstrated.

Lisa is a graduate of the University of Colorado at Boulder and has a masters degree in speech pathology from the Northern Arizona University in Clinical Speech Pathology. She works with adults with neurological disorders such as strokes and traumatic brain injuries.

Spinning in Space – Biomedical Research in Space

Carol O'Leary, Vice President and Center Director and Debbie Hertzog, Director of Marketing and Special Events, Challenger Learning Center, www.clccs.org

Participants learn about the challenges of human space exploration and the critical role space medicine plays in going to the moon and on to Mars. They have an opportunity to spin in the Barany Chair and use vision-shifting glasses to experience the effects of space.

Carol has a bachelor's degree in physiology and a master's degree in science education. She is the Challenger Learning Center Director.

Steady Hand Game

Presented by 39 Agilent Technology Employee Volunteers, www.agilent.com

Agilent Technology works to inspire minds and enrich lives in local communities by supporting programs that increase student interest and achievement in science. Workshop volunteers are technical and support employees.

Participants explore the fundamentals of electricity. They build an electrical circuit that includes an energy source, resistance, a light and a switch. The completed assembly is also a steady hand game that can be played and shared with friends.

Vibration and Sound – Make a Kalimba

Presented by Agilent Technology Employee Volunteers, www.agilent.com

Girls Exploring Science, Engineering & Technology Event Final Report

Agilent Technology works to inspire minds and enrich lives in local communities by supporting programs that increase student interest and achievement in science. Workshop volunteers are technical and support employees.

Vibration and Sound provides young scientists with an opportunity to build a thumb piano and explore the level of sound from low to high. Through investigation, variables that affect pitch such as the length of metal pieces are examined.

Visible Human

Michael White and Terra Doucette, Visible Human Project at the Center for Human Simulation, www.uchsc.edu

This workshop focuses on surgical simulators, interactive programs for learning and teaching anatomy and future possibilities. Students dissect through a virtual cadaver on a computer as well as create anatomical animations.

Mike graduated from the University of Colorado with degrees in video production and history. His work at the Center involves anatomical and scientific research with an emphasis on multimedia development and html-based lesson design.

Water Transport

Patsy Sullivan, Senior Project Engineer, Martin/Martin Inc., www.martinmartin.com and Hope Yu, Environmental Specialist, City of Golden Drinking Water Plant, www.ci.golden.co.us

Participants learn where water comes from, how it gets to homes and what makes it safe to drink. They explore the effect of gravity and piece together a water system to move water between tanks by pumping and gravity flow.

Patsy is a registered Professional Engineer in the State of Colorado and has a bachelor's degree in civil engineering from the University of Illinois at Champaign-Urbana. Hope has a bachelor's degree in chemical engineering.

Wind Engineering and You

Rick Shin, Science Consultant, National Renewable Energy Laboratory, www.nrel.gov

The workshop includes a top-level view of wind energy in the world followed by hands-on work with a small wind turbine model and a discussion of wind energy in the world's future.

Rick has a BA in mathematics and an MA in middle school science education. He teaches for NREL and is in charge of the Renewable Energy and Efficiency Education on Wheels program.

Girls Exploring Science, Engineering & Technology Event Final Report

Appendix A

“Girls Exploring Science, Engineering & Technology” Event March 10, 2006

Sponsorship Levels:

Senior Sponsors – \$10,000

Sponsors in this level will receive all Junior level benefits plus the following:

- The sponsor’s banner hung in the ballroom near podium/stage for the event.
- An opportunity to extend a personal welcome to the guests on behalf of the sponsor during breakfast or lunch.

Junior Sponsors – \$5,000

Sponsors in this level will receive all Sophomore level benefits plus the following:

- An invitation to the SWE Rocky Mountain Section Awards and Recognition Banquet in June 2006 where sponsor will be recognized for supporting GESET.

Sophomore Sponsors – \$2,500

Sponsors in this level will receive all Freshman level benefits plus the following:

- Sponsor level listing provided to all media covering the event.
- Podium recognition of sponsorship level.

Freshman Sponsors – Up to \$2,499

Sponsors in this level will receive the following:

- Sponsor level listing in all program materials and reports.
- A final report covering the event, including letter of appreciation, statistics and picture.

Specific Sponsorship Opportunities:

As a sole sponsor of one of the following, the sponsor will have signage at the event indicating as such. Any printed materials, advertising, etc. will list this sponsorship as well. Sponsorship of the following will be acknowledged at the appropriate sponsorship level.

- Breakfast sponsor
- Lunch Sponsor – In addition to sponsoring lunch, the sponsor may provide company logo stickers that can be placed on the boxed lunches or the sponsor may provide nylon lunch bags, which have the company logo and event name screened on them
- A/V Equipment Sponsor
- Computer Sponsor (Computers are used in numerous workshops on-site)
- Tote Bag Sponsor – The bags (plastic or otherwise) may have company logo
- T-shirts for the attendees and volunteers
- Registration Area, including coffee service for volunteers and chaperones
- On-Line registration (in kind services), initial programming, support and web server hosting
- Copying and Postage (in kind services) for registration packets to schools
- Workshop Presenter, including all materials and handouts
- Exhibits Participant

“Adopt-A-School” Sponsorship Opportunities:

Select a participating school to “adopt” as the sole sponsor for that school. Adoptive sponsor will have signage at the event indicating as such. Any printed materials, advertising, etc. will list this sponsorship as well. In addition, each adopted school will receive a GESET certificate recognizing the adoptive sponsor.

Girls Exploring Science, Engineering & Technology Event Final Report

Provide funding (\$600) for a school to bring up to 40 students to the event. Funding covers bus transportation and substitute teacher costs. Most schools offer this event as a field trip and as such, costs associated with attending the field trip must come out of the schools field trip budgets. Many schools can only afford two field trips per year per class. {Registration is free to attendees.}

Student Sponsorship Opportunities:

Provide funding for a student to attend the event. Sponsor one or more students at \$30 each which covers the cost of hosting the event for that student. {Registration is free to attendees.}

Other In-Kind Sponsorship Opportunities:

Provide 1,600 giveaways, one for each attendee and chaperone, with company name/logo.

Provide a career guidance handout to go in the bags for the attendees to take home. The handout may have company info and logo, job line/website, and highlight philanthropic activities the company has sponsored in the local community or career guidance activities the company has sponsored or participated in locally.

Allow employees to volunteer the day of the event. Volunteers may wear company logo attire at the event. Volunteers will receive a certificate and lunch for volunteering at the event.