

National Center for Women & Information Technology

PROMISING PRACTICES

Girls Exploring Science, Engineering, and Technology Event – GESET (Case Study 1)

Targeted Recruitment of Women and Girls into IT



K-12 Education

The Rocky Mountain Section of the Society of Women Engineers, Lockheed Martin, Junior Achievement of the Rocky Mountains, Inc., and the Women's Foundation of Colorado collaborate each year to produce the Girls Exploring Science, Engineering, and Technology (GESET) event for hundreds of girls. In 2006, over 1,200 Denver metropolitan area girls, and more than 200 volunteers, teachers, and chaperones participated in the event. The purpose of GESET is to engage middle-school girls in science, engineering, and technology activities, orient them toward the high school courses they need to take to enter related career fields, and interest them in pursuing these avenues as careers. Girls attend three workshops that are interactive, hands-on experiences, demonstrating real-world aspects of science, engineering, and technology. In addition, workshop presenters are asked to emphasize the importance of studying science and mathematics in high school, including which essential courses girls need to take. Girls are also encouraged to look at various exhibits by local STEM organizations, including booths run by Denver Public Schools technology advancement program and several industry participants. Students fill out a survey at the end of their last workshop, after which they attended a lunch with drawings for raffle prizes. In 2006, the Colorado Coalition for Gender & IT (an NCWIT Hub) also provided a workshop for the adults, where they discussed myths and effective practices related to girls in IT. This workshop provided a valuable environment for like-minded organizations to begin collaborative efforts to improve girls' and women's participation in information technology.



New survey items are added or refined every year to better understand girls' attitudes and behaviors; for example, in 2006 a new question was asked relating to girls' willingness to take a class dominated by boys. Observation of the GESET event has supported the collection of good (and bad) ideas. For example, one engineer asked girls how many wanted to be auto mechanics; the girls looked at each other and rolled their eyes. She then asked them if they thought it would be useful to be able to repair a car; to this, they could agree. Now that the engineer had their attention, she told the girls that like knowing how to fix a car, knowing math and science would help them to achieve other goals, including having cool careers.

EVIDENCE OF EFFECTIVENESS

The University of Colorado's ATLAS Evaluation & Research Group, led by NCWIT Senior Research Scientist Lecia Barker, has both observed the event and administered surveys for students and adults for the past three years. Although it is not possible for a one-time survey to determine the long-range effectiveness of such an event, the observations and surveys help organizers to ensure that their immediate goals are being met. The surveys also discover more about girls and the people who influence them. For example, each year the survey asks the open-ended question, "What do you want to do when you grow up?" Obviously, there will be some elements of fantasy in the girls' answers (this decreases with age, according to research), but the question can inform recruiters choosing application areas within which IT instruction can be embedded.

GENERAL PRINCIPLES AND ESSENTIAL INGREDIENTS

The most important elements for reaching girls of this age group are to:

- Ensure that the girls are with their friends or can otherwise feel a sense of belonging in the group to which they are assigned
- Keep the talk to a minimum and the action to a maximum (get advice from middle school teachers, who are experts at this)
- Connect what they are doing to things they already know or care about

NCWIT offers practices for increasing and benefiting from gender diversity in IT at the K-12, undergraduate, graduate, and career levels.

This case study describes a research-inspired practice that may need further evaluation. Try it, and let us know your results.

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PROMISING PRACTICES

What are the Important Components of Targeted Recruiting? with Case Study 1



K-12 Education

Professional recruiters know that being strategic about recruiting requires consideration of several elements, including making decisions that are aligned with your staffing or enrollment goals. A clearly defined recruitment strategy sets up a framework for focusing your efforts and planning beyond individual events or campaigns. The strategy defines what activities to concentrate on and what activities are unimportant.

Developing a strategic recruiting plan means going beyond specific tactics—like website development or a visit to a local university—to setting goals, finding partners, developing an evaluation plan, and developing and delivering materials.

Create a specific and quantifiable goal. Who do you want to reach? Is there a particular quality of student or employee? How many? Is there more than one target group? Once you have a goal in mind, it will be easier to implement a plan and develop a plan for tracking your progress.

Leverage existing efforts and relationships. Establish partnerships with people who already interact with your target audience and who are more likely to understand the audience's needs. For example, research shows that family and teachers have significant influence on children's academic and career choices. Training or informing teachers might get more "bang for their buck" than trying to interact with every child. Leveraging existing relationships, like friendships or trusted authorities, can bring an important personal touch.

Message content should be based on research about your audience. What do they believe about IT careers or academic programs now? What are their current goals? Messages can preemptively overcome misconceptions while appealing to existing desires. For example, the Information and Computing Sciences School at UC-Irvine is planning an introductory programming course on biological applications of computing to take advantage of female students' interest in biology. The course content will include information on computing careers within health and other biology-intensive settings. Craft a message that emphasizes content aimed specifically at the goals and interests of your target group, but remember to be truthful from the onset.

Use more than one way of getting the message across. The more times someone hears a message, and the more believable it is, the more likely they are to act on it. Take advantage of the media your audience pays attention to, but target the media of those who might influence them, too. And consider incentives and recognition for the influencers, like "teacher of the year."

RESOURCES

Barker, L. J., Snow, E. S., Garvin-Doxas, K. & Weston, T. (2006). Recruiting middle school girls into IT: Data on girls' perceptions and experiences from a mixed demographic group. In Cohoon, J. M. and W. Aspray (Eds.) *Women and Information Technology: Research on Under-representation*. Cambridge, MA: MIT Press, 115-136.
National Institute for Women in Trades, Technology, and Sciences Recruitment Strategies: http://www.iwitts.com/html/recruiting_strategies.html

RECRUITING QUICK LIST

- **Audience**
Target audience
Opinion leaders
Influencers
- **Message**
Needs, goals, interests of target sector
Challenging wisdom of typical choices
Truth in advertising
- **Method of Delivery**
Medium, multiple media
Contact situation
Deliverer
- **Leveraging & Building Relationships**
Existing efforts, contacts
- **Problems & Opposition**
Costs, resources
Opposing viewpoints
Misconceptions
Competing pressures
Beliefs about whether they can belong
- **Time Frame, Timing, & Repetition**
Typical planning, decision making
Multiple times
Imminent entry v. long-term influence

Keep in mind that a **contact situation**, the environment in which you meet with your target audience, will influence how your audience members interact with you. People have multiple identities and the priority each is given changes by age group. For example, middle school kids might feel strong pressure to conform in a group, but might be more persuadable in another context. Contact should be made by a credible person and information source.

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Visit www.ncwit.org/practices to find out more.

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