# GIRLS ARE IT! INTRODUCING GIRL SCOUTS & GIRL SCOUT VOLUNTEERS TO 'IT' ACTIVITIES & EXPERIMENTS

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#### Goals of the Project

Girl Scouts, Hornets' Nest Council is committed to inspiring girls with the highest ideals of character, conduct, patriotism and service that they may become happy and resourceful citizens. Girl Scouting is also committed to being an organization "Where Girls Grow Strong" and "Serving Every Girl, Everywhere." This project will have a far reaching impact on several hundred women and girls who have been involved over the past two years and will continue to be involved next year in the delivery and evaluation of various activities. The outcome will provide important information for those in the research community who are interested in encouraging women and minorities to consider careers in information technology.

Girl Scouts is uniquely qualified to serve as the expert on issues affecting girls ages 5-17. The research from this project seeks to address the following issues:

- Girls are far less likely than boys to choose to pursue IT related degrees or careers in the IT field.
- Girls and minorities are not likely to experience using technology in school at an early
  age, be influenced by technology-savvy educators or perceive IT careers as collaborative
  or inviting.
- Girls' introduction to computers tends to come from applications (i.e. word processors) rather than as a tool to solve problems or learn interesting content.
- Girls need to be introduced and have access to technology from "multiple entry points."
   That is, technology will be inviting when it can help them learn about and pursue their interest.
- Girls who are involved in all-girl and collaborative rather than competitive activities are drawn to those pursuits.
- Schools are not likely to provide technology-savvy educators to serve as role models or IT innovators. Girls and minorities can best hope to see this type of role model in other areas of their lives.

#### **Main Activities To Date**

During the first nine months of the project, research was successfully undertaken to provide data on current technology usage and comfort levels for girls in the targeted age group, including traditionally underserved populations. This data, along with focus group sessions involving adult volunteers, provided the foundation on which we have developed the program content.

The recruitment of IT mentors and volunteers to help lead this program continues to be a priority. Our partnership with the University of North Carolina in Charlotte (UNCC) has given us access to many IT professional educators and students. UNCC also sponsors an annual conference for middle and high school teachers and guidance counselors known as the Diversity in Technology Institute Conference (DITI). We have profiled our work at this conference for the last two years thus increasing community awareness. The partnerships with DITI as well as the Charlotte chapter of Women in Technology International (WITI) have yielded much volunteer interest. Our vast network of current volunteers (almost 5,000 adult members) has also yielded significant input into the project and will continue in a highly collaborative nature. A broadcast message regarding the need for volunteer is also listed on the Girls Are IT! website.

Much of the development for the various program components has been completed and is on track for our October 30<sup>th</sup> roll out. The program consists of three main components – an educational website, a mobile technology classroom, and an official kick off event to excite our membership about the project and ensure optimal participation by the targeted population.

The "Kicking I.T. Off" event will take place on October 30, 2004 on the campus of UNCC. In preparation, we have solicited participation from local, regional, and national organizations and institutions that focus on information technology and who have shown interest in this field via participation in similar projects. The Kick Off will be a 2-hour event featuring keynote addresses by Bridget-Anne Hampden, recently retired Chief Information Officer of Wachovia Corporation, and Dr. Theresa Dahlberg, Associate Professor of Computer Science at the University of North Carolina at Charlotte. In addition to the guest speakers, girls will be led to visit the many IT related booths in the exhibitor hall. Here, an estimated 500 girls will be exposed to Information Technology careers, activities, gizmos and gadgets as presented by volunteers from organizations such as BellSouth Women's Networking Alliance, IBM, New Horizons Computer Learning Center, and BDPA (formerly Black Data Processing Association).

At the kick off, we will unveil the other components of the program, the educational website and the mobile technology classroom. As an incentive for enthusiastic participation, we will be utilizing our traditional patch program, for which a unique patch is being created to be consistent with the website and bus branding image. Additionally, door prizes will be awarded and a naming contest will be held for the mobile technology classroom. To ensure maximum participation, we have heavily publicized the project and the event to our own membership of 12,000 girls and 5,000 adult members. We are also actively working with the GSHNC Outreach staff members to ensure participation of the girls they serve which include groups in rural and urban communities as well the targeted cultures of our African American, Asian, and Latino communities.

The Girls Are I.T. web site (www.girlsareit.org or <a href="www.girlsareit.org/testing">www.girlsareit.org/testing</a> pre October 30th) is an interactive girl friendly site where we will encourage navigation by providing a Girls Are I.T. scavenger hunt. Girls successfully completing this scavenger hunt will earn yet another component of the Girls Are I.T. patch. The main sections of the site include *Work It Girl*, where girls are exposed to many types of IT careers and Tech Divas, *I.T.* 's *Time*, a time line of technology and women's contributions, and *Image I.T.* where girls can read about crazy technology predictions from the past and post their own prediction for the future.

A used school bus has been purchased and is in the midst of being converted to a mobile technology classroom with twelve work stations. We are also in the process of developing four computer curriculums which the girls will have an opportunity to access via the bus: Building Nanodevices, Maneuvering Remote Robots Using Wireless Sensors, HTML Programming, and the Use of Computers to Assist the Visually and Speech Impaired. The content of each of the four curriculums focuses on how technology can help people live better lives. Each activity provides hands-on experience.

We have been working with Terri Manning, Vice President of Institutional Research at Central Piedmont Community College, to create an evaluation tool to assist us with our research questions. She has created an online pre and post survey to be administered to all girl and adult participants in the program as well as a non participating control group. She is also assisting us with a tracking system which will help us capture which combinations of the three components participants engaged in.

### **Next Steps Planned**

Ensuring the pre survey is completed before girls and adults participate in any component of the program will be our top priority. Final development work needs to be done on the mobile classroom and the curriculum to be delivered in it. Training of the IT mentors will be started this fall. The roll out of the mobile technology bus to troops throughout the Council's eight counties will follow and will continue through the summer of 2005. Priority will be given to our outreach sites. During this time we will also be tracking girl and adult participation in the various components. The evaluation phase of the project will research girls' (and women volunteers') interest in technology and IT careers and compares them with a control/experimental group study to assess if there are significant differences in attitudes between girls and women volunteers who participate in the standard programs vs. the technology-based ones that will occur in 2005.

## **Key Open Research Questions**

There are four main research goals for the Girls Are IT! project. They are to:

- 1. Increase the self-efficacy (as evaluated through attitude surveys and observation) of the target population of girls and minorities to succeed in a broad range of IT career fields.
- 2. Create a sustainable network of community IT resources which will nurture the ongoing preparation of the target populations to feed the workforce.
- 3. Develop effective, bilingual IT based activities, training materials and delivery support designed to facilitate collaborative relationships among target girl populations and troop leaders/adult mentors/parents.
- 4. Provide research results that help describe the relationship between using new technology and the level of increase or decrease in girls' (and women volunteers') interest in IT career fields.