Build IT is an out-of-school project-based curriculum that capitalizes on girls’ interest in design and communication technologies. It reaches middle school girls from populations underrepresented in information technology (IT) fields through Girls Inc. affiliates that serve more than 900,000 girls each year in the United States and Canada. The SRI International Center for Technology in Learning and Girls Incorporated of Alameda County (GIAC) developed Build IT with funding from the National Science Foundation (NSF) and The Noyce Foundation.

The goals of Build IT are to motivate middle school girls to
• Explore IT and IT careers
• Use technology to strengthen and build their technology fluency
• Take mathematics and computer science courses in preparation for future STEM education and IT careers.

In addition, Build IT enhances staff capacity to offer programs that encourage IT fluency. The following data shows that the Build IT program is achieving its goals.

### Girls See IT as a Possible Career
- 78% of the girls believe that knowing about computers will expand and improve their career choices.
- 82% of the girls think that women can have successful IT careers.
- 79% say that they work well with computers.
- Many of the girls express interest in IT careers and can articulate the responsibilities of specific IT jobs.

> “I want to be a software engineer because I want to be involved with computers.”
  —Build IT Participant

> “I would like to create software because I would make a lot of money, and people in these jobs are intelligent.”
  —Build IT Participant

### Girls Are Increasing Their Technology Skills and Conceptual Knowledge
Girls have concrete technology skills:
- 80% can tell someone how to use a computer program, explaining specific functions to accomplish a task.
- 77% can troubleshoot a computer problem.
- 78% can easily learn new computer programs and describe how information travels through the Internet.

Girls have demonstrated that they can
- Program a game, build a website, and lead a design team
- Learn new programming languages and how to use new software
- Describe how information travels through the Internet.

Girls have applied their skills and conceptual understanding formally through performance tasks, such as
- Using object-oriented programming to develop a computer game
- Using design criteria to give each other feedback on their websites
- Fixing their own HTML code and helping other participants troubleshoot HTML errors.

> “I’ve noticed that my daughter’s interest in computers has grown.”
  —Build IT Parent

At Family Tech Nights, girls give presentations to attendees on the design process and how the Internet works. They demonstrate to themselves, peers, parents, teachers, IT professionals, and the program leaders that they understand IT concepts.
Girls Express More Interest in Mathematics and Computer Science

Build IT girls show increases in their
• Understanding of mathematics usefulness and their confidence in mathematics
• Confidence and ability to use computers
• Interest in computer and mathematics courses in order to pursue an IT career.

Staff Members Have Developed Greater IT Knowledge and Skills

• 100% of the Girls Inc. affiliate staff members believe that Build IT fits well with the needs of the girls and the local community and encourage continuation of Build IT at their program sites.
• Many of the affiliates have found that Build IT appeals to funders, making it possible to sustain not only Build IT but attract funding for other afterschool programs as well.
• Girls Inc. affiliate staff members assist staff at other affiliates in implementing Build IT.
• Girls Inc. national recruits affiliates to adopt Build IT, provides professional development, and offers support to implement Build IT effectively.

Girls Inc. affiliate staff members report and demonstrate increased IT understanding and the ability to
• Support participant engagement
• Communicate effectively with the technology support staff
• Troubleshoot technical problems
• Maintain equipment, including Internet and server access.

“Build IT has strengthened my IT knowledge a lot, and has helped me feel more secure in my knowledge. Overall, I really enjoyed Build IT, but it was a learning lesson.”
— Girls Inc. Staff Member

“The Build IT curriculum was challenging because technology isn’t my field of expertise. But I was excited because I was learning.”
— Girls Inc. Staff Member

“I have been so inspired working with this curriculum and with the whole Build IT team that I have applied to a graduate program...in learning, media and technology.”
— Girls Inc. Staff Member

“Before Build IT all I know how to do was send emails and do word processing. Involvement with Build IT has greatly increased my IT skills. I never knew how anything traveled in the Internet. Now, not only do I have that knowledge, but I’ve learned how to create blogs, and I’ve learned IT vocabulary. The curriculum was a very good thing for me.”
— Girls Inc. Staff Member

This material is based on work supported by the National Science Foundation under Grant No. ESI-0524762. Any opinions, findings, and conclusions or recommendations expressed here are those of the authors and do not necessarily reflect the views of the National Science Foundation.