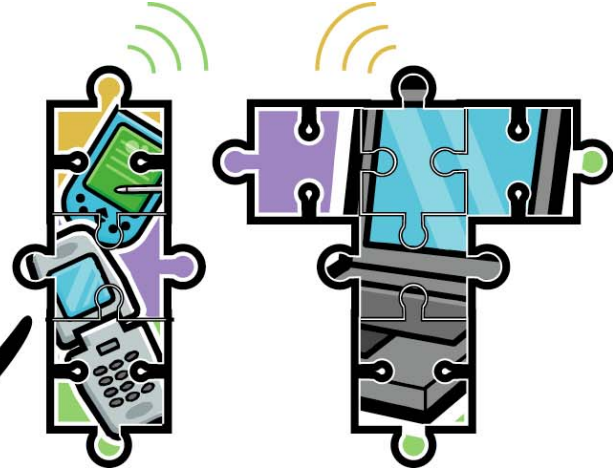


Build



Girls Building Information Technology Fluency Through Design

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SRI International



A 3 year project funded by the National Science Foundation

Build



Build IT Approach

*Girls Building Information
Technology Fluency Through Design*

- A problem- and designed-based curriculum
 - Follows the *Understanding by Design* approach
 - Uses design and communication technologies to motivate girls to use technology, develop IT fluency, and consider IT careers
 - Connects mathematics and computer science concepts
- Frameworks for involving local IT professionals
- PD materials and supports for youth staff
- Embedded performance tasks and Family Tech Nights
- Formative and summative evaluations
 - Inform the design of the curriculum
 - Indicate what girls are learning

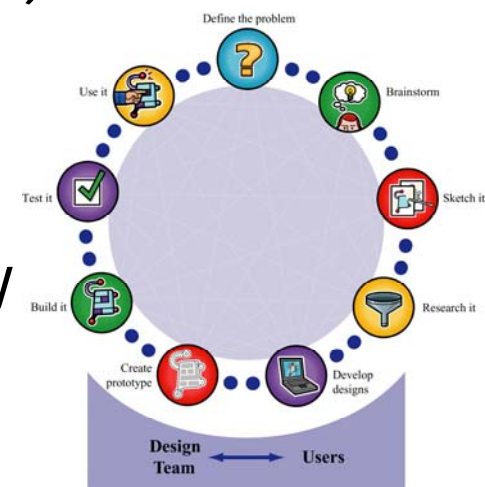


Build



IT Skills and Concepts

- Understand that design is a process with specific stages and elements and be able to apply this process (NRC).
 - Girls use the design process throughout Build IT.
- Understand the importance of iteration and its impact on the definition of the problem (NRC, SCANS).
 - Girls incorporate feedback from users to revise their designs.
- Understand that networks (e.g. Internet) have structures that allow information to be routed between computers (NRC, SCANS).
 - Girls troubleshoot technical problems.
- Develop an understanding of and ability to use algorithmic thinking (ACM).
 - Currently disconnected from information technology and design activities.





Build



Questions We Are Addressing

- Are girls who participate in Build IT more likely to become interested in IT careers and make plans to take courses in high school to prepare them for those careers?
- Do girls who participate in Build IT become more knowledgeable about IT careers and learn IT concepts?
- Do girls who participate in Build IT develop more contemporary IT skills and intellectual capabilities for IT?
- Does Girls Inc. grow in its capacity to offer IT fluency focused programs over the course of the project?