



*Girls Building Information Technology Fluency Through Design*

Build IT is an after school and summer youth-based curriculum for middle school girls to develop IT fluency, interest in mathematics, and knowledge of IT careers. The curricular, professional development, and assessment materials developed and co-owned by SRI International and Girls Incorporated of Alameda County reached more than 800 girls during the NSF-funded three-year project (2005 to 2008) and a two-year pilot scaling of Build IT (2008-2010) in the Girls Inc. network of affiliates. Build IT is now scalable to Girls Inc.'s 1,500 program sites that reach more than 800,000 girls annually. The Noyce Foundation funded the pilot scaling of Build IT (2008-2010) and full scale up (2010-2012) of the project in the Girls Inc. network. The Build IT materials are available to educators and youth development facilitators.

Build IT is a problem-based curriculum that capitalizes on girls' interest in design and communication technologies and incorporates performance tasks for IT fluency assessment. It provides structured interactions with IT professionals, including having girls participate in engineering design and development teams. Build IT's use of the design process, assessment system, co-design for development, and a train-the-trainer approach to building STEM capacity in informal learning provides strategies for practitioners and opportunities for research on informal STEM learning.

Build IT's goals are to

- motivate middle school girls to use technology and to build their technology fluency.
- increase middle school girls' interest in and desire to take high school algebra, geometry, and computer science courses in preparation for postsecondary STEM education and/or careers.
- increase middle school girls' interest in IT and pursuing IT careers.
- enhance staff capacity to provide IT fluency programming.

Build IT materials include

- problem-based curriculum developed using the *Understanding by Design* approach.
- an assessment system that includes embedded formative assessments and scaffolds for evaluating technology fluency.
- youth staff professional development materials to enhance staff capacity.
- frameworks for involving IT professionals.
- evaluation instrumentation and research findings.

**View the PBS-produced video of Build IT at**

[http://itestlrc.edc.org/inside\\_itest/caprofile.html](http://itestlrc.edc.org/inside_itest/caprofile.html)

**Contact:**

Melissa Koch, Principal Investigator & Director  
[melissa.koch@sri.com](mailto:melissa.koch@sri.com) 650-859-2227

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