

Reviewed Collection of Research-Based Resources and the BPC Community

The Broadening Participation in Computing (BPC) Collection in the Engineering Pathway Digital Library enables educators at all levels to identify, select, and use educational resources that have been shown by research to be effective for increasing the participation of members of underrepresented groups in computing. This reviewed collection includes three kinds of resources: evidence-based interventions; research articles, literature reviews, and background papers; and web sites and projects of BPC Community members (BPC Alliances and BPC Demonstration Projects and likeminded organizations). We hope to soon include evaluation tools and reports of BPC evaluators. As with other NSDL libraries, Engineering Pathway does not serve resources, but describes and points to them. 318 resources have now been catalogued. These resources are being reviewed by doctoral students with special training that combines their social science methodological expertise with research content on overcoming underrepresentation. In addition, the reviewers are establishing two recommended sub-collections, “Promising Practices” (evidence-based interventions) and “Key Research” (scholarly articles and evaluation studies).

BPC Search Appliance: Search from any website with HTML code

Users of any web site can now search remotely for high-quality, reviewed resources to overcome underrepresentation in computing without ever leaving the website they started in. The BPC Search Appliance uses an inline frame (I-Frame), an HTML element that allows websites to embed one HTML document inside another HTML document. The embedded document can be changed without reloading the source website, which makes the I-Frame a less intrusive component for searching the BPC Collection. Using a “scripted search,” users can get high-quality results without necessarily knowing the right search terms or what experts consider effective—and less than effective—interventions.

Hosted Digital Library: Searches and News Feeds

Search for Engineering Pathway resources or have our on-topic examples of the use of inline frames (iframes) for hosting an ER search or news feed on your own site. The code necessary to use

To include the iframe in a web page, simple tags containing the iframe are embedded in the site code where the hosted search or other optional attributes of the iframe, can be set to the values that you'll find two hosted searches and one news feed that can be added to do so. Simply click, copy and paste the line of code to

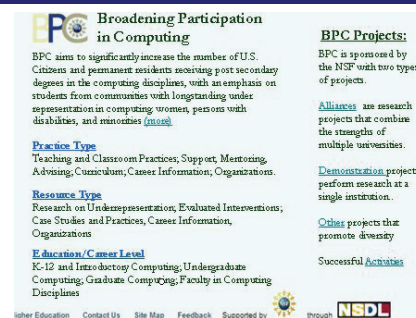
Embed: `<iframe src="http://www.engineeringpathway.org/hosted" />`

Search for Computing Diversity and Education Resources

Instructions for adding an I-Frame search to a website are available at Engineering Pathway. Contact Kim Kalahar kalahark@colorado.edu for more information.

Educational Landing Page to Ensure Users Quickly Understand What Works

The landing page will allow both searching and browsing, but is also intended to implicitly instruct a user about the kinds of practices that recruit and retain underrepresented students in computing. Resources will be browsable under several categories, based on research conducted with community members and other users.



BPC Broadening Participation in Computing

BPC aims to significantly increase the number of U.S. Citizens and permanent residents receiving post secondary degrees in the computing disciplines, with an emphasis on students from communities with longstanding underrepresentation in computing: women, persons with disabilities, and minorities ([more](#)).

Practice Type
Teaching and Classroom Practices, Support, Mentoring, Advising, Curriculum, Career Information, Organizations.

Resource Type
Research on Underrepresentation, Evaluated Interventions, Case Studies and Practices, Career Information, Organizations.

Education/Career Level
K-12 and Introductory Computing, Undergraduate Computing, Graduate Computing, Faculty in Computing Disciplines.


BPC Projects:
BPC is sponsored by the NSF with two types of projects.

Alliances are research projects that combine the strengths of multiple universities.

Demonstration projects perform research at a single institution.

Other projects that promote diversity.

Successful **Activities**

Higher Education Contact Us Site Map Feedback Supported by 

Project Team: Lecia Barker, University of Texas-Austin; Lucy Sanders & Kim Kalahar, University of Colorado-Boulder; Alice Agogino & Michael Smith, University of California-Berkeley; Cheryl Seals, Auburn University; Tracy Camp, Colorado School of Mines. Project overview: <http://www.colorado.edu/atlas/research/arc/pairs>

* The NSF title of this demonstration project is Practices Aggregation, Infrastructure, and Retrieval Service (PAIRS).