In this document, we describe 3 BPC Best Practices: (1) The **GenderMag Project** offers a research-based method to identify and address gender bias in user-facing designs, benefiting women and other minoritized genders in technology interactions. (2) **GenderMag-Teach** and (3) the **GenderMag Online Course** provide resources and training for educators and IT staff to promote gender-inclusive technology design concepts and reduce design failures.

GenderMag Project Short Description: Long Description: GenderMag-Teach Short Description: Longer Description: GenderMag Online Course Short Description: Longer Description:

GenderMag Project

Short Description:

The GenderMag Project provides a research-based method for finding, fixing, and averting gender bias "bugs" in your department website, course portals, scholarship application forms, software user interfaces, informational flyers, and other online and offline user-facing designs. Using GenderMag's method can help decrease failures and other poor experiences women, and members of any minoritized gender, have when they interact with technology and information in both school and industry settings. Research has shown that it is an accurate and effective method to find and fix gender bias bugs.

Intended Level(s): Undergraduate, Graduate, Early Career, Mid Career

Intended Population: Women, LBGTQ

Org: The GenderMag Project Url: <u>https://gendermag.org/</u>

Long Description:

GenderMag is a research-based method your department and individual faculty and staff can use to find, fix, and avert gender-biases in the technology and informational resources you provide to prospective students, current students, alumni, donors, staff, faculty, and any other internal or external stakeholders. GenderMag focuses toward creating equitable technology and information interaction experiences for women and people of any minoritized gender. In the process, it improves everyone else's experiences. Research has shown that it is very accurate and very effective.

Departments can adopt GenderMag by encouraging their personnel (IT, office, and other staff, students workers, faculty, etc.) to receive GenderMag training and by incentivizing or otherwise supporting their usage of GenderMag on the user-facing designs they produce. GenderMag resources are all free and linked from their website, as is their free GenderMag Online Course. A good place to begin is the "GenderMag Kit" (GenderMag.org > "GenderMag Method: What & How" > "Download Kit & Forms").

GenderMag has been used by universities, colleges, and technology organizations in over 30 states and over 50 countries. The GenderMag Project is co-directed by Dr. Margaret Burnett and Dr. Anita Sarma at Oregon State University (OSU).

GenderMag has multiple entries in the BPCnet Activity Library that might be of interest depending on your department's or your needs:

- GenderMag Project for individuals, teams or departments;
- GenderMag-Teach for individual faculty and departments;
- GenderMag Online Course for all.

These activities can be cascaded. For example, in a multi-year BPC plan, individuals and teams could start with GenderMag Online Course to get the certificates. In later years,

GenderMag-Teach could be used in teaching by the department, and the GenderMag Project further used by all on project outcomes and materials.

Activity

Departmental, Individual

Program Costs

All materials are free including the <u>GenderMag Online Course</u> (unmoderated). Consultation and synchronous, moderated trainings are also available for a fee.

GenderMag-Teach

Short Description:

GenderMag-Teach is a collection of resources for educators and technical trainers who want to teach gender-inclusive technology design concepts to their computer science, engineering, IT, or other types of students. Research has shown that doing so increases students' feelings of belonging in their classes and in the CS major. Educators can also use the same concepts to find, fix, and avert gender bias bugs in their courseware (e.g., Blackboard/Canvas pages, assignments, syllabi, learning widgets). GenderMag-Teach is part of The GenderMag Project (https://gendermag.org).

Intended Level(s): Undergraduate, Graduate, Early Career, Mid Career

Intended Population:

Women, LGBTQ

Org: The GenderMag Project Url: <u>https://gendermag.org/educators.php</u>

Longer Description:

GenderMag-Teach provides a <u>repository of open educational resources (OERs)</u> and advice for educators and technical trainers on how to teach gender-inclusive technology design. The repository is housed at OERCommons.org. Anyone can download these resources, incorporate them directly into their courses, adapt and remix them, and upload their modified or new resources to the repository. Most of the resources are licensed under Creative Commons Attribution 4.0, meaning that they can be used in any way so long as the original authors are given credit.

All the resources are for teaching GenderMag gender-inclusive technology design. GenderMag, provided by The GenderMag Project (<u>https://gendermag.org</u>), is a research-based method for finding, fixing, and averting gender biases in user-facing designs such as websites, software, courses, robots, and many other forms of technology or information design. To detect these biases, evaluators "walk through" a design while taking the perspective of a user with under-represented problem-solving styles. The method includes several components, some of which can be taught in isolation or accompanied by a small amount of prerequisite GenderMag knowledge. Because of this, GenderMag can be taught at many different education levels and in small, bite-sized chunks.

The <u>OERCommons.org repository of GenderMag teaching and learning resources</u> is organized by topic and material type. Topics include "Activities", "Homeworks", "Test Questions", and "Lectures". Most of the materials are meant to be given or presented to students and others

provide educators guidance on how to go about teaching GenderMag concepts (e.g., "PCK + Strategies"). GenderMag topics include "Cognitive Styles", "Personas", and "Walkthrough Method". The repository also links to a <u>free, online GenderMag course</u> that has two modules specifically for educators.

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Activity

Departmental, Individual

Program Costs

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GenderMag Online Course

Short Description:

The GenderMag Online Course provides (1) gender-inclusive technology design training for department IT staff, faculty, and anyone else who is interested in finding, fixing, and averting gender bias in their user-facing designs and (2) training for educators on how to teach these topics to computer science, engineering, IT, or other students. Departments can use the free, online training to train staffers to reduce design failures that disproportionately affect women and anyone of minoritized genders who are interacting with department's online resources, such as websites, recruiting materials, or course materials. There are also two modules designed for educators who want to incorporate inclusive design topics into their courses.

Intended Level(s):

Undergraduate, Graduate, Early Career, Mid Career

Intended Population:

Women, LGBTQ

Org: The GenderMag Project **Url**: <u>https://gendermag.org/onlinetraining.php</u>

Longer Description:

The GenderMag Online Course is a free, online, self-directed training on gender-inclusive technology design. It was created for educators, instructional designers, technology professionals, and anyone else interested in this topic. The course covers how to do and teach GenderMag, a method for finding, fixing, and averting gender biases in technology and information designs. Educators who complete the course will learn to (1) reduce gender biases in their courseware and (2) teach their students to reduce gender biases in designs they create. Professionals, such as department IT staff, can use GenderMag to reduce gender biases in department websites, software, recruiting materials, and other technology and information designs.

The GenderMag Online Course is divided into two halves: Modules 1 and 2 support learning GenderMag, and Modules 3 and 4 support teaching GenderMag to others. Completing the course in its entirety takes about 3 or 4 hours. It is provided on-demand and is unmonitored so people can start, pause, and finish it on their own timeline. Upon completion of each half, trainees are eligible for a professional development certificate.

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Activity

Departmental, Individual

Program Costs

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