Welcome to the
NGCP National Webinar

Celebrate Global Accessibility Awareness Day
Tuesday, May 18, 2021

Please respond to the poll and introduce yourself in the chat.

Use the chat to ask questions, respond to one another, and share resources.

NGCP Vision

The National Girls Collaborative Project **brings together organizations** committed to informing and encouraging girls to pursue careers in science, technology, engineering, and mathematics (STEM).
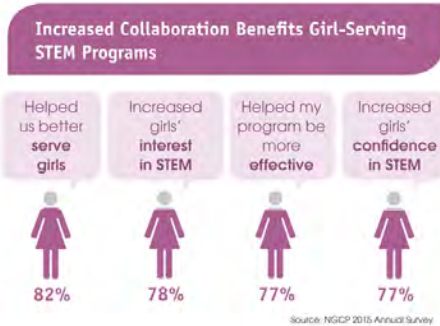
NGCP Goals

1. **Maximize access** to shared resources within organizations interested in engaging girls in STEM.

2. **Strengthen the capacity** of programs by sharing exemplary practice research and models.

3. **Use the leverage of a network** to achieve gender equity in STEM.

National Girls Collaborative Project

NGCP Activities

National Network of Collaborative Teams

Speakers:

Sheryl Burgstahler, Ph.D.
Founder and Director of the DO-IT team and the IT Accessibility Technology Team out of the University of Washington

Crystal R. Emery, p.g.a.
Founder and CEO of URU The Right to Be, Inc, activist, and filmmaker

National Girls Collaborative Project

Accessible & Inclusive Learning

National Global Accessibility Day 2021

Sheryl Burgstahler, Ph. D.

sherylb@uw.edu

2 units in Accessible Technology Services

IT Accessibility Team
- 1984–
- Funded by UW

DO-IT Center
- USA, 1992– Supported with federal, state, corporate, private funds
- DO-IT Japan, 2007–
- Center on UD in Education, 1999–

DO·IT

Disabilities
Opportunities
Internetworking
Technology

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Access Computing

In an "inclusive" experience, everyone

- who meets requirements, with or without accommodations, is encouraged to participate
- feels welcome
- is fully engaged in accessible & inclusive activities

One-minute history of the evolution of responses to human differences

- Eliminate, exclude, segregate
- Cure, rehabilitate, accommodate
- Social justice: Inclusion & universal design

Accommodation-focused approach to access

Adjust an existing product or environment for a specific person…Common in online learning:

- remediating inaccessible documents
- captioning videos

Definition: Universal design (UD) =

"the design of products & environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design."
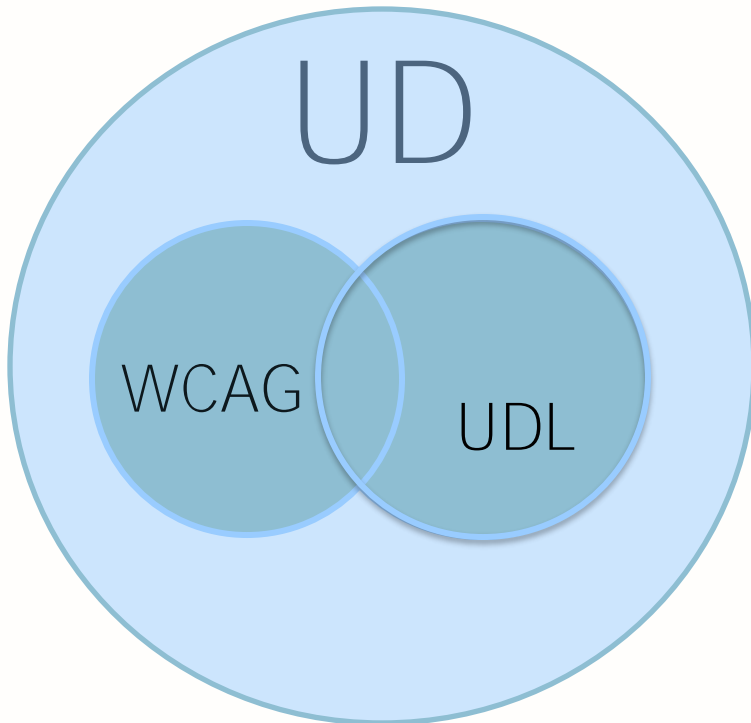
The Center for Universal Design
www.design.ncsu.edu/cud

3 sets of principles underpin UD guidance for all aspects of education

UD

WCAG   UDL

- 7 Universal Design

  - 3 Universal Design for Learning

  - 4 Web Content Accessibility Guidelines

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Access Computing

In a nutshell,

1. Provide multiple ways for participants to learn & to demonstrate what they have learned.
2. Provide multiple ways to engage.
3. Ensure all technologies, facilities, services, resources, & strategies are accessible to individuals with a wide variety of disabilities.
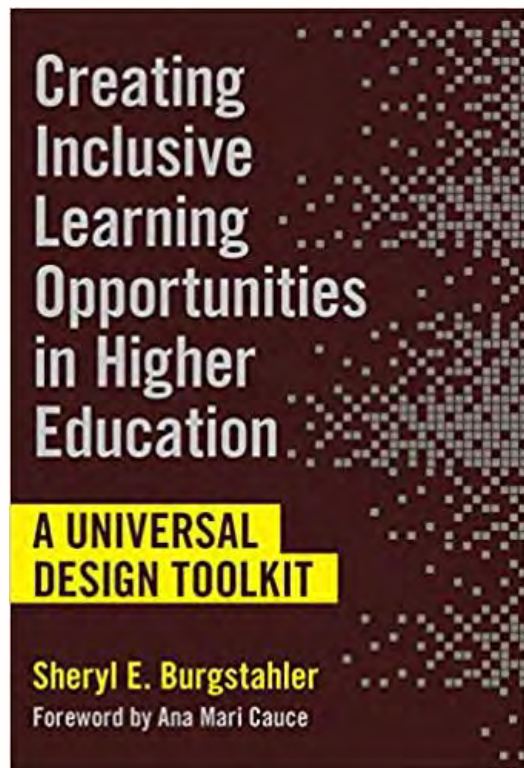
An attitude, a framework, a goal, a process—UD:

- Supports social justice
- Values diversity, equity, & inclusion
- Promotes best practices.
- Does not lower standards
- Is proactive
- Can be implemented incrementally
- Benefits everyone
- Minimizes the need for accommodations

Resources

- *Center for Universal Design in Education*, uw.edu/doit/cude

  - **20% book discount with code INLEHE**

  - *A UDHE Framework*

  - *20 Tips for Teaching an Accessible Online Course*

- Email sherylb@uw.edu to join the UDHE online community of practice

Celebrating Global Accessibility Awareness Day:

How We Move Towards a More Accessible World

Crystal R. Emery, p.g.a

Founder and CEO, URU The Right to Be, Inc.

Common Language

- **Diversity:** All the ways that people are different and the same at the individual and group levels

- **Equity:** Fair and just treatment of all people

- **Accessibility:** Giving equitable entry to everyone along the continuum of human ability and experience

- **Inclusion:** Ensuring diverse individuals fully participate in all aspects and experiences
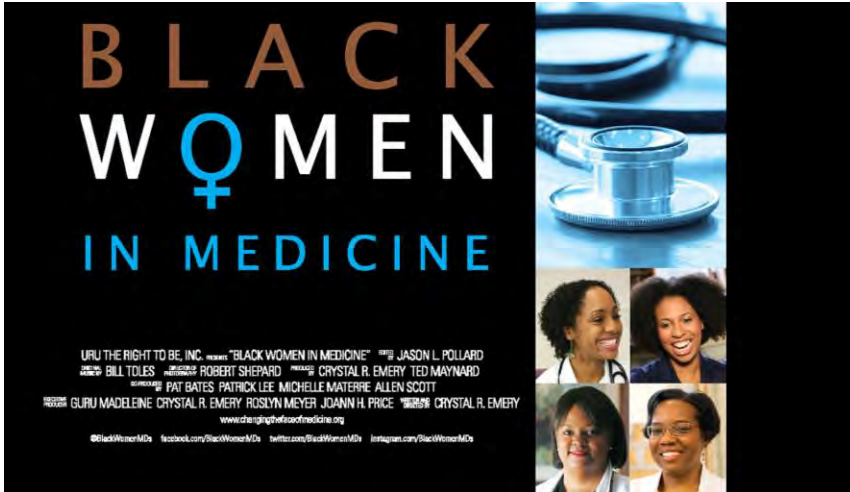
Understanding Intersectionality

"The impact of the triple jeopardy syndrome cannot be overstated… as an African American with a disability, [one] can never can be quite sure if their race, gender or disability is hurting their chances for advancement."

– Dr. Donna Walton

RespectAbility, 2018

Premiere of *Black Women in Medicine*, 2016

Inequity in Education and STEM

- There are 7 million differently-abled students in the US, comprising 14% of national public school enrollment.

- More than 56 million Americans live with some form of disability. 5.4 million are Black or African Americans.

- Students with disabilities are about twice as likely to be suspended as those without disabilities.

- Many teachers, instructors, and professors are frequently unable, unprepared, or otherwise ill-equipped to recognize and address the needs of students with disabilities. As a result, course content is often inaccessible.

- Individuals with disabilities are underrepresented in STEM fields (NSF, 2017).

Emerging Researchers National Conference in STEM, 2020

Questions to Ask When Designing Programs:

- What environmental barriers exist for my students in this learning environment?

- What assumptions am I making about my students?

- How can I adapt this lesson or activity to allow my students different opportunities to engage and connect with the learning material?

- What is the objective of this lesson or activity?

- What can be changed about the lesson or activity to make it inclusive to all learners while still meeting the objectives?

- What flexible measures can I offer to my students so that they can demonstrate their understanding?

National Academy of Science, 2019

Creating an Inclusive Learning Climate

- **Connect instruction to people, scenarios, and experiences that reflect human diversity** (e.g., race, gender, ethnicity, ability)

- **Evaluate instructional practices for unconscious bias** (e.g., racial or gender stereotypes, differing expectations based on sex or physical abilities, etc.)

  - "I need some strong men to come move this equipment."

  - Assuming people with the same skin color, sex, etc., have similar likes and dislikes

  - Images and lessons that include predominantly white and/or male scientists

  - Expecting male students to problem solve and work through incorrect answers, while providing the right answer to female students immediately

  - Assuming students with a particular disability are automatically unable to participate or accomplish specific goals (e.g., "She can't write. She has Down's Syndrome." "He'll never understand sound waves. He's deaf.")

Crystal and Governor Tom Ridge of Pennsylvania.

National Organization on Disability, 2017

RespectAbility, Capitol Hill, 2018

Call to Action

- Seek out opportunities to learn about barriers

- Work with an open mindset to understand diverse experiences

- Serve as a champion and ally for this work in your educational community

- Set specific and tangible goals with clear success criteria in your programs around making steps to improve diversity, equity, accessibility, and inclusion

URU The Right To Be, Inc.

Contact us at **info@uruglobal.org**

Visit our website: **www.urutherightobe.org**

Q&A

Upcoming NGCP Events

Representation Matters! Highlighting the IF/THEN Collection
May 24, 2021

Curious about Curiosity Camp? IF/THEN Collection Resources to Support Girls in STEM
June 22, 2021

Act Locally! with NGCP Local Collaboratives
June 16, 2021