Teach Access

Born Accessible: Addressing the Accessibility Skills Gap through Curricular Transformation

HETS Webinar

Speakers

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Agenda

- Teach Access
- Accessibility: The what, the why, the who
- The case for teaching accessibility
- Accessibility fundamental concepts and skills
- A phased approach to curricular transformation
- Q&A

Framing this Space

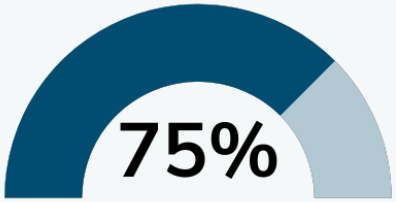
- Breathe
- #SayTheWord: disability is not a bad word!
- Ask questions
- Keep in mind that systemic change involves continuous and incremental small adjustments. We can start these within our role and scale them upward and sideways.

Teach Access

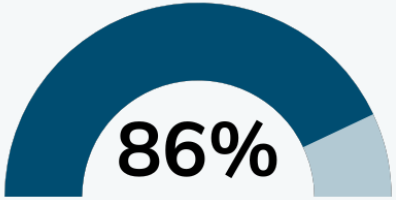
What is the Accessibility Skills Gap?

- A gap in accessibility knowledge and digital skills by students graduating and entering the workforce.
- In 2018, the Partnership on Employment and Accessible Technology (PEAT) conducted a study to better understand this gap.
- In 2022, Teach Access conducted a similar survey to see the current state of the gap.

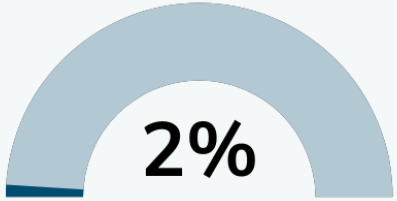
2022 Accessible Technology Skills Gap Survey



75% of respondents saw a **moderate to significant** increase for employees with accessibility skills in their organizations in the last 5 years.



86% said they anticipate the demand for accessibility skills **to increase.**



2% said **it's easy** for their organization to find candidates with accessibility skills.

Source: Teach Access: Bridging the Accessible Technology Skills Gap White Paper

Teach Access

- National non-profit founded in 2016.
- Collaboration between educational institutions, industry, government, and disability advocacy organizations around the country.
- Focused on teaching **accessibility**, and supporting efforts to teach **accessibly**.
- We envision a future where technology is born accessible and inclusive for **all**.

Accessibility: The What, The Why, The Who

What is Accessibility?

- The inclusive practice of removing barriers which prevent access to information and functionalities in digital content.
- The design of products, devices, services, or environments for people with disabilities.
- It's important to remember that what is accessible to one person with a disability is not necessarily accessible to someone else with the same or different disability.

Source: Interaction Design Foundation

Some Societal Considerations

- The World Health Organization estimates there are **1 billion** people worldwide living with a disability.
- The Centers for Disease Control and Prevention estimates **one quarter** of all U.S. adults have a disability.

Some Legal Considerations

- **The Americans with Disabilities Act (ADA)** prevents disability-based discrimination, mandates accessibility in various domains.

- **Section 508 of the Rehabilitation Act of 1973** requires federal agencies to make their electronic and information technology (EIT) accessible to people with disabilities.

- The **Accessible Canada Act (ACA)** prohibits discrimination on the basis of disability and enhancing accessibility in federal jurisdiction sectors.

- **Dear Colleague Letter** jointly issued by the Justice Department & Department of Education reminds institutions to ensure that online services, programs, and activities are accessible (including those provided by third parties).

- **European Accessibility Act** standardizes accessibility requirements for products and services across Europe.

- Additional regulations and policies: https://www.w3.org/WAI/policies/

Some Quality Considerations

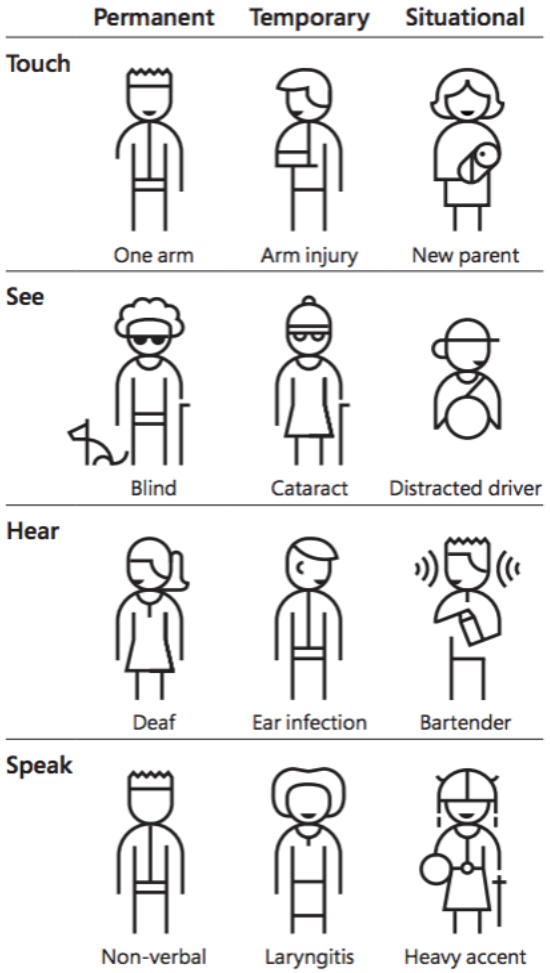
- The SUNY Online Course Quality Review Rubric (OSQCR) considers accessibility across all standards.
- Quality Matters Course Design Rubrics for Higher Ed and K-12 have a standard dedicated to Accessibility and Usability (Standard 8)
- ISTE Standards emphasize the importance of educators advocating for equitable access to educational technology, content, and opportunities (Standard 2.2b) and of coaches collaborating in the creation of accessible learning environments (Standard 4.4c). They also list accessibility/accessible design as a computational thinking competency (Standard 5)

Some Accreditation Considerations

Accrediting Commission	Standard	Practice
WASC Senior College and University Commission (WASCUC)	Standard One: Defining Institutional Mission and Acting with Integrity	CFR 1.2 …the institution defines and acts with intention to advance diversity, equity, and inclusion in all its activities, including its goal setting, policies, practices, and use of resources, across academic, student support, and co-curricular programs and services.
Higher Learning Commission (HLC)	Criterion One: Mission	1.C. …The institution encourages curricular or co curricular activities that prepare students for informed citizenship and workplace success.
Middle States Commission on Higher Education (MSCHE)	Standard Two: Ethics and Integrity Standard Three: Design and Delivery of the Student Experience	7. as appropriate to its mission, has policies, services or programs in place to: promote diversity, equity, and inclusion; promote affordability and accessibility; 5. …Consistent with mission, the general education program also includes the study of values, ethics, and diverse perspectives; and
Program Accreditation (ABET, ACM, etc.)		

Who Benefits from Accessibility

Source: [Microsoft Inclusive Design]



The Case for Teaching Accessibility

Consider your experience:

What have you learned about accessibility and/or disability in school?

What's the State of Accessibility in Education?

- The focus of most educational institutions has been on **websites, technology procurement,** and **teaching accessibly.**
- Some institutions have been **teaching accessibility.**
- There is still a gap in accessibility knowledge and digital skills by students graduating and entering the workforce.

Teaching Accessibly

- Involves making sure that course content, technologies, and activities are accessible to learners with disabilities.
    - Examples: Adding captions to videos, adding alternate-text to images, using descriptive hyperlinks, etc.

Teaching Accessibility

- It can be as straightforward as introducing a lesson or activity on accessibility, accessible design, or disability in one of our courses
    - Example: In a writing course, teaching students about plain language and anti-ableist language

Why Teach Accessibility?

- Accessibility is an essential design component of systems and processes
- Accessibility is a standard in some industries; is becoming the standard in others
- Assistive technologies are becoming increasingly embedded in industry, governmental service, and private practice
- Accessibility is a legal requirement and a best practice
- Teaching accessibility demonstrates real and actionable commitment to diversity, equity, and inclusion

Accessibility Fundamental Concepts and Skills

What Could We Teach?

1. Disability
2. Societal Context & Historical Perspectives
3. User Interface Facilitators & Barriers (with examples)
4. Common Assistive Technologies (AT)
5. Best Practices for Product Development
6. Applied Techniques in different fields

Source: Teaching Accessibility Fundamental Concepts and Skills (2018)

1. Disability Topics

- Common types of disabilities
- Current demographics
- Understanding ability from a functional approach
- The impact of disability in daily living activities
- Temporary, Permanent, and Situational limitations

Source: Teaching Accessibility Fundamental Concepts and Skills (2018)

2. Societal Context and Historical Perspectives

- Identity and cultural norms
- Accessibility as a civil right
- ADA history & basic rules
- Section 508 history and basic rules
- Landmark legal cases
- Pending regulations and implementations
- WC3 and Web Content Accessibility Guidelines (WCAG)

Source: Teaching Accessibility Fundamental Concepts and Skills (2018)

3. User Interface Facilitators and Barriers (with examples)

- Accessibility design thinking (Usability + Accessibility = User delight)
- Graphical User Interface
- Touch/tactile screens
- Gesture input
- Video and rich media
- Speech to text / speech commands
- Providing accessible instructions and support
- Training on AT and accessibility features

Source: Teaching Accessibility Fundamental Concepts and Skills (2018)

4. Common Assistive Technologies (AT)

- Types (screen reader, captioning, switches, magnifiers, braille display, etc.)
- Evolution from specialty AT to mainstream AT (example: smartphones)
- Profound impact of mainstream technologies (speech recognition, language translation tools, autonomous cars, etc.)
- Simple tips to get students introduced to using AT
- Using AT

Source: Teaching Accessibility Fundamental Concepts and Skills (2018)

5. Best Practices for Product Development

- Accessibility as a design principle and not a feature
- Accessible design as part of universal design
- User research and design principles (requirements gathering, Designing and conducting inclusive user studies, user feedback)
- Development cycle integration
- Validation and user testing
- Communication out (documentation, marketing, and customer support)
- Communication up (ROI, impact analysis)

Source: Teaching Accessibility Fundamental Concepts and Skills (2018)

6. Applied Techniques

- UI elements & properties (label, focus, tab order)
- Semantic code (headings, landmarks, buttons)
- Accessibility APIs and frameworks (iOS, Android, ARIA)
- Languages and platforms that support accessibility
- Testing tools
- Use cases
- Information architecture
- POUR principles

Source: Teaching Accessibility Fundamental Concepts and Skills (2018)

A Phased Approach to Curricular Transformation

Syllabus Level

- Adding accessibility to the course’s name or description
- Including accessibility-focused course goals
- Including accessibility as a course topic
- Including accessibility as an evaluation criteria for course projects/assignments

Course Level

- Invite guest speakers to share their experiences and insights
- Create a discussion prompt related to disability and accessibility
- Assign a reading or video about disability and accessibility
- Organize demonstrations of assistive technologies (AT)
- Hands-on exercises such as captioning a short video, creating an accessible document or content, or evaluating a website's accessibility
- Have students research disabilities, accessibility-related legal cases, accessible design guidelines and best practices, or AT

Program Level

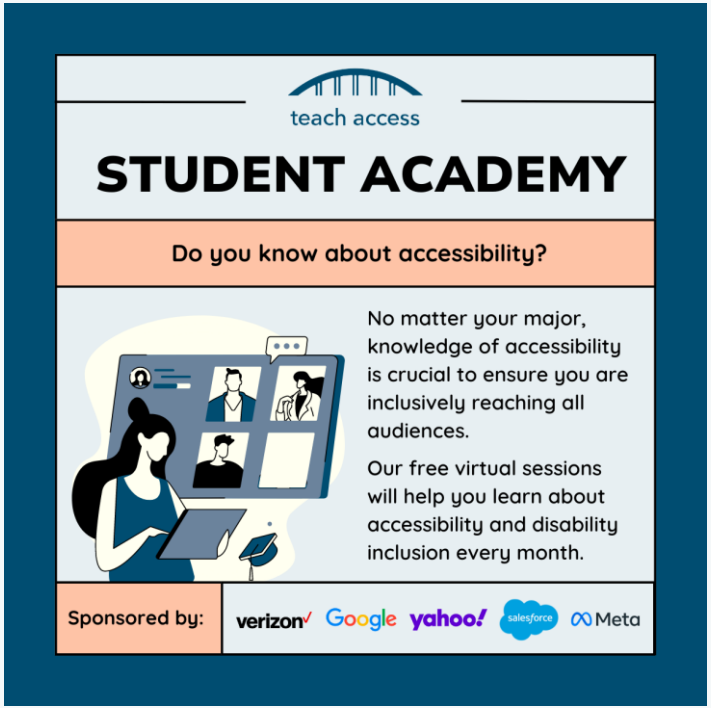
- Include curricular materials (readings, videos, etc.) about accessibility or from disabled authors
- Promote disability and accessibility topics for research, creative, and design projects
- Integrate accessibility topics in senior design/capstone projects
- Add accessibility requirements as criteria for regular, creative, or design projects
- Create an introductory course to disability awareness and accessibility (as program requirement or elective)
- Incorporate accessibility concepts and skills across the curriculum

Institutional Level

- Create an introductory course to disability awareness and accessibility (as a General Education requirement)
- Include teaching, researching, and publishing about accessibility as requirement for faculty annual reviews
- Incorporate teaching accessibility and teaching accessibly in academic policies and practices
- Allocate funding for building accessibility knowledge in faculty and students
- Offer extra and co-curricular activities to increase accessibility awareness

Teach Access Programs for Students

Teach Access Student Academy



Student Ambassadors Program

Teach Access Programs for Educators

Teach Access by Design

Teach Access Grants

Teach Access Programs for Educators (Continued)

Teach Access Fellowship Program

Over the course of a year:

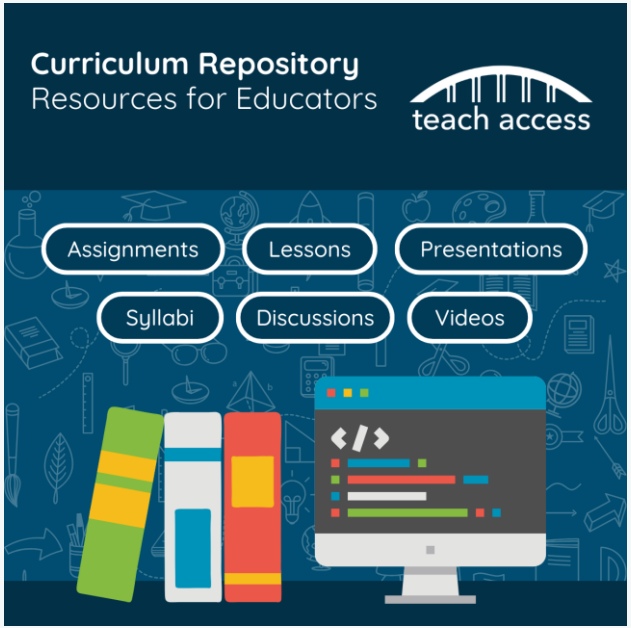
- Learn from experts in accessibility & inclusion
- Develop and implement innovative approaches to teach accessibility
- Collaborate with peers to further advocacy
- Earn a stipend to support your work

Quick Bytes + Connect

- COMING SOON!
- 30-minute workshops to learn about accessibility concepts or skills followed by an optional 30-minute meet-up.

Teach Access Resources

Teach Access Curriculum Repository (TACR)



Self-Paced Accessibility Courses

Q&A

Visit: teachaccess.org | Email: info@teachaccess.org