

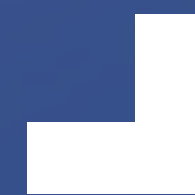


BUILDING A CULTURE TOWARD



Digital Accessibility & Inclusion in Higher Education

3Play Access 2022
March 31, 2022 | Kyle Shachmut



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BUILDING A **CULTURE** TOWARD ACCESSIBILITY IS ABOUT **PEOPLE**



WHAT IS DIGITAL ACCESSIBILITY?







digital accessibility — making electronic content available to and usable by everyone, at the same time, with the same ease of use, *including and especially people with disabilities*






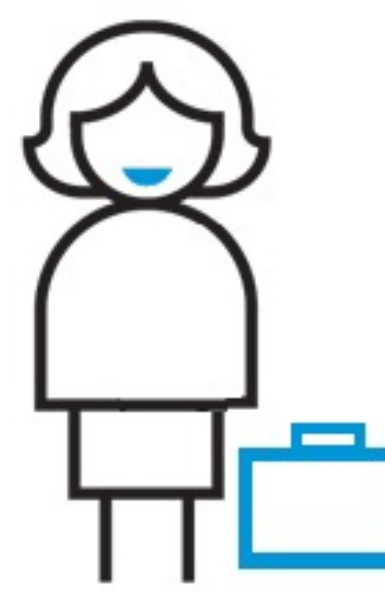


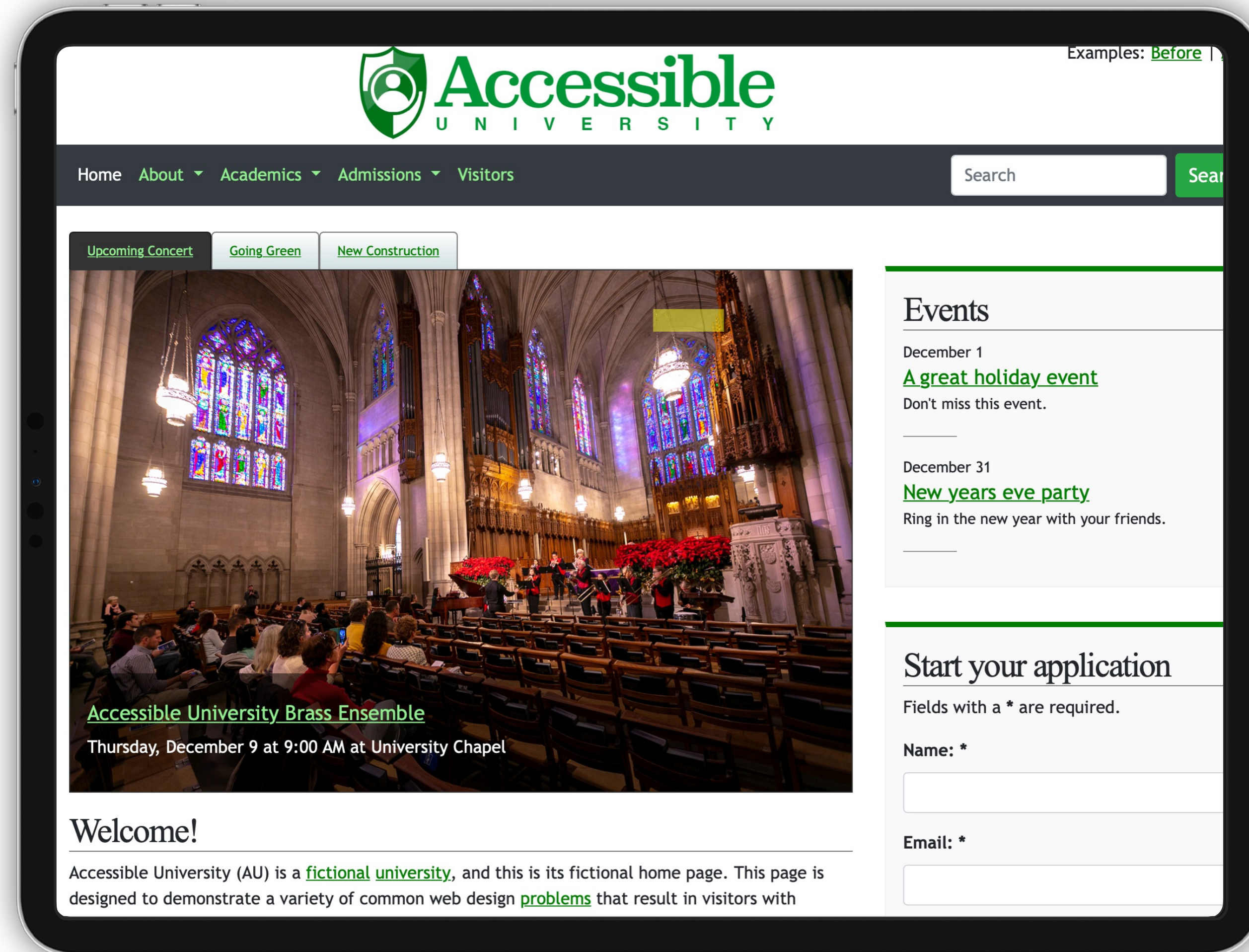
Digital accessibility is an important part of disability inclusion and Diversity Equity & Inclusion (DEI) work where IT has high impact and business ownership.

TYPES OF EXCLUSIONS

disability and associated exclusions can be **permanent**, **temporary**, or **situational**

	Permanent	Temporary	Situational
Touch			
	One arm	Arm injury	New parent
See			
	Blind	Cataract	Distracted driver

	Permanent	Temporary	Situational
Hear			
	Deaf	Ear infection	Bartender
Speak			
	Non-verbal	Laryngitis	Heavy accent



DEMO: ACCESSIBILITY BARRIERS

A helpful teaching and demonstration tool is the Accessible University 4.0 site, created by U of Washington's DO-IT Center and updated by Duke University. The links display the same site with and without accessibility improvements that are very apparent to users of assistive technology. The "about" link explains the accessibility enhancements that make all the difference.

[AU - accessible version](#)

[AU - inaccessible version](#)

[AU - list of issues](#)



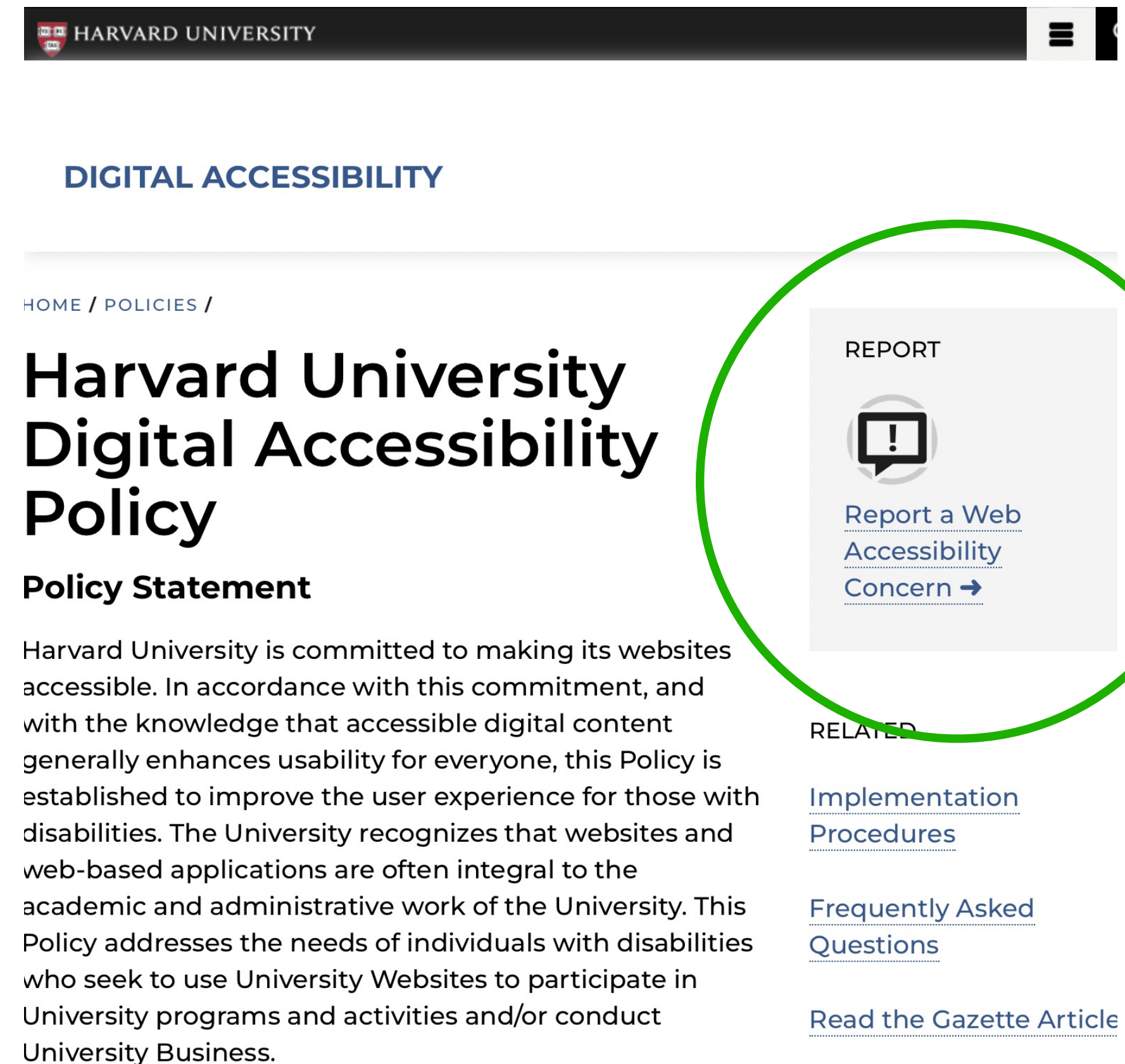
CAMPUS EXAMPLES

examples of successful digital accessibility implementation efforts at or across postsecondary institutions that are part of building toward a culture of inclusion



UNIVERSITY POLICY & PROCEDURES

- University websites striving to meet WCAG 2.1 AA
- Developing plans for new content and popular legacy material to meet accessibility standards by design or upon request
- Establish an expert team: [Digital Accessibility Services](#) (DAS)
- Create oversight and governance for IT Accessibility
- Creates network of [Digital Accessibility Liaisons](#) (DAL) - champions across an organization to promote and implement change
- Procedures accompany a Policy to set expectation. Example: make it simpler to [report any barriers](#)



HARVARD UNIVERSITY

DIGITAL ACCESSIBILITY


HOME / POLICIES /

Harvard University Digital Accessibility Policy

Policy Statement

Harvard University is committed to making its websites accessible. In accordance with this commitment, and with the knowledge that accessible digital content generally enhances usability for everyone, this Policy is established to improve the user experience for those with disabilities. The University recognizes that websites and web-based applications are often integral to the academic and administrative work of the University. This Policy addresses the needs of individuals with disabilities who seek to use University Websites to participate in University programs and activities and/or conduct University Business.

REPORT

 [Report a Web Accessibility Concern →](#)

RELATED

[Implementation Procedures](#)

[Frequently Asked Questions](#)

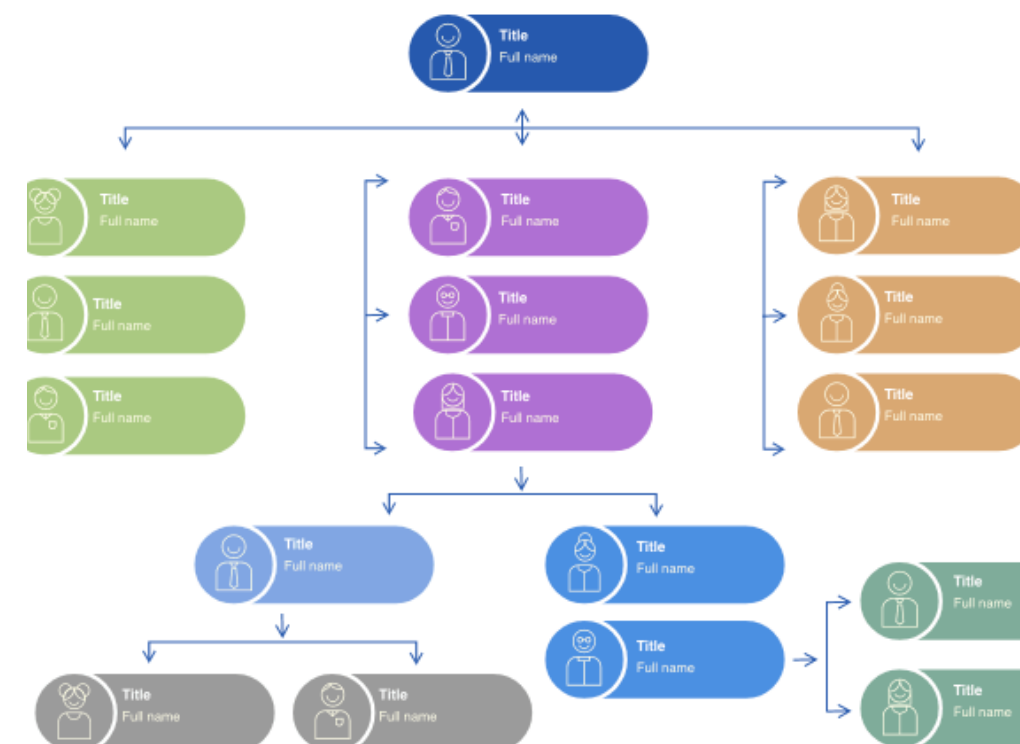
[Read the Gazette Article](#)

ORGANIZATIONAL STRUCTURE AND SUPPORT



EXECUTIVE SPONSORSHIP

- tone setting
- budget and resource allocation



ORGANIZATIONAL STRUCTURES

- leadership & reporting structures



ANALOGOUS TO IT SECURITY

- staffing profile, maturity of process and rigor of expectations



COLLABORATIVE,, CREATIVE LEADERSHIP

- shared responsibilities across decentralized organizations



COURSE READINGS & FORMATTED TEXT

simple elements like semantic markup, and formatting styles have a big impact on the accessibility and readability of text documents.

Page 2 – OCR Reference No. 10122118

information kiosks, Automated Teller Machines (ATMs) transaction machines, computers, ancillary equipment, software, firmware and similar procedures, services (including support services), and related resources.

C. “Equally effective” means that the alternative format or medium communicates the same information in as timely a fashion as does the original format or medium.

D. “Legacy websites” are University Program and Department websites published before July 30, 2013.

III. REMEDIAL ACTIONS

To resolve the concerns identified in the Complaint, the University will take effective steps, the specifics of which are described below, designed to ensure that EIT used in University programs and activities is accessible to individuals with disabilities.

- A. EIT Accessibility Policy and Procedures
- By March 14, 2014, the University shall develop a draft EIT Accessibility Policy that demonstrates its commitment to implementing accessibility of EIT. Along with the policy, the University shall develop draft procedures to implement its EIT Accessibility Policy across all disciplines and will provide to OCR for review and comment the draft policy and procedures. OCR will provide comments about the draft policy and procedures as promptly as possible, and the University will incorporate OCR’s comments into its policy and procedures unless there is disagreement, in which case the University and OCR will work together in good faith to resolve the disagreement.
 - Within 30 calendar days of receiving OCR’s comments about the draft EIT Accessibility Policy and Procedures developed pursuant to Section III.A.1. of this Agreement (or the resolution of any disagreement that arises about OCR’s comments, whichever is later), the University shall incorporate OCR’s comments and adopt and implement the policy and procedures.
 - Within 30 calendar days of adopting and implementing its EIT Accessibility Policy and Procedures pursuant to Section III.A.2. of this Agreement, the University will disseminate those policy and procedures to all staff and faculty, and the University will provide additional instruction and support to both staff and faculty. The University will also post the adopted policy and procedures on a University website. The University shall disseminate its EIT Accessibility Policy and Procedures on an annual basis to all University personnel, including senior academic leadership (deans and chancellors), department heads, faculty, and staff.

Page 3 – OCR Reference No. 10122118

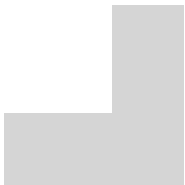
- Within 30 calendar days of adopting and implementing its EIT Accessibility Policy and Procedures pursuant to Section III.A.2. of this Agreement, the University will provide presentations and workshops about the policy and procedures to University senior academic leadership, department heads, and information technology staff.
- B. Grievance Procedure
- By March 14, 2014, the University shall disseminate a grievance procedure compliant with Section 504 and Title II whereby a student, faculty member, staff member, or member of the public may file a grievance to the University’s Office of Equal Opportunity and Affirmative Action (“EO/AA”) regarding an EIT accessibility barrier. The grievance procedure shall be posted on the websites for the EO/AA Office, the Office of Disability Services for Students, and the University website dedicated to accessibility. The procedure shall include a mechanism whereby the Director of EO/AA or his or her designee shall investigate the grievance and respond to the grievant within a reasonable timeframe of the filing of the grievance.
- C. EIT Procurement Procedures
- By May 1, 2014, the University shall develop and institute procedures that require the University to purchase or recommend only EITs that will provide the same programs, benefits, and services as they do to individuals without disabilities, except when it would fundamentally alter a program or when it is not technically feasible to do so, in which case the procedures will require the University to provide accessible alternate EITs.
 - By May 1, 2014, the University shall implement as part of its request for proposal process a requirement that bidders meet the accessibility standards of WCAG 2.0 Level AA for web-based technology (as set forth in Appendix A to this Agreement) and Section 508 of the Rehabilitation Act and the Americans with Disabilities Act for other EITs; and requiring or encouraging, at the University’s discretion, as part of any contract with its vendors, provisions in which the vendor warrants that any technology provided complies with these standards and any applicable current federal and state disability laws.
- D. EIT Accessibility Training
- By March 14, 2014, the University shall provide and make readily available, to faculty and staff who develop or post content on any University website or through other EITs, or who select, create, or post EIT for students or otherwise incorporate students’ use of EIT in their classes, information about their obligations to ensure EIT accessibility and about resources to assist in meeting those obligations, including instruction on how to make digital information

Page 2 – OCR Reference No. 10122118 information kiosks, Automated Teller Machines (ATMs) transaction machines, computers, ancillary equipment, software, firmware and similar procedures, services (including support services), and related resources. C. “Equally effective” means that the alternative format or medium communicates the same information in as timely a fashion as does the original format or medium. D. “Legacy websites” are University Program and Department websites published before July 30, 2013. III. REMEDIAL ACTIONS To resolve the concerns identified in the Complaint, the University will take effective steps, the specifics of which are described below, designed to ensure that EIT used in University programs and activities is accessible to individuals with disabilities. A. EIT Accessibility Policy and Procedures 1 By March 14, 2014, the University shall develop a draft EIT Accessibility Policy that demonstrates its commitment to implementing accessibility of EIT. Along with the policy, the University shall develop draft procedures to implement its EIT Accessibility Policy across all disciplines and will provide to OCR for review and comment the draft policy and procedures. OCR will provide comments about the draft policy and procedures as promptly as possible, and the University will incorporate OCR’s comments into its policy and procedures unless there is disagreement, in which case the University and OCR will work together in good faith to resolve the disagreement. 2. Within 30 calendar days of receiving OCR’s comments about the draft EIT Accessibility Policy and Procedures developed pursuant to Section III.A.1. of this Agreement (or the resolution of any disagreement that arises about OCR’s comments, whichever is later), the University shall incorporate OCR’s comments and adopt and implement the policy and procedures. 3 Within 30 calendar days of adopting and implementing its EIT Accessibility Policy and Procedures pursuant to Section III.A.2. of this Agreement, the University will disseminate those policy and procedures to all staff and faculty, and the University will provide additional instruction and support to both staff and faculty. The University will also post the adopted policy and procedures on a University website. The University shall disseminate its EIT Accessibility Policy and Procedures on an annual basis to all University personnel, including senior academic leadership (deans and chancellors), department heads, faculty, and staff. Page 3 – OCR Reference No. 10122118. Within 30 calendar days of adopting and implementing its EIT Accessibility Policy and Procedures pursuant to Section III.A.2. of this Agreement, the University will provide presentations and workshops about the policy and procedures to University senior academic leadership, department heads, and information technology staff. Grievance Procedure By March 14, 2014, the University shall disseminate a grievance procedure compliant with Section 504 and Title II whereby a student, faculty member, staff member, or member of the public may file a grievance to the University’s Office of Equal Opportunity and Affirmative Act (“EO/AA”) regarding an EIT accessibility barrier. The grievance procedure shall be posted on the websites for the EO/AA Office, the Office of Disability Services for Students, and the University website dedicated to accessibility. The procedure shall include a mechanism whereby the Director of EO/AA or his or her designee shall investigate the grievance and respond to the grievant within a reasonable timeframe of the filing of the grievance. EIT Procurement Procedures 1. By May 1, 2014, the University shall develop and institute procedures that require the University to purchase or recommend only EITs that will provide the same programs, benefits, and services as they do to individuals without disabilities, except when it would fundamentally alter a program or when it is not technically feasible to do so, in which case the procedures will require the University to provide accessible alternate EITs. 2. By May 1, 2014, the University shall implement as part of its request for proposal process a requirement that bidders meet the accessibility standards of WCAG 2.0 Level AA for web-based technology (as set forth in Appendix A to this Agreement) and Section 508 of the Rehabilitation Act and the Americans with Disabilities Act for other EITs; and requiring or encouraging, at the University’s discretion, as part of any contract with its vendors, provisions in which the vendor warrants that any technology provided complies with these standards and any applicable current federal and state disability laws.

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reading an accessibility OCR legal case

reading an OCR case as rendered via OCR (optical character recognition on a computer)



ONLINE LEARNING TOOLS

GIF showing the HX Annotation Tool using keyboard text selection.

Asterisks (*) mark the beginning and end selection (highlight), removing need of a mouse to click-and-drag to highlight.

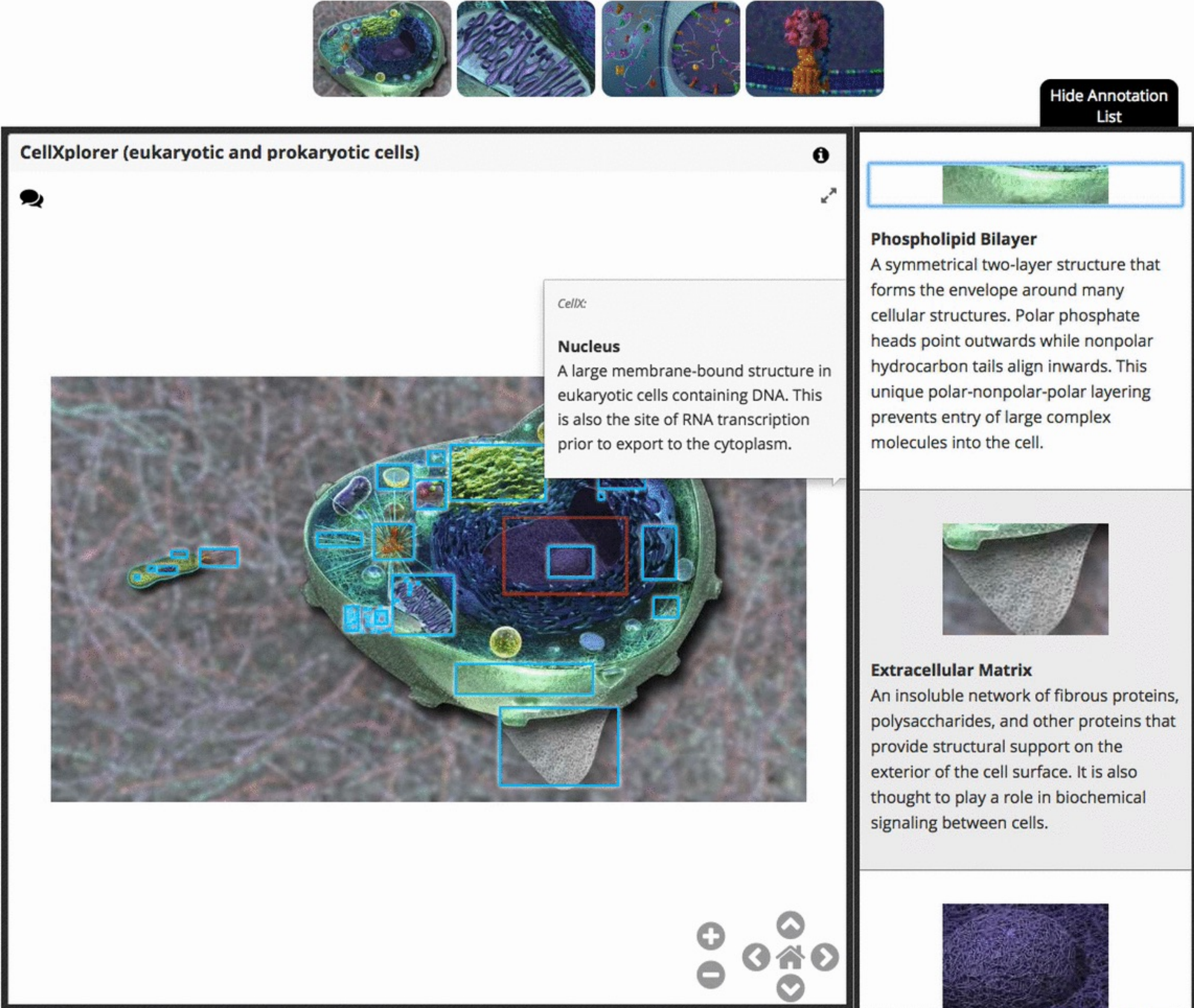
The screenshot displays the HX Annotation Tool interface. At the top, there is a navigation bar with a home icon, a keyboard icon, a share icon, and a menu icon. Below the navigation bar, there are controls for 'Hide Annotations' and 'Text Size (default)' with '+' and '-' buttons. The main content area shows the title 'Abraham Lincoln's Second Inaugural Address' and a highlighted section 'Fellow-Countrymen:'. The text of the address is displayed in three paragraphs. The first paragraph is highlighted in yellow. The second paragraph is highlighted in light blue. The third paragraph is highlighted in light green. The sidebar on the right contains a search bar, a 'Search by:' dropdown with options 'Users', 'Annotation Text', and 'Tag', and a 'Search' button. Below the search bar, there is a section for 'Iduarte1991' with a note 'last updated 11 days ago'. The note content is 'Highlight two examples in the speech that exemplified Lincoln's passion for keeping the Union together.' and it has 0 comments.

ONLINE TOOLS FOR MULTIMEDIA

GIF demonstrates the HX Annotation Tool acting as a tool to aid accessibility.

The tool added descriptive text to explain sections of an image as learners zoom to different levels. These ensure comments are made in the right region. It was built using included annotation and tagging features of the tool.

An assistive technology feature became the crux of the 'introduction' created to onboard all learners.



The screenshot displays the CellXplorer interface, titled "CellXplorer (eukaryotic and prokaryotic cells)". The main window shows a 3D rendered illustration of a cell with various organelles. A tooltip for the "Nucleus" is visible, stating: "A large membrane-bound structure in eukaryotic cells containing DNA. This is also the site of RNA transcription prior to export to the cytoplasm." The right sidebar contains a "Hide Annotation List" button and a list of annotations with corresponding images and descriptions:

- Phospholipid Bilayer**: A symmetrical two-layer structure that forms the envelope around many cellular structures. Polar phosphate heads point outwards while nonpolar hydrocarbon tails align inwards. This unique polar-nonpolar-polar layering prevents entry of large complex molecules into the cell.
- Extracellular Matrix**: An insoluble network of fibrous proteins, polysaccharides, and other proteins that provide structural support on the exterior of the cell surface. It is also thought to play a role in biochemical signaling between cells.

At the bottom right of the interface, there are navigation controls including a plus/minus zoom button and directional arrows. A second "Hide Annotation List" button is located at the bottom right of the sidebar.

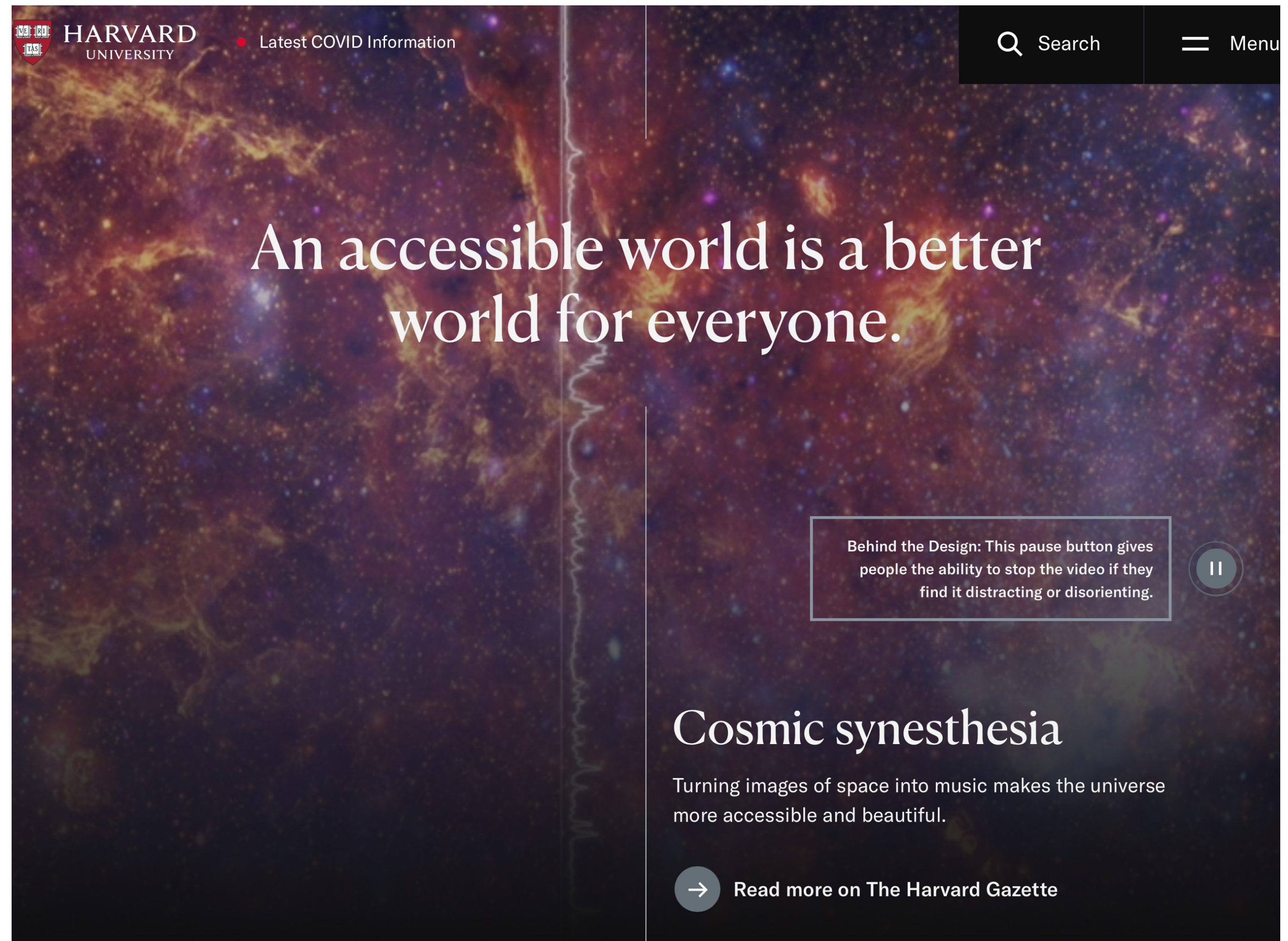
Image above: 3-D rendered illustrations of prokaryotic and eukaryotic cells.

Digital accessibility: Everyone has a role to play

Every Content Creator has a responsibility to know about accessibility and how they contribute to digital inclusion on campus:

[Digital Accessibility Digest](#) - regular tips & tricks newsletter for faculty, staff & students

[Harvard - the accessible world](#) - recent harvard.edu homepage takeover



harvard.edu/in-focus/the-accessible-world

COLLABORATE: **LEARN FROM** AND **SHARE** **WITH OTHER INSTITUTIONS**

- Many institutions perform similar work to make curricular, co-curricular and extra curricular programs activities and services accessible
- EDUCAUSE [IT Accessibility Community Group](#): An active community of professionals with an online forum, monthly gatherings and efforts to produce community resources.

EDUCAUSE

UNCOMMON THINKING
FOR THE COMMON GOOD





ADDRESS ACCESSIBILITY IN PURCHASING



bit.ly/ER-accessibility-questions

[Asking the Right Questions for Procuring
Inclusive, Accessible Technology](#)

HECVAT: Higher Ed Community Vendor Assessment Toolkit

Standardized tool that integrates IT Security and IT Accessibility vendor risk assessments

Knowledgeable Access contact

Conformance to Accessibility Standards

DOCU-12: VPAT or ACR within the past year?

ITAC-01: Audited by third-party expert?

ITAC-02: Process for verifying conformance?

ITAC-03: A standard of conformance for?

ITAC-04: Current, detailed roadmap with delivery timelines?

Organizational Maturity toward Accessibility

ITAC-05: Do staff maintain current skill set in accessibility?

ITAC-06: Process for reporting and tracking issues?

ITAC-07: Implement accessibility into development lifecycle?

Accessibility via UX, Support & Documentation

ITAC-08: All functions by only the keyboard?

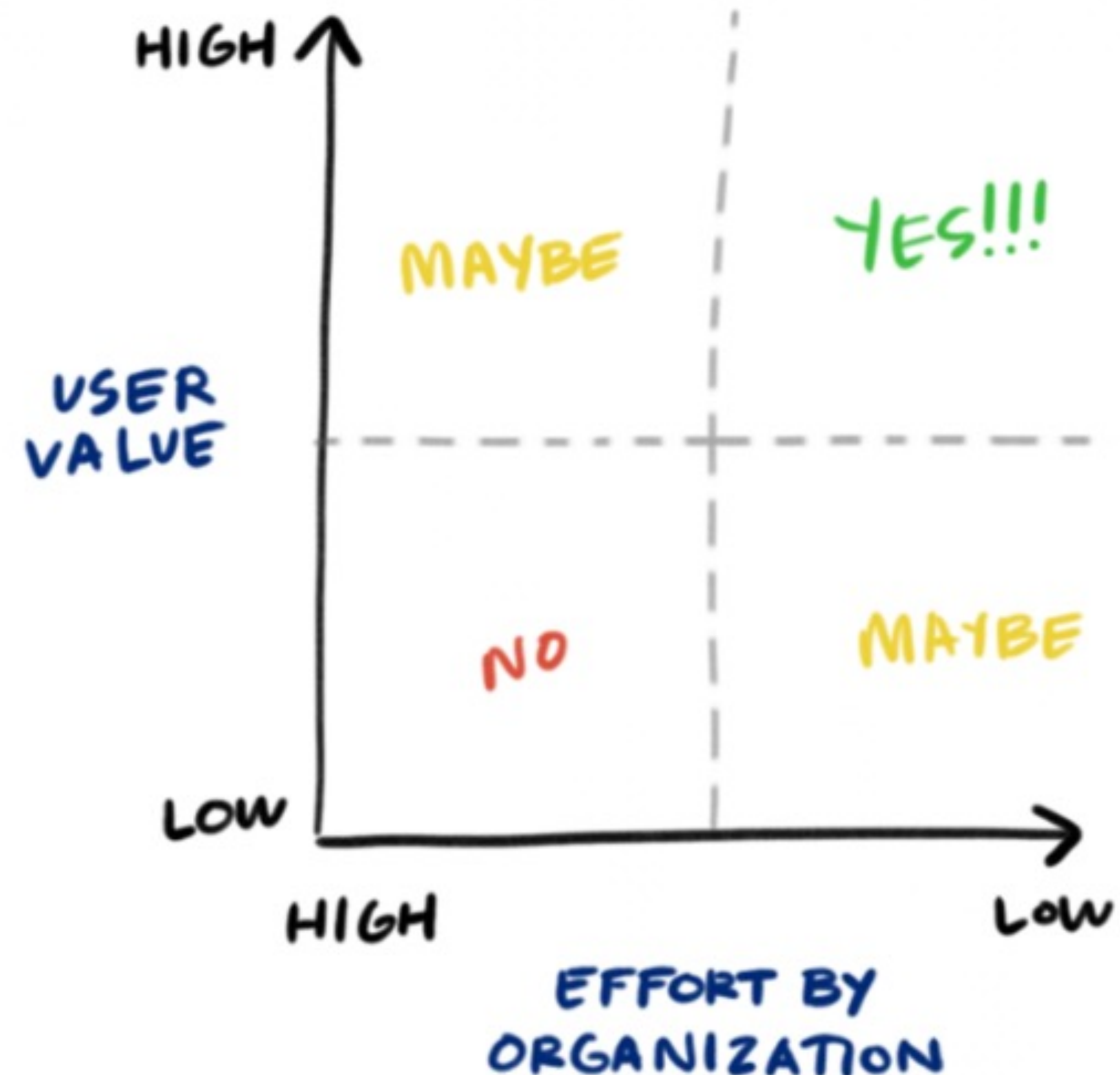
ITAC-09: Special modes, "lite" versions, or overlays?

DOCU-13: Documentation to support accessibility features?



STRATEGIES TO GET STARTED

1. Hire and solicit feedback from people with disabilities
2. Cultivate relationships and find executive sponsorship
3. Codify shared values into institutional policies, procedures & practices
4. Spread the word and advocate for accessibility—everyone has a role to play!
5. Integrate accessibility into your content creation process to prevent future work





QUESTIONS & DISCUSSION

**Building a Culture Toward Digital
Accessibility and Inclusion in Higher
Education**

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