



# Building an Accessible Learning Environment

Inclusive experiences for every student



#### **MEET YOUR GUIDE: TRAINER EXPERTISE**

#### Surbhi Lohia

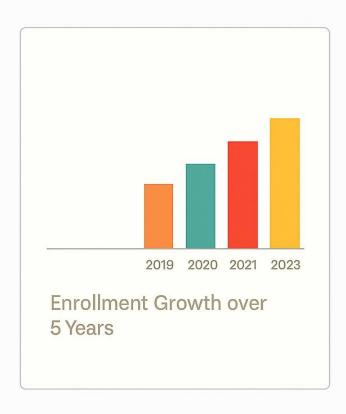
- 10+ years in digital accessibility & inclusive design (WCAG, ADA, Section 508)
- Led accessibility strategy at Accenture & SAP Labs; built CoEs & mentored teams
- Speaker & advocate at Axe Con 2025, IAAP Webinar; active in global accessibility community
- Expertise: audits, inclusive design, training, organizational change
- Skilled with JAWS, NVDA, VoiceOver, ARIA, Microsoft Suite, Workday
- Early career: Trainer for the Blind, empowering 150+ visually impaired students



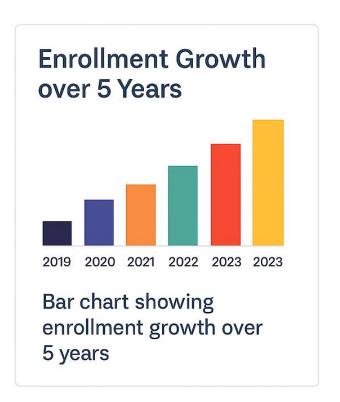
ACCESSIBILITY SUBJECT MATTER EXPERT | CPACC CERTIFIED | 100% VISUALLY IMPAIRED

#### Can You Spot The Clear Winner?

# Can everyone access this?



# What's different here?



Small font, low contrast, unclear visuals, unlabeled image

Vs

Clear font, high contrast, labeled chart with description/alt text

#### **TODAY'S OBJECTIVES**

- Why Accessibility Matters?
- Understanding User Needs
- Accessibility & Compliance
- Principles of Accessible Design (POUR)
- Common Accessibility Barriers
- Accessibility in Practice
- Accessibility Tools & Resources
- From Awareness to Action: The Road Ahead
- Accessibility Deep Dive: Upcoming Sessions
- Q & A

# Why Accessibility Matters?

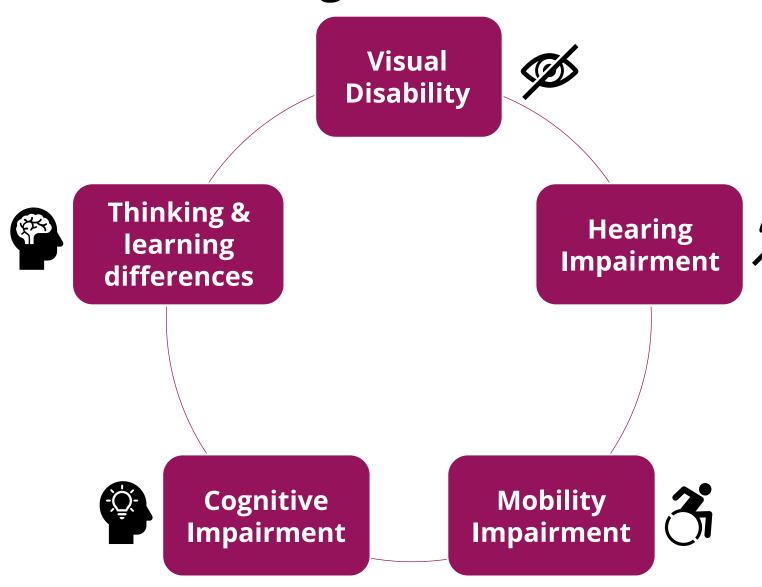
#### **Challenges & Impact**

- Nearly 1 in 5 students has a disability—yet access is rare
- Up to **43% of students** report a disability (many uncounted)
- **49.5%** student with disabilities graduate vs. **68%** peers

#### **Barriers & Readiness**

- 96% of U.S. higher-ed websites are non-compliant with ADA
- 1/3 faculty unaware of WCAG;
  45% unclear on details
- Only 10% of faculty feel they have adequate accessibility tools

# **Understanding User Needs**



- Disabilities are diverse: visual, hearing, mobility, cognitive, neurodivergence
- Needs vary across physical & digital environments
- One size does not fit all accessibility ≠ just compliance
- Universal Design: benefits everyone, not only those with disabilities
- Co-design with students:
   "Nothing about us without us"

# **Accessibility & Compliance**

# $\sqrt{1}$

- ADA & Section 508
- WCAG Standards

Legal Obligations

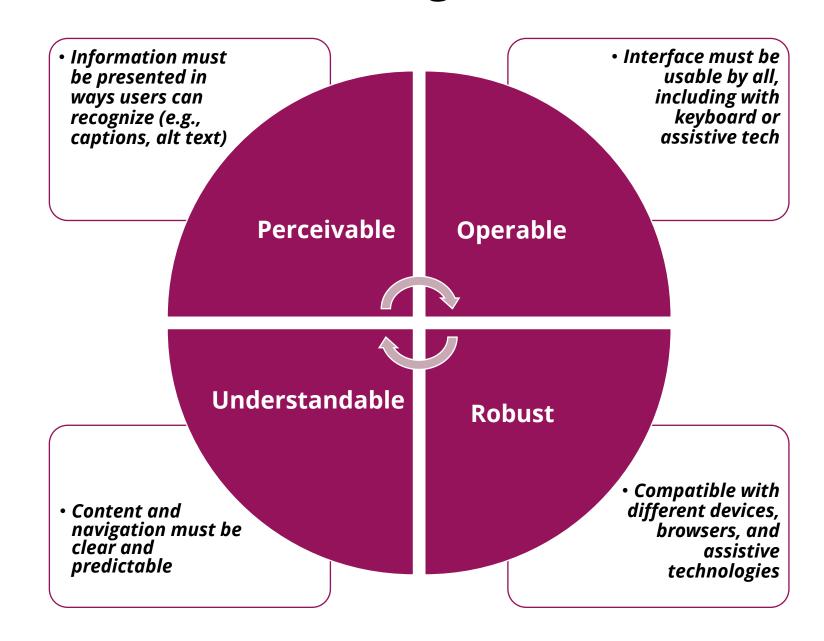
# Student Success



- Non-Compliance Risks
- Inclusive Design Benefits

Better Experience for all students

# **Principles of Accessible Design (POUR)**



# **Common Accessibility Barriers**



Low color contrast

Missing alt text for images

Poor font choice / small text size



Lack of captions
Inaccessible
audio/video
content



Interfaces requiring fine mouse control
No keyboard navigation support



Complex navigation or cluttered layouts Jargon-heavy or

unclear content

Time-limited tasks without flexibility



Websites/apps incompatible with assistive tech (e.g., screen readers)

Mobile-unfriendly design

#### **Accessibility in Practice: Effective Alternative Text**

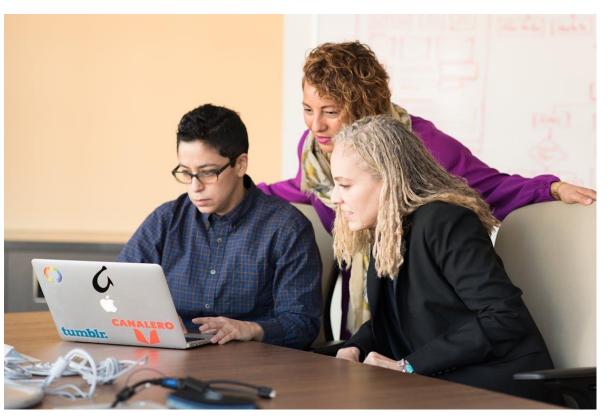
**X** Poor Examples

No Alt Text: Screen reader says "Image."

Vague Alt Text: "People."

Over-Described Alt Text:

"A young man with glasses wearing a blue checkered shirt is typing on a silver laptop covered in stickers while two women ... [etc.]."



Good Examples

**Useful Alt Text:** 

"Three colleagues collaborating around a laptop during a meeting."

Context-Specific Alt Text:

"Colleagues working together on a laptop, representing teamwork."

### **Accessibility in practice: Sufficient Color Contrast**

This is sample text in low contrast

This is sample text in low contrast

This is sample text in low contrast

Bad Contrast Examples

This is sample text with proper contrast

This is sample text with proper contrast

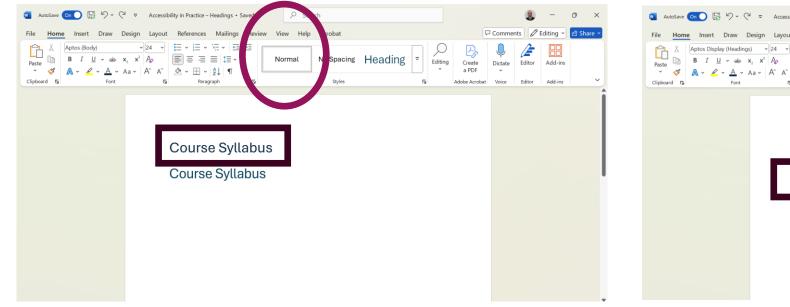
This is sample text with proper contrast

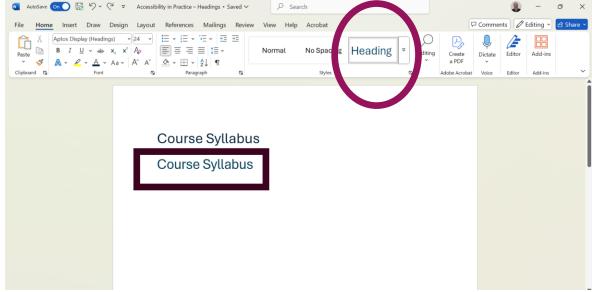
Good Contrast Examples

# **Accessibility in practice: Headings For Structure**









# **Accessibility in practice: Descriptive Links**

**X** Poor Example

Good Example

**Click here** 

Click here to go to

Accessibility Tools & Resources slide

# **Accessibility in practice: Clear Language**

Poor Example

Students must demonstrate interdisciplinary metacognition aligned to institutional paradigms

Students are required to furnish comprehensive expository documentation delineating their epistemological framework and methodological justifications within a fortnight of project initiation

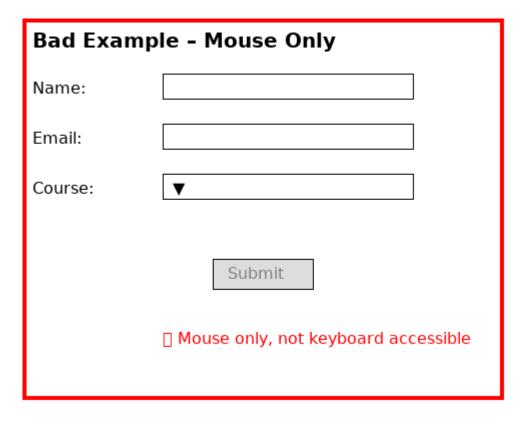


Students should explain how their learning connects across subjects

Students must submit a 2-page paper explaining their research approach and methods within two weeks of starting the project

### Accessibility in practice: Flexible Interaction







Good Example - Keyboard Accessible	
Name:	
Email:	
Course:	▼
	Submit    Fully keyboard accessible

# **Accessibility in practice: Compatible Content**

#### **X** Poor Example

```
BIOLOGY 101 - STUDY GUIDE Chapter 5: Cell
Structure Key Concepts: • Cell membrane:
Controls what enters/exits • Nucleus:
Contains genetic material (DNA) •
Mitochondria: Powerhouse of the cell •
Ribosomes: Protein synthesis Important Terms:
- Prokaryotic: Cells without nucleus -
Eukaryotic: Cells with nucleus - Organelles:
Specialized cell parts Exam Tips: Remember
the functions of each organelle Practice
drawing cell diagrams Review photosynthesis
vs cellular respiration
```

#### **✓** Good Example

#### **BIOLOGY 101 - STUDY GUIDE**

#### **Chapter 5: Cell Structure**

#### **Key Concepts:**

- Cell membrane: Controls what enters/exits
- Nucleus: Contains genetic material (DNA)
- Mitochondria: Powerhouse of the cell
- **Ribosomes:** Protein synthesis

#### **Important Terms:**

- Prokaryotic: Cells without nucleus
- Eukaryotic: Cells with nucleus
- Organelles: Specialized cell parts
- Exam Tips:
- 1. Remember the functions of each organelle
- 2. Practice drawing cell diagrams
- Review photosynthesis vs cellular respiration

#### **Accessibility Tools & Resources**

#### **Built-in tools**

- Microsoft
   Accessibility
   Checker
   (Word, PPT, Excel)
- Google Docs
   Accessibility
   Features
- Adobe
   Acrobat
   Accessibility
   Checker

#### **Testing Tools**

- WAVE (Web Accessibility Evaluation Tool)
- axe DevTools
- ColorContrastAnalyzer

# Guidelines & References

- WCAG (Web Content Accessibility Guidelines)
- Section 508 (U.S.)
- ADA Title II & III (higher-ed impact

#### **Helpful Sites**

- W3C WAI

   (Web
   Accessibility
   Initiative)
- <u>A11Y Project</u> (checklists, tutorials)

#### From Awareness to Action: The Road Ahead

#### Today We Covered

Accessibility = equity + compliance + better experience for all

Small steps (headings, alt text, contrast, captions)  $\rightarrow$  big impact

Everyone shares responsibility: faculty, staff, students, IT

Accessibility is not extra work—it's good design

If there's one thing you take away today, it's this: Accessibility isn't about checklists—it's about people

# **Accessibility Deep Dive: Upcoming Sessions**

Session 2: Image description & alt text

Session 3: Video accessibility

Session 4: On-page content accessibility

Session 5: PDF tagging & accessible documents

# Q&A

### **THANKS**

#### Source

- 1) 96% of American Colleges Deny Equal Access to Disabled AAAtraq
- 2) Study Shows Equity Gap in Classroom Tech for Students With Disabilities govtech
- 3) Report: Almost All Disabled Students Lack Access to College Readiness Programs The 74
- 4) Faculty Survey Shows Need for Digital Accessibility Support insidehighered