The Intersectionality of Digital Accessibility and Universal Design for Learning

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Agenda

Understanding UD, UDL, and Digital Accessibility

Civil and Human Rights

Rethinking How We Structure Learning

Components of a Successful UDL Course

Learning Outcomes

- Gain an understanding of the relationship between universal design for learning and digital accessibility.

- Identify at least 4 ways to increase UDL through digital accessibility practices.

- Understand the current legal landscape around digital accessibility.

The Population We *All* Serve

- 1 in 5 Americans
- 1.3 billion people worldwide
- Education (USA)
  - 19% of undergrads
  - 12% of grads
- Majority in Ed = Invisible Disabilities
  - Highest percentage LD/ADD/Psych – all can be print-related
- 800,000 US Veterans from the Gulf and Afghanistan wars
  - 177,000 have hearing loss
- 30 million – deaf or hard of hearing
- 9% of men are color blind
- Only 15.7% of people with a visual impairment attain a Bachelor's Degree or higher

Understanding UD, UDL, and Digital Accessibility

Universal Design

Creating an environment that is as accessible as possible for all people.

-Ron Mace

Universal Design for Learning

"A scientifically valid framework for guiding educational practice that provides flexibility in the ways information is **presented**, in the ways students **respond** or **demonstrate** knowledge and skills, and in the ways students are **engaged**."
– Higher Education Opportunity Act

- **Representation/Access** – presenting material in a way that the greatest number of students can access it flexibly to meet their needs.

  - **Expression/Response** – students demonstrating what they learn through different types of assessment.

    - **Engagement** – the multiple ways students are involved in the learning process.

UDL in Practice

| Representation/Access	Expression	Engagement
Gaining access by transforming information into useful knowledge through: • Digital Media* • Print* • Touch • Audio* • Virtual Media*	Expressing understanding through: • Writing* • Presenting* • Storytelling* • Multimedia* • Building/Making* • Making sense of learning*	Engaging with content and concepts using: • Interaction* • Problem solving* • Designing* • Video* • Graphics* • Collaborating* • Reflection*

* Indicates an area that does or can involve digital learning and digital access

Reference: *How to Personalize Learning*, Bray & McCloskÉy (2016)

Digital Accessibility

"Digital accessibility refers to the inclusive practice of removing barriers that prevent interaction with, or access to websites, digital tools and technologies, by people with disabilities."
– Georgetown University, School of Law

- Design of digital resources for everyone.
- Ensures accessibility across websites, applications, and tools.
- Integral to modern society: education, communication, empowerment, and entertainment
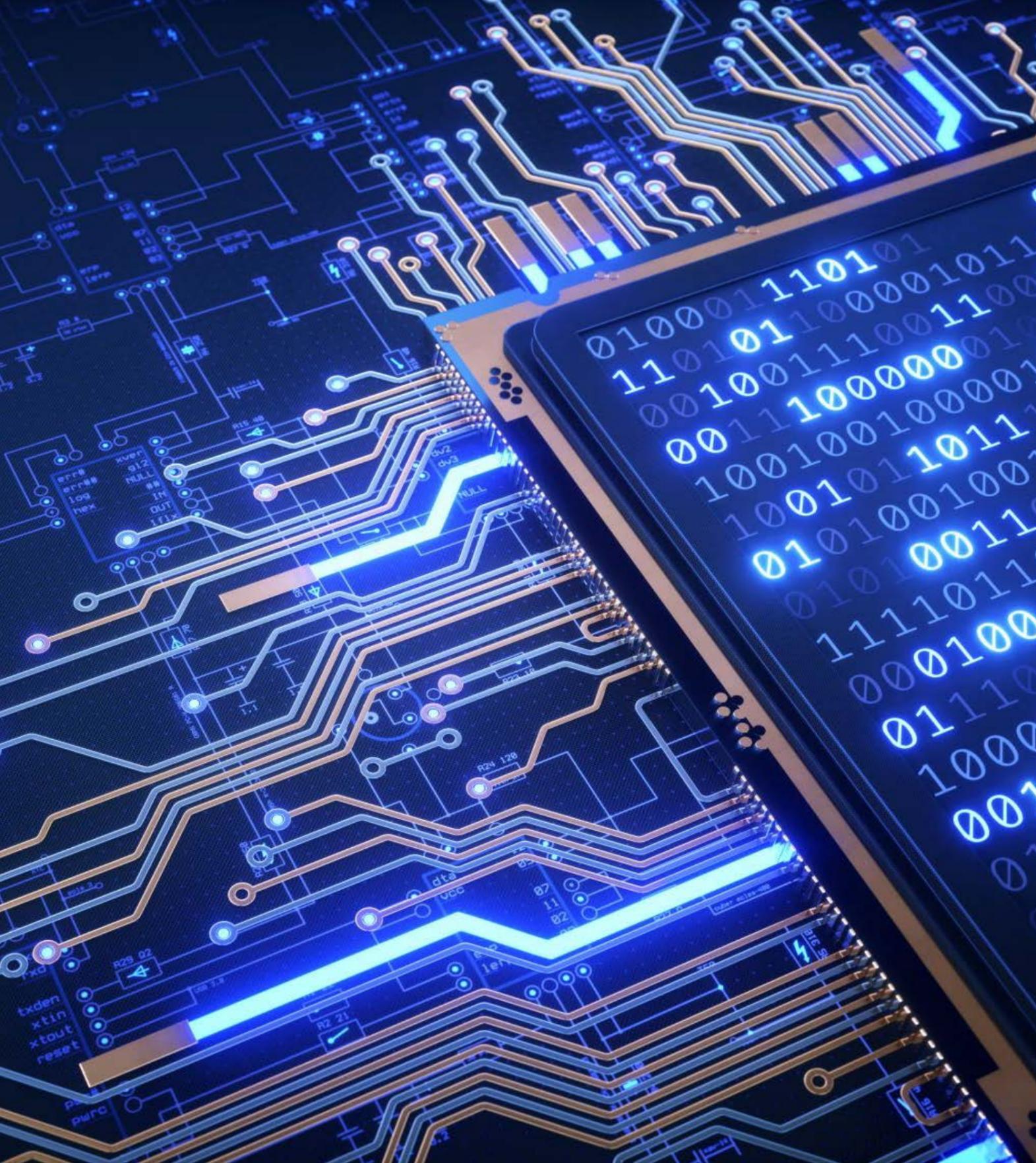
Web Content Accessibility Guidelines (WCAG) **2.2**

4 Basic Principles

- Perceivable: Available to the senses (vision and hearing primarily) either through the browser or through assistive technologies (e.g. screen readers, screen enlargers, etc.)

- Operable: Users can interact with all controls and interactive elements using either the mouse, keyboard, or an assistive device.

- Understandable: Content is clear and limits confusion and ambiguity.

- Robust: A wide range of technologies (including old and new user agents and assistive technologies) can access the content.

In other words, UDL and Digital Accessibility are about...

Designing all products & environments

- to be **usable** by all people
- to the **greatest extent** possible
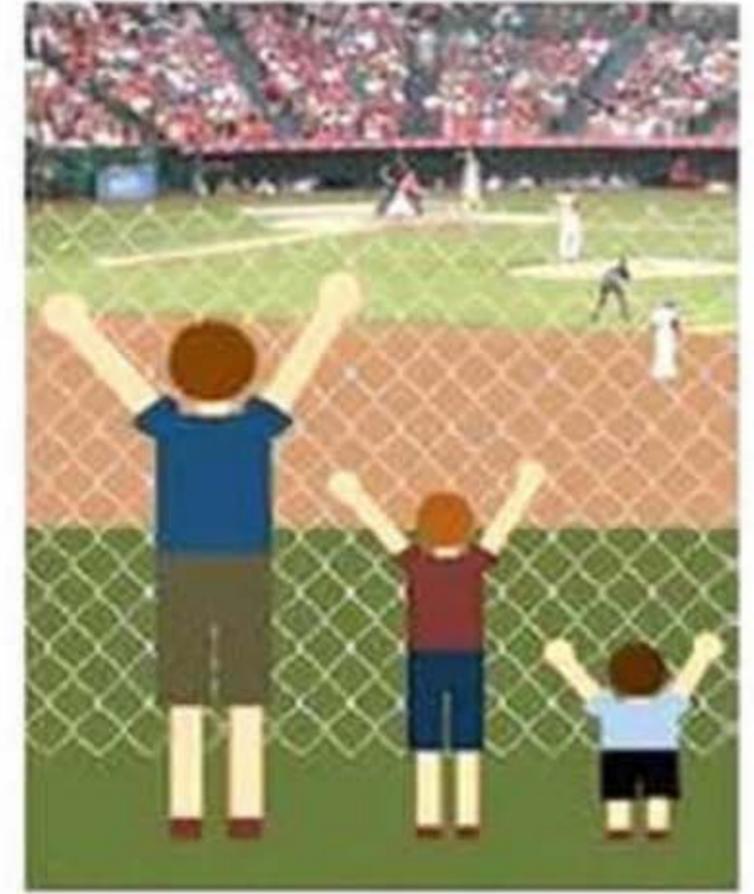- **without** the need for **adaptation** or specialized design

Equality versus Equity

In the first image, it is assumed that everyone will benefit from the same supports. They are being treated equally.

In the second image, individuals are given different supports to make it possible for them to have equal access to the game. They are being treated equitably.

In the third image, all three can see the game without any supports or accommodations because the cause of the inequity was addressed. The systemic barrier has been removed.

Civil and Human Rights

Current US Laws

- Civil Rights Act of 1964 – added rights for PWD in 1973 – **Disability Rights are Civil Rights**
- Rehabilitation Act 1973
  - Section 504 – applies to higher education
  - Section 508 – DOES NOT APPLY to higher education, only applies to US government institutions (fully government funded)
- Americans with Disabilities Act as Amended 1990/2008
  - Title 1
  - **Title 2**
  - Title 3
  - Title 4

Newly Updated ADA Title II

April 8, 2024 - "Attorney General Merrick B. Garland [...] signed a final rule under Title II of the Americans with Disabilities Act (ADA) **to ensure the accessibility of web content and mobile applications (apps) for people with disabilities**."

Published in Federal Register:
April 24, 2024

- Applies to "Public Entities"
  - State and local government offices that provide benefits and/or social services, like food assistance, health insurance, or employment services
  - Public schools, community colleges, and public universities
  - State and local police departments, courts, and elections offices
  - Public hospitals and public healthcare clinics
  - Public parks and recreation programs
  - Public libraries
  - Public transit agencies (e.g. Amtrak)
  - Special Purpose Districts

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Title II Updates Cover

- Active Web and App Content
  - Information and experiences available on the web (e.g. text, images, sound, videos, and documents)
  - This includes content within online courses

- Websites - main and subsidiary sites
  - Including sites created and updated by a 3rd party on behalf of a Public Entity

- Web-based processes
  - Including those involving 3rd party software programs

- Apps used by the organization
  - Including those produced or maintained by 3rd parties

Sets a specific Technical Standard: WCAG 2.1 at the AA Level

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Section 504

- Applies to both public and private (employing 15 or more people) sectors
- Proposed changes to rulemaking were submitted for public comment by the Department of Justice, Office of Civil Rights in May of 2022
  - Would constitute a landmark legal update for the private sector.
  - Originally expected a legal update by August 2023
  - There have yet to be any official decisions made, rules updated, or new timelines announced
- May 1, 2024 – **U.S. Department of Health and Human Services (HHS)** finalizes a rule that takes into account the proposed changes to Section 504 as it relates to website, app, and technology accessibility (WCAG 2.1, level AA) in the health/medical field only.
  - Applies to **public and private entities** – including those that accept Medicare and/or Medicaid funding.

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Digital Accessibility is Already Required

European Union

Rethinking How We Structure Learning

Technology is here. We need to use it to make learning environments that are so flexible/accessible that they can truly nurture the potential of every individual.

Barriers for Users With and Without Disabilities

- Inconsistent internet connection, must rely on downloaded content
- Slower bandwidth
- Older or outdated technology
- Relying on a smart phone for online access
- Less tech-savvy
- Background distractions/competition for attention
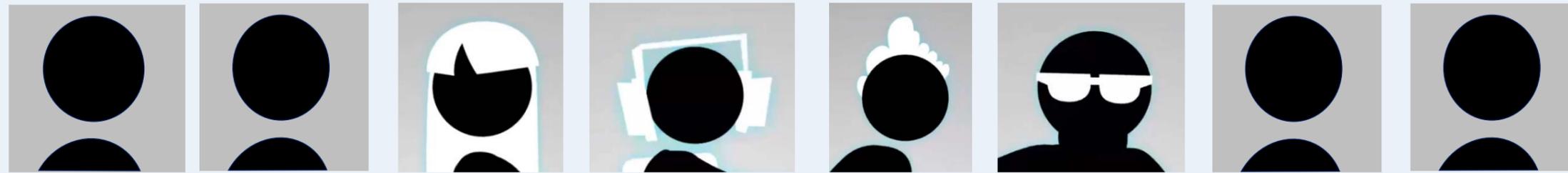- Person who's first language is NOT English
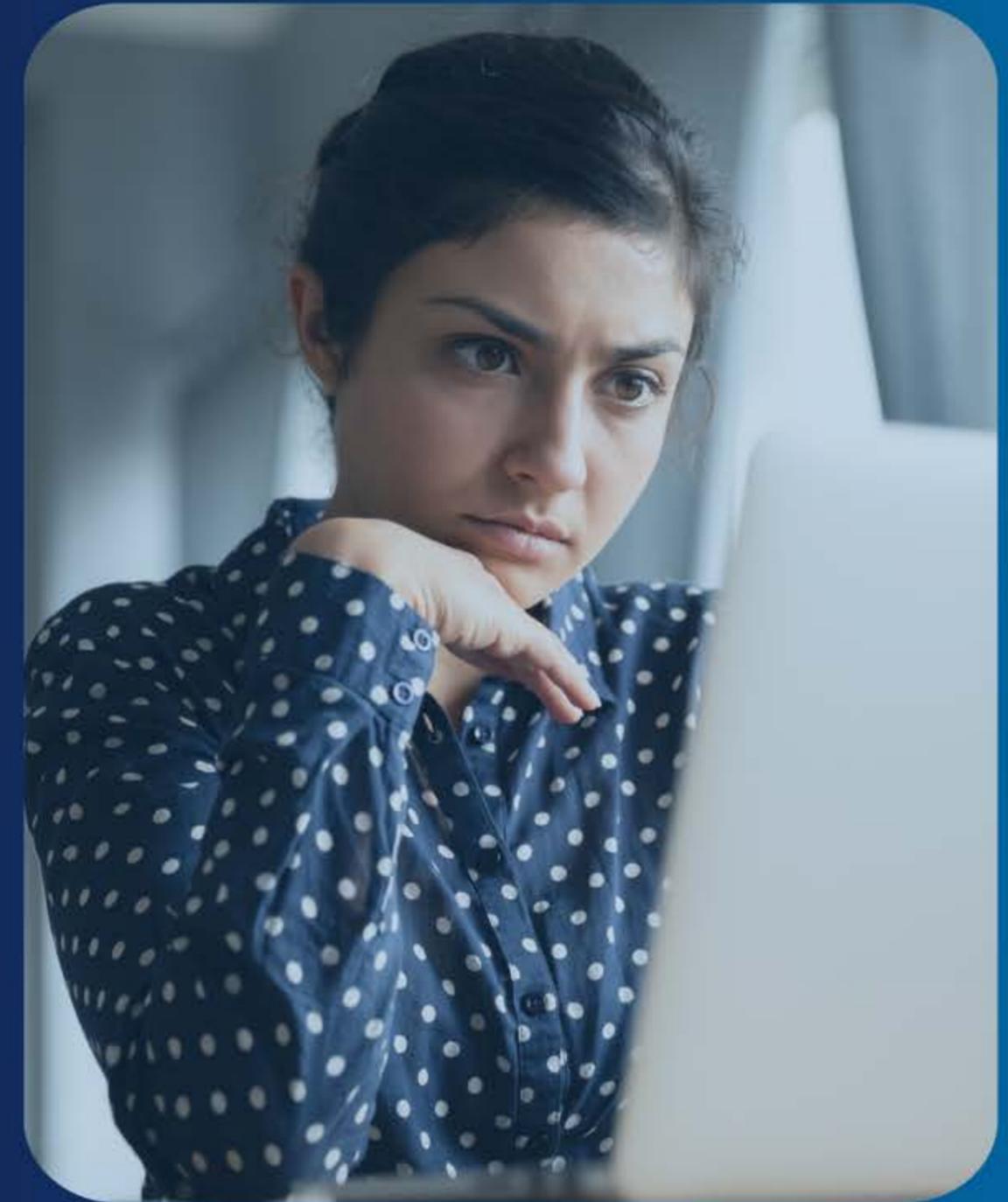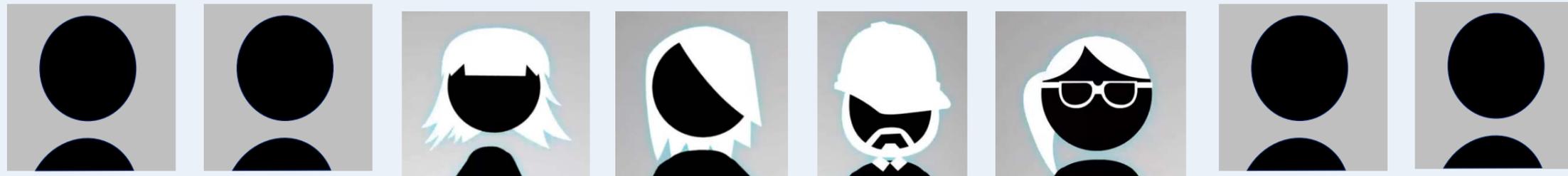
Learning
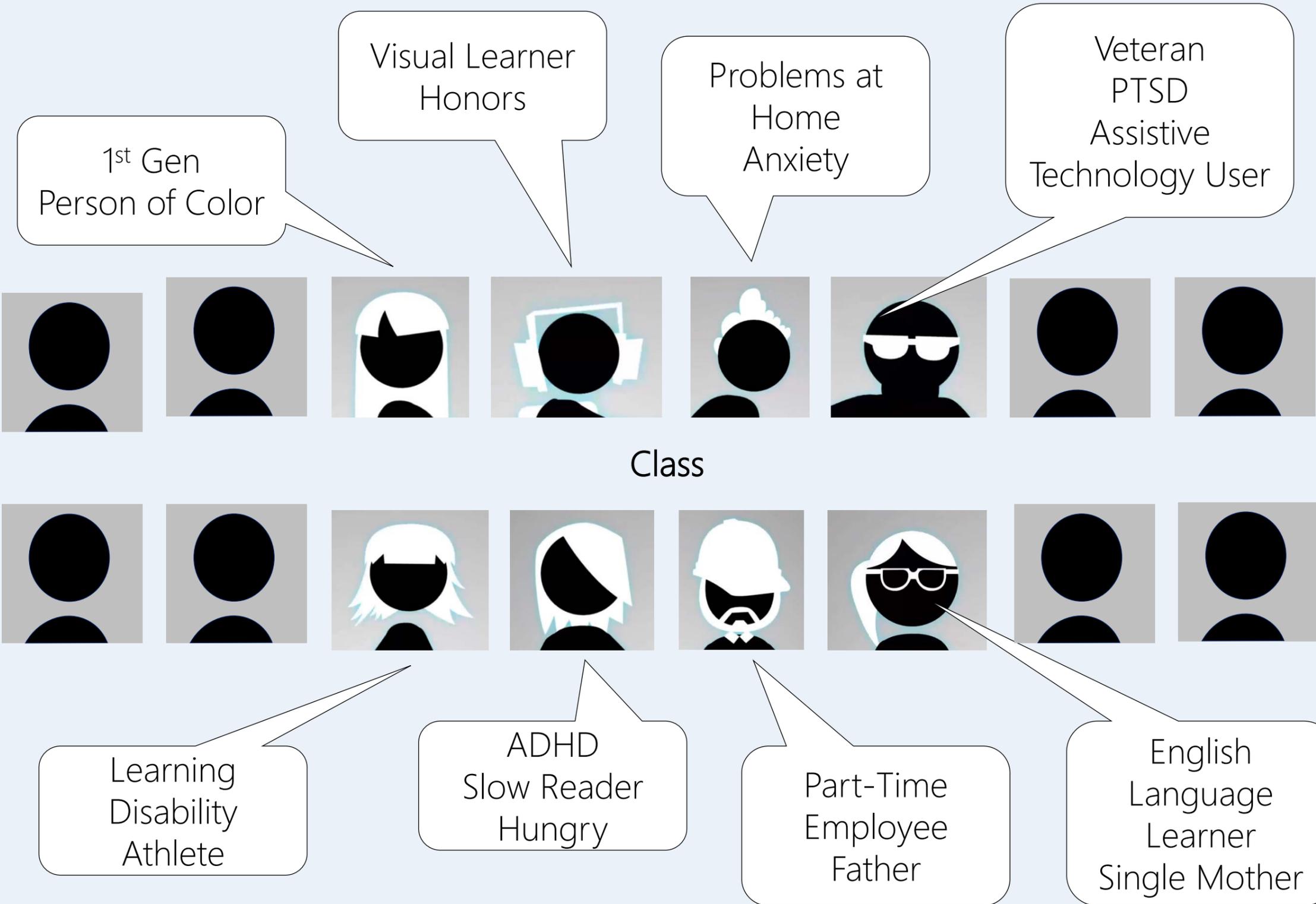
What do we assume about learners?

Learning?

Does everyone obtain information the same way?

Who are the learners that make up classes today?

Class

So....

- ▶ How can we create a more inclusionary environment?
- ▶ Reduce classroom and test accommodations?
- ▶ Meet the needs of more students?

Proactive vs. Reactive

Website or LMS

- Videos with proper captions
- Alternate communication methods (text, slack, etc.)
- Audio and Visual options

Any/all Printed and Electronic Communication

- Handouts
- Online articles
- Textbooks
- Online assignments

Learning Styles and Learning Tools

- Auditory Learner
- Visual Learner
- Hands-On Learner
- Cell phone/laptop/tablet
- Each other (GroupMe, text)

Components of a Successful UDL Course

Flexibility

Build in flexibility where feasible. The extent to which you can incorporate flexibility depends on several factors, including the type of information you want the student to learn, size of the class, how many teachers and aids are working with the group, and the timing of assignments. When preparing for class, look for places where introducing flexibility makes sense, for example:

- Avoid inflexible, unduly punitive approaches.
- Offer the student a choice in how the session flows (you teach them, they "teach" you, start with the answer and work backwards, etc).
- Allow students to choose from a *limited* range of topics for apportion of the class or a type of assignment.

https://uwaterloo.ca/centre-for-teaching-excellence/teaching-resources/teaching-tips/planning-courses-and-assignments/universal-design-course-design

Accessibility

Remember the Principles of WCAG 2.2. Prepare accessible instructional materials. Accessible materials enable students with disabilities to be able to access course content in whatever way they need, which is particularly important for students who use adaptive technology (e.g., screenreader, screen enhancement software). There are several steps involved in creating accessible materials; start with making just one small change and build from there as you are able.

https://uwaterloo.ca/centre-for-teaching-excellence/teaching-resources/teaching-tips/planning-courses-and-assignments/universal-design-course-design

Variety/Choice

- Include a variety of assessment types in your course. Students can demonstrate their learning in different ways and have different strengths and areas for development.

- Use a variety of assessment methods to provide a more equitable way for learners to show what they know.

- Expand on the ways in which you measure class participation so that quiet students (i.e. students with competing distractions, students with social anxiety, students whose first language is not English, students who are deaf or HoH, students with a developmental delay [k12], etc.) can still demonstrate that they are engaged.

https://uwaterloo.ca/centre-for-teaching-excellence/teaching-resources/teaching-tips/planning-courses-and-assignments/universal-design-course-design
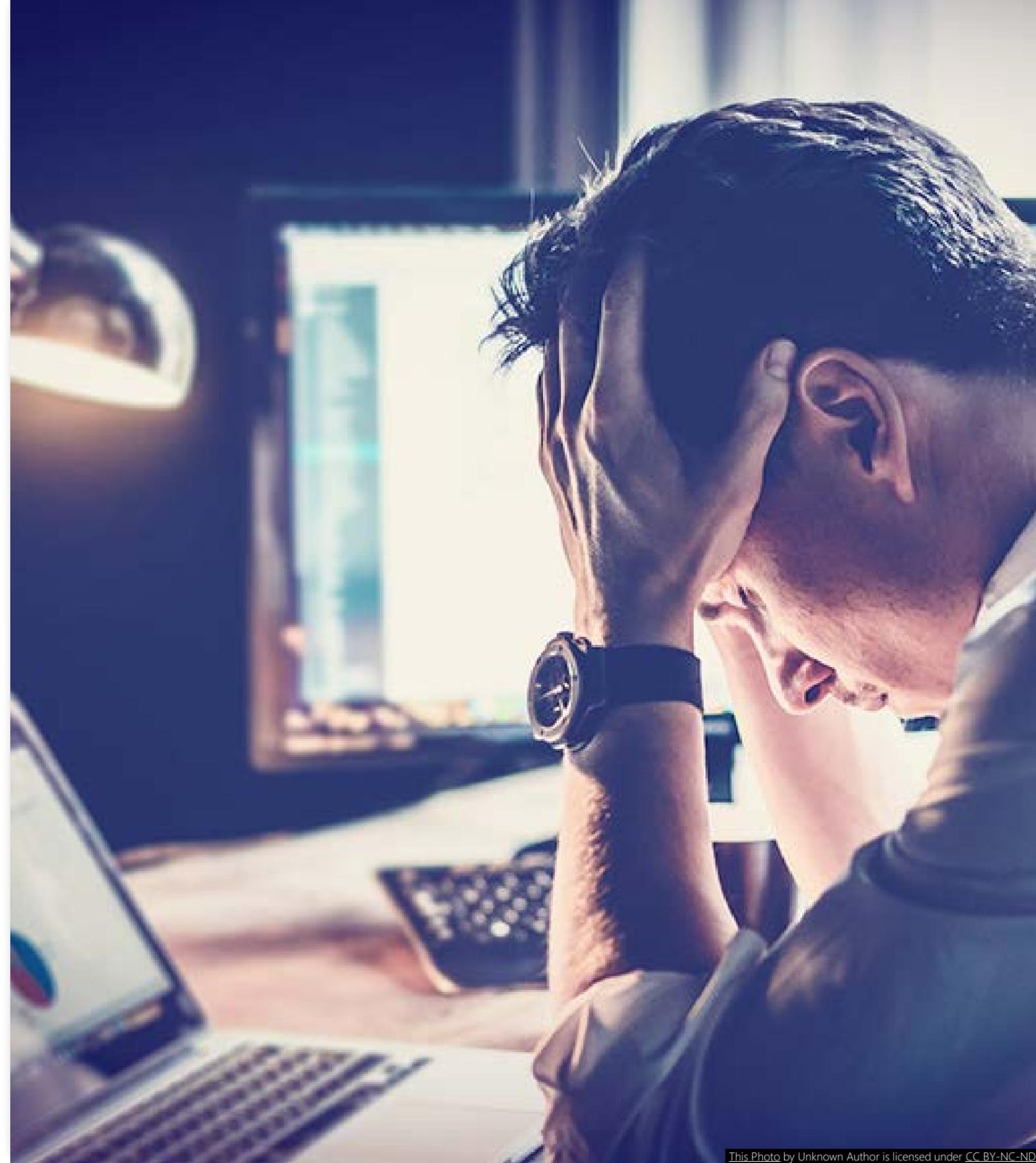
Effort

Minimize unnecessary effort and stress. The goal is not to reduce effort and stress altogether: learning requires effort and is sometimes stressful. However, learning can be hindered when students expend too much energy working on tasks that don't contribute to their learning. To limit unnecessary effort and stress, you can:
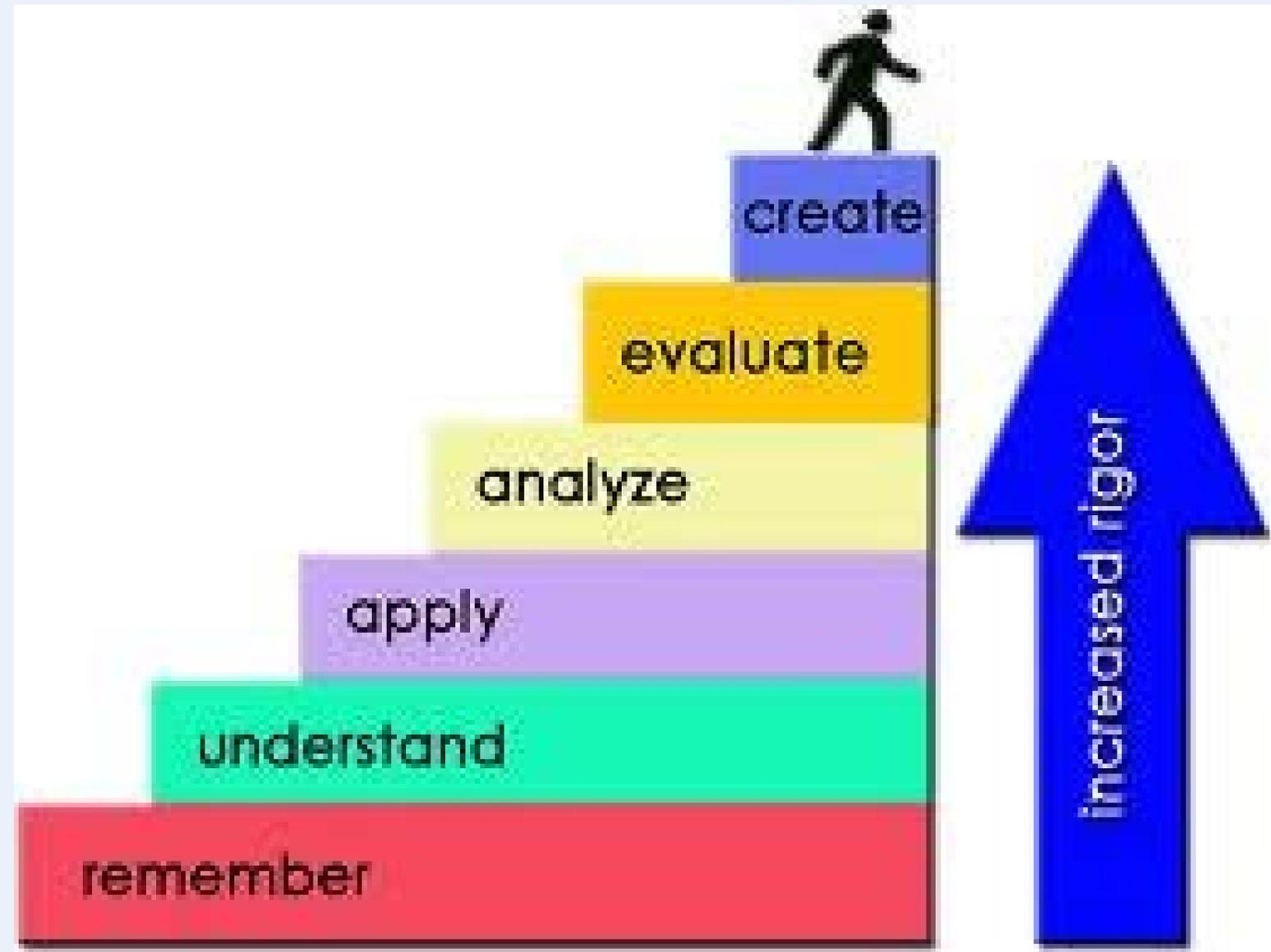
- Assign examples or learning tasks that are relevant and necessary to meet the intended learning outcomes of the session – if giving them things to take away and practice set some as "required", and designate others as "supplemental" – and make sure every option is accessible.
- At the beginning of a course, tell students about the types of tasks/approaches you will be using so that they can plan ahead.
- Whenever possible, provide clear and consistent information to help manage their expectations.
- Provide sufficient and clear instructions using multiple means when possible (e.g. verbally, in writing).
- Schedule some spot-checks early in the term so that students can make informed decisions based on your feedback.

https://uwaterloo.ca/centre-for-teaching-excellence/teaching-resources/teaching-tips/planning-courses-and-assignments/universal-design-course-design

UDL in Education

UDL is NOT about reducing the rigors of academics

Getting Started

• Have students choose from a selected bank of assignment topics or at the beginning of the semester, allow students to determine what percentage of their grade can be dependent on certain assessment options.

mid-semester evaluation, and/or evaluate how productive your class sessions are.

As with any teaching strategy, reflect on how it went. Did it work for you? For your students? Were students able to attain the information you intended for them to gain? Make necessary adjustments for your next session.

https://teaching.cornell.edu/teaching-resources/designing-your-course/universal-design-learning

Questions?

Thank you!

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Resources and References

- CAST (www.cast.org) – Center for Applied Special Technology
- Universal Design Course Design
- (https://uwaterloo.ca/centre-for-teaching-excellence/teaching-resources/teaching-tips/planning-courses-and-assignments/universal-design-course-design)
- Equal Access Universal Design Instruction
- (https://www.washington.edu/doit/equal-access-universal-design-instruction)
- Louisiana Tech Settlement (http://ahead.org/DOJ_Louisiana_Tech_Settlement)
- Library Doors (https://www.flickr.com/photos/osuvalleylibrary/490439366)
- Americans with Disabilities Act of 1990, AS AMENDED with ADA Amendments Act of 2008. (2009, June15). Retrieved March 14, 2018, from https://www.ada.gov/pubs/adastatute08.htm
- Civil Rights Act of 1964 § 7, 42 U.S.C. § 2000e et seq (1964).
- "Section 504 of the Rehabilitation Act of 1973 (29 U.S.C." Code of Federal Regulations, title 28 (2002):516-544.
- Dear Colleague Letter on Online Accessibility at Postsecondary Institutions
- Web Content Accessibility Guidelines (WCAG) 2.1