

Universal Design For Learning

Benefits of Implementation in Postsecondary Education



Michigan Developmental
Disabilities Institute

Community Service

Education

Research

Dissemination



WAYNE STATE
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Our Learning Objectives

At the conclusion of this session, participants will:

1. Understand what **access** means in postsecondary education (PSE)
2. Identify the elements that make up a **curriculum**
3. Become familiar with the three (3) concepts at the heart of **Universal Design for Learning (UDL)**
4. Be able to build a mental picture of what UDL looks like in a college or university classroom and online



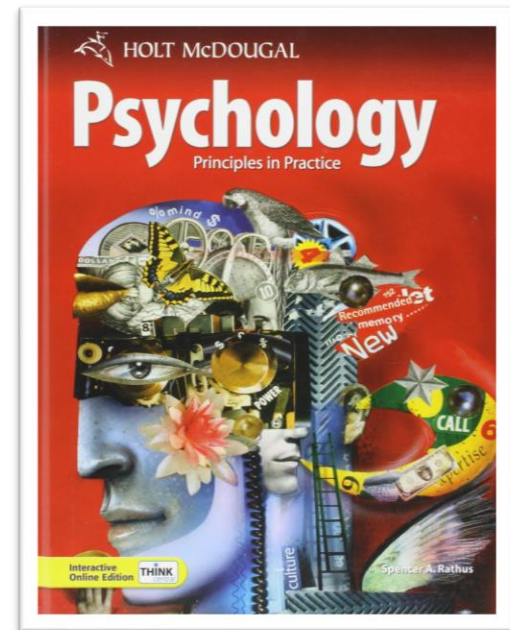
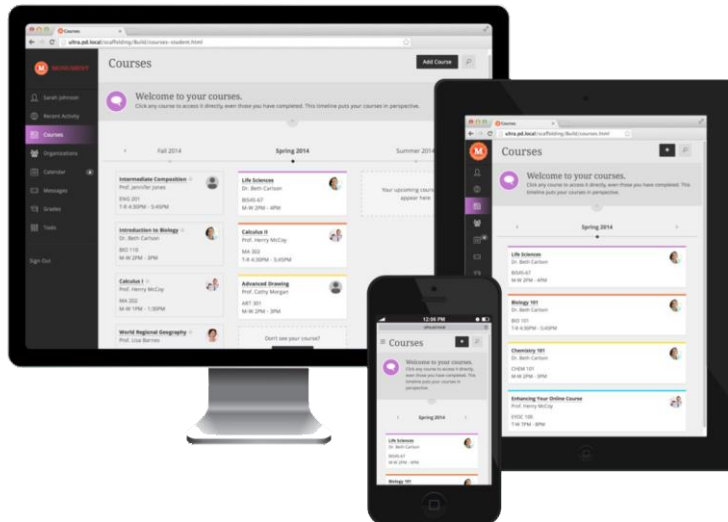
What Does “Access” Mean?

- Access TO PSE:
 - Access TO PSE most often refers to gaining acceptance to a college, university, or trade school
 - Barriers include:
 - Not having a high school diploma
 - Not qualifying for federal/state student aid (\$\$\$)
 - Low scores on entrance tests (e.g. SAT, ACT)
 - Location



What Does “Access” Mean?

- Access **IN** PSE:
 - UDL addresses access **IN** a course:
 - Course materials (e.g. textbooks, assignments)
 - Instructional methods and tools (e.g. lectures, online delivery)
 - Assessments (e.g. exams, research papers)
 - Concepts themselves



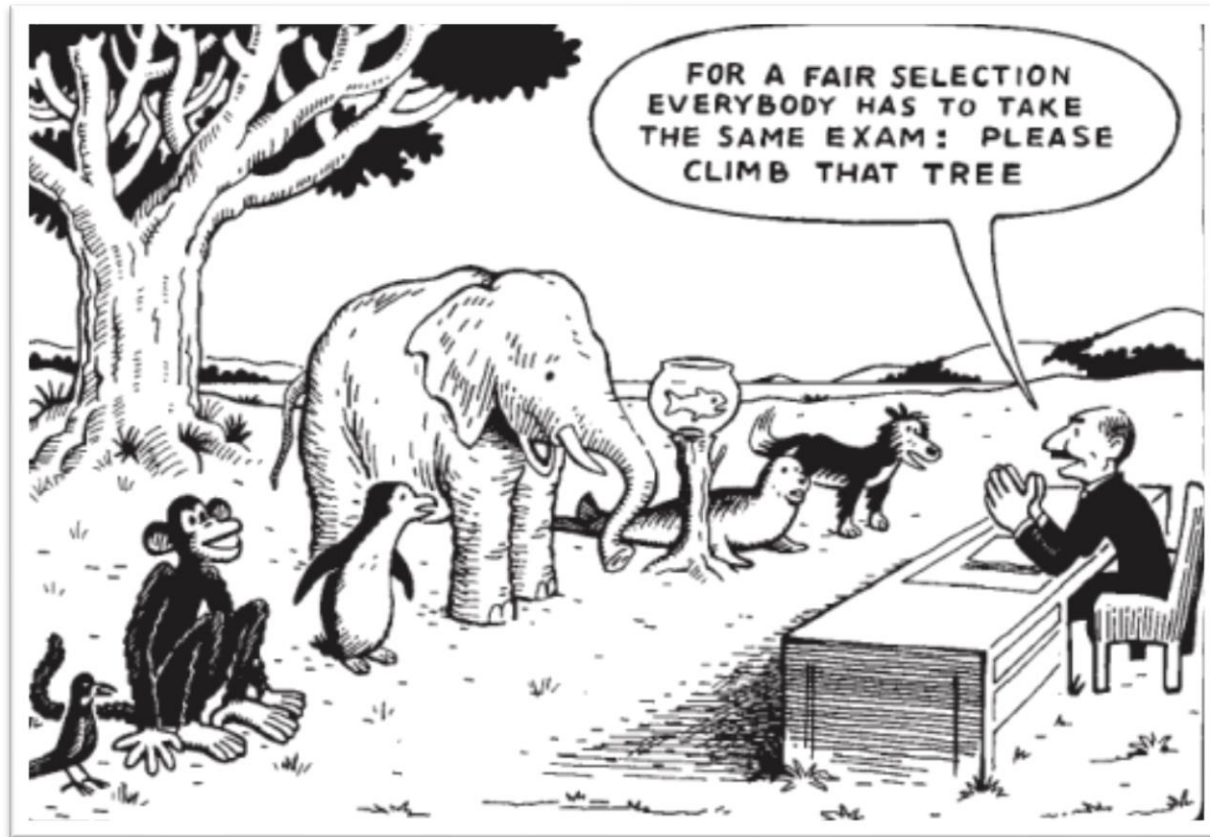
Where did UDL come from?

- UDL stems from the world of architecture
 - Removing physical barriers to buildings
 - Curbs, stairs, heavy doors



Where did UDL come from?

- Rigid or inaccessible course materials can introduce unnecessary barriers to learning



Why UDL?

- Expanded access through UDL benefits ALL students
 - Increases chances for success across the board
 - Opens the door to innovation, creativity, critical thinking
 - Addresses the needs of diverse learners



About UDL

CAST  YEARS OF
INNOVATION
1984-2009

Transforming education through Universal Design for Learning — <http://www.cast.org>

UDL at a glance



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About UDL

- **Universal:** Every learner
- **Design:** Intentional, purposeful, planned
- **Learning:** Challenging and supporting all learners in meaningful ways



UDL and Curriculum

- Curriculum
 - The **totality** of student experiences
 - Can include:
 - Learning goals
 - Methods of assessment
 - Instructional style and tools
 - Means of delivery
 - Course materials



UDL and Curriculum

- Curriculum
 - The **totality** of student experiences
 - Also includes a student's **interactions** with:
 - All items already mentioned
 - The instructor
 - Other students
 - The room
 - The Learning Management System (LMS) or website



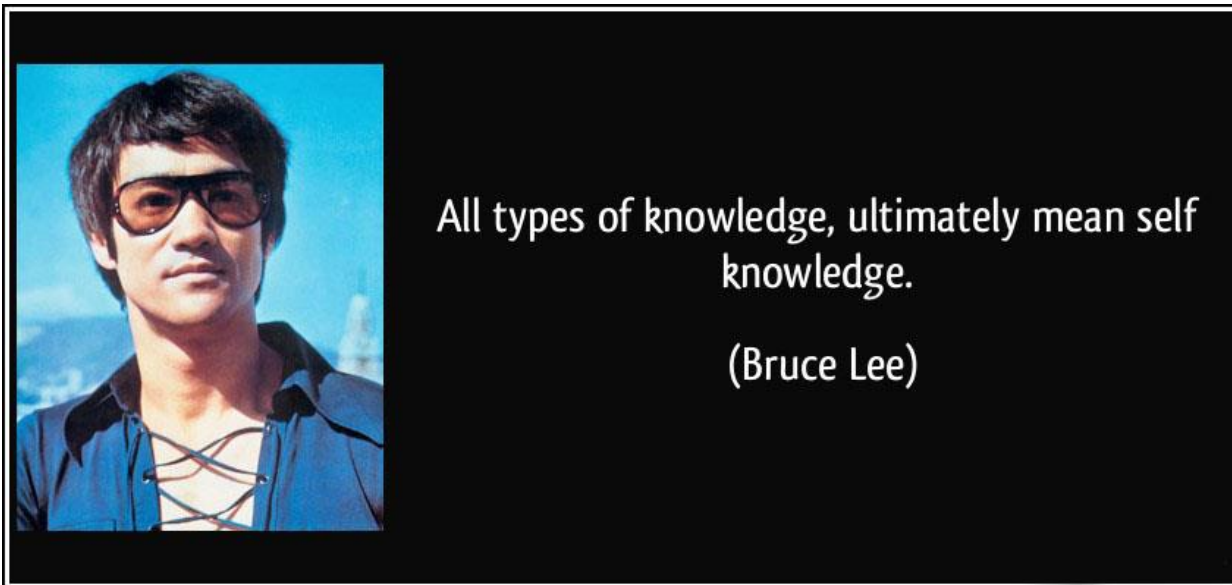
UDL and Curriculum

- Emotion and cognition are intertwined
 - **Negative** interactions with the learning environment impact learning
 - Highlights the importance of building accessible curriculum



UDL and the Expert Learner

- The goal of UDL is to foster a **growth** mindset
 - As opposed to fixed or rigid
- Develop **self-knowledge**
- A key to learning is knowing how **YOU** learn best!



At the Heart of UDL

- Three (3) concepts at the heart of UDL:
 1. Engagement
 2. Representation
 3. Action and Expression

The Universal Design for Learning Guidelines

Provide multiple means of
Engagement



Affective Networks
The "WHY" of Learning

Provide multiple means of
Representation



Recognition Networks
The "WHAT" of Learning

CAST | Until learning has no limits™

Provide multiple means of
Action & Expression



Strategic Networks
The "HOW" of Learning



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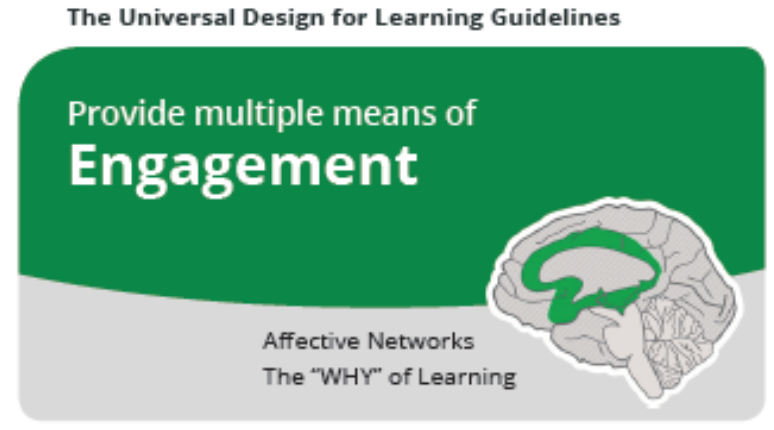
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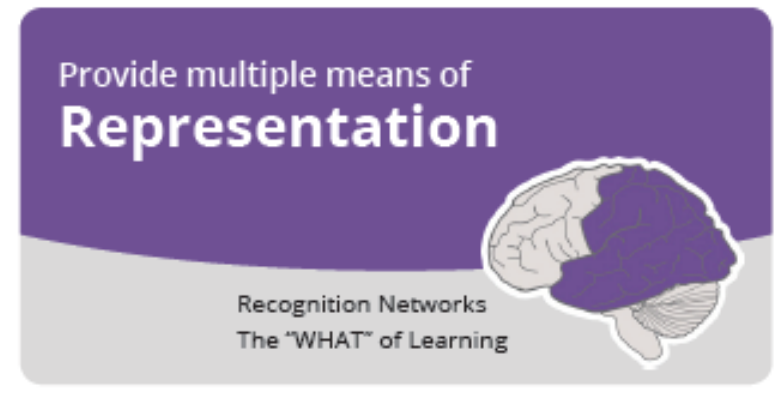
Engagement

- The “**why**” of learning
- Affective (emotional) network of our brains
- Offering MULTIPLE means of engagement:
 - Foster community
 - Show value
 - Show relevance
 - Relate learning goals
 - Getting hands-on
 - ?



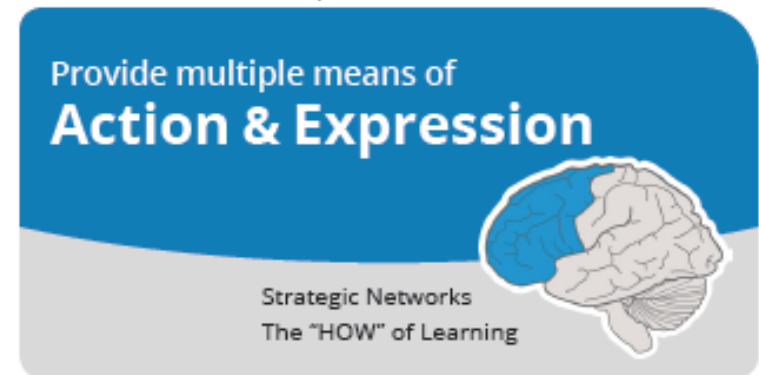
Representation

- The “**what**” of learning
- Recognition network of our brains
- Offering MULTIPLE means of representation:
 - Text
 - Video
 - Small groups
 - Games/Apps
 - ?



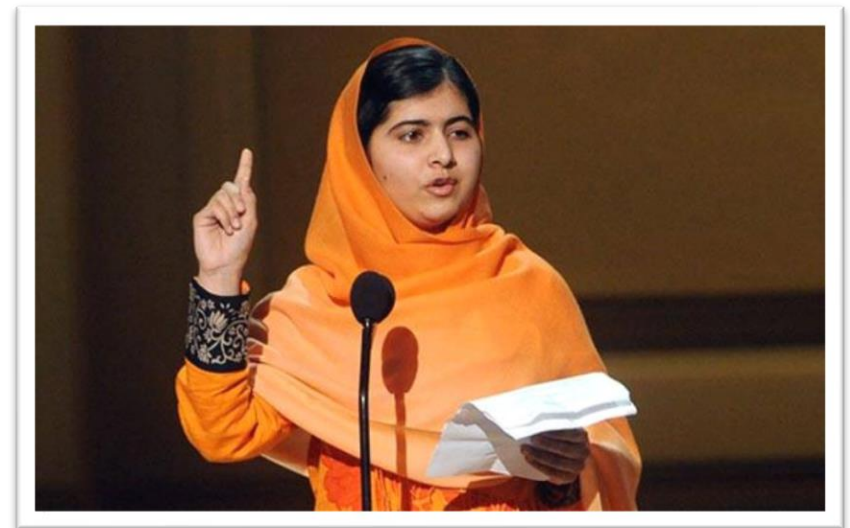
Action and Expression

- The “**how**” of learning
- Strategic network of our brains
- Offering MULTIPLE means of action and expression:
 - Written papers
 - Group Projects
 - Visual/auditory expression
 - Hands-on projects
 - ?



UDL in the College Course

- Lecture is a common and powerful instructional tool
 - Important learning tool in most disciplines
 - Expressive, contextual
 - Expands on the written word
 - Provides emotional elements
- **BUT**, lectures can be inaccessible



Malala Yousafzai accepting the Nobel Prize.

UDL in the College Course

Would Dr. Martin Luther King Jr.'s "I have a Dream" speech be as powerful if only experienced in text form?



UDL in the College Course

“I have a dream that one day, this nation will rise up and live out the true meaning of its creed: “We hold these truths to be self-evident, that all men are created equal.” I have a dream that one day on the red hills of Georgia, the sons of former slaves and the sons of former slave owners will be able to sit down together at the table of brotherhood. I have a dream that one day even the state of Mississippi, a state sweltering with the heat of injustice, sweltering with the heat of oppression, will be transformed into an oasis of freedom and justice. I have a dream that my four little children will one day live in a nation where they will not be judged by the color of their skin but by the content of their character.” -Martin Luther King Jr.



UDL in the College Course



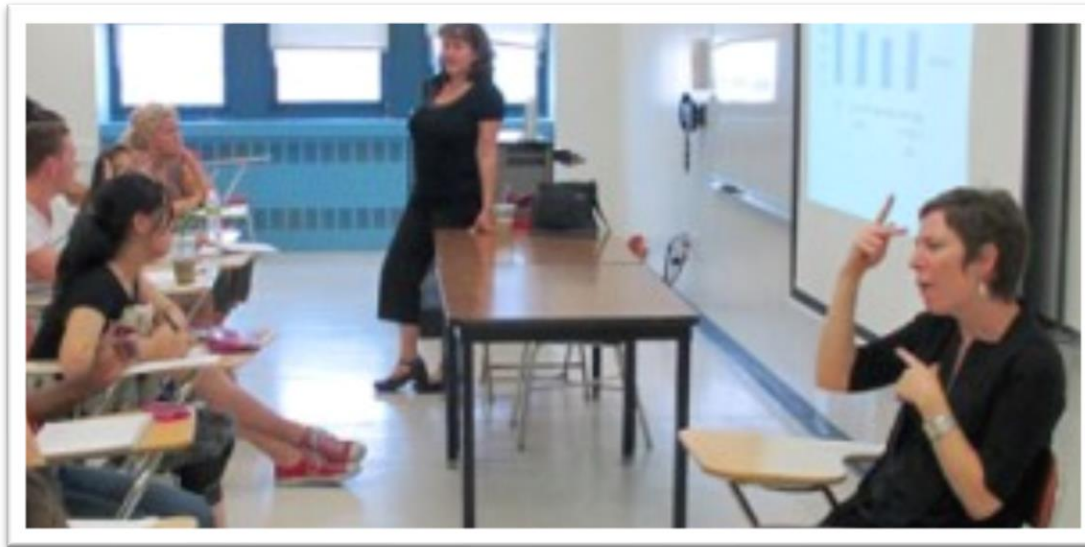
UDL in the College Course

- **EXAMPLE:** Making lecture universally accessible
 - Harvard Graduate School of Education course (T-560)
 - Used multiple strategies to make lecture more engaging, accessible and interactive
 - Use of traditional accommodations and technology



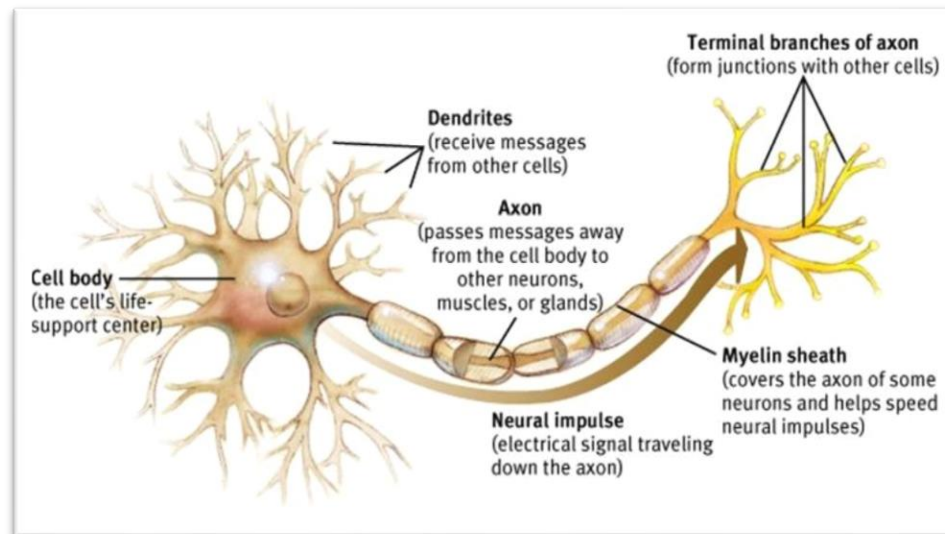
UDL in the College Course

- Provided alternative representations of the course lectures.
- **First:** For hearing impaired and deaf students:
 - Sign language interpreter used



UDL in the College Course

- **Second:** for visually impaired and blind students:
 - Oral description of visuals
 - Expanded description can benefit students who are not visually impaired
 - Especially in the case of complex graphics



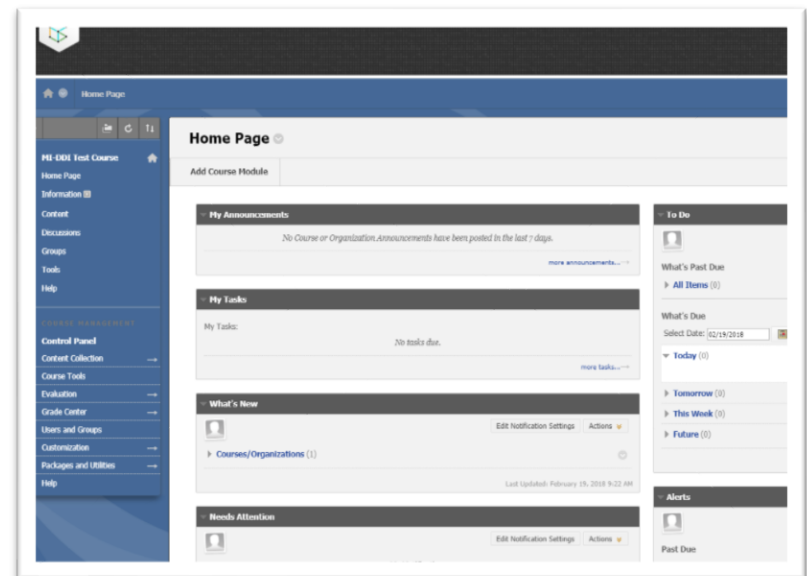
UDL in the College Course

- **Third:** To address linguistic and cognitive load:
 - Lectures recorded and placed on course website
 - Become permanent resources available to all students
 - Benefits students for whom English is **not** a first language
 - Captions can be added
 - Reduces cognitive load placed on students



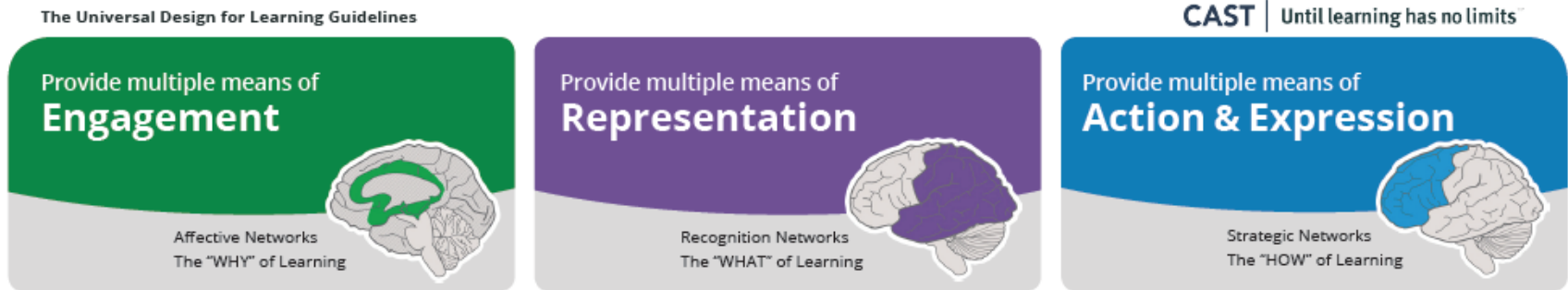
UDL in the College Course

- **Fourth:** Student lecture notes are collected and made available for all learners in course
 - A few students are tasked each week with submitting lecture notes
 - Posted to course website
 - Students can comment on them
 - High level of engagement
 - Students know their notes will be seen by peers



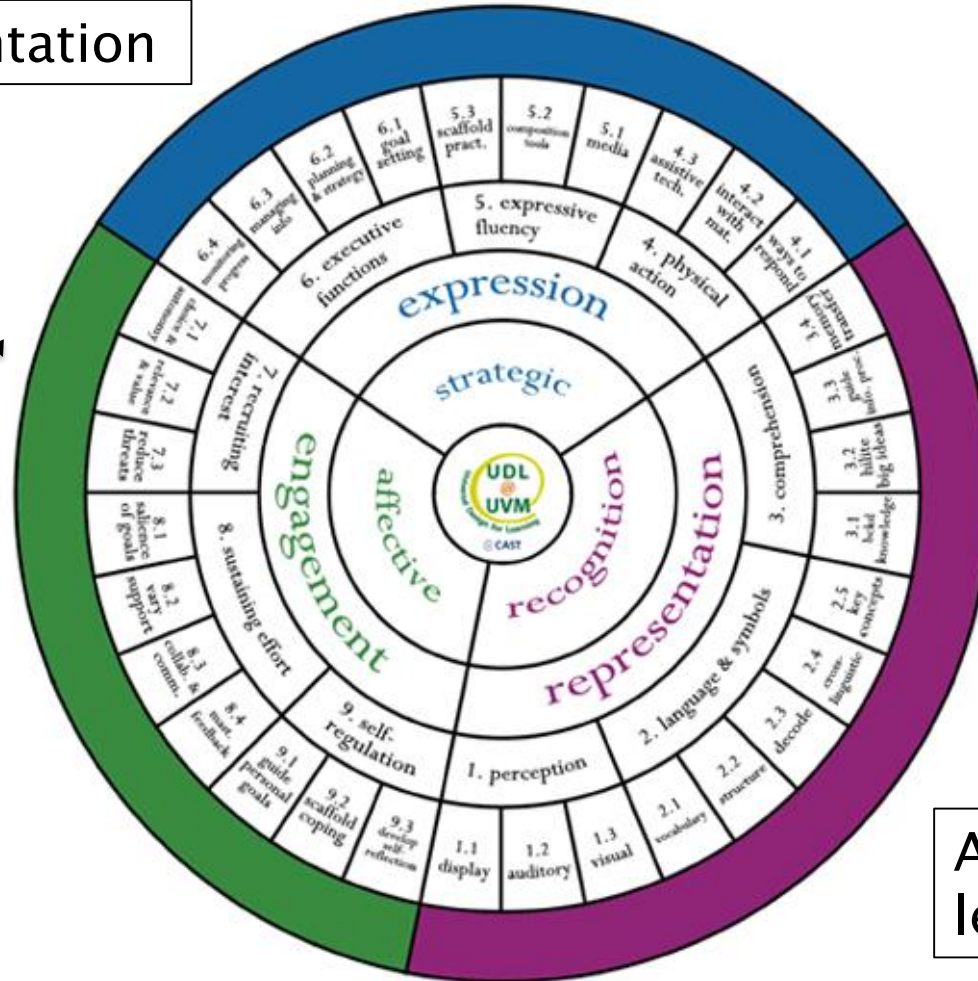
UDL in the College Course

- **Fifth:** PowerPoint slides created mainly to be visual in nature



UDL in the College Course

Visual Representation



Adds texture to lecture



UDL in Postsecondary Education

- Continues to grow in K-12 application in Michigan
- Empirical evidence supports use in PSE
- Growing number of tools, resources available
- So what's next?



Open Learning Initiative

Transforming higher education through the science of learning.



DO-IT



CAST

Universal Design for Learning



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Questions?



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http://ddi.wayne.edu/mcan/mcan_2018_udl_bray.pdf



Accessibility Resources

- **Web Content Accessibility Guidelines (WCAG) 2.0**
 - <https://www.w3.org/TR/WCAG20/>
 - Covers a wide range of recommendations for making web content more accessible.
- **Universal Design for Learning Series (web-based)**
 - <http://udlseries.udlcenter.org/>
 - Offered by the National Center on Universal Design for Learning (UDL).
- **CAST (Center for Assistive Special Technology)**
 - <http://www.cast.org/>
 - A nonprofit education research and development organization that works to expand learning opportunities for all individuals through Universal Design for Learning.



Accessibility Resources

- **Quality Matters**
 - <https://www.qualitymatters.org/>
 - A faculty-centered, peer review process that's designed to certify the quality of online and blended courses. Submit a course for review and receive feedback.
- **Section 508.gov**
 - <https://www.section508.gov/content/academic-community>
 - List of Accessibility Programs in the Academic Community.
- **The National Center on Disability and Access to Education**
 - <http://ncdae.org/>
 - Addresses issues of technology and disability in education policies and practices to enhance the lives of people with disabilities and their families.



Accessibility Resources

- **Example of a UDL Syllabus:**

http://udloncampus.cast.org/page/planning_syllabus#.WnTJBahKuUk

- **Example of UDL Learning Goals:**

http://udloncampus.cast.org/page/planning_goal#.Wob3KKgbOUk



Thank you!

Selected sources:

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