Module 7 Meeting Needs - Physical and Sensory Needs

https://hypersay.com/view/PYPHI

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DECIDE Project Leader

M7 CONTENT

- Introduction

- Accommodations and Assistive Technology

- Accessible Design

- Design and develop course materials

- Workshop

- Assesment test

M7 - Introduction

- The goal of this course is to promote equal opportunity and the full participation of students with disabilities in higher education by helping participants advance their awareness of the meaning of accessibility in education.

- Participants will gain competence and confidence in working with students by focusing on legislation, universal design, and assistive technologies.

Coursera. (2019). *Disability Awareness and Support | Coursera*. [online] Available at: https://www.coursera.org/learn/disability-awareness [Accessed 2 Jul. 2019].

Readings

The following article describes three phases of progress for inclusion of students with disabilities in higher education: Advocacy, Accommodation, and Accessibility:

Perez, L. (May/June 2015). From accommodation to accessibility: Creating learning environments that work for all, EDUCAUSE Review, 50 (3).

https://er.educause.edu/articles/2015/4/from-accommodations-to-accessibility-creating-learning-environments-that-work-for-all

Review the following sections in the report World Health Organization: World Report of Disability, World Health Organization and World Bank: https://www.who.int/disabilities/world_report/2011/en/

Understanding Disability (pgs 1-10)

Disability-A Global Picture (pgs 19-46)

Review several of the publications on the website Introduction to the ADA.

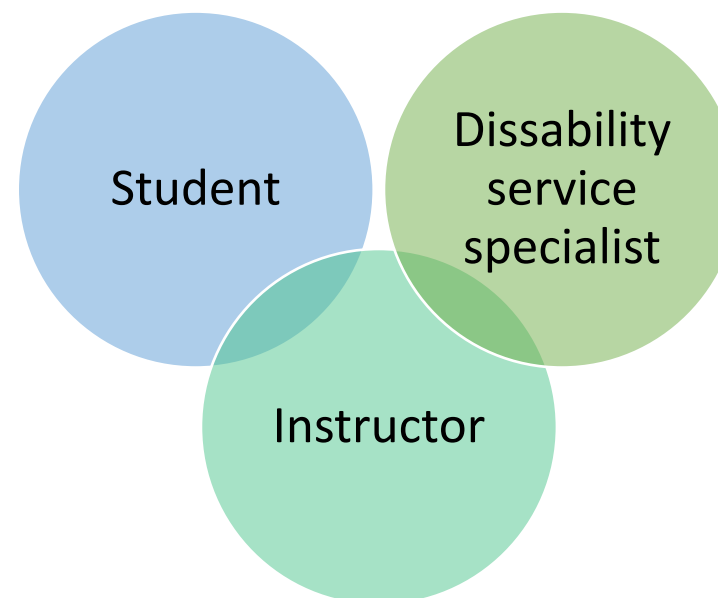Cheatsheets are one-page recourses for creating accessible documents

http://ncdae.org/resources/cheatsheets/pdf/electronic-content.pdf

Tips and Tools: Principles of Accessible Design shares some principles of accessible design. http://ncdae.org/resources/factsheets/principles.php

Course Design that Meets More Learners' Needs from Campus Technology shares information on how several university campuses are approaching universal design for learning (UDL). https://campustechnology.com/Articles/2015/03/04/Course-Design-That-Meets-More-Learners-Needs.aspx?Page=2

Introduction

A theme you will hear repeatedly throughout the course, is that creating a positive learning experience for students with disabilities, requires collaboration and communication among the students, instructor, and disability services specialists.

Student

Dissability service specialist

Instructor

- C:\Angela\2019 with health and friendship\DECIDE PROJECT\Limerick training\Limerick_ppt\What is a dissability.mp4

WHAT IS A DISSABILITY ?

Coursera. (2019). *Disability Awareness and Support | Coursera*. [online] Available at: https://www.coursera.org/learn/disability-awareness [Accessed 2 Jul. 2019].

Legislation

- C:\Angela\2019 with health and friendship\DECIDE PROJECT\Limerick training\Limerick_ppt\Legislation.mp4
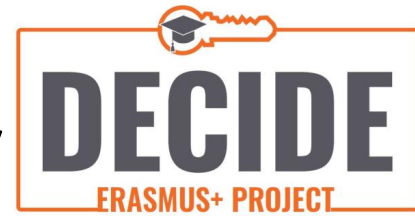
LEGISLATION

Coursera. (2019). *Disability Awareness and Support | Coursera*. [online] Available at: https://www.coursera.org/learn/disability-awareness [Accessed 2 Jul. 2019].

C:\Angela\2019 with health and friendship\DECIDE PROJECT\Limerick training\Limerick_ppt\Obtaining services.mp4

OBTAINING SERVICES

Coursera. (2019). *Disability Awareness and Support | Coursera*. [online] Available at: https://www.coursera.org/learn/disability-awareness [Accessed 2 Jul. 2019].

DISSCUTIONS Legislation In Your Country

The purpose of this discussion is to compare and contrast the legislation related to disabilities in various countries.

- What is the key legislation related to students with disabilities in your country?

- Are students aware of their rights and responsibilities?

- If there is no legislation, how might the United Nations Convention on the Rights of Persons with Disabilities be applied in your country?

- HYPERSAY

Coursera. (2019). *Disability Awareness and Support | Coursera*. [online] Available at: https://www.coursera.org/learn/disability-awareness [Accessed 2 Jul. 2019].
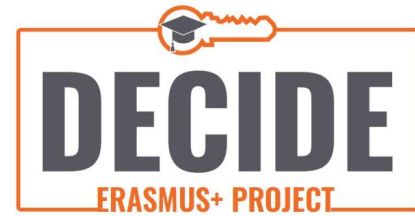
M7.1 Accommodations and Assistive Technology

- In M7.1 we describe the process used for deciding on reasonable accommodations for students with disabilities and the role of Disability Services in making this determination.

- We identify specific accommodations that students with disabilities might need in order to fully participate in life at the university.

Coursera. (2019). *Disability Awareness and Support | Coursera*. [online] Available at: https://www.coursera.org/learn/disability-awareness [Accessed 2 Jul. 2019].

Readings

- https://www.nichd.nih.gov/health/topics/rehabtech/conditioninfo/device

What are some types of assistive devices and how are they used?

Some examples of assistive technologies are:

- Mobility aids, such as wheelchairs, scooters, walkers, canes, crutches[1], prosthetic devices, and orthotic devices.[2]
- Hearing aids to help people hear or hear more clearly.[3]
- Cognitive aids, including computer or electrical assistive devices, to help people with memory, attention, or other challenges in their thinking skills.[3]
- Computer software and hardware, such as voice recognition programs, screen readers, and screen enlargement applications, to help people with mobility and sensory impairments use computers and mobile devices.[4,5]
- Tools such as automatic page turners, book holders, and adapted pencil grips to help learners with disabilities participate in educational activities[4,6,7]
- Closed captioning to allow people with hearing problems to watch movies, television programs, and other digital media.[4]
- Physical modifications in the built environment, including ramps, grab bars, and wider doorways to enable access to buildings, businesses, and workplaces.[8,9]

- Assistive technology.mp4

ASSISTIVE TECHNOLOGY

WEB ACCESIBILITY

The major categories of disability types are:

Visual

Blindness, low vision, color-blindness

Hearing

Deafness and hard-of-hearing

Motor

Inability to use a mouse, slow response time, limited fine motor control

Cognitive

Learning disabilities, distractibility, inability to remember or focus on large amounts of information

Webaim.org. (2016). *WebAIM: Introduction to Web Accessibility*. [online] Available at: https://webaim.org/intro/ [Accessed 14 Jul. 2019].

Web Accessibility

1. **Perceivable:** because they cannot perceive (see) visual information such as graphics, layout, or color-based cues
2. **Operable:** because they usually depend on a keyboard to operate (navigate) web content functionality, rather than a mouse
3. **Understandable:** because they cannot understand content that is presented in an illogical linear order, or which contains extraneous text not meant to be read word for word or character by character (such as long web addresses), etc.
4. **Robust:** because the assistive technologies used by the blind are not always capable of accessing a broad range of technologies, especially if those technologies are new

Screen readers

Key Concepts for Blindness

Challenges	Solutions
Users generally do not use a mouse	Don't write scripts that require mouse usage. Supply keyboard alternatives.
Images, photos, graphics are unusable	Provide text descriptions, in `alt` text and, if necessary, longer explanations (either on the same page or with a link to another page).
Users often listen to the web pages using a screen reader	Allow for users to skip over navigational menus, long lists of items, ASCII art, and other things that might be difficult or tedious to listen to.
Users often jump from link to link using the `Tab` key	Make sure that links make sense out of context ("click here" is problematic).
Frames cannot be "seen" all at once. They must be visited separately, which can lead to disorientation.	Don't use frames unless you have to. If you use them, provide frame titles that communicate their purpose (e.g. "navigational frame", "main content").
It may be difficult for users to tell where they are when listening to table cell contents	Provide column and row headers (`<th>`). Make sure that tables—especially those with merged cells—make sense when read row by row from left to right.
Complex tables and graphs that are usually interpreted visually are unusable	Provide summaries and/or text descriptions.
Not all screen readers support image maps	Supply redundant text links for hot spots in image maps
Colors are unusable	Do not rely on color alone to convey meaning
Users expect links to take them somewhere	Don't write scripts in links that don't have true destinations associated with them (e.g. `href="javascript: function(this)")`

Screen reader.mp4

Screen reading software lets blind people use the internet

blind people use the internet,

Screen Magnifiers

- [Types of Low Vision](#)
  - [Macular degeneration](#)
  - [Glaucoma](#)
  - [Diabetic retinopathy](#)
  - [Cataract](#)
- [Screen Magnifiers](#)
- [High Contrast](#)
- [Overriding Font and Background Colors](#)
- [Horizontal Scrolling](#)
- [Key Concepts](#)

This is a software program that zooms in on a small area of the screen, allowing people with low vision to see it more clearly. Common screen magnifiers include ZoomText and MAGic.

Low vision concepts

Key Concepts for Low Vision

Challenges	Solutions
Text in graphics does not enlarge without special software, and looks pixilated when enlarged	Limit or eliminate text within graphics
Users may set their own font and background colors	Allow them to do so by using as much real text as possible, rather than text within graphics.
Screen magnifiers reduce the usable window size	To reduce that amount of horizontal scrolling, use relative rather than absolute units (e.g. use percentages for table widths instead of pixels)

https://webaim.org/articles/visual/lowvision

Key Concepts for Color-blindness

Challenges	Solutions
Reds and greens are often indistinguishable	This is not normally a problem except in cases where the colors convey important information. Under these circumstances you will need to either change the graphic or provide an additional means of obtaining the same information. Oftentimes the most appropriate way to do this is to provide an explanation in the text itself.
Other colors may be indistinguishable	Same as above.

https://webaim.org/articles/visual/colorblind

Auditory Disabilities

Degrees of Hearing Loss

Mild hearing loss:
The inability to hear sounds below about 30 decibels. Speech can be difficult to understand, especially if background noises are present.

Moderate hearing loss:
The inability to hear sounds below about 50 decibels. A hearing aid may be required.

Severe hearing loss:
The inability to hear sounds below about 80 decibels. Hearing aids are useful in some cases, but are inadequate in others. Some individuals with severe hearing loss communicate principally through sign language; others rely on lip-reading techniques.

Profound hearing loss:
The absence of the ability to hear, or the inability to hear sounds below about 95 decibels. Like those with severe hearing loss, some individuals with profound hearing loss communicate principally through sign language; others rely on lip-reading techniques.

Auditory Disabilities

○ Deafness as a Culture
○ Sign Languages and "Lip Reading"

In the United States, for example, the most common sign language is American Sign Language, or ASL.

In Britain, British Sign Language, or BSL, is the most common. In Australia, Australian Sign Language, or Auslan, is the most common.

Signed English is another variation, although it is less of a full-featured language and more of a translation of spoken English into a system of signs.

When you branch out to France, Sweden, South America, and Asia, the differences are even more pronounced.

Asian sign languages have almost nothing in common with American or European sign languages, and have no common linguistic root. There have been some attempts to make an international version of sign language, known as Gestuno, but this committee-developed system of signing is inferior to the world's richer natural sign languages and has seen only limited use.

Motor Disabilities

Types of Motor Disabilities

- Traumatic Injuries
  - Spinal cord injury
  - Loss or damage of limb(s)
- Diseases and Congenital Conditions
  - Cerebral palsy
  - Muscular dystrophy
  - Multiple sclerosis
  - Spina bifida
  - ALS (Lou Gehrig's Disease)
  - Arthritis
  - Parkinson's disease
  - Essential tremor

Key Concepts: Motor Impairments

Challenges	Solutions
Users may not be able to use the mouse.	Make sure that all functions are available from the keyboard (try tabbing from link to link).
Users may not be able to control the mouse or the keyboard well.	Make sure that your pages are error-tolerant (e.g. ask "are you sure you want to delete this file?"), do not create small links or moving links.
Users may be using voice-activated software.	Voice-activated software can replicate mouse movement, but not as efficiently as it can replicate keyboard functionality, so make sure that all functions are available from the keyboard.
Users may become fatigued when using "puff-and-sip" or similar adaptive technologies.	Provide a method for skipping over long lists of links or other lengthy content.

Assistive Technologies

- Assistive Technologies
  - Mouth stick
  - Head wand
  - Single-switch access
  - Sip and puff switch
  - Oversized trackball mouse
  - Adaptive keyboard
  - Eye tracking
  - Voice recognition software
 - Other assistive technologies

USING MOBILE APPS

By Diane Brauner on November 30, 2017

iOS 11 has several new features, including the Screen Recorder feature. The screen recorder feature enables you to capture of video recording of what you are doing on your iPhone or iPad - the video even captures your voice narration and VoiceOver!

Screen Recording for Teachers

There are many purposes for using the screen recording tool. Here are a few educational ideas:

- Create quick video tutorials for students

  - Instructions on how to use an app, accessibility feature, etc.
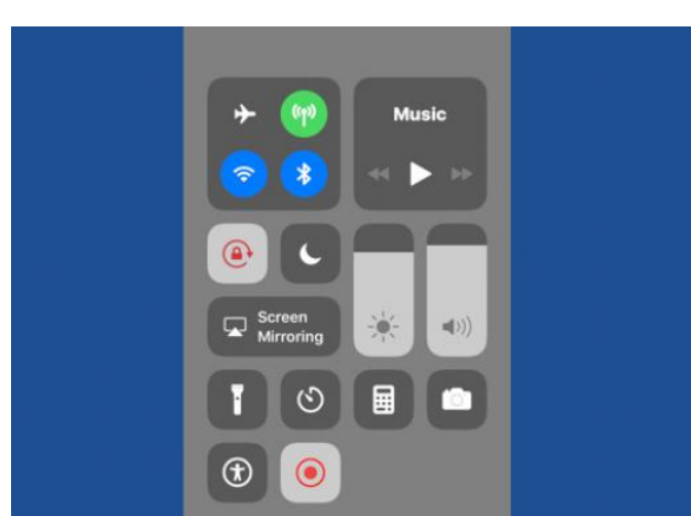
Related Courses

Coding Activities Workshop
Onsite Training - September 19, 2019

Multimedia Accessibility in the Digital Classroom: Strategies for Students with Visual Impairments
Online Class - June 17, 2019

- Create quick video tutorials for students

  - Instructions on how to use an app, accessibility feature, etc.

  - Sample videos of how to complete a homework problem

- Create quick video tutorials for mainstream classroom teachers

  - Demonstrate accessibility features/commands for mainstream classroom teachers

  - Demonstrate how to create accessible materials such as how to add alt tag descriptions or how make an accessible PowerPoint

  - Explain how to turn on/off accessibility features; this is especially important if your student needs assistance

https://www.perkinselearning.org/technology/blog/screen-recorder-ios-11-feature

Assistive technology

- Assistive Technology.docx

- Glossary

- GLOSSARY.docx

M7.2 Accessible Design

- In M7.1 we reviewed disability definitions and legislation, plus the disability services, accommodations, and technologies that you might find on your college campus.
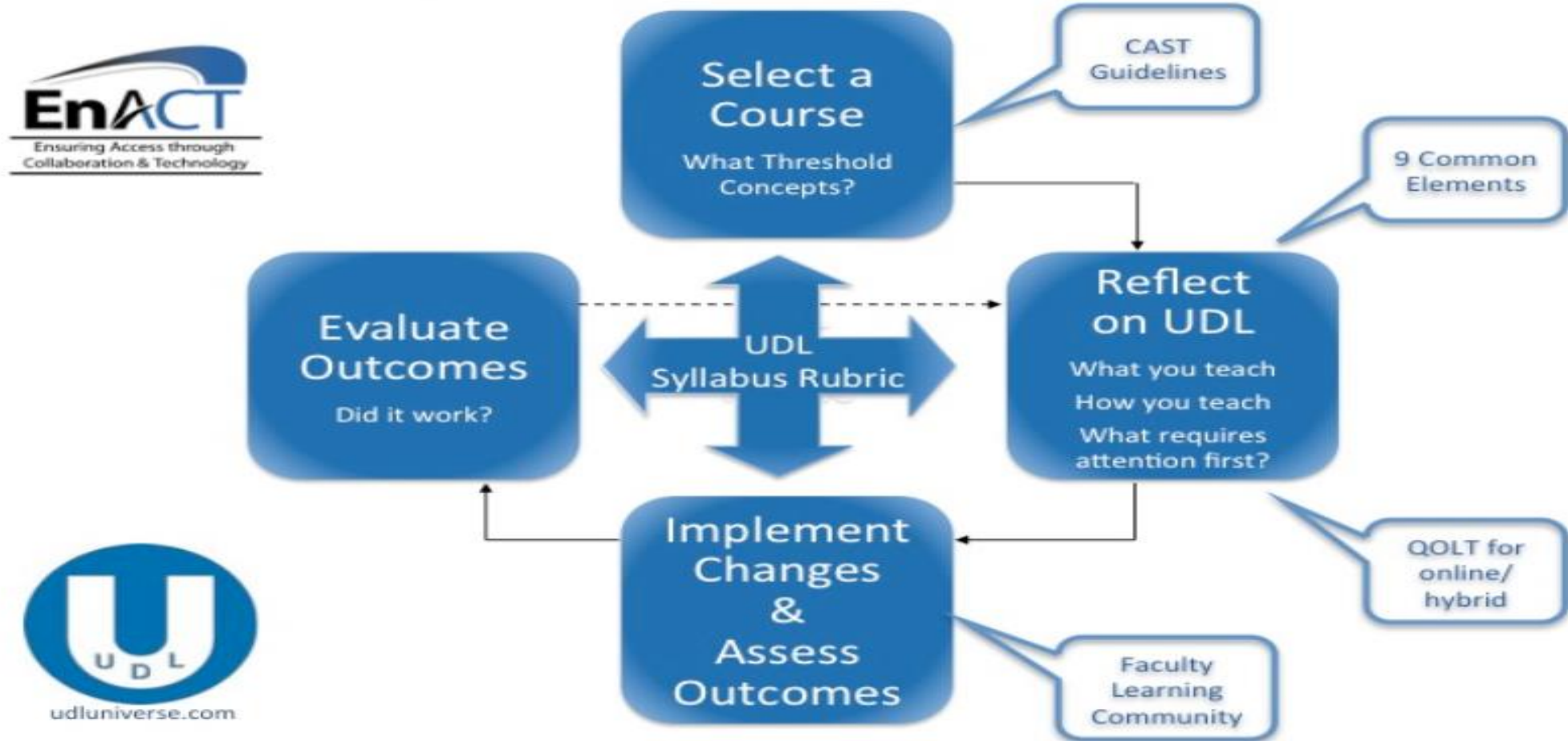
Universal Design Origins

UDL has its roots in Universal Design, a term coined by Ronald L. Mace (North Carolina State University) in 1972, as a way to describe the concept of designing all products and the built environment to be aesthetic and usable to the greatest extent possible by everyone, regardless of their age, ability, or status in life.

The Disability Act 2005 defines Universal Design as:

1. The design and composition of an environment nso that it may be accessed, understood, and used

   1. To the greatest possible extend

   2. In the most independent and natural manner possible

   3. In the widest possible range of situations

   4. Without the need for adaptation, modification, assistive devices or specialized solutions, by any persons of any age or size or having any particular physical, sensory, mental health or intellectual ability or disability, and

2. Means, in relation to electronic systems, any electronics-based process of creating products, services or systems so that they may be used by any person.

The following Course Redesign Process graphic represents the steps and primary resources to be used when working with faculty to make UDL course changes.

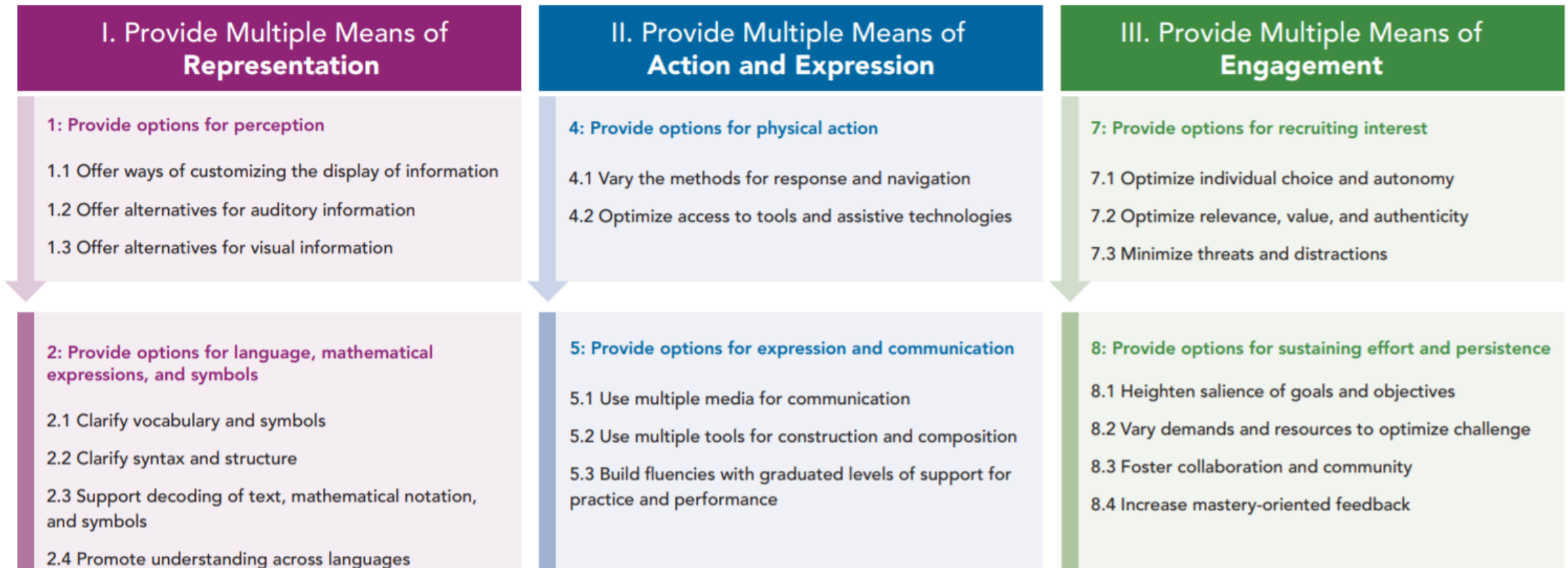Engaging in Reflective Teaching through UDL

UDL_Syllabus_Rubric_UPDATED_2-9-2012.pdf

Universal Design for Learning: A Rubric for Evaluating Your Course Syllabus

A well-designed syllabus offers more than the instructor's contact information and a course outline. It also provides information about course goals and objectives, grading procedures, support services, and course policies regarding class participation, missed examinations, late assignments, and academic integrity. ~Howard University

Elements	Traditional Syllabus	Enhanced Syllabus	Exemplary Syllabus	Tips/Tools
Instructor Information	Syllabus provides a single way to way to contact instructor for student questions or concerns.	Syllabus offers varied ways to contact instructor for student questions or concerns.	Syllabus offers varied ways to contact instructor for student questions or concerns and provides brief overview of instructor.	
Textbooks	Syllabus lists required and recommended textbooks.	Syllabus lists required and recommended textbooks with information about where they can be purchased. Short statement provided as to why the textbook was selected.	Syllabus lists required and recommended textbooks with information about where they can be purchased. Electronic equivalent provided or texts ordered early to ensure timely conversion in an alternative format. Short statement provided as to why the textbook was selected.	
Course Assignments (*explanation*)	Syllabus identifies all learning objectives, course requirements/ assignments, and appropriate due dates.	Syllabus identifies and explains all learning objectives, course requirements/ assignments, and appropriate due dates.	Syllabus clearly explains and links all learning objectives, course requirements/assignments, and appropriate due dates.	
Course Assignments (*examples*)	Syllabus provides information on how to complete major course projects, activities or papers.	Syllabus provides detailed guidance on how to complete major course projects, activities or papers.	Syllabus provides detailed guidance on how to complete major course projects, activities or papers and offers links to examples and illustrations as appropriate.	
Course Assignments (*submission*)	Syllabus requires students to submit course assignments in a single or specific way.	Syllabus allows for specific students to submit course assignments in alternative formats with prior instructor approval.	Syllabus provides multiple ways for all students to submit course assignments.	

CAST_UDL_Guidelines.pdf

Universal Design for Learning Guidelines

I. Provide Multiple Means of **Representation**	II. Provide Multiple Means of **Action and Expression**	III. Provide Multiple Means of **Engagement**
1: Provide options for perception	**4: Provide options for physical action**	**7: Provide options for recruiting interest**
1.1 Offer ways of customizing the display of information	4.1 Vary the methods for response and navigation	7.1 Optimize individual choice and autonomy
1.2 Offer alternatives for auditory information	4.2 Optimize access to tools and assistive technologies	7.2 Optimize relevance, value, and authenticity
1.3 Offer alternatives for visual information		7.3 Minimize threats and distractions
2: Provide options for language, mathematical expressions, and symbols	**5: Provide options for expression and communication**	**8: Provide options for sustaining effort and persistence**
2.1 Clarify vocabulary and symbols	5.1 Use multiple media for communication	8.1 Heighten salience of goals and objectives
2.2 Clarify syntax and structure	5.2 Use multiple tools for construction and composition	8.2 Vary demands and resources to optimize challenge
2.3 Support decoding of text, mathematical notation, and symbols	5.3 Build fluencies with graduated levels of support for practice and performance	8.3 Foster collaboration and community
2.4 Promote understanding across languages		8.4 Increase mastery-oriented feedback

Nine_Common_UDL_Elements_2-10-12.pdf

Nine Common Elements of Universal Design for Learning in Higher Education

General Elements	Strategy
1. Course Syllabus	Provide a course syllabus that clearly identifies all course requirements, course expectations and due dates.
2. Course Syllabus	Provide contact information so students have varied ways to contact you with questions or concerns.
UDL Representation Elements	
3. Teaching Style	Provide multiple ways of clearly identifying and explaining essential course concepts (highlight the main ideas in different ways).
4. Teaching Style	Offer multiple ways to teach important concepts which incorporate different teaching styles (present information visually and verbally).
5. Teaching Resources	Provide examples and/or illustrations of all major course assignments (offer examples of successful work or assignment expectations).
UDL Engagement Elements	
6. Student Participation in Learning	Offer varied ways to involve students in the learning process (use lectures, small group work, class discussion, hands-on activities).
7. Student Feedback	Offer clear and specific feedback on assignments and encourage re-submission of assignments, as appropriate.
UDL Expression Elements	
8. Student Expression of Learning	Provide alternatives for how students can complete major course assignments (offer different ways to complete class activities).
9. Student Expression of Learning	Provide clear guidelines and/or evaluation rubrics for all major course assignments (how assignments are structured, submitted & graded).

Syllabus Disability Statement

Disability Statement Definition

A statement placed on course syllabi indicating a faculty member's willingness to provide reasonable accommodations to a student with a disability.

Rationale

The statement should be an invitation to students who have disabilities to meet with the faculty member, in a confidential environment, to review course requirements and to discuss their need for accommodations. Establishing reasonable accommodations should be considered on a case-by-case basis because of the functional limitations of each individual and the specific demands of the course will vary.

Principles

- A statement on the syllabus and an announcement in class **normalizes** the accommodation process by treating it as just another part of the course.

- The statement can be altered to meet the **specific needs** of your department/courses.

- It is recommended that instructors for multiple section courses and labs **come to an agreement** on the syllabus statement used.

"A disability statement opens the lines of communication making the student feel more comfortable approaching faculty to disclose their disability and need for accommodation". Jennifer Aaron, Student self-advocate

Guidelines for Creating a Complete and Accessible Syllabus

Definition

The term syllabus refers to a written course description that provides the objectives, assignments, and schedule. The syllabus serves as a contract between the faculty member and the student, outlining expectations and requirements for successful completion of the course. Included in a syllabus is a disability statement.

Essential Elements of an Accessible Syllabus

◆ **Basic Information:** Course title, course number, number of credits, current year and term, meeting time and location, your name, location of your office and office phone number, email address, office hours, appointment times, information on teaching assistants, and a syllabus disability statement.

◆ **Prerequisites:** Classes, skills, and information required prior to enrolling in course.

◆ **Course Objective:** Information to be covered, general themes, and course activities.

◆ **Learning Objectives:** A precise statement(s) linking subject matter and student performance. The objective includes competencies, skills, and knowledge students should acquire by the end of the course.

◆ **Textbooks/Readings:** Titles, authors, editions, and local book retailers. You should always attempt to order textbooks for which electronic format is available. For information on available alternate format of a book, contact the publisher.

◆ **Course Schedule:** Supply schedule of events; include discussion topics, exam dates, assignments, and readings to be completed for each day.

◆ **Additional Required Materials:** Any additional course material such as calculator or art supplies that the student has to buy to successfully complete the course. Information on such materials needs to be as detailed and specific as possible.

◆ **Grades:** Describe how you are going to calculate the grades and give an explanation of what is required to receive a particular grade.

◆ **Course Policies:** Specify how you deal with tardiness, absences, late assignments, test/assignment make-ups, and academic misconduct.

The **Accessibility Assignment** consists of three parts:

- A disability statement for a course syllabus
- An example of a type of disability with appropriate accommodations and assistive technologies
- A workplace action plan to enhance accessibility

- SurveyMonkey/Hypersay

M7. 3   Design and develop course materials

We use the term "universal design" to emphasize the inclusive design of instruction to make it meaningful and useful for all students.

We also look at best practices for documents such as using clear fonts, organizing text with headings, and describing images with alternative text.

http://ncdae.org/resources/cheatsheets/

Increasing universal access by developing *educational resources*

Cheatsheets

These one-page accessibility resources, or "cheatsheets," have been developed to assist anyone who is creating accessible content. These free resources are catered to less-technical individuals, such as faculty and staff.

Microsoft Office
- Word
- PDF Conversion in Word
- PowerPoint
- Excel

Adobe
- Acrobat XI
- Acrobat X
- InDesign CS5.5

Other Accessibility Topics
- Creating Accessible Electronic Content
- Identifying Web Accessibility Issues
- Captioning YouTube Videos

[UDL.mp4](UDL.mp4)

UNIVERSAL DESIGN FOR LEARNING

[Document Design.mp4](Document%20Design.mp4)

DOCUMENT DESIGN

Accessibility in Online Courses – Trends, Tips & Tools

Current trends that may affect access to online courses

Online courses are incorporating more complex pieces of multimedia than ever before. The use of multimedia presents a challenge at times
for accessibility and it is recommended that faculty members make their materials accessible as they are designing and creating them.
For example, videos, lecture capture, and screencasts should be captioned. Narrated PowerPoints should be captioned or the audio
portion can be transcribed and placed in the notes section.

Current trends impacting online courses in higher education:

1. Increased use of Complex Media/Software
   a. Narrated PowerPoint Presentations
   b. Video Lecture Capture (e.g., Adobe Connect, Blackboard Collaborate, Tegrity)
   c. Screencasting software (e.g., Camtasia, Captivate)
   d. Video (e.g.,YouTube, Vimeo)
2. Increased trends in course delivery methods include:
   a. MOOCs
   b. Flipped Classrooms
3. Increased use of Mobile Technology
   a. Mobile Smart Phones (e.g., iPhone, Android, Windows Phone)
   b. Wearables (e.g., Google glasses, smart watches)
   c. Tablet Computers (e.g., iPad, Android, Windows Surface)
   d. E-book Readers (e.g., Kindle, Nook)

Some of future trends impacting online courses in higher education

1. Increased use of Social Media (e.g., Facebook, Twitter, LinkedIn, YouTube) as a course requirement
2. Cloud Programs (e.g., Google Apps, Microsoft Office 365)
3. With the renewed focus on competency-based learning and personalized learning, adaptive learning products (e.g., RealizeIT, Knewton, LEAP, Adapt Courseware, ALEKS, etc.) are growing in numbers and finding their way into mainstream education.

Tips and Strategies for Building Accessible Courses -I

1. Create Accessible Online Course Pages
   a. The most accessible documents include:
      i. HTML – follow the WCAG 2.0 guidelines to create accessible HTML pages
      ii. MSWord – follow the Microsoft Of f ice's accessibility guide to create accessible MSWord documents
      iii. PDF documents (add sparingly). Follow the Adobe's guide for creating accessible PDFs
2. Add/Create Accessible Media
   a. PowerPoint
      i. Add alternative text to graphs, photos, other images
      ii. Use Microsoft's Accessibility Checker to check for accessibility issues in Word, Excel, and PowerPoint
   b. Narrated PowerPoints
      i. Transcribe audio
      ii. Add transcription to PowerPoint Notes section or caption using accessible screencast software (e.g., Camtasia or Captivate)
   c. Screencasts

Tips and Strategies for Building Accessible Courses –II

i.   Create transcripts to add captions.
ii.   Use programs such as Camtasia or Captivate to create accessible screencasts
d. Video Lecture Capture
i.   Caption live (e.g., Adobe Connect)
ii.   Caption later (e.g., Tegrity)
3. Captioning Tools
a. Do-It-Yourself Caption Systems
i.   YouTube: Add subtitles and closed captions to your YouTube videos (must have a YouTube account):
https://support.google.com/youtube/answer/2734796?hl=en
ii.   Amara http://amara.org/en/YouTube Automatic Captions
iii. http://teach.ucf.edu/resources/accessibility-tips/#audio
4. Self-Created Videos
a. Create transcripts
i.   Ensures important points are covered
ii.   Easier to make updates/edits from semester to semester
iii. Easier to add captions
5. Other Video Sources
a. Search for videos with captions
b. Seek textbook publishers who offer captioned content
c. Request textbook publishers caption non-captioned items

General Strategies and Assistive Technology for Faculty and Students

Category	Definition	Online Strategies for Faculty	Online Strategies for Students	Assistive Technology
Cognitive Differences • Learning Disabilities • Attention Deficit Disorder • Autism Spectrum Disorder (ASD) • Traumatic Brain Injuries • Psychological	• May have oral/language/ processing differences • May take longer to complete activities than usual	• Provide estimated times required to complete each assignment. • Chunk and divide content into small sections so it is easier for your students to absorb and it requires less scrolling for easier content navigation. • Provide clearly written assignments and instructions. • Consider providing alternate ways to complete some assignments (e.g., video vs. PowerPoint vs. short paper).	• Self-advocacy Plan ahead • Take short, frequent breaks • Learn & practice time management strategies • Consider taking a smaller course load • Consider a peer mentor Consider registering with the • student disabilities services office	• Organizational software (e.g., Read & Write Gold) • Visual mapping software (e.g., Inspiration) • Ask what is available on your campus

Category	Definition	Online Strategies for Faculty	Online Strategies for Students	Assistive Technology
Hearing Differences	• Deaf: unable to hear • Hearing Impaired/Hard of Hearing: those who have some hearing	• Provide captions for any videos or • other audio-type online course materials (e.g., narrated PPT)	• Self-advocacy • Plan ahead • Consider peer support • Consider registering with the student disabilities services office on campus	• Communication Access Realtime Translation (CART) transcription and signing service • (refer to student disabilities office) • Assistive Listening Devices
Visual Differences • Blindness • Low Vision • Color Blindness	• Blindness: loss of • useful vision • Low Vision: has some useful vision	• Explain all images, charts, and graphs • in descriptive text • Low Vision/Colorblind: black text on white background is generally best; use care when including color; check for color accessibility	• Self-advocacy • Plan ahead • Consider peer support Consider registering with the • student disabilities services office on • campus	• Screen reading software (e.g., JAWS, NVDA, Window Eyes) • Braille Keyboard • Talking Feedback Calculator • Screen Magnification Software (e,g., Zoom Text)
Language Differences • ESOL (English for Speakers of Other Languages)	ESOL: the use or study of English by speakers of other languages	• Provide estimated times required to complete each assignment. • Chunk and divide content into small sections so it is easier for your students to absorb and it requires less scrolling for easier content navigation. • Provide clearly written assignments and instructions. • Provide captions to video and other transcripts for audio-only	• Consider registering with the • student disabilities services office on campus	

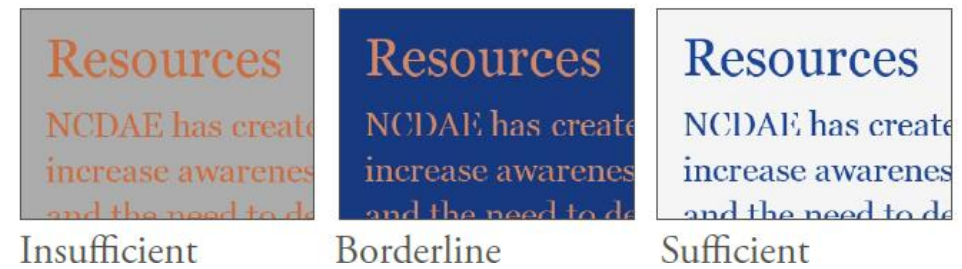# CREATING ACCESSIBLE ELECTRONIC CONTENT-I

The following handout provides general recommendations for **creating accessible content.** For **program-specific** instructions (e.g., Microsoft Word, PowerPoint, Adobe Acrobat) see our other cheatsheets **(ncdae.org/resources/cheatsheets/).**

Write clearly

- Use the **simplest** language appropriate for your content.
- Use illustrations, icons, etc. to **supplement** text.
- Check spelling, grammar, and readability.
- Be careful with abbreviations, jargon, complex language, or anything that might **confuse the reader.**
- AVOID THE USE OF ALL CAPS. IT CAN BE DIFFICULT TO READ.

Remember users with visual disabilities

- The use of color can enhance comprehension, but **do not use color alone** to convey information (e.g., "Items in red are due this week"). Using color is fine (e.g., "The items due this week have the red word 'due' next to them"), it just can't be the only way information is provided.
- Make sure that **color contrast is strong,** especially between text and background. This is true for images that include text as well.

Resources	Resources	Resources
NCDAE has create	NCDAE has create	NCDAE has create
increase awarenes	increase awarenes	increase awarenes
and the need to de	and the need to de	and the need to de
Insufficient	Borderline	Sufficient

CREATING ACCESSIBLE ELECTRONIC CONTENT-II

Use good semantic structure

- Organize your content using **true headings** (sometimes labeled as "H1" "Heading 1", etc.). The document title should be a first-level heading, the next level should be second-level, etc. **Avoid skipping levels** (e.g., jumping from first-level to third-level headings).

Introduction to Web Accessibility

Implementing Web Accessibility

Before anyone can make their web site accessible, they must understand accessibility, be committ
accessibility, learn how to implement accessibility, and understand their legal obligations.

Commitment and accountability

Awareness. The foundation of any kind of commitment to web accessibility is awareness of th

Most web developers are not opposed to the concept of making the internet accessible to peo
disabilities. Most accessibility errors on web sites are the result of lack of awareness, rather th
apathy.

Leadership. Understanding the issues is an important first step, but it does not solve the prob
especially in large organizations. If the leadership of an organization does not express commi

- **Do not** use descriptions that **rely only on sight** (e.g., "click on the square", "the box on the left side of the page", "The big blue text").
- Use **adequate text size,** usually no smaller than 10 point.

Be careful with data tables

- If the tools allow **provide headers** for data tables.

Plan Element	Yes/No	Supporting Documentation	Add N
An executive summary	Yes	Summary is attached	
A comprehensive timeline	Yes	3-year timeline in place	
Assignment of specific responsibilities	Yes	List of employee responsibilities	Our ne to a tr
Metrics, milestones and measurable steps	Yes	Attendance lists for the last 4 workshops attached	

CREATING ACCESSIBLE ELECTRONIC CONTENT-III

- Use *true bulleted and numbered lists* rather than creating it by using the tab key and an asterisk or number.
- Provide a *table of contents* for long documents.
- Provide a *descriptive* document or *page title.*
- Use *true columns* instead of other methods (e.g., using the "Tab" key to create columns one line at a time).

- Use the *simplest table structure* possible. Be careful with spanned rows or columns and avoid multiple levels of table headers.
- *Avoid* using tables for visual layout when possible.

American Printing House for the Blind

- [American Printing House for the Blind..ppt](#)

BIG

BOLD
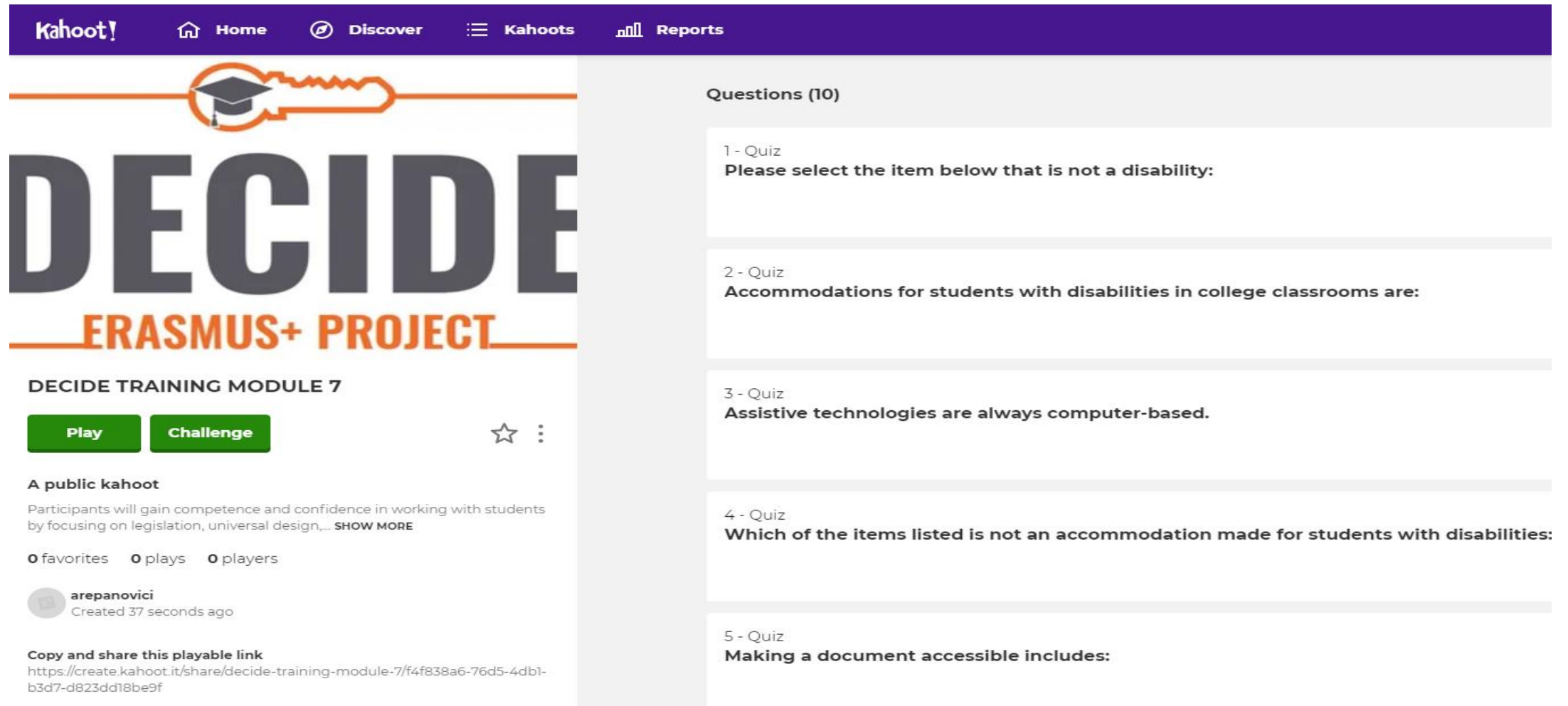
CONTRAST

M7 WORKSHOP

- Case study 1: deafness CASE STUDY 1.docx

- Case study 2: low vision CASE STUDY 2.docx

- Case study 3: ethics CASE STUDY 3.docx

- Discussions

M7 Assesment test

https://create.kahoot.it/share/decide-training-module-7/f4f838a6-76d5-4db1-b3d7-d823dd18be9f

DECIDE
ERASMUS+ PROJECT

Transilvania University of Brașov
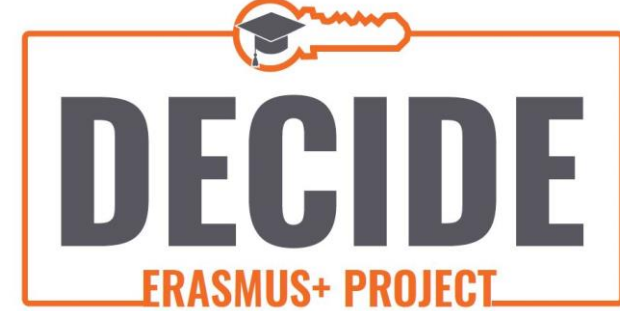
ROMANIA

Prof.dr.eng., dr.marketing Angela Repanovici

arepanovici@unitbv.ro

Рақмет сізге!

Rahmat!

Сипос!

Mulțumesc!

Ευχαριστώ!

Thank you!

Go raibh maith agat!

Vielen Dank!