

The background features a series of overlapping, concentric circles and lines in shades of gray and blue, creating a dynamic, abstract pattern. The main content is centered within a dark blue rectangular area.

Supporting Students with Disabilities in Your Classroom

Elaine Daidone

Susan Altman

Seham Mohamed



Accessibility

- **Accessibility is Everyone's Responsibility**
- **Moral vs Legal compliance**
- **Compliance but Social Justice**
- **Goal of accessibility is to provide opportunity for persons with disabilities to participate**



Disability Services Staff

- **Elaine Weir-Daidone, Counselor for Students with Disabilities**
- **Jason Holmwood, Counselor**
- **Sheema Majiddudin, Counselor**

- **Adapted Testing Center Staff**

- **Assistive Technology Lab – Seham Mohammed**

What is a Disability According to the Americans with Disabilities Act (ADA)?

- "a physical or mental impairment that substantially limits one or more major life activities of such individual."
- "Major life activities" involves such things as self-care, basic bodily functions, seeing, walking, and communicating.

Physical

Medical disorder

Visual, movement, Hearing

Mental

Learning Disability

Emotional Disability

Which Disabilities
are common at
MCC?

Autism Spectrum
Disorders

Speech/Language
Impairment

Intellectual
Disabilities

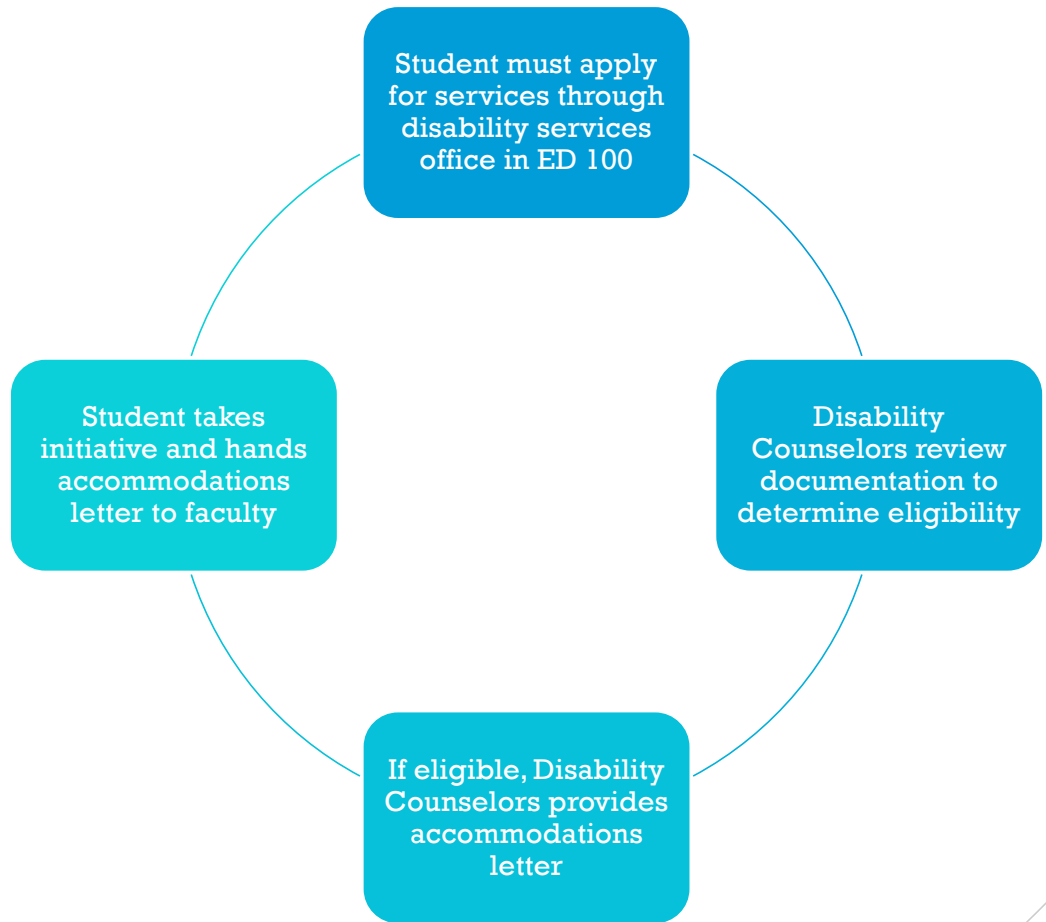
ADHD

Learning
Disabilities

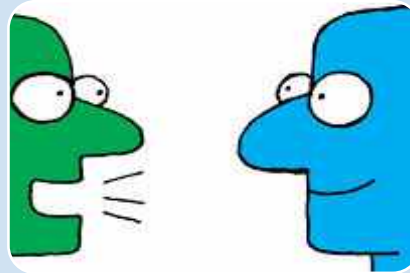
Psychological

Physical/Health
Disability/Sensory
Impairments

Disability Services Process



Challenges for Students



Students have
to initiate
disability
process

Students have
to
communicate
with
instructors
and
counselors

Students must
keep track of
and monitor
their learning

Department of Counseling Services
Edison Hall, Room 100 732-906-2546
disabilityservices@[middlesexcc.edu](mailto:disabilityservices@middlesexcc.edu)

Disability
Services
Available

- **Accommodations**
- **Adaptive Testing Services**
- **Assistive Technology Lab**
- **Interpreter Services**
- **Note taking Services**
- **Alternative Text Format**
- **Accessible Campus Environment**

The slide features a decorative background of curved lines in shades of gray, some solid and some dashed, sweeping across the top and bottom. On the left side, there is a blue rectangular box with a white border and a small white triangle pointing downwards at the bottom center, resembling a speech bubble. Inside this box, the text 'Faculty Suggestions' is written in white, with 'Faculty' on the top line and 'Suggestions' on the bottom line.

Faculty Suggestions

- **Syllabus statement**
- **Only provide disability accommodations to students who submit a LOA**
- **Be in touch with office if you are concerned about an accommodation (ie extended time on assignments)**
- **Adapted Testing Center procedures while remote**
- **Refer students who self-disclose psychiatric, medical or learning issues**



Executive Functioning and Students with Disabilities

- **Cognitive flexibility is a critical executive functioning skill that can be broadly defined as the ability to adapt behaviors in response to changes in environment (Cools, 2015). A skill of shifting**
- **Impacts Students with Disabilities more significantly: Spectrum Disorders, Generalized Anxiety Disorders, Personality Disorders**
- **Adjustment to shifts depends on individualized manifestations of disability**

Suggestions

- Give students sense of control, structure will reduce anxiety and increase flexibility
- Increased need to address student anxiety, predictable routines
- Be clear about expectations, behavioral, materials needed
- Be clear about how to participate
- Many students do better with pictures/sounds experiential rather than words
- Build in executive functioning into course “this is the most important”
- Pre-tests/post tests

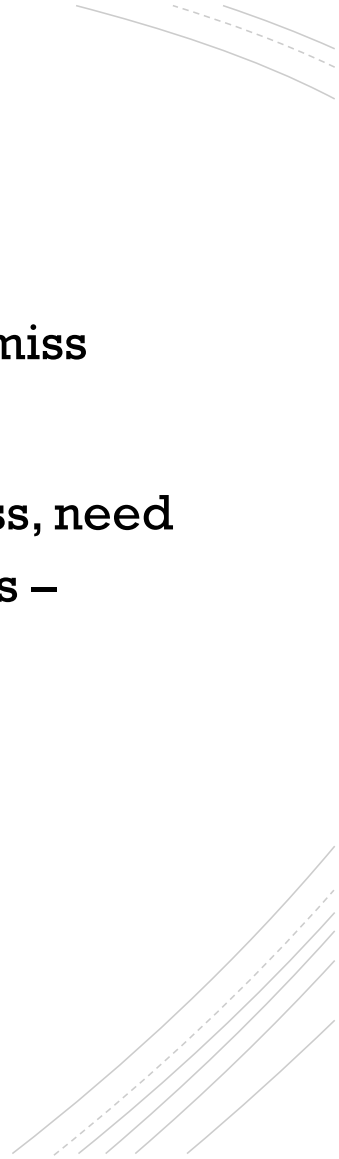


Distractions

- **Classes at home coping with distractions**
- **Concentration and focus may be impacted**
- **Time management skills especially difficult for students with Executive functioning issues**
- **Supports from DS: Coaching for time management/workspace set up/distractions**



Online/Remote Challenges for SWD

- Online is more difficult for some, miss sensory feedback
 - Some students coped in a live class, need accommodations in an online class – example HOH
 - Some students benefit from remote/online
- 

Assistive Technology Resources

Seham Mohamed, Assistive Technology
Lab Coordinator
smohamed@middlesexcc.edu

Johnson Learning Center, 243

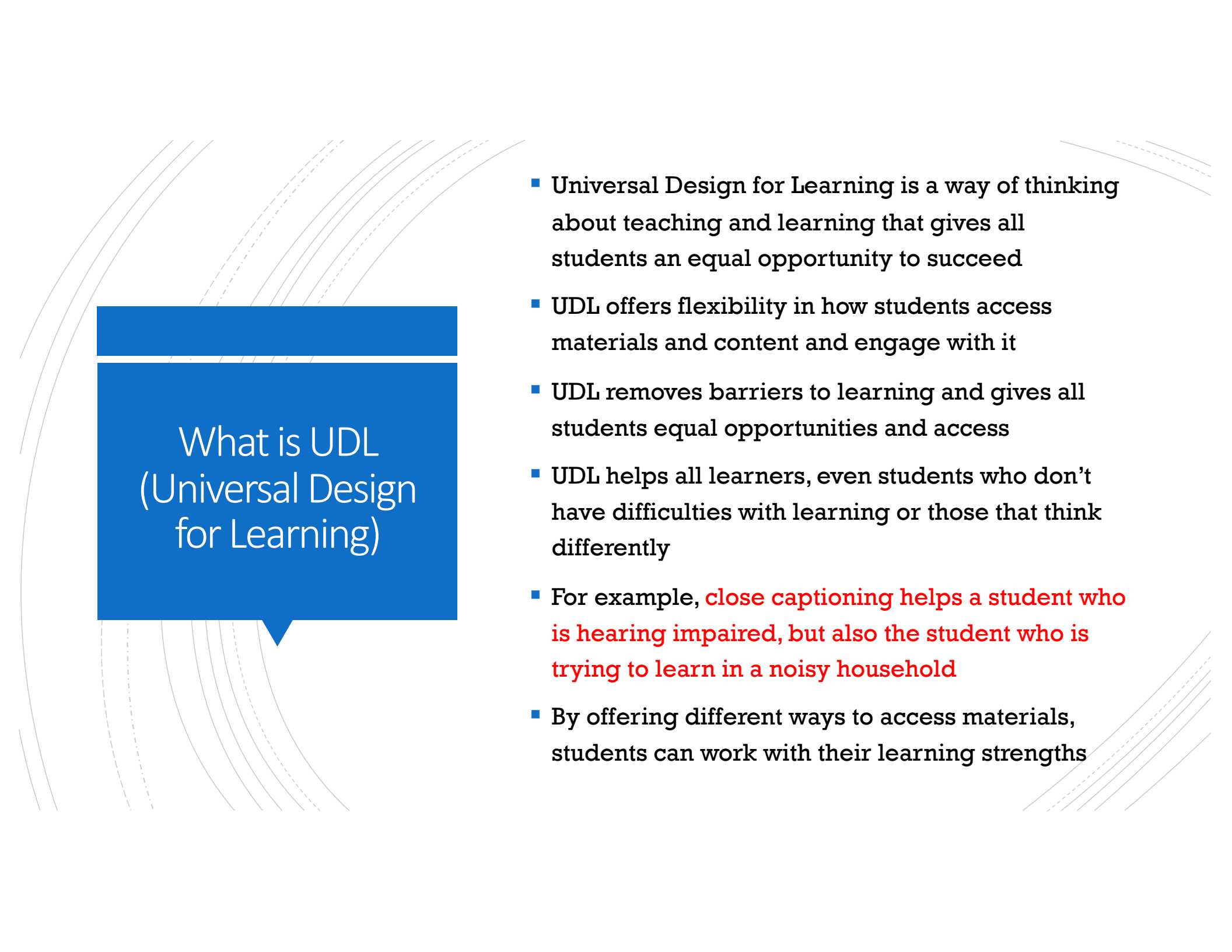
- 15 work stations/designated lab coordinator
- Adaptive equipment such as Digital Recorders, Smart Pens, and Magnifiers
- Various software applications such as Kurzweil 3000, Inspiration, Read & Write, Zoomtext, and SnapRead
- Books in alternative format
- Lending program and training

Accessibility Tools in Canvas and UDL

Provided by the Department of eLearning and CELT

Contact us at eLearning@middlesexcc.edu

CELT@middlesexcc.edu

The slide features a decorative background of thin, curved lines in shades of grey and blue, creating a sense of movement and depth. A prominent blue speech bubble shape is positioned on the left side, containing the title text.

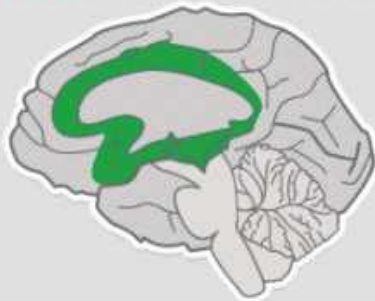
What is UDL (Universal Design for Learning)

- Universal Design for Learning is a way of thinking about teaching and learning that gives all students an equal opportunity to succeed
- UDL offers flexibility in how students access materials and content and engage with it
- UDL removes barriers to learning and gives all students equal opportunities and access
- UDL helps all learners, even students who don't have difficulties with learning or those that think differently
- For example, **close captioning helps a student who is hearing impaired, but also the student who is trying to learn in a noisy household**
- By offering different ways to access materials, students can work with their learning strengths

Universal Design for Learning Guidelines

[Visit the UDL Guidelines](#) 

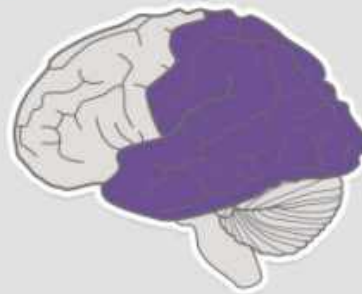
AFFECTIVE NETWORKS:
THE **WHY** OF LEARNING



Engagement

For purposeful, motivated learners, stimulate interest and motivation for learning.

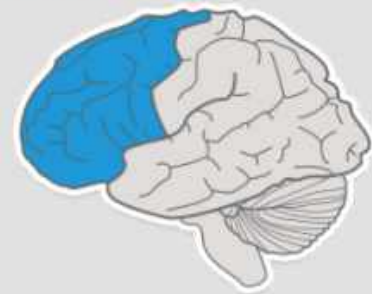
RECOGNITION NETWORKS:
THE **WHAT** OF LEARNING



Representation

For resourceful, knowledgeable learners, present information and content in different ways.

STRATEGIC NETWORKS:
THE **HOW** OF LEARNING



Action & Expression

For strategic, goal-directed learners, differentiate the ways that students can express what they know.

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.



Provide multiple means of **Action & Expression**

Strategic Networks
The "HOW" of Learning.



Access

Provide options for **Recruiting Interest**

- Optimize individual choice and autonomy
- Optimize relevance, value, and authenticity
- Minimize threats and distractions

Provide options for **Perception**

- Offer ways of customizing the display of information
- Offer alternatives for auditory information
- Offer alternatives for visual information

Provide options for **Physical Action**

- Vary the methods for response and navigation
- Optimize access to tools and assistive technologies

Build

Provide options for **Sustaining Effort & Persistence**

- Heighten salience of goals and objectives
- Vary demands and resources to optimize challenge
- Foster collaboration and community
- Increase mastery-oriented feedback

Provide options for **Language & Symbols**

- Clarify vocabulary and symbols
- Clarify syntax and structure
- Support decoding of text, mathematical notation, and symbols
- Promote understanding across languages
- Illustrate through multiple media

Provide options for **Expression & Communication**

- Use multiple media for communication
- Use multiple tools for construction and composition
- Build fluencies with graduated levels of support for practice and performance

Internalize

Provide options for **Self Regulation**

- Promote expectations and beliefs that optimize motivation
- Facilitate personal coping skills and strategies
- Develop self-assessment and reflection

Provide options for **Comprehension**

- Activate or supply background knowledge
- Highlight patterns, critical features, big ideas, and relationships
- Guide information processing and visualization
- Maximize transfer and generalization

Provide options for **Executive Functions**

- Guide appropriate goal-setting
- Support planning and strategy development
- Facilitate managing information and resources
- Enhance capacity for monitoring progress

Goal

Expert learners who are...

Purposeful & Motivated

Resourceful & Knowledgeable

Strategic & Goal-Directed

Best Practices

<http://udlguidelines.cast.org/>

Practices for Developing Accessible Learning Materials

Frey and King, OLC

- Consider multiple formats for content such as Word, PowerPoint, PDFs
- Create PowerPoints with Optimal Character Recognition rather than scanned images
- Design for the web: Clear consistent headings, Limit Navigation and Menu Buttons, Provide Instructions for Course Tools, Design with Color Contrast for Text and Background
- Use San Serif Text such as Verdana, use Alt-Text
- Provide edited transcripts and/or captioning for audio and video files
- Provide Instructor Contact information in prominent place
- Use Discussion Board or email instead of Chat as primary communication

https://secure.onlinelearningconsortium.org/effective_practices/ten-practices-developing-accessibility-material

Designing for users on the autistic spectrum



Do...

use simple colours



write in plain English

Do this.

use simple sentences and bullets



make buttons descriptive

Attach files

build simple and consistent layouts



Don't...

use bright contrasting colours



use figures of speech and idioms



create a wall of text



make buttons vague and unpredictable

Click here!

build complex and cluttered layouts



Designing for users with dyslexia



Do...

use images and diagrams to support text



align text to the left and keep a consistent layout



consider producing materials in other formats (for example, audio or video)



keep content short, clear and simple



let users change the contrast between background and text



Don't...

use large blocks of heavy text



underline words, use italics or write in capitals

DON'T DO THIS

force users to remember things from previous pages - give reminders and prompts



rely on accurate spelling - use autocorrect or provide suggestions



put too much information in one place



Designing for users who are Deaf or hard of hearing



Do...

Don't...

write in plain English

Do this.

use complicated words or figures of speech



use subtitles or provide transcripts for videos



put content in audio or video only



use a linear, logical layout



make complex layouts and menus



break up content with sub-headings, images and videos



make users read long blocks of content



let users ask for an interpreter when booking appointments



don't make telephone the only means of contact for users



Designing for users with physical or motor disabilities



Do...

Don't...

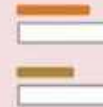
make large clickable actions



demand precision



give form fields space



bunch interactions together



design for keyboard or speech only use



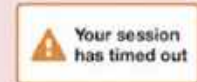
make dynamic content that requires a lot of mouse movement



design with mobile and touchscreen in mind



have short time out windows



provide shortcuts



tire users with lots of typing and scrolling



Designing for users with low vision



Do...

use good colour contrasts and a readable font size



publish all information on web pages



use a combination of colour, shapes and text



follow a linear, logical layout



put buttons and notifications in context



Don't...

use low colour contrasts and small font size



bury information in downloads



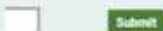
only use colour to convey meaning



spread content all over a page



separate actions from their context



Designing for users of screen readers



Do...

describe images and provide transcripts for video



follow a linear, logical layout



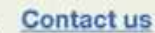
structure content using HTML5



build for keyboard use only



write descriptive links and headings



Don't...

only show information in an image or video



spread content all over a page



rely on text size and placement for structure



force mouse or screen use



write uninformative links and headings



Canvas Tools

UDOIT

- UDOIT is an accessibility checker created by the University of Central Florida
- One click allows UDOIT to assess your course content for accessibility issues
- It then provides fixes to improve accessibility in your course.

The screenshot shows the UDOIT User Guide page within a Canvas LMS interface. The page title is "UDOIT User Guide". The main content area features the UDOIT logo and a welcome message: "Welcome to the UDOIT User Guide created by Clemson University. UDOIT is an accessibility auditing tool for Canvas that was created by the University of Central Florida. This tool scans your Canvas course, generates a report of accessibility issues that could impede your students' ability to learn, and provides resources for addressing these issues. See the video introduction below to see how it works." Below the text is a video player titled "Center for Distributed Learning - Introduction to UDOIT". The left sidebar contains a navigation menu with items like Home, Announcements, Modules, Office 365, Purchase Course Materials, Library Guides, UDOIT (highlighted with a red box and a red arrow), Studio, Discussions, Rubrics, Pages, Assignments, Grades, People, Syllabus, Files, Outcomes, Quizzes, and Conferences. The right sidebar shows "Course Status" with "Unpublish" and "Published" buttons, and a list of course management actions such as "Import Existing Content", "Import from Commons", "Choose Home Page", "View Course Stream", "Course Setup Checklist", "New Announcement", "Student View", "View Course Analytics", and "View Course Notifications". At the bottom right, it says "Coming Up: Nothing for the next week".

Accessibility Checker

The screenshot shows a web browser window at the URL `middlesexcc.instructure.com/courses/18001/pages/welcome-page/edit`. The page title is "WELCOME PAGE". On the left is a navigation menu with items like Home, Announcements, Studio, Modules, Assignments, Zoom, Discussions, Grades, People, Pages, Files, Quizzes, Chat, Attendance, and Office 365. The main content area is an HTML editor with a toolbar and a text box containing "WELCOME PAGE". Below the editor is a rich text editor with a toolbar and a paragraph of text: "Welcome to ART 105-SP3 Introduction to Art!". A red arrow points to a "Check Accessibility" button in the top right corner of the rich text editor. Below the text is a photo of art supplies. At the bottom right of the page, there is a page number "505" and an "Options" dropdown menu set to "Only teachers".

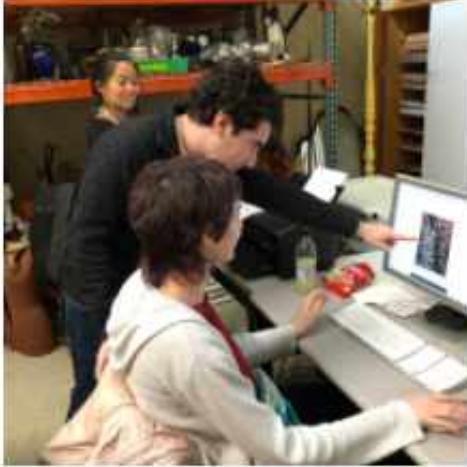
Accessibility Checker

The screenshot displays a course page editor interface. On the left is a navigation sidebar with icons for Home, Announcements, Studio, Modules, Assignments, Zoom, Discussions, Grades, People, Pages, Files, Quizzes, Chat, Attendance, and Office 365. The main editor area shows a page titled "WELCOME PAGE" with a red arrow pointing to the top right corner. The page content includes the heading "Welcome to ART 105-SP3 Introduction to Art!" and a photograph of art supplies. Below the page content, there are options for role selection, currently set to "Only teachers". On the right side, a floating "Accessibility Checker" window is open, displaying the message "No accessibility issues were detected." and an illustration of three balloons (pink, blue, and orange).

Adding
Alt-text

B I U A A I [Text Alignment Icons] [List Icons] [Table Icon] [Link Icon] [Image Icon] [Math Icon] [Undo Icon] [Redo Icon] [Text Color Icon] [Background Color Icon] [Font Size: 18pt] [Paragraph] [Accessibility Icon]

Embed Image



Welcome to ART 149-01: Art Studio Seminar!

533 words

Adding
Alt-text

Insert / Edit Image



Image Source

B



URL

Canvas

Flickr

http://example.com/image.png

Attributes

Alt text:



Describe the image to improve accessibility

Decorative Image

Indicates the image is for decorative purposes only and should not be read by screenreaders

Dimensions

 x

Aspect ratio will be preserved

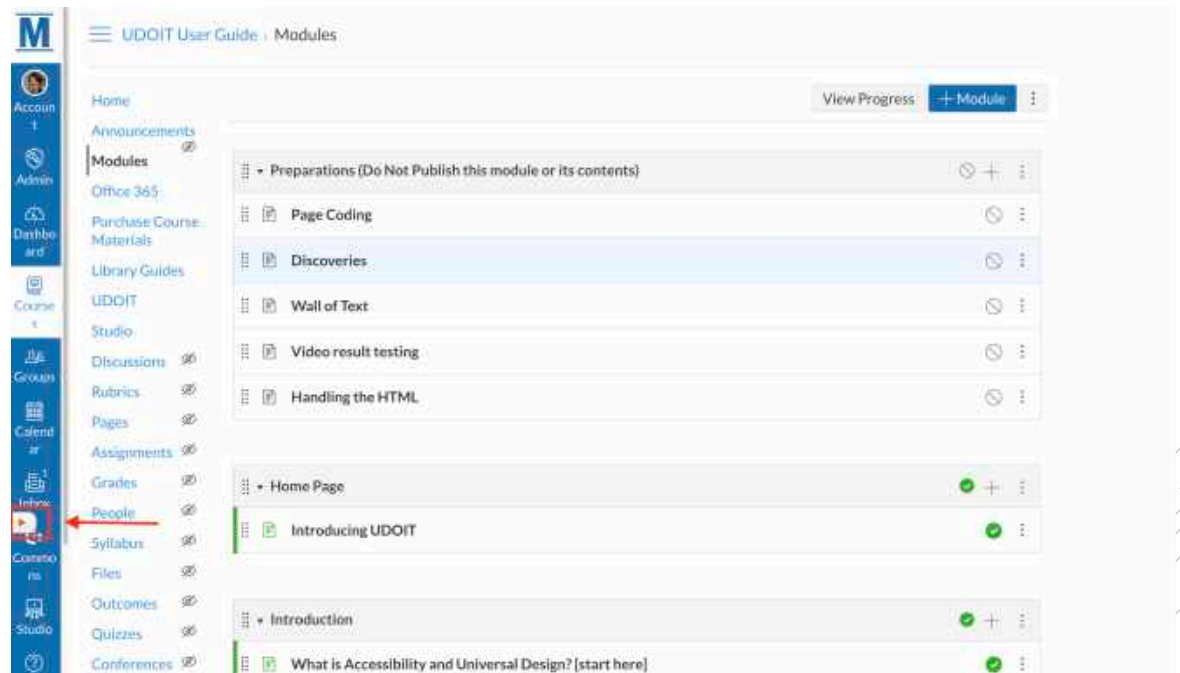
533 words

Cancel

Update

ReadSpeaker

- Every Canvas course shell comes with modules outlining ReadSpeaker
- ReadSpeaker is a screen reading tool which will read every page in Canvas to the student.
- Simply click on the little orange triangle found on every page.

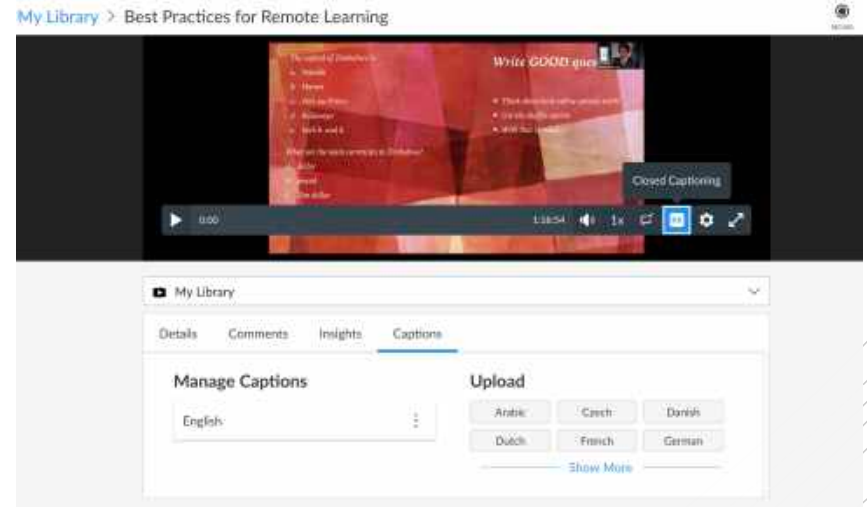


The screenshot displays a Canvas LMS course page titled "UDOIT User Guide | Modules". The left-hand navigation menu includes various icons, with a red arrow pointing to the ReadSpeaker icon (a small orange triangle with a white 'R'). The main content area shows a list of modules under the heading "UDOIT User Guide | Modules". The modules listed are: "Preparations (Do Not Publish this module or its contents)", "Page Coding", "Discoveries", "Wall of Text", "Video result testing", and "Handling the HTML". Below these, there are sections for "Home Page" and "Introduction", each containing a module titled "Introducing UDOIT" and "What is Accessibility and Universal Design? (start here)" respectively. The ReadSpeaker icon is visible in the bottom right corner of the page.

Video Captioning



- Both Studio and Zoom provide automatic captioning to ensure videos are accessible to all students



Student Resources

- Each Canvas Shell comes with a Module pointing students to resources available to help them become successful.

The screenshot displays the Canvas LMS interface. On the left is a navigation menu with items: Home, Studio, Syllabus, Announcements, Zoom, Attendance, Modules (highlighted), Grades, People, Office 365, Purchase Course Materials, Library Guides, Rubrics, LockDown Browser, Outcomes, Conferences, Discussions, Collaborations, and Files. The main content area shows a 'STUDENT RESOURCES' module with the following items:

Resource Name	Status
MCC Tutoring Services and Writing Center	Completed
MCC Student Services	Completed
Guidelines for Online Etiquette	Completed
Academic Integrity: What is It? and Why It Matters	Completed
MCC Help Desk	Completed

Below this, there is another module titled 'ReadSpeaker Resources for Students' with the following items:

Resource Name	Status
Getting Started.pdf	Completed
ReadSpeaker Student Flyer.pdf	Completed
webReader Accessibility Keys.pdf	Completed
Why Should I Use ReadSpeaker.pdf	Completed



Apply this to
your course

- **What will you do to make your course more accessible to help all learners?**
- **How can you support all learners in your classroom?**