Universal Design for Accessible Online Courses

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This coming fall 2018 CCSU is offering around 50 completely online classes and about 200 hybrid courses. Hybrid classes are a combo of in class and online content. If you estimate it at a conservative 20 students per class that’s about 5000 students taking classes online. That doesn’t even count the number of students enrolled in in-class courses that require blackboard.
Struggles for Students with Physical and Psychological Disorders

In any given class these students may struggle with visual and hearing impairments, physical or motor function limitations, as well as wide variety of mood, behavior, or learning disabilities.
Accommodations

- Visual Impairments
  - Readers
  - Magnification Software
  - Alternative Formats

- Auditory Impairments
  - Speech to Text Software
  - Note taker/Interpreter

- Physical Limitations
  - Extra Time

- Psychiatric Disabilities
  - Distraction Reduced Areas
  - Flexibility
Reasons for Studying Online

There has been a recent surge in students with disabilities enrolling in online courses. In a study conducted in 2015 by Susana Verdinelli and Debbie Kutner, students and students with disabilities alike were asked why they chose to enroll in online courses:

- Flexibility
- Limited Interactions
- More time with materials
- Personal agenda
Real Life

- **Flexibility**
  - Physical Disabilities
  - Not having to sit in class at certain times
  - Allowed to sit, walk or rest

- **More time with materials**
  - Learning disabilities (dyslexia, reading, writing)
  - More time to read and turn in assignments

- **Limited Interactions**
  - Physical and Psychological (autism, wheelchair bound)
  - Stigma avoidance
  - Reduces anxiety
  - Less communication

- **Individual agendas**
  - Physical and Psychological (PTSD, Autism, Cancer)
  - Can choose how they interact and engage in class
What is Universal Design?

Accommodating the widest variety and number of people throughout the lifespan
Universal Design In Education

In education, Universal Design is about meeting the needs of a growing diverse population, that includes not only students with disabilities, but those of all ethnic groups, social classes and ages.
Reasons for Studying Online for Students without disabilities:

Location - not having to commute
Family - balancing children, family and school
Flexibility – allowed to make their own schedule
Components of Universal Design for Instruction

- Equitable Use
- Flexibility in Use
- Simple and Intuitive
- Perceptible Information
- Tolerance for Error
- Low Physical Effort
- Size and Space for Approach and Use
Additional Components

- Disabilities, Opportunities, Internetworking and Technology (DO-IT)
  - A Community of Learners- promoting interaction and community among students and between faculty
  - Instructional Climate- designed to be welcoming and inclusive

- Center for Applied Special Technology (CAST)
  - Multiple means of representation- various ways of acquiring knowledge
  - Multiple means of action and expression- alternatives for demonstrating knowledge
  - Multiple means of engagement- offer challenges and increase motivation
Universal Design for Learning
Developed in Massachusetts out of concepts from neuroscience
Multiple Means of Representation

Syllabus

Multimedia

Study Guides
Syllabus

- Consider making an introductory video:
  - Introduce yourself
  - Cover the objectives of the course
    - Show how objectives will directly relate to assignments
  - Clearly state your expectations for the class and students
  - Give a tour to show the critical features of the online course
  - Consider adding additional means of communication such as frequented professional social media

- For hard copy syllabi:
  - Font is no smaller than 12pt.
  - Use a readable font
  - Include both bold and color to add emphasis
Multimedia

- Include a variety of materials that are accessible:
  - Textbooks
  - YouTube
  - Blogs
  - Presentations
  - Screencasts of lectures
  - Audio recordings

- Make sure all videos are closed captioned or transcribed

- Consider adding descriptions to photos
Multiple Means of Engagement

- Variety of type of Discussions
- Variety of Homework Assignments
- Study Strategies
Variety of Engagement

- In course materials
  - Include small group and whole group discussions; stimulate debate
  - Use screencasts for lectures
  - Include videos

- In assigned materials
  - Readings
  - Exercises
  - Group projects
  - Wed searches
Multiple Means of Expression

- Variety of Assignments
- Choice in graded assignments
- Use of word processing software
- Sufficient time on exams
Variety on Assignments

- Graded Assignments
  - Papers
  - Exams
  - Homework assignments
  - Presentations or videos

- Exams
  - Exam
  - Final paper
  - Presentation
  - Website
What’s Important to Students in Online Courses?

- **Highly Valued**
  - Email Communication with Instructor
  - Online Grade book
  - Instructor Feedback during and after assignment due

- **Not as Valued**
  - Face-to-Face Meetings
  - Scheduled Meeting Times
  - Threaded Discussions
  - Team Assignments
  - Biography Page
Important Elements of Online Class Design

- Provide multiple formats of materials
- Provide varied course assignments and graded projects
- Make syllabi clear and concise
- Include an introduction page to course design
- Make consistent weekly or topical folders
- Only include content and assignments pertinent to course objectives
- Encourage student-faculty contact
- Incorporate multimedia
- Make sure all documents and media are accessible
Universal Design in action

Blackboard Learn
Example of Consistent Structure

Course Content

- Course Introduction
- Week 1
- Week 2
- Midterm Exam
- Week 3
- Week 4
Use of Narrated Syllabus and ADA Compliant Syllabus
Examples of Consistent Scaffolding

<table>
<thead>
<tr>
<th>Week 1</th>
<th>Week 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1: Learning Materials</td>
<td>Week 3: Learning Materials</td>
</tr>
<tr>
<td>Week 1: Assignments</td>
<td>Week 3: Assignments</td>
</tr>
<tr>
<td>Week 1: Discussion Board</td>
<td>Week 3: Discussion Board</td>
</tr>
</tbody>
</table>
Multiple Means of Representation

Use of narrated powerpoint, close captioned video, readable PDF

**Narratted and CC powerpoint**

[Watch Media]

**Enhancing Online Course Design**

Attached Files: [Online Student Expectations-Enhancing Online Course Design.pdf (82.067 KB)]

**Making Sense of Universal Design for Learning**

[Watch Video]

**Making Sense of Universal Design for Learning**

Duration: 3:53
User: n/a - Added: 1/30/15
One Step at a Time

- Universal Design takes time
  - Start with what can be made accessible now
    - Readable PDF’s
    - Font 12pt
    - Readable fonts
    - Colors and bold for emphasis
    - Consistent headings and structure
    - Use WAVE web accessibility tool
  - Reorganize online interface to be consistent and structured
- Incorporate multimedia
  - Substitute readings for video
  - Record a lecture
Resources at CCSU

- **IDTRC** – Instructional Design and Technology Resource Center
  - Training: Blackboard Learn, Microsoft, Camtasia
    - Training schedule is on IDTRC website
- Located on 3rd floor of the library
Helpful Websites

- CAST Website
  - Universal Design Learning in Higher Education
- National Design Center for Learning
- Blackboard Accessibility
- WAVE Web Accessibility Tool
Questions?
Resources


Resources


