Building Online Instructional Course Materials With Accessibility and Accommodation in Mind

With the Most instructors have at some point in their careers received a letter from their institution's disability office about accommodating a student with a disability. The letter may state that the instructor needs to allow the student additional time to take exams, provide extra notes, or allow them to audio record lectures. As an instructor, we may feel such requests add to our teaching load and daily duties. We may even overhear other faculty say that accommodating such requests is not their responsibility.

Accessibility

Accessibility is defined as creating a learning environment that is conducive to all students, regardless of their physical or mental challenges. The Rehabilitation Act of 1973 was the first major legislative effort to secure equal access for individuals with disabilities. In 1998, the Rehabilitation Act was reauthorized to include amendments to Section 508 that provide a blueprint for Section 504 and prohibit the federal government from procuring electronic and information technology goods and services that are not fully accessible. Section 504 was the first civil rights legislation in the United States designed to protect individuals with disabilities from discrimination based on their disability status. In addition, Section 504 requires that school districts provide a free, appropriate public education to qualified students in their jurisdictions who have a physical or mental impairment that substantially limits one or more major life activities. Therefore, this legislative action makes the instructor responsible for creating classroom instructions and materials that integrate accessibility to accommodate all students' needs and learning outcomes.

Accommodation

Instructors may feel that accommodations change the rigor of the lesson. But accommodation is really about designing your instructional materials, learning management system, and assessment methods to allow all individuals to understand the concepts you are trying to deliver. For instance, you may have a student in your class who is blind or vision-impaired. To help this student excel in your class, you may want to create your PowerPoint lecture slides with a voiceover and large visual aids. This approach could be beneficial to all the students in your class, especially those individuals who study while at their job and would appreciate being able to listen to audio lectures. From my personal experience, the initial process requires time to format and record the instructional materials. However, once the materials are recorded and archived, you can save time in future terms by reproducing the same steps.

Universal Design Framework

During the spring semester of 2020, I was introduced to Universal Design for Learning (UDL), and I find these principles very helpful in designing my course to accommodate students with disabilities. The UDL framework is grounded in three main principles that include representation, engagement, and action and expression. Representation means using a variety of methods to present information. In my class (synchronous or asynchronous), I normally use videos, pictures, and PowerPoint slides with voiceover to present a concept. To engage students, I usually start with a short interactive activity that requires students to use the internet and online resources to complete an assigned task. For action and expression, I invite students to demonstrate what they learn through writing or voice recording. By incorporating these different teaching strategies and opportunities to engage with the course content, all students have the opportunity to learn the required course content by the end of the lesson.

Accessibility Tools

There are many accessibility tools that are available to help instructors accommodate students with disabilities. PowerPoint and Microsoft Word are the most popular software used in the classroom. To develop a Microsoft document that is accessible, you can:

1. Create uniform heading structures throughout your document, which allows the reader to quickly navigate the document.
2. Use at least a 12-point font size. If an individual in your class is visually impaired, you may want to use a larger font size.
3. Use simple, plain language.
4. Reframe from using too much bright color contrast, since some students cannot see color.
5. If you include images in the document, always add alternative text.
6. When creating a list, you should use numbers or bullets to emphasize the steps and sequencing.
7. Your document columns should be selected from the page setup group and not from the column tab.

Once you have designed your document, check to see if it meets accessibility standards. This can be done by selecting the "File" tab on the top of your page, then selecting "Info." Then, click on "Check for Issues." Click "Check Accessibility" and a report will appear that will indicate errors, warnings, or suggested tips to repair your document. Designing and checking for accessibility in PowerPoint follows the same principles, except you may need to embed a video file with captions or an audio file with a transcript.

Accessibility Tools in Canvas

Several Learning Management Systems (LMS) such as Canvas, Moodle, Blackboard, Teams, and Google Classroom are available to help with accessibility in the classroom. Canvas is the LMS my college uses. Whenever I design a course in Canvas, I always check to ensure it's accessibility compliant. Here are some of the things that I check:

1. All headings have a descriptive title section and follow a simple, clear layout.
2. Texts are bold or italic to distinguish important content.
3. Images have alternative text (alt).
4. Links are attached to a word description.
5. Videos have captions embedded.
6. Microsoft and PowerPoint content files are formatted according to the description above.
7. Color contrasts are adequate and meet accessibility standards.

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