Providing Accessibility Support at the University of Central Florida

By Jennifer Patterson Lorenzetti, M.S.

The University of Central Florida is the second largest university in the country. In the fall of 2015, total enrollment was nearly 63,000 students, of which 33,000 took at least one web- or video-based course. Over a third of UCF’s credit hours are generated online.

This adds up to a big job for instructional designer Nancy Swenson, who works in the Instructional Design Center for Distributed Learning. She notes that accessibility is always an issue for faculty and instructional designers at the university, and this is apparent from looking at the large impact just a small percentage of students with disabilities can have on the institution.

Currently, just two percent of the university’s enrollment is registered with the Student Accessibility Services office, which is charged with helping students with disabilities access the courses and resources of UCF. However, this relatively small percentage of students can have a tremendous impact. Of the nearly 7,000 course sections offered by UCF in fall 2015, nearly 40 percent had at least one student who was registered with the Student Accessibility Office; this means that, of the nearly 2,000 faculty members, over two-thirds have at least one student who might be affected by accessibility issues. And this is just an accounting of those students who have registered their need. Often, students with disabilities choose not to register, and courses that are accessible for students with disabilities are often more accessible to students without disabilities as well. Clearly, constructing accessible course is valuable to many constituents.

However, meeting the need for online course accessibility is something of a moving target. “It’s an ongoing challenge,” Swenson says.

For students with disabilities, constructing accessible course is valuable to many constituents. However, the institution had a problem. According to Swenson, procedures for providing accommodations in face-to-face classes were clear and well-defined. But providing accommodations in online courses was trickier. Faculty members were increasingly taking the initiative to create their own multimedia elements, which led at times to problems with accessibility.

At the same time, Swenson’s office was fielding more calls for individual accessibility problems that needed to be handled on a case-by-case basis. It was not clear who and how all of these requests would be handled. “What we were doing was not sustainable,” she says.

So, after meetings with representation from senior level administration, the Center for Distributed Learning, and Student Accessibility Services, a new model emerged. This model relies on three main pillars of accessibility: universal design for learning, proactive requests, and immediate need.

3 Pillars: The online course accessibility support model

The first pillar is “universal design for learning,” which is the area that Swenson says the designers hope to focus on most. “We always want to be in universal design; that’s where we can do the most good for our students.” This is the pillar that addresses accessibility issues before accommodations are needed. By putting the focus on the front end, the institution can address the needs of diverse learners, and Swenson’s office will spend less
time retrofitting courses in the face of accommodation requests. This pillar also emphasizes training faculty and developers before they develop a new course; completion of a class, IDL 6543, is required before anyone can develop a mixed/hybrid or fully online course.

The second pillar is “proactive requests.” This pillar addresses the needs of faculty members and courses that may be considered “legacy,” an important population as UCF has offered online course since 1996. This means that there are many faculty members who attended faculty development trainings about accessibility several years ago and possibly have been developing new materials for their courses since then. However, there is a possibility that these faculty members have inadvertently allowed material into their classes that doesn’t meet current needs for accessibility. “This is a tricky conversation to have; [faculty members] want [their courses] to be accessible but don’t know how,” Swenson says.

These faculty members can get help in two different ways. First, the faculty member can request a review of the course for accessibility issues, and, second, an instructional designer can recommend and initiate the review.

Once a course is in review, the faculty member can take advantage of several services. The CDL can perform an evaluation of the content with an eye for accessibility issues, then provide a report to the faculty member of any issues that arise. At this point, the instructional designer and the faculty member can construct a plan to improve the accessibility of the course. Faculty members can also take a more active role in assessing their own course for accessibility issues. Using a freely-available tool called “UDOIT” (Universal Design Online content Inspection Tool), the faculty member can assess a course and receive a report with information on resources for addressing common issues. UDOIT is a tool that is available to others not affiliated with UCF, and Swenson notes that her office has received multiple requests for this tool that can be customized to the needs of the institution using it.

Additionally, experienced faculty members can enroll in IDL 7000, a refresher course for faculty members who have previously completed accessibility training.

Finally, the last pillar is “immediate need,” and Swenson notes that her office “spend[s] a great deal of time” dealing with these issues. These immediate issues arise when students contact the office needing help with course accessibility and accommodation. Many of these requests come from students who are sight- or hearing-impaired and need assistance with their classes. Under the direction of a point person inside the CDL, the office follows a set workflow to be sure that needs are identified and addressed in a timely manner.

The model for addressing accessibility within online courses has brought several advantages to the institution. Primarily, it has allowed the CDL and others to be more effective in meeting the needs of students with disabilities. Additionally, the regular meetings and discussions improve communications across campus, help identify problem areas, and help
If a course is developed from scratch, how much does your school pay the instructor or course designer to develop the course?

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The Teaching Goals Inventory (TGI) is a valuable resource to assist instructors who are developing new courses or revising a pre-existing course (Angleo & Cross, 1993). TGI has three purposes: 1) to encourage instructors to think more critically about their teaching and learning goals; 2) to aid instructors in aligning their teaching goals with measurable assessment techniques; and 3) to provide instructors with a common platform for sharing teaching strategies. This self-evaluation aids instructors in identifying what really matters most in a specific course and effectively designing course activities. It also ties these activities directly to student performance goals, helping to measure instructional impact.

The inventory requires instructors to identify and rank learning goals and then categorizes those learning goals into one of six clusters. They are:

1. Higher order thinking skills (analyze, synthesize, think creatively, etc.)
2. Basic academic success skills (memory, listening, speaking, writing, etc.)
3. Discipline-specific knowledge and skills (learn terms, facts, concepts, theories, etc.)
4. Liberal arts and academic values (openness to new ideas, social justice, ethics, etc.)
5. Work and career preparation (collaboration, leadership, organization, etc.)
6. Personal development (self-confidence, motivation, respect for others, etc.)

Using the clusters, instructors follow a four-step process in applying the tool: 1) rate the importance of learning goals, 2) identify the essential goals and categorize into clusters, 3) manually compute the final cluster scores, and 4) identify relevant Classroom Assessment Techniques (CATs) aligned with identified learning objectives and ranked clusters.

Using the Interactive Teaching Goals Inventory

Brown (2014) adapted the TGI into an interactive Web 2.0 tool permitting a much easier method for instructors to rate, identify, and compute relevant assessment techniques aligned with their goals. The online version of the tool, found at (bit.ly/TmMl7n), scores user inputs immediately and provides a clear indication of the relative importance of the identified goals and goal clusters. The steps to using it are:

Step 3: Interpreting the results

The analysis reports a ranking of the goal categories by priority based upon user inputs. This ranking should closely mirror the learning objectives for existing courses or may be a useful reference for creating overall learning objectives for new or redesigned courses.

The analysis also creates a list of CATs that are most closely aligned with the top two goal categories. By limiting this listing, the tool permits instructors, designer, and program managers to focus on assessment techniques that are reflective of the course goals and objectives.

Finally, the analysis identifies the user’s essential learning goals and lists CATs that specifically relate to those essential goals.

Using CATs for the online environment

The Interactive Teaching Goals Inventory tool can provide instructors with a comprehensive process for mapping their learning goals.
Smog Alerts in China Promote Online Education

December 31st, 2015
By Zhao Xinying, China Daily

Beijing’s two recent red alerts for air pollution led to the suspension of classes at primary and middle schools in the capital, but online education platforms experienced a boom. According to 17zuoye.com, an Internet-based K12 homework service, the number of newly registered users on Dec 8 was almost three times as many as the day before, with 3,000 teachers and 160,000 students in Beijing assigning and doing homework there. Users of Homework Box, a mobile app that has similar functions to 17zuoye.com, hit a new high in the number of questions downloaded and worked on by students from Dec 7 to 9, when Beijing issued its first red alert for air pollution and primary and middle schools of the capital suspended classes for three days.


Opportunities and Threats of the MOOC Movement for Higher Education: The European Perspective
January 6th, 2016
By Robert Schuwer, et al; IRRODL

Most of the literature focus on the origin of the MOOC movement in the US. The specific context of Europe with on the one hand autonomous countries and educational systems and on the other hand cross-border cooperation and regulations through the European Union differs from the US context. This specific context can influence the way in which the MOOC movement affect education in Europe, both reusing MOOCs from other continents (US) as publishing MOOCs, on a European platform or outside of Europe. In the context of the EU funded HOME project, a research was conducted to identify opportunities and threats of the MOOC movement on the European institutions of higher education.


New MIT Study Finds Affluent Students More Likely to Complete MOOCs
January 2nd, 2016
By EdSurge

Do MOOCs really provide the eponymous openness they promise? In an study titled “Democratizing Education? Examining Access and Usage Patterns in Massive Open Online Courses,” Harvard and MIT researchers questioned the assumption that open access signifies a level playing field. They analyzed completion data from 68 MOOCs offered by Harvard and MIT between 2012 and 2014 and found that course participants often lived in more affluent neighborhoods than the average US citizen. Students with more resources also showed a greater tendency to complete a given course, and the report suggests the divide is widest among adolescents and young adults. Young students enrolling in courses lived, on average, in neighborhoods with a median income 38 percent higher than the American average. Teenagers with college-educated parents were twice as likely to complete their courses as teens without degree-holding parents.


The Space for Social Media in Structured Online Learning
January 1st, 2016
By Gilly Salmon, et al; Distance Educator

In this paper, we explore the benefits of using social media in an online educational setting, with a particular focus on the use of Facebook and Twitter by participants in a Massive Open Online Course (MOOC) developed to enable educators to learn about the Carpe Diem learning design process. We define social media as digital social tools and environments located outside of the provision of a formal university-provided Learning Management System. We use data collected via interviews and surveys with the MOOC participants as well as social media postings made by the participants throughout the MOOC to offer insights into how participants’ usage and perception of social media in their online learning experiences differed and why. We identified that, although some participants benefitted from social media by crediting it, for example, with networking and knowledge-sharing opportunities, others objected or refused to engage with social media, perceiving it as a waste of their time.

Read the rest at: http://distance-educator.com/the-space-for-social-media-in-structured-online-learning/.

Indonesian Online Education Platform Links Up With US Counterpart EdX
December 30th, 2015
By Jakarta Post

Jakarta. IndonesiaX, a local massive open online course platform, is partnering with its US counterpart EdX to allow Indonesians more access to courses offered by some of the world’s most prestigious universities. EdX is an initiative spearheaded by the Massachusetts Institute of Technology and Harvard University in 2012,

continued on page 6
Free Accessibility Tutorials from OLC

When the DOJ/OCR Makes a Visit: Lessons Learned in Resolving Complaints About Inaccessible IT

Wednesday, February 17th at 2pm ET
In this webinar, accessibility leaders at three different universities will discuss what to expect in a Department of Justice (DOJ) or U.S. Department of Education Office for Civil Rights (OCR) review, as well as the lessons they’ve learned at their institutions in resolving complaints about inaccessible IT. Learning from schools that have successfully resolved DOJ/OCR complaints, this webinar will provide valuable insight into how campus communities can work to ensure the accessibility of IT.

10 Tips for Implementing Accessible Online Media

Thursday, February 25th at 2pm ET
In this webinar, Janet Sylvia, Web Accessibility Group Leader and Web Accessibility Trainer, and Lily Bond from 3Play Media will go through 10 tips for implementing accessible online media at your institution. Looking at several different scenarios, they will discuss actionable strategies to help you find a solution that will work for you.

Quick Start to Captioning

Thursday, March 10th at 2pm ET
Watch this webinar to learn the basics of how to add closed captions to online video to make it fully accessible, searchable, and SEO-friendly. This webinar covers Section 508 and ADA accessibility compliance, creation of closed captions, explanation of caption formats and video player compatibility, as well as an overview of automated workflows and integration with lecture capture and video platforms.

Quick Start to Video Search

Thursday, March 17th at 2pm ET
In this webinar, we will go through strategies for implementing video search on your website. We will walk you through how to install an interactive transcript as well as how to easily customize it with the SDK (software development kit). We will also show live demos and downloadable examples that highlight the features and benefits of video search.

To register, go to: http://www.3play-media.com/how-it-works/webinars/.

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while IndonesiaX partners with the Bandung Institute of Technology and the Indonesia Stock Exchange, among other institutions. “The free online courses under IndonesiaX will help to democratize access to education in Indonesia and this new partnership will allow our students to access materials from one of the best educators’ in the world, such as Professor Charles Fried from Harvard University,” Lucynna Mangendidopo Pandjaitan, the chief executive of IndonesiaX, said in a statement received by the Jakarta Globe on Tuesday.

Read the rest at: http://jakarta-globe.beritasatu.com/education/indonesian-online-education-platform-links-us-counterpart-edx/.

Free Stanford Computer Science & Engineering Courses Now Online
January 3rd, 2016
By Henry Herrera, Fondo Online
Stanford Engineering Everywhere is a new project rolling out of Stanford, and it’s making available to anyone, anywhere, 10 complete online computer science and electrical engineering courses. This includes the three-course Introduction to Computer Science series taken by the majority of Stanford undergraduates.

Read the rest at: http://gran-fondo-online.com/2015/12/freestanfordcomputer-scienceamp-engineering-courses-now/.

MOOCs in 2015: Breaking Down the Numbers
January 1st, 2016
By Dharwal Shab, EdSurge
Have massive open online courses emerged from the Trough of Disillusionment to the Slopes of Enlightenment? Wherever MOOCs belong on the Gartner Hype Cycle, one thing is clear: there are more courses and students now than ever before.

Student enrollments in MOOCs doubled this year. In fact, more people signed up for MOOCs in 2015 than they did in the first three years of the “modern” MOOC movement (which started in late 2011—when the first Stanford MOOCs took off). According to data collected by Class Central, the total number of students who signed up for at least one course has crossed 35 million—up from an estimated 17 million last year.

Nearly all of the Classroom Assessment Techniques suggested by the tool work well in an online environment. For example, in one graduate level course on administrative theory in educational organizations, the instructor implemented the Group Instructional Feedback technique with great success. At the end of each weekly module, the instructor sends students an anonymous survey requesting feedback on the content, assignments, and instruction. The two-part survey includes Likert scale questions focused on identifying what works and what needs improvement, as well as two open-ended questions on student “take-a-ways” and suggestions. The instructor analyzes the results to modify future instruction with the intent of serving student needs.

Only a small number of techniques present significant challenges to online implementation and would not be recommended. The remaining techniques lend themselves to use in online environments with moderate modification. In an Environmental Sociology course taught at a large Midwest university, for instance, instructors integrated the Minute Paper technique by creating a timed quiz consisting of a single question on the relevant material. The quiz required students to respond to the question prompt and submit their response within two minutes, synthesizing their understanding of the topic under discussion. The results of the quiz also informed the instructors of topic areas requiring additional coverage.

Instructors in a Business Law course use the Pro and Con Grid technique with great success. For this assessment, students must review specific case studies or movie clips and complete a provided pro/con grid addressing the relevant legal decision, focus, or issue. Instructors created a Pro/Con Grid template using a popular online spreadsheet program and linked the spreadsheet within the course module. Students then accessed the spreadsheet, entered their responses, and saved the document with a unique name for instructor review.

In another course, the instructor implemented the Punctuated Lectures technique in an interesting and unique way. This technique requires completion of five individual steps: 1) listen, 2) stop, 3) reflect, 4) write, and 5) give feedback. This technique involves both student and teacher interaction—a sometimes difficult activity in an online environment. To overcome the challenge, this instructor videotaped a short ten-minute lecture on a specific topic. Using the VideoANT tool, at specific intervals the instructor required that students post a reflection on what they experienced during the video playback. Finally, students provided the instructor with anonymous feedback on the activity, allowing the instructor to make modifications as necessary for future assignments.

When used in conjunction with Angelo and Cross’s (1993) handbook, Classroom Assessment Techniques, the Interactive Teaching Goals Inventory tool can provide instructors with a comprehensive process for mapping their learning goals with specific assessment techniques to improve their courses.

References


Michael R. Jolley, Shital Chheda, and Sushma Jolly are instructional design technology specialists at the University of Nebraska–Lincoln.

improve processes. Finally, using this model has increased faculty awareness of the need for accessibility and the challenges students face.

However, meeting the need for online course accessibility is something of a moving target. “It’s an ongoing challenge, looking at procedures and processes,” Swenson says. “We thought we had a well-oiled machine, but things change.”

One thing that changes with time is the kind and amount of multimedia elements included in courses. As technology advances, so does the need to be sure that the addition of such elements to classes does not shut some students out of the full experience of a course. Regular reviews of the accessibility of courses is a great first step, and UCF has proven that it is possible even at a very large university.
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**Lighting, Color Critical For Students with Disabilities**

January 2nd, 2016
By Tara García Mathewson, Education Dive

Higher education institutions must consider the needs of students with physical disabilities because of federal law, but colleges and universities may be overlooking design options that will benefit those with learning disabilities like ADHD or autism spectrum disorder. Brent Betit writes for University Business that administrators can create more welcoming environments for these students by using warm, neutral colors and soft, indirect lighting in academic buildings.


**Penn’s Online Learning Initiative Launches New Robotics Specialization**

December 30th, 2015
By Amanda Mott, UPenn

Beginning in January, the University of Pennsylvania will roll out a new robotics specialization, an online five-course sequence, via the University’s Online Learning Initiative on the Coursera platform. Members of the School of Engineering and Applied Science’s GRASP Laboratory will teach these courses. Instructors include Vijay Kumar. “Robots are virtually everywhere in our lives today,” said Kumar. “No longer the stuff of science fiction, robots have evolved into complicated autonomous agents with sophisticated mapping technologies and coordination, capabilities and applications within a wide array of industries.”


**Online Learning Environments in Higher Education: Connectivism vs. Dissociation**

January 5th, 2016
By Sasha A. Reese, Education Information Technologies

Over the last decade online education has emerged as a way for students and faculty to collaborate more freely, attain greater flexibility, and utilize new media to learn. The burning debate lies in whether online educational options are harmful to traditional education or offer endless benefits necessary to accommodate a 21st century learner. Supporters of virtual learning environments suggest that 21st century learners require the construction and creation capabilities offered through Web 2.0 to succeed while critics suggest that asynchronous interactions are not engaging and rigorous enough for higher education. A balanced online environment should provide a blend of both asynchronous and synchronous opportunities, which promote communication and collaboration among classmates and instructors.

*Read the rest at: [https://www.researchgate.net/publication/272030180_Online_learning_environments_in_higher_education_Connectivism_vs_dissociation](https://www.researchgate.net/publication/272030180_Online_learning_environments_in_higher_education_Connectivism_vs_dissociation).*

**GW and D.C. Team Up To Create Course on Medical Marijuana**

January 3rd, 2016
By Justine Coleman, GW Hatchet

GW researchers hope a new online course will help those who prescribe medical marijuana learn more about the effectiveness of the drug. Faculty at the Milken Institute School of Public Health with the Continuing Education for Health Professionals joined officials from the D.C. Department of Health to develop three online courses to teach medical professionals more about prescribing medical marijuana and other prescription drugs. The three modules are being launched through the D.C. Center for Rational Prescribing and focus on cannabis pharmacology, efficacy and effects and how marijuana interacts with other drugs.


**MOOCs and the Claim of Education for All: A Disillusion by Empirical Data**

January 6th, 2016
By Matthias Robs and Mario Ganz, IRRODL

MOOCs have shaped the discussion on learning with digital media for the last few years. One claim of MOOCs in the tradition of Open Educational Resources is to expand access to education, mainly in the field of higher education. But do MOOCs meet this claim? The empirical data in this article confirm the suspicion that, despite all the heterogeneity of the participants, MOOCs are mostly used by people with a higher level of education. Data of participants from two MOOCs from Germany, as well as, empirical data from large providers and universities are used. But due to the different forms of MOOCs there is no comprehensive proof possible. With respect to the Knowledge Gap Theory and the Digital Divide, a theoretical framework is provided to explain possible causes of a different usage. The aim of the article is to point out the risks of an increase of inequalities as a consequence of hyping MOOCs and to stimulate a discussion about possible answers to make MOOCs an instrument of education for all.