Do UDOIT for Webcourses@UCF

Who Is Using It and Where?

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UCF Online Background

The 2016–2017 academic year at the University of Central Florida (UCF) confirmed that online learning is rapidly on the march to becoming the dominant modality in the student learning experience. Further affirmation of this includes UCF Online winning national recognition in 2018 as being within the Top 20 Ranking for Best Online Programs by *U.S. News & World Report* (Best Online Bachelor's Programs-University of Central Florida, 2018). With the launch of UCF Online in spring 2016, the percentage of students taking fully online courses has continued its dramatic rise. During the 2016–2017 academic year, 42.2% of total university student credit hours were either fully online (32.5% of this number) or blended. In addition, 81% of all UCF students took at least one online or blended course, with 72% taking at least one fully online course. Five colleges exceed 25% in student credit hours, and four colleges well exceed the 50% mark.

UCF has become a respectably large higher educational institution over the last half decade, yet this is not because of increasing enrollment in face-to-face classroom courses. In contrast, face to face has been steadily diminishing at a similar rate to the increase of video, blended, and web modalities (Cavanagh, 2017).

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Does This Equal Online Access?

A developing concern is whether this increase in online learning offerings and enrollment translates to more online accessibility barriers for students with disabilities (SWD). This concern primarily focuses on those students with blind/low vision (BLV) and deaf/hard of hearing (DHH) challenges. Since fall 2012, the author has served as a coordinator between the Center for Distributed Learning (CDL) and Student Accessibility Services (SAS) to address online course challenges from a reactive stance before each semester begins. Coordination between the staff at SAS and CDL has been central to successfully identifying and remediating online accessibility issues for students connected to SAS who are enrolled in online modalities. Despite strong coordination efforts, the online review process remained cum-

bersome, often due to faculty misunderstandings and misperceptions. However, the online accessibility review process has expanded and developed in important ways over the last few years to be better equipped to respond both reactively and, more importantly from a universal design for learning perspective, proactively.

Why would it be important to promote proactive self-reviews of online content to faculty? The review process between CDL and SAS started with the Techrangers (2018), a team of students who provide course development for faculty and other web/application development. The Techrangers sent reports to the author, who would then send report letters by e-mail to faculty (and copy instructional designers if assigned). However, faculty had varying abilities to understand and make repairs and improvements to their course content, which could significantly add to the challenge of timely delivery to SWD.

At this time, the rising number of higher education institutions being sued at the federal level had provided some measure of motivation to avoid litigation, despite the fact that the rules have not always been clear. Accessibility lawsuits, complaints and settlements have risen dramatically over the last few years (Carlson, 2018). The last sentence in the whitepaper, Legal Landscape Update: 2017 in Review (2017 Legal Landscape for Digital Accessibility Whitepaper, 2018), advises,

> Until there are clearer rules, the best way to avoid a surprise digital accessibility suit is to make sure that your website and other digital assets are accessible to begin with. Even if you did not build accessibility in up-front, the costs of auditing and retrofitting your website often pale in comparison to the costs of litigation. (p. 26)

For higher education institutions, the cost is often the time invested in review and repairs and paying for transcriptions for audio/video content. This has been true at UCF, and the impressive scale of online courses would be impossible to fully address. Would it ever be possible for faculty to evaluate and self-repair online content in a timely and affordable manner?

Back in 2012, the Techrangers at CDL had an open-source automated product for creating online accessibility reports. However, they were not suitable for faculty to comprehend, since they were generated lists of HTML code. Before faculty received feedback on their course content, these reports had to be reviewed and interpreted for the most serious online accessibility concerns. A confidence challenge in the feedback delivery included the likelihood that something important would be missed because of the needlelike detail in the HTML code haystack as well as the possibly faculty had made changes in the course content after the first reports had been run. In addition, there was a widespread expectation among faculty that any online accessibility issues were technical in nature. Therefore, faculty did not believe themselves to be qualified to address them, so they expected the technical teams to do the remediation. Yet, tensions could rise when the question arose about who was responsible for the course content.

Faculty at UCF have a great amount of academic freedom, and they are understandably protective of what content they place in their courses. Some faculty members have initially interpreted addressing accessibility concerns as threats to their copyright, academic freedom, or as frustration due to not understanding what needed to be done to their course content to make it more accessible. Yet, technical staff did not want to nor did they deem themselves qualified to modify instructor-placed content. One common example would be the need of Alt (alternative) text for online images. The faculty member, not technical staff, would best determine what Alt text would be relevant to the content of the course being taught.

These role and technical challenges created a complex, slow, and inadequate online accessibility review process that wasn't serving anyone as well as needed. Faculty

had limited knowledge of online accessibility and (Universal Design for Learning, UDL) design for learning principles, and the technical staff could never be authoritative in most remediation measures for online content. The increasing scale of courses offered online at UCF forebode of more difficulties to come in delivering accessible content in a timely fashion to the students connected with SAS who required it.

To verify and evaluate enrollment details, CDL created and implemented a tool that generates data for each semester using an internal tool called the Executive Information System, or the EIS (Raible & Uranis, 2016). Part of the EIS is dedicated to reporting overall accessibility data, which include learning disabilities, attention deficit hyperactivity disorder, and other health disabilities in addition to the focus in this article on BLV and DHH. Taken as a whole, in spring 2018, SWD had an enrollment of 3.22% of total students. This percentage may sound relatively insignificant; however, the EIS data reveal that this small number of students had a rippling impact upon courses taught at UCF. In spring 2018, SWD were enrolled in 41.9% of all sections at UCF, which meant that 72.74% of faculty had at least one SWD enrolled in their courses. Granted, a smaller percentage of SWD had BLV (76 students or 0.04%) or DHH (58 or 0.03%) support needs, yet this high impact of SWD on faculty teaching online should not be overlooked or dismissed.

A few years ago, the online accessibility review process for courses that had students enrolled with blind/low vision and deaf/hard of hearing needs could be quite time consuming, confusing, and complex for faculty and staff. It should also be noted that the percentage of students connected with SAS does not completely reflect the likely higher number of UCF students who would benefit from more accessible Webcourses@UCF since there are SWD who choose to not disclose their disabilities or challenges to SAS. In addition, having technical staff thoroughly review all online course content would never be achievable, due to scale. However, from a UDL perspective, it is highly desirable and increasingly necessary from a proactive stance that faculty take a knowledgeable and more confident role in reviewing and remediating their own course content, thereby enabling all of their students better access their online content.

Part of the Answer: U**DO**IT

To address this interest in enhancing the ability of online faculty to self-identify and correct accessibility issues, CDL has highlighted this concern in its IDL6543 professional development course, which is required for faculty to design and teach Webcourses@UCF fully online, or in the W modality (IDL6543-UCF CDL, 2018). Yet, online content evaluations were still dependent on being performed by the Techrangers at CDL using an open-source tool that delivered cumbersome HTML reports. In late 2013, the author proposed submitting to the first Canvas Grant for Higher Education for Improved Universal Design for Learning, after the Techrangers Team Lead, Jacob Bates, said he believed his team could create a self-service accessibility checker for instructor-placed content (Tinsley-Kim, 2014). In early 2014, CDL was awarded a $10,000 Canvas Higher Education Grant, and the pursuit to build the Universal Design Online content Inspection Tool, or U**DO**IT (pronounced "You do it,") had begun.

In May 2015, the U**DO**IT LTI (learning tool interoperability) was launched within Webcourses@UCF (Universal Design Online Content Inspection Tool (UDOIT) - UCF CDL, 2018). It was promoted through various media and events including the Webcourses@UCF Faculty Update online newsletter, during face-to-face training sessions of IDL6543, U**DO**IT face-to-face training sessions and Webcourses@UCF Support Open Labs. U**DO**IT was generally welcomed by online faculty (more so by nonnative English-speaking faculty, attributed to an anecdotal notice of approx-

imately over 60% of this population connecting with CDL for face-to-face training and phone assistance). In contrast, the length of the U**DO**IT reports were also deemed to be initially alarming by some faculty who had heavy content loads. However, the primary usage of U**DO**IT remained with the Techrangers during the reactive online accessibility reviews, which took place a few weeks before and after a semester had begun.

While U**DO**IT was initially modeled after other online evaluation tools for automated accessibility reports, such as WebAIM's WAVE tool (WAVE Web Accessibility Tool, 2018), the Techrangers and the CDL Accessibility Team determined they could take this tool further than just reporting errors and suggestions. Why not allow online faculty to fix common errors on the spot within U**DO**IT? The U FIX IT tool was created to allow faculty to remediate Alt text, headings, headers for tables, naming links, and color contrast with more features under development. U FIX IT has been one of the strongest marketing points that U**DO**IT contains since repairs can be done without having to go outside of the report. U FIX IT also reduces the number of errors and suggestions each time something is appropriately addressed, which may encourage faculty to pursue further improved accessibility of their course content.

What's Happening in the United States and Abroad?

The national announcement of the launch of U**DO**IT was showcased by Jacob Bates at InstructureCon 2015, the Canvas by Instructure yearly conference (Bates, 2015). Since then, CDL has been notified by over 50 institutions that they have incorporated the U**DO**IT LTI into their instances of Canvas. This includes Canvas institutions in Canada, and inquiries are currently being made in Australia. In this list are a few institutions that have made code contributions via the U**DO**IT GitHub as well as Michelle Tuten at Clemson University who created a Canvas course cartridge that serves as a U**DO**IT User Guide. In January 2018, the U**DO**IT Team of Jacob Bates, John Raible, and the author presented introductory training to the California Community College Chancellor's Office, representing the largest system of higher education in the United States, so awareness, implementation, and collaboration for the improvement of the U**DO**IT LTI continues to expand (Bates, Raible, & Tinsley-Kim, 2018).

The UDOIT LTI has been the recipient of a number of awards since the initial Canvas Higher Education Grant in 2014. In 2015, UDOIT was recognized with the Online Learning Consortium Effective Practice Award. The Campus Technology Innovators—Administration Category was awarded in 2016. Three awards were given in 2017: the Platinum IMS Global Learning Impact Award—Established Projects Category, the Prudential Productivity Award, and the WCET WOW Award. The CDL Accessibility Team and the Techrangers have been pleased to receive positive feedback and suggestions for the further development of UDOIT through the technical and instructional connections and collaborations gained through these awards.

What's Happening at UCF?

With the national and international accolades that U**DO**IT has collected since 2014, the expectation would be understandable that the online faculty at UCF are largely aware, supportive, engaged, and benefiting from using this internal LTI in their Webcourses@UCF. After all, every instructor is required to have Webcourses@UCF for Academic Engagement purposes, and U**DO**IT is openly viewable to faculty (not students) in the Course Menu. Yet, as of early 2018, the most common usage of U**DO**IT remained among the Techrangers to evaluate the Webcourses@UCF that require review for online BLV and DHH accessibility needs.

The summer terms are the most popular semester for W, or fully online, Webcourses@UCF, so this time period may be most instructive of who is making the most use of U**DO**IT. Jacob Bates generated reports for the overall usage data for U**DO**IT, and while some data could not be confidently attributed to their sources, most users were distinguishable as either Techrangers or faculty. Comparing W modality courses proactively run through U**DO**IT by online faculty members in Summer 2016 (29) and 2017 (27), the numbers are nearly even. The number of reactive runs by the Techrangers was smaller for W courses, with 19 for summer 2016 and 22 for summer 2017; however, these were primarily for the narrow population of SAS-connected students with BLV and DHH needs.

Referencing the EIS, the number of W sections in summer 2016 totaled 395. Therefore, the percentage of faculty teaching a W course in summer 2016 that proactively completed running U**DO**IT at least once was .073%. In summer 2017, the percentage fell to .061% because the number of W course sections rose to 438. The data show there is significant room for improvement for more online instructors at UCF to proactively use U**DO**IT in their Webcourses@UCF.

What's the Plan Moving Forward?

To increase awareness and use of U**DO**IT in the UCF academic community, it is expected that internal promotion via Webcourses@UCF newsletters and support training will continue. An accessibility/UDL professional development course is being designed that will include modules about U**DO**IT. Further internal promotional opportunities will be explored through applications for UCF awards and programs. The Techrangers, the CDL Accessibility Team, and SAS will continue to build on connections and partners within UCF, Canvas by Instructure, and other institutions.

The UDOIT story will continue to be told at conferences and other training events within and beyond UCF, while encouraging both reactive and proactive faculty to share their experience with colleagues. Word of mouth from colleagues and instructional designers has been often mentioned as to how faculty learned what UDOIT was, its ease of use, and gave them the confidence to try it in one of their courses. The issue of confidence is noted as a significant reason why online faculty may dismiss, avoid, or even ignore calls to make their course content more accessible for all. A recent posting on Inside Higher Ed entitled, "Confidence Crisis in Online Accessibility," opens with the following statement, "Confidence in the accessibility of online courses at community colleges has fallen dramatically in the last decade, a survey from the Instructional Technology Council reveals" (McKenzie, 2018). A number of factors are listed to suggest why this has happened, but little is given about how to build more confidence. Perhaps more awareness by word of mouth among colleagues is one of the keys.

Given the author's former 2-decade career as an ESL/EFL instructor, she is also considering exploring the perceived attentiveness of nonnative English-speaking online faculty to UDL. This is because a number of these faculty that had reactive U**DO**IT reports sent to them have been observed to be more likely than their native English speaking colleagues to engage one on one by e-mail, phone, or face to face. They expressed the desire to ensure their understanding and accuracy of improving accessibility to their course content for all of their students. Could it be that their nonnative English linguistic skills encourage them to push through insecurities to become more confident in delivering more accessible content? While not tested yet, it would be interesting to see if confidence improves among groups of faculty after nonnative English-speaking faculty train their native-

speaking colleagues in using automated accessibility tools like U**DO**IT.

With the projected increased offering and rising enrollment in Webcourses@UCF, the need to proactively make the content as fully accessible as possible for all students is imperative. Faculty who have had content in their Webcourses@UCF reactively reviewed and remediated are far less likely to need to make significant improvements in the future as they become more fully aware of what constitutes accessible online content. However, this is a nearly invisible percentage at this time at UCF. To modify a phrase, with great academic freedom in online environments comes great responsibility to ensure that the content can be accessed by all students.

The hope of the creators and developers of U**DO**IT is that awareness, understanding, and confidence of instructors properly delivering online content will rise more significantly at UCF. This includes encouraging them to increase usage of accessibility and UDL principles and best practices. Having in-house tools like U**DO**IT should continue to reduce lack of engagement among faculty in improving their online courses. Why do U**DO**IT for Webcourses@UCF? To self-guide faculty to benefit more, if not all, students who are learning online and thereby contribute to their degree-seeking academic success.

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