Standard 2: Digital Age Learning Culture

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Introduction

Higher education organizations face many challenges while trying to ensure engaging and current technology-infused learning in the classroom for 21st century or digital age learners. Zhao (2015) discusses the urgency to understand and make changes in this new world of learners. Many organizations understand the immediate need for change; however, most do not agree on how to make change, whether in paradigm, pedagogy, or technology. Engaging learners and sparking creativity should be the focus of this change according to Egan, Maguire, Christophers, and Rooney (2017). Social trends dictate the learning culture and they are what drive the mining of data for digital age learners. This creativity is described as the 'cultural capital' for these learners (Sheridan-Rabideau, 2010, p. 54 as cited in Egan et al., 2017).

Educators can begin to address digital age concerns by recognizing that current classrooms are filled with students who see a world of possibilities because they are the users of information that is immediate and driven by social trends. I submit the reason for this is the availability of technology and although it is not a panacea, it is what will lead the change needed in educational entities. Onyema and Daniil (2017) recognize this need in what they call a mobile age and they suggest that educators need to stop dragging their feet and focus on introducing interactive technology in the classroom. The administrators in educational entities can promote a viable digital age learning culture by being aware of the needs of digital age students, by continually upgrading technology and pedagogy (andragogy) regardless of organizational resistance, and by creating a plan that is relevant to all stakeholders. In doing this, I believe educators can address standard 2 and provide an education for students that is engaging and at the same time relevant and rigorous.

Performance Indicators

Standard 2 has five indicators that address educational administrator's willingness to focus on digital age learning and how they might ensure instructional innovation, promote effective use of technology, provide a variety of learner-centered environments, ensure technology infusion in curricula, and provide avenues for collaboration. The indicators are examples of what educators and educational administrators 'should' do in order to successfully support the standard in their organization. As stated previously, Onyema and Daniil (2017) have shown educators are slow to response to change; however, following the standard and its suggestions can help create a viable plan, possibly quelling some fear of change and allowing for improved curricula and learner experiences.

Indicator 1

This first indicator looks at instructional innovation that allows for continuous improvement in digital age learning. In supporting such innovation, educational administrators need to provide a pathway for educators to learn about available innovations in the area of instruction. The computing sciences (CS) department does not have written policy and/or procedures that specifically address ways to improve innovation or introduce technology in instruction, as stated previously in brief one. The CS department does support faculty in the endeavors to introduce innovative practices and new technology. This support is via university avenues such as the COOL grant (https://www.coastal.edu/online/facultyresources/grants/courseenhancementgrant/), professional development (Dean M. Roberts, personal communication, August 2016), and conference attendance (http://www.abet.org/workshops-and-events/continuous-improvement-forum-ciaf/). Again, shared-governance is the rule (https://www.chronicle.com/article/Exactly-What-Is-Shared/47065). The department chair will not hinder any faculty member's desire to make

change. When change affects several faculty or multiple courses, the faculty member is asked to present suggested changes to the entire faculty body in a department meeting (W. Jones, personal communication, August 2017). This process may seem ad-hoc, but it works and gives the faculty body a sense of being a part of the decision-making process.

Indicator 2

This second indicator puts the onus of modeling and promoting the use of technology for learning on the administrators. It seems redundant to continue to repeat the open policies of our department, but the indicators dictate such. The department chair and coordinators demonstrated support of collaboration and technology use in April, 2018. The decision was made to change multiple (approximately 5) course textbooks to use a completely electronic format (department meeting, April 2018). This was significant and related to this indicator for three reasons: 1) two of the courses are taught by the department chair, 2) two courses are taught by two different coordinators, and 3) the new textbooks are not simple e-books, but are interactive platforms that allow students to practice learned content, complete homework assignments, and upload external material, directly into the textbook (http://www.zybooks.com/). The sweeping changes were made based on discussions with faculty currently using similar textbooks and an assessment completed by me while completing the EDIT 677 (Assessments) course at Coastal Carolina University for the introductory programming course.

Indicator 3

This third indicator addresses some guarantees that technology is available when needed. Since the computing sciences (CS) department primarily teaches content based on technology, it is imperative that technology is available, works when needed, and is supported the by

information technology services(ITS) department (https://www.coastal.edu/intranet/its/). Our department has two dedicated labs with approximately fifty computers (24 per class plus instructor PCs). The CS department is given priority use of these labs. Students are required to purchase laptops as a degree-seeking students in our department (Coastal Carolina University Course Catalog, various dates). The ITS department supports students and faculty/staff separately. Any issues that arise in the labs are reported to our department executive administrator and then passed on to ITS.

The department also supports a research lab and tutoring center. The technology in the research lab is purchased with student technology fees as well as grant funding. The focus of the research lab is undergraduate research and cutting-edge projects (3D-printing and virtual reality). Both centers are open and monitored from 8am to 5pm, with the research lab open until 7pm. Informing students that these resources are available is important, so both centers are 'fish bowls' (open glass walls and doors) with research projects, like robots and 3D-printings, clearly displayed. Posters are also displayed for potential research projects. Faculty are also asked to announce to students the centers' availability for research, help, and studying purposes.

Indicator 4

This fourth indicator looks at the practice of those leading instruction and how well they connect technology to the context of the instruction. As mentioned early, we are a technology department, so infusing technology into our curriculum is important and our primary focus. Our department only seeks candidate to teach, whether full-time or part-time, who are seasoned in the use of technology for the variety of context areas (computer science, information systems, and information technology). The department chair charges committees for degree areas with keep technology current and curricula progressive (W. Jones, department meeting, various dates). This

requires that faculty members continuously review ABET accreditation requirements and cross-reference with current course offerings and content. The committees are asked to bring forward suggested changes in a timely fashion (in case of textbook changes or technology changes). Our department must follow ITS procedure for implementation of new technology, network changes, or installation of new software.

Indicator 5

This fifth and last indicator looks at how well leaders share information with the learning community. Without further information from our department leads, I cannot address the sharing of information with national and global communities. I can address the support of faculty in the area of professional development. Tenured, tenure-track, and lecturer positions have equal access to education to further skills in our content area, which is technology. This set of faculty, including part-time, are also encouraged to attend training courses offered by campus organizations CeTeal (https://www.coastal.edu/ceteal/) and Training, Development and Service Excellence (https://www.coastal.edu/tdse/). In addition, full-time faculty can further their education via a tuition reimbursement program offered by the university (Dean M. Roberts, personal communication, August 2016).

Our department also has a student exchange and faculty exchange program in Xiamen, China, located at Huaqiao University (W. Jones, personal communication, various dates). This program does allow the sharing of curricula information between the two schools as well as collaboration on research projects. We have student organizations for which faculty are asked to advise and/or attend meetings (http://upe.acm.org/). The organization also have a professional branch for which students and faculty can attend conferences (https://www.acm.org/).

Conclusion

In conclusion, I have not been able to find written policy or procedures during my research for standard 2. Any written policy relates specifically to accreditation, as with ABET, or with the university, as with professional development. Our department, for whatever historical reasoning, works on the premise of shared-governance where each member can put forth suggestions for change in technology and curriculum. The only exception to unmonitored change is when change may overstep the boundaries of accreditation, other members of the department, or the university.

I would like to see more written procedures, not necessarily policy, for some of the indicators for standard 2. As in indicator 1, I would like to see the inclusion of industry, students, and parents, in the feedback and suggestion process. I believe these are untapped areas of ideas that can progress innovation in our department in the areas of technology and curricula. The inclusion of these stakeholders along with faculty and staff can address collaboration suggestions in indicator 2. Since parents are not a part of the feedback process and feedback for student learning is not gathered or assessed, we cannot fully address student centered learning and individualized learning as suggested in indicator 3. Finally, as suggested in indicator 5, our department needs a more collaborative approach to sharing information amongst department members as well as local, national, and global communities. We do not have a portal for which we can share research projects, research ideas, or novel approaches to technology, innovative or otherwise. Embracing these suggestions, along with our current approach, will put our department in more successful reach of standard 2.

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