INCLUDING "ANYONE" IN THE "ANYTIME, ANYWHERE" PARADIGM: STRATEGIES TO BUILD ACCESS IN DISTANCE EDUCATION

Kathleen P. King Ed.D & Gerene M. Thompson M.Ed.
University of South Florida
4202 East Fowler Avenue, EDU 105
Tampa, FL 33620
KathleenKing@usf.edu

INTRODUCTION

In the past 30 years, distance learning has come a long way in innovative technologies advancing opportunities for teaching and learning. In 2011, the public understands and accepts widely the once surprising concept of "Anytime, Anywhere" learning (Allen & Seaman, 2010). To expand our educational commitment to access and equity, this paper addresses the need and means to incorporate "Anyone" into this paradigm.

While we spend a great deal of time and effort teaching educators to adopt and design effective online learning, we focus much less on creating welcoming and accessible online learning environments for every student. This paper has three major sections: (1) defining the issues related to accessible online learning, (2) defining and providing examples of Universal Design Learning (UDL) and assistive technology easily applied to online classes, and (3) sharing strategies for online learning access by addressing policy issues, student needs and online course design. By introducing and discussing these

areas of online course facilitation, our aim is to introduce new strategies and resources while also building awareness of the need to design our courses in higher education for the needs of all learners.

DISCOVERING ISSUES FOR ACCESSIBLE ONLINE LEARNING

Universities struggle to keep pace with the changing educational needs of an ever growing and changing population base (Allen & Seaman, 2010). The rapid growth of online learning highlights this lag and necessitates changes in the traditional structure of universities (Hillman & Corkery, 2010). A few years ago, a typical first day included crowded walkways and parking lots, administrative offices bustling with activity, and long lines at on-campus food services. Today, a typical first day of class may be a mouse click away. Due to these dramatic changes, universities must think differently about how students' expectations of and needs for accessing educational and support services.

The decision to offer distance learning courses and/or programs creates a ripple effect across the institution. Institutions design non-academic departments like Admissions, the Business Office, and Registrar around the traditional face-to-face sixteen week semester, not for the shift created by distance learning. Unfortunately, this lack of preparation creates a myriad of challenges for online students who, before they are able to log on for their first day of class, must navigate an institutional framework that is not yet ready to receive them. To illustrate, many institutions offer distance learning courses in abbreviated semesters or terms. Eight week or sometimes four week mini-terms replace the sixteen week semester as abbreviated course formats provide benefits for both the student and the institution. With this calendar, students complete more courses allowing them to reach degree completion at an accelerated pace and institutions benefit from the enrollment growth. Changes needing consideration include payment deadlines, add/drop deadlines, registration dates, information technology support delivery, as only a few examples (Hillman & Corkery, 2010).

Clearly, distance learning introduced new opportunities and challenges for higher education institutions. The administrative and student service processes used to support traditional face-to-face course delivery simply do not work well for distance learning students and institutions cannot underestimate the importance of these services. La Padula, 2003 expresses this best "A student's distance learning experience is often shaped by the quality of the services that support the educational process. Online learners benefit from student support services specifically designed to meet their needs" (p.120). To be successful in the online learning arena, institutions must be prepared to re-think current institutional frameworks and consider new ways of conducting business in order to increase access to online learning.

STUDENTS WITH SPECIAL NEEDS

Continuing along this theme of access ultimately brings forward the need for institutional support of students with special needs desiring or needing to enroll in online courses. Yet although the resources are readily available, special needs of students are not within the scope of the faculty's attention, nor are the means to design and teach online courses for special need students. How do we change this pattern? Three strategies are capable of substantially tipping the balance in the direction of accessibility of special needs learners: 1) invite your campus disability services office to post their top ten accessibility tips for online courses on the home page of the Learning Management System (LMS), 2) embed key accessibility resources into the LMS menu and course control panel, and 3) provide online accessibility workshops in all campus faculty development venues: on-demand formats, podcasts, face-to-face, department meetings, campus conferences, etc.

Once faculty become more aware of the need to address special needs students in online environments, they will begin to search for the means to do so. By university experts providing key resources, strategies and training to guide faculty learning in these areas, they build greater success, reduce frustration, and cultivate ethical student-centered instruction. Showcasing the work of early faculty adopters of accessible online instruction will demonstrate success and encourage collaboration regarding best practices.

STUDENT TECHNOLOGY AND READINESS ISSUES

As we consider how to design online courses, which are truly welcoming to all students, many times we make assumptions about technology access and readiness. Specifically, while many parts of well-developed countries have their expectations of broadband access, this is not true for all people in either rural or urban settings (Zou, 2011). Therefore, institutions need to determine how to meet the needs of future students to have the online access they need for successful learning.

In addition, sustained research demonstrates that there are indicators of student readiness for online learning. These indicators not only include the obvious technology access and literacy, but also self-discipline, initiative, and strong reading skills (Gibson, 2006; Mullen & Tallent-Runnels, 2006). How can we as educators and institutions help students assess and/or develop these skills? Providing self-assessment tools for prospective students to use prior to enrollment is a valuable, and scalable, way to build awareness of issues and needs, while also cultivating responsibility and self-efficacy (Gibson). As we support students making informed decisions about their readiness for online learning and provide full support services, the circle of access grows wider.

EXPLORING UNIVERSAL DESIGN AND ASSISTIVE TECHNOLOGY

Fortunately, an area within distance learning which has been growing for the last 15 years is that of accessibility, and ease of use. Many researchers and centers have this topic as the focus of their work and have made so much headway that the accessibility approach to design is now called Universal Design (Burgstahler, Anderson, & Litskow, 2011; University of Arkansas at Little Rock, n.d.).

There are several obvious benefits to Universal Design as it affords people with various disabilities the ability to access, or better access web sites and distance learning. Such Universal Design includes features which will be compatible to screen readers (for the blind or seeing impaired) and voice to text - for those people who have difficulty typing - (Burgstahler, Anderson, & Litskow, 2011). While many software programs have been available for decades to address these issues, they have customarily been quite expensive. Now faculty and students alike find that many of these accessibility features are in their computers' operating system at no additional cost (King, 2011).

In addition to technical course design (using code), there are many aspects of designing distance learning which professors have control over to make a course more accessible by using Universal Design principles. This partial list of strategies reveals easy ways to make online courses more user-friendly. Considering that varied needs of students with learning disabilities, over time faculty could add additional means to share course context so that learners with vision problems could hear audio versions of texts, for instance.

There are free conversion programs which transform text files into MP3 (audio) files. This strategy addresses accommodation needs for face to face and online classes. An example of a commercial product is Read and Write, Gold (BrightEye Technology, 2010), which provides assistance for students to have text read aloud, whether in PDF or other text form. Research demonstrates that Read and Write, Gold specifically addresses the learning needs of not only visually impaired, but also dyslexic, ESL and learning impaired students.

Other strategies include using different multimedia across a unit in order that students who are auditory, text or visual learners will find their preferred method for some of the activities. In our experience, it pleasantly surprises most faculty how easy it is to customize the LMS to include other content formats. Consider how to include the meaning of the content to be studied in video, audio and text. This strategy ensures that all students will find their learning preference addressed and will have greater potential to master the content and application.

FREE RESOURCES (IN YOUR OPERATING SYSTEM AND OTHERS)

Faculty can make a significant difference in the life of special needs learners by pairing the appropriate designing of online courses with Universal Design principles and free programs. When we design courses in ways that people with different needs can access them, sometimes the means to do so becomes the barrier. The great news is that in 2011, our major computer operating systems have screen readers,

magnifiers and other programs included onboard at no additional cost. Any of these materials can be used to guide individual and group faculty development.

However, most users are not aware of these tools, so what can faculty do? Exploring just these few sites which include free resource will expand your awareness of free tools and networks available to support faculty learning and study support. Following each item in the list is a very brief annotation to guide your site reviews and how faculty and students could employ these resources.

> **AHEAD:** Association of Higher Education and Disability http://www.ahead.org/
> A professional association for faculty and administrations interested in disability in higher education Several free publications and resources for increasing understanding on the topic. Inexpensive membership.

> **DO-IT:** Disability, Opportunities, Internetworking, and Technology http://www.washington.edu/doit/
> Originally launched at the University of Wisconsin through a Fund for the Improvement of Postsecondary education (FIPSE), this resource and learning portal is now hosted by the US government. You will find abundant free resources, insights and news abut accessibility in higher education here.

> **Universal Design Toolkit** http://www.ahead.org/resources/universal-design
> The AHEAD association has worked to develop a nuts and bolts introduction to Universal Design. These abundant resources for further readings, tools and recommended practices are all free on the web.

> **WAVE Accessibility Toolbar:** http://webaim.org/toolbar
> Several of these free tools are available on the web. WAVE is particularly robust and reliable to guide users in determining if the web pages they develop are accessible to blind or deaf users. This program is a a toolbar which one downloads and installs in the web browser. It is activated when needed to evaluate a page. Learn by doing is the motto here.

> **WebAim** (Introduction to Web accessibility) http://webaim.org/
> Another extensive site which introduces the scope of disability, but as it particularly relates to access to the web. Nobody reaches this goal better than WebAim. Free resources and abundant learning material to guide faculty in understanding disability needs and accessible design strategies.

PAID RESOURCES

For more specific and advanced needs, there are many different applications, likely already on campus for student access. A good place to start would be campus disability offices which usually provide resources and/or access to specialized accessibility technology. Moreover, understanding the available tools and their potential enables instructors to develop and plan courses which work within that scope. The following list of assistive technology tools is useful in expanding faculty and student available accommodation strategies and resource base further.

SHARING STRATEGIES FOR ONLINE LEARNING ACCESS

Before institutions determine the services needed to support their distance learners, they must first know two things 1) Who their distance learners are (or who they want them to be), and 2) Are they ready to serve distance learners? The profile of an institution's distance learning population is important because it provides key information to guide an institution's approach to increasing access to support services for distance learners. For instance, an institution at which the majority of the students take courses both online and face-to-face needs to approach access to student services differently than one at which most distance learning students take courses predominantly online. Institutions also determine their readiness to serve distance learners by identifying barriers to access and gaps in current services (Zou, 2011).

Institutions know that distance learning has the potential to significantly impact enrollment growth, but this growth is not without consequence. As a result, institutions must be strategic as they foray into the world of distance education. An important first step is the creation of a distance learning task force. This core group should include individuals from across campus and must include a representative to communicate with upper level administration (Hillman & Corkery, 2010). Goals for the task force include determining the distance learning program(s) the institution hopes to offer, target populations and institutional structures needed to support the process. For institutions already transitioned to distance learning, but seeking to improve access and/or expand support service offerings, a helpful exercise is to conduct a process-mapping session. Hillman & Corkery, 2010 define process mapping as 'outlining from the student's standpoint, the structure of initial contact through admissions to the start of classes and beyond with a focus on retention' (p. 469). Process mapping can be an important tool in determining barriers to access and gaps in current service offerings for distance learners.

Other important considerations for distance learners are the type of service offerings. When offered, the most common services provided tend to be those that are within the main administrative context (admissions, financial aid, registration, etc.), but, similarly to campus based students, online learners may need access to more support. Additional services might include academic tutoring, library resources, advising, counseling services, personal counseling and career services (La Padula, 2003).

Higher Education institutions find greater success when they integrate several critical services in a common portal to create an online version of a centralized student services center. Consider how much more cost efficient and scalable such an approach is compared to redundant specialized online student service centers. In addition, from the student's perspective, access to visibility of services escalates when delivered in a portal-like format (Phelps, 2006). Smaller colleges have also explored sharing resources across institutions: for instance, multiple colleges may opt to share library, admissions or registration systems (Phelps).

CONCLUSION AND GETTING STARTED

This paper has: 1) offered recommendations to improve access to online education by improving support services for distance learners (including tools and resources), and 2) highlighted several strategies for faculty to select from to begin modifying their online courses immediately for accessibility. In addition, we have discussed how faculty can make these choices for themselves, choose where to begin, decide their pace, and incorporate resources based on student needs and course content.

Self-efficacy is just as important for faculty as it is for students; therefore, this paper builds understanding and resource repertoire for faculty to gain confidence as online educators teaching diverse communities of learners. We realize this, and so this paper introduces the Universal Design Learning approach. Our hope is that more faculty will realize how they can include ALL students in their online *and* face to face classes all the time. Designing to meet all learners' needs ensures no one is excluded.

In the same way, it is the faculty who will continue to develop the best ways to make our classes truly inclusive. Building communities where we can share strategies, and barriers will be powerful in advancing our learning. How will you continue your professional development in online learning accessibility?

References

Allen, E. I., & Seaman, J. (2010). Learning on demand: Online education in the United States, 2009. Retrieved from, http://sloanconsortium.org/publications/survey/pdf/learningondemand.pdf.

BrightEye Technology. (2010). Read & Write, Gold. Retrieved from, http://www.readwritegold.com/

Burgstahler, S. Anderson, A., & Litskow, M (2011). Accessible technologies for online and face to face teaching and learning. In K. P. King & T. D. Cox (Eds.) *The professor's guide to taming technology* (pp. 201 – 218) Charlotte, NC: Information Age Publishing.

Gibson, C. (2006). Increasing equity: Seeking mainstream advantages for all. In K. P. King, & J. K. Griggs (Eds.) *Harnessing innovative technologies in Higher Education* (pp. 133-150). Madison, WI: Atwood

Hillman, S. J., & Corkery, M.G. (2010). University infrastructural needs and decisions in moving towards online delivery programmes. *Journal of Higher Education Policy and Management, 32*(5), 467-474.

King, K. P. (2011). Adaptive technology *hiding* in your operating system. In K. P. King, and T. Cox. (Eds.). *The professor's guide to taming technology: Leveraging digital media, Web 2.0 and more for learning.* (pp. 183-200). Charlotte, NC: Information Age Publishing, Inc.

LaPadula, M. (2003). A comprehensive look at online student support services for distance learners. *The American Journal of Distance Education, 17*(2), 119-128.

Mullen, G. E., & Tallent-Runnels, M. K. (2006). Student outcomes and perceptions of instructors' demands and support in online and traditional classrooms. *Internet and Higher Education, 9*(4), 257-266.

Phelps, M. R. (2006). Using distance education to increase higher education opportunities. In K. P. King, & J. K. Griggs (Eds.) *Harnessing innovative technologies in Higher Education* (pp. 77 – 96). Madison, WI: Atwood

University of Arkansas at Little Rock. (n.d.). Universal Design Toolkit. Retrieved from, http://www.ahead.org/resources/universal-design

Zou, J. J. (September 25, 2011). Faster internet service fuels growth at West Virginia Community Colleges. *The Chronicle of Higher Education*. Retrieved from, http://chronicle.com/article/Faster-Internet-Service-Fuels/1291