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Universal Design for Learning: A Proactive Pedagogical Approach

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1. Introduction

Failure to complete coursework and maintain a satisfactory GPA remains a critical issue for most students with disabilities attending college. Tincani (2004) reports that while the total enrollment of students with disabilities in the United States is increasing, they do not complete a degree or certificate at the same rate as their non-disabled peers. Although a myriad of factors may account for differences in completion rates, factors related to hidden barriers that prevent students with disabilities from succeeding must be considered.

While the provisions within the Americans with Disabilities Act of 1990 have been successful in removing the physical barriers that prevented students with disabilities from participating in higher education, other significant barriers remain (Paul, 2000). Though addressing environmental access through the elimination of physical barriers may have supported access for individuals with physical disabilities, a larger number of postsecondary students have “hidden disabilities” and are challenged by curricular barriers. While campuses have largely addressed their legal obligations to remove physical obstacles impacting access, many have not focused on instructional design and related pedagogical barriers. The challenge then is how to move faculty beyond the provision of reasonable accommodations toward carefully considering their instructional practices to afford students every opportunity for access

and, ultimately, educational success. If we want to truly support students with disabilities, we must consider how to substantively renovate the faculty-student interchange and offer faculty a transformative pedagogical approach that supports students with disabilities in the teaching and learning process. Clearly, a new model is in order.

Universal Design for Learning (UDL) is an emerging paradigm in higher education that holds great promise in addressing instructional access issues for learners of all preferences, abilities and disabilities (Scott, McGuire & Shaw, 2003). At its core, UDL is a pedagogical approach to planning and developing curricula in ways that promote access, participation, and progress for all individuals, including students with disabilities (Rose & Meyer, 2002). While the original premise of Universal Design (Center for Universal Design, 1998) stemmed from the belief that we must proactively consider human differences in the physical design of public spaces, recently, several researchers have articulated analogous models for assessment and instruction in higher education (Ouellet, 2004). Today it is unimaginable that any publically funded building would be built without multiple means of physical access included in the design. UDL promotes the idea that what has been done in the physical world of architecture can also be accomplished in the more abstract world of knowledge (Pisa & Coyne, 2001). Proactive efforts to design educational materials that support a diverse range of learners will result in better materials for all learners.

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Leading this effort, the Center for Applied Special Technology (cast.org) has formulated UDL into three pedagogical principles:

- *Multiple means of representation.* Subject matter can be presented in alternate modes for students who learn best from visual or auditory information, or for those who need differing levels of complexity.
- *Multiple means of engagement.* Student learning interests are matched with the mode of presentation and their preferred means of expression. Students are more motivated when engaged in what they are learning.
- *Multiple means of expression.* Allows students to respond with their preferred means of control. This accommodates the differing cognitive strategies and motor-system controls of students.

Universal Design for Learning, as it is being considered in higher education, acknowledges that after-the-fact curriculum adaptations can be time consuming to design and difficult to implement (Orkwis, 1999). UDL posits that a more effective way to address the needs of diverse learners is to proactively consider the design of instructional materials and activities that enable learning goals by individuals with vast differences in preferences, abilities or disabilities. Importantly, UDL moves away from the deficit model of disability in favor of a more inclusive paradigm in which people with disabilities are accepted as part of our larger community of learners bringing with them various learning strengths and weaknesses. UDL challenges a faculty member to first consider the curricular barriers that may limit student success as opposed to the misconception that the student is solely accountable for their academic difficulties.

If a faculty member can accept this paradigm shift, it often provides them greater freedom to explore innovative pedagogical changes to support student success while still maintaining expectations of academic rigor. Thus, faculty who adopt UDL strategies are encouraged to think in novel ways about instruction that strives to deliver optimal levels of learner support. Much like the application of Universal Design in architecture or product development, a universally designed classroom is inherently more inclusive and likely to meet the needs of a more diverse student population. However, despite growing interest, the imple-

mentation of Universal Design for Learning in higher education remains somewhat nebulous. While faculty may intuitively recognize the potential benefits of such inclusive teaching practices, they often lack the understanding to apply these concepts in practical ways (Orr & Hammig, 2009).

2. Does UDL Work?

Although many articles are theoretical or descriptive in nature, more recent empirical research on the efficacy of Universal Design for Learning in higher education is beginning to emerge (Gaddy, Bakken, & Fulk, 2008). In an effort to add to this knowledgebase, Ensuring Access through Collation and Technology (EnACT) is conducting an ongoing evaluation of the efficacy of UDL in higher education.

Since 2005, faculty from 14 California State University (CSU) campuses have participated in a United States Department of Education funded project focused on implementing UDL practices in higher education. Specifically, faculty were asked to attend a workshop introducing them to the principles of UDL and then participate in campus-based Faculty Learning Communities, which provide a structured forum to begin examining specific UDL course changes to “threshold concepts” (Meyer & Land, 2003) that were deemed essential for student success. When considering the impact of our EnACT project activities, we examined the ways UDL influenced both student and faculty perspectives. The following data offer a few highlights:

Faculty Data

- 85% of project faculty viewed UDL as essential to effective teaching and learning in their courses.
- 100% of project faculty reported that they would “likely” or “very likely” make UDL changes to other courses in the future
- 68% of project faculty reported that implementation of UDL principles was perceived as positive by their students
- 73% of project faculty indicated that they would “not have made substantive changes to their courses” without project support.
- Faculty also reported increases in student confidence, student success in mastering course materials,

and increased student engagement

Student Data

- 869 students experienced UDL course changes
- 10.5% of these students reported some form of disability
- 63% of students without disabilities (SWoD) and 61% of students with disabilities (SWD) reported that “before this class, I sometimes struggled to learn what my professors were trying to teach me”
- 66% of students without disabilities (SWoD) and 78% of students with disabilities (SWD) reported that UDL courses changes were “very important” in ensuring their academic success

3. Implications for Practice

For these faculty members, UDL helped begin a conceptual shift with respect to how they viewed their pedagogical relationship with all students, including students with disabilities. Historically, individuals with disabilities were often deemed “challenged” by their disability and thus when considering their educational struggles, a common solution was to provide “necessary accommodations” to level the academic playing field. The implication of this solution, while noble, is that individuals who cannot successfully interact with the curriculum in a traditional fashion are alleged to blame for their perceived inability to learn. Alternatively, when faculty consider the principles of UDL, a shift occurs in educational responsibility. Instead of blaming the individual with a disability for their learning challenges, perhaps faculty should first consider the extent to which their pedagogical environment is welcoming to a community of diverse learners. As noted by one faculty member:

UDL allows me to think more broadly about teaching methods to reach everyone regardless of learning style – it has profoundly impacted how I approach teaching in that not everyone who comes to my classroom is the same. (Faculty, San Francisco State University)

The implication of this shift is striking—perhaps a “one size fits all” model of teaching is not ideal? The fiscal and public policy implications of this shift may also have

enormous implications for postsecondary institutions as they move away from costly individualized accommodations to appropriate educational pedagogy for all students, with or without disabilities. As is being increasingly noted within the research and practice community, UDL not only benefits individuals with disabilities but indeed, all learners.

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