Learner Demographics and a Rationale for UDL

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This scenario in this assignment includes the biology department chair approaching me for recommendations to revise the design to help close the achievement gap in a high-enrollment biology course. The course enrolls approximately 700 students with a course withdrawal rate of 19% and a course failure rate of 15% in the last fiscal year. In addition, the biology course enrolls 33% of students of color, 43% of first-generation students, 26% of Pell-eligible students, and 6% of students with a registered disability. My goal in this paper is to provide a rationale for UDL to the biology department chair, incorporating references to learner diversity and impact.

My strategy for presenting the UDL to the biology department chair would be two-fold; long-term UDL goals and short-term UDL goals. This assignment is similar to the article, "Increasing accessibility of college STEM courses through faculty development in Universal Design for Learning" (Langley et al., 2013). In this article, sixteen faculty members of STEM courses taught six hundred students, with thirteen teaching Biology courses. Using an approximation, I would assume that about 18 to 20 faculty teach the 700 students in my scenario.

My long-term goal would include training these 18 to 20 faculty in a sustained multiyear training program of UDL in the areas of "education, implementation, evaluation, and dissemination" (Langley et al. 2013, 1). In addition, creating a constructivist learning environment would facilitate a collaborative atmosphere with readings and discussions of the books *Universal Design in Higher Education* (Burgstahler 2015) and *Creating Inclusive Learning Opportunities in Higher Education* (Burgstahler 2020). Additionally, this same article by (Langley et al. 2013) referenced a Faculty Universal Design for Learning Observation Tool, which would be examined during the readings and discussion sessions to implement such a tool.

Further educational opportunities could include seminars by nationally recognized experts in the field. For example, in the article by (Langley et al. 2013), several faculty members presented techniques for increasing the scope and access to technology, which is a technique I would recommend. These faculty members in the article "instructed their colleagues on the use of vodcasting, podcast/media server/compression issues, the digital pen, and implementing best practices for supporting all students" (Langley et al. 2013, 2). A similar approach of faculty members sharing best practices with other faculty members would be another recommendation to the biology department chair.

My short-term recommendations to the biology chair would include implementing the UDL framework principles to modify Biology course interactions. The goal of these changes would facilitate a learning environment "to be as barrier-free as possible [and] allow learners to select how they want to engage with the material based on their learning needs" (Tobin and Behling 2018, 99). Students in higher education are mobile and digital learners, so all my specific UDL short-term goals would benefit them. Additionally, the demographics of this biology class include a significant portion of first-generation students, Pell-eligible students, and students with registered disabilities, which means the implementation of a UDL framework will benefit them as well.

Some of my specific goals would include posted lesson goals, assignment options, flexible workspaces, and regular feedback (Tobin and Behling 2018). I would give specific examples within the above categories during my presentation to the department chair. Additionally, I would suggest implementing the Faculty Four program of implementing a few simple but effective and expansive effective UDL techniques that include alternative text, accessible documents, captions, transcripts, and audio descriptions, and choosing accessible third-party resources (Tobin and Behling 2018, 107-108). My last set of recommendations could involve having the faculty "Look through the course interactions and identify elements that are single-stream, meaning that there is only one way to get access to the information" (Tobin and Behling 2018, 110).

The UDL framework helps to create a learning environment where all students are included and promotes student success simultaneously. As Todd Rose said in his presentation, average students are just a myth, so let us help all students "overcome the drag of an educational environment designed on average" (TEDx Talks 2013).

- Burgstahler, Sherly E. 2015. *Universal Design in Higher Education from Principles to Practice*. Cambridge, Ma Harvard Education Press.
- Burgstahler, Sheryl.2020. "Equal Access: Universal Design of Instruction." *Do-It*. May28, 2020.\$CANVAS_COURSE_REFERENCE\$/file_ref/g74f3c2ea69e783b6f871e3fcafbe9c ca?wrap=1.
- Burgstahler, Sheryl and Elizabeth Moore. 2015. "Impact of faculty training in UDI on the grades of students with disabilities." in *Universal design in higher education: Promising practices.* University of Washington.

Seattle.https://www.washington.edu/doit/resources/books/universal-design-higher-education-promising-practices.

- Burgstahler, Sheryl E. 2020. *Creating Inclusive Learning Opportunities in Higher Education*. Harvard Education Press. Fitchburg, MA.
- Langley-Turnbaugh S. J., M. Blair, and J. Whitney. 2013. "Increasing accessibility of college STEM cources through faculty development in UDL." in *Universal design in higher education: Promising practices*. University of Washington.

Seattle.https://www.washington.edu/doit/increasing-accessibility-college-stem-courses-through-faculty-development-universal-design-learning.

Rose, Todd. 2013. "The Myth of Average." *TEDx Sonoma County*. June 19, 2013. Video,18:26. https://youtu.be/4eBmyttcfU4.

Tobin, Thomas J, and Kirsten Behling. 2018. *Reach Everyone, Teach Everyone : Universal Design for Learning in Higher Education*. Morgantown West Virginia: West Virginia University Press.