Technical Brief: Online and Blended Instruction: Pedagogy and Evidence-Based Practices

<div align="center">

Online and Blended Instruction:

Pedagogy and Evidence-Based Practices

Technical Brief # 01

</div>

Please cite as:

<div align="center">

Abstract

</div>

This brief highlights effective pedagogical strategies and evidence-based practices for instructors of online or blended courses to consider during course development and implementation. Current research and theoretical frameworks in the professional literature suggest that teaching online requires an approach that is different from that used in a face-to-face course, including a new role for the instructor and a need for a change in learning activities.

Pedagogical Shift

Teaching online courses requires a fundamental shift in pedagogy (the instructional strategies a teacher uses). An instructor cannot simply move course materials from a traditional course to the online environment.

- This shift requires the course to evolve from being lecture/teacher-centered to being more active/student-centered (Bonk & Zhang, 2006; Dukes, Koorland, & Scott, 2009; Mason, 1998). Two significant implications of this shift to a more student-centered approach are that the learning process is inherently more hands-on (Bonk & Zhang, 2006) and that it requires more self-regulation (Cho, 2004). In place of simply reading and responding or viewing a lecture and responding, hands-on activities should be designed so that students actively engage with content and create authentic products. An example of a hands-on activity for students in an ecology course is to read about the benefits of recycling and to design an effective recycling program for their local community/university. Inherently, this hands-on approach requires students to delve more deeply into the course content and to manage their time effectively in order to complete assignments. Students must be more responsible for learning the content on their own with less guidance in terms of pacing and leading on the part of the online course instructor. Thus, student self-regulation (organization of one's own learning) is more important in the online learning environment compared to a traditional face-to-face course.

- This shift can also be characterized as a change from a traditional to a more constructivist pedagogy. In constructivist pedagogy, the student is required to construct knowledge (Muir, 2001). Students are responsible for linking information to prior knowledge, for drawing connections between information, and for applying this information in real world contexts. This real world application requires students to act as independent problems solvers (Kurubacak, 2007). Within the online learning environment, there is a more nuanced link between what is

taught, how it is taught, and how learning is assessed (Muir, 2001). The recycling example illustrates this link between content that is taught and how student learning of that content is assessed, as well as provides an example of a hands-on learning activity, having student solve real world problems.

Role of Effective Online Instructors

The shift in pedagogy to a more student-centered approach requires a change in the role of the instructor who acts as more of a facilitator providing students the opportunity to wrestle with real world consequences of the content they are learning.

- To successfully achieve this role, the instructor must foster authentic and active learning opportunities, encourage cooperation among students, and give students prompt feedback (Bonk & Zhang, 2006; Grant & Thorton, 2007; Smith). Savery (2005) suggested the V.O.C.A.L. model in which instructors should be Visible, Organized, Compassionate, Analytical, and a Leader-by-example.

- A fundamental difference for instructors planning an online course is the need to "conceptualize the [course] development process from the learner's perspective rather than that of the content or teacher" (Sims, Dobbs, & Hand, 2002, p. 141). The instructor must think more about how students could learn the information and must develop activities that foster student learning in comparison to a different instructional role in a teacher-led, face-to-face course.

Effective Strategies for Online Courses

There are many strategies that online instructors can use as they shift their pedagogy for the online teaching environment. The following list highlights some basic strategies (please see references for more extensive strategies and suggestions for building constructivist online course environments):

- Have students attend or create a class-wide web conference (Bonk & Zhang, 2006);
- Utilize asynchronous discussions since they allow for more depth and are more accessible to all students (Bonk & Zhang, 2006; Dukes et al., 2009);
- Have students create individual blogs or have teams use blogs to document collaboration (Bonk & Zhang, 2006);
- Develop simulations (mock trials, debates, role plays, etc.) within online discussions (Bonk & Zhang, 2006);
- Engage students in self-assessment (such as self-tests or self-reflections; Bonk & Zhang, 2006);
- Encourage the creation of "more polished and meaningful products" (Bonk & Zhang, 2006) such as a proposal, presentation, or paper that addresses a real-world issue or a scholarly debate that has been crafted over a large portion of the course;
- Provide alternative text for graphics and visuals to improve accessibility (Dukes et al., 2009);
- Avoid excessive amounts of text based material with a goal of increasing the accessibility of information (Dukes et al., 2009);
- Provide notes within posted PowerPoint presentations (Dukes et al., 2009);
- Create a question forum for students to post questions about materials or course expectations that can be answered by the instructor and other students (Dukes et al., 2009);
- Give students choices in types of assessments used to demonstrate the knowledge and skills acquired in the course (Hosie, Schibec, & Backhaus, 2005); and
- Utilize project based online learning (Kurubacak, 2007) which involves having students create products (presentations, proposals, etc.) that are relevant to the discipline they are studying and may require multiple components. For example, students may have to create a presentation and/or a web site about the information they

have gathered to solve a real world problem relating to the course content.

Works Cited

Bonk, C. J., & Zhang, K. (2006). Introducing the R2D2 model: Online learning for the diverse learners of this world. *Distance Education*, 27(2), 249-264. doi:10.1080/01587910600789670

Cho, M. (2004, October). *The effects of design strategies for promoting students' self-regulated learning skills on students' self-regulation and achievements in online learning environments* . Paper presented at the 27th meeting of the Association for Educational Communications and Technology, Chicago, IL. Retrieved from http://www.eric.ed.gov/PDFS/ED485062.pdf [2]

Dukes III, L. L, Koorland, M. A., & Scott, S. S. (2009). Making blended instruction better: Integrating universal design for instruction principles in course design and delivery. *Action in Teacher Education*, 31(1), 38-48.

Grant, M. R., & Thornton, H. R. (December 2007). Best practices in undergraduate adult centered online learning: Mechanisms for course design and delivery. *MERLOT Journal of Online Learning and Teaching*, 3(4), 346-362. Retrieved from http://jolt.merlot.org/documents/grant.pdf [3]

Hosie, P., Schibec, R., & Backhaus, A. (2005). A framework and checklists for evaluative online learning in higher education. *Assessment and Evaluation in Higher Education*, 30(5), 539-553. doi: 10.1080/02602930500187097

Kurubacak, G. (2007). *Promoting self-motivated learning through project based online learning*. Retrieved from http://www.eric.ed.gov/PDFS/ED495256.pdf [4]

Mason, R. (2001). Models of online courses. *Ed at a Distance*, 15(7). Retrieved from http://eric.ed.gov [5]

Muir, D. (2001, June). *Adapting online education to different learning styles*. Paper presented at 22nd National Education Computing Conference, Chicago, IL. Retrieved from http://www.eric.ed.gov/PDFS/ED462940.pdf [6]

Savery, J. R. (2005). BE VOCAL: Characteristics of successful online instructors. *Journal of Interactive Online Learning*, 4(2). Retrieved from http://www.ncolr.org/jiol/issues/pdf/4.2.6.pdf [7]

Sims, R., Dobbs, G., & Hand, T. (2002). Enhancing quality in online learning: Scaffolding planning and design through proactive evaluation. *Distance Education*, 23(2), 135-148. doi: 10.1080/0158791022000009169

Smith, T. C. (2005). Fifty-one competencies for online instruction. *The Journal of Educators Online*, 2(2). Retrieved from http://www.thejeo.com/Ted%20Smith%20Final.pdf [8]

Other Suggested Readings

Lorenzi, F., MacKeogh, K., & Fox, S. (2004). Preparing students for learning in an online world: An evaluation of the student passport to e-learning (SPEL) model. *European Journal of Open Distance and E-learning*. Retrieved from http://www.eurodl.org/materials/contrib/2004/Lorenzi_MacKeogh_Fox.htm [9]

Milson, M. R., & Wilemon, D. (2008). Educational quality correlates of online graduate management education. *The Journal of Distance Education*, 22(3). Retrieved from http://www.jofde.ca/index.php/jde/article/viewArticle/446/678 [10]

Oblinger, D. G., &. Hawkins, B. L. (2006). The myth about online course development. *EDUCAUSE Review*, 41(1), 14-15. Retrieved from http://net.educause.edu/ir/library/pdf/erm0617.pdf [11]

Links:

[1] http://www.udi.uconn.edu

[2] http://www.eric.ed.gov/PDFS/ED485062.pdf

[3] http://jolt.merlot.org/documents/grant.pdf

[4] http://www.eric.ed.gov/PDFS/ED495256.pdf

[5] http://eric.ed.gov

[6] http://www.eric.ed.gov/PDFS/ED462940.pdf

[7] http://www.ncolr.org/jiol/issues/pdf/4.2.6.pdf

[8] http://www.thejeo.com/Ted Smith Final.pdf

[9] http://www.eurodl.org/materials/contrib/2004/Lorenzi_MacKeogh_Fox.htm

[10] http://www.jofde.ca/index.php/jde/article/viewArticle/446/678

[11] http://net.educause.edu/ir/library/pdf/erm0617.pdf