Strategies and Techniques to Help Online Students Persist

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The online learning population is a heterogeneous and diverse group of learners from a variety of cultural and educational backgrounds. One of the main reasons learners engage in online learning is because of the flexibility it provides them to pursue their educational goals along with a number of roles and responsibilities in their life. However, there are additional challenges online learners have to overcome to be able to persist and successfully achieve their goals. Persistence refers to learners’ actions as they relate to continuing their education from the first year until degree completion. There is evidence that dropout rates among distance learners are higher than those of traditional, campus-based learners (Allen & Seaman, 2009).

Rovai Model of Persistence

Alfred Rovai (2003) evaluated several persistence models relevant to non-traditional learners and developed a composite model to explain persistence of learners enrolled in online courses. He integrates Bean and Metzner’s (1985) learner characteristics prior to admission including age, ethnicity, gender, intellectual development, academic performance, and preparation. In addition, he includes skills that distance learners need to acquire to successfully navigate the online environment include computer literacy, information literacy, time management, reading and writing skills, and online interaction skills. Once learners are admitted to a program of study, there are additional factors both external and internal to the institution that can affect the ability of a learner to persist. According to Rovai (2003), external factors include issues with finances, hours of employment, family responsibilities, the presence of outside encouragement, opportunity to transfer, and life crises such as sickness, divorce, and job loss.

Rovai (2003) cited internal factors affecting learners after admission including variables researched by Tinto (1975), Bean & Metzner (1985), Workman and Stenard (1996), Kerka and Grow (1996, as cited in Rovai, 2003). According to Tinto (1975), social and academic integration as well as goal commitment, institutional commitment, and the development of a learning community are internal institutional factors that affect persistence. Workman and Stenard (1996) analyzed the needs of distance learners that influence persistence of online learners. These needs include consistency and clarity of online programs, policies and procedures, learner’s sense of self-esteem, ability to identify with the institution and not be looked at as an “outsider”, the need to develop interpersonal relationships with peers, faculty, and staff, and the ability to access academic support and services.

Self-Efficacy & Cognitive Load

Learners new to an online environment often come to the learning experience with low confidence in their ability to be successful. New learners have to manage the technology, the course environment, the policies and procedures, the vocabulary, and the content. It is normal for learners to have to sift through a lot of incoming information, but when it is a barrier to the goal of learning, it is considered interference. Cognitive load, which is related to the load on working memory during learning, can have an impact on emotion and information processing. If too much new information is presented to learners at one time, an immediate response can be anxiety, which can have an impact on attention and information processing.
According to Sweller and Chandler (1994), there are two sources of cognitive load that have implications for instruction, intrinsic cognitive load and extraneous cognitive load. Intrinsic cognitive load relates to the complexity of the learning content, as well as the schemata that learners have constructed, and cannot be controlled by design. If the learning content is complex and the learner has little prior knowledge and therefore few or no schemata, then the intrinsic load of the content is high. Extraneous cognitive load is imposed by the design and the organization of the learning materials and has a negative impact on learning; therefore, it should be reduced to maximize learning. If the materials being taught are difficult, then intrinsic cognitive load is high, so the amount of content that is presented and the structure in which it is presented should be simple to reduce extraneous cognitive load.

Chang and Ley (2006) describe online learning activities such as navigating the course room, using multiple-linked materials, finding your way back from linked materials to the original place you began, and solving technical issues and connection problems that split learners’ attention and increase extraneous cognitive load. Information that is linked from multiple locations within and external to the course can cause extraneous cognitive load for learners.

It is also important to consider the amount of information that is presented to the learner at one time if the intrinsic load of the information is high. Try to limit resources to those that are necessary to complete or prepare for upcoming activities.

Cognitive Scaffolding to Support Persistence

Many learners enter the online environment without skills to plan, monitor, and evaluate their thinking and learning (Stavredes, 2011). Other learners may lack prior knowledge and need support in learning new content areas and competencies. Cognitive scaffolding provides a strategic way to make available the appropriate support for a diversity of needs to help learners persist.

Sharma and Hannafin (2005) define three main activities for implementing scaffolding in practice: 1) establishing the goal of the activity at the beginning, 2) continuing to refine the goal throughout the activity, and 3) leveraging appropriate support and communication strategies to enable the achievement of the goal (p. 19–20). This helps to situate the learning activity within a goal, helps learners to internalize and adapt the goal, and, finally, to achieve the goal.

Stavredes (2011) describes procedural scaffolding as guiding learners as they learn how to navigate the online course environment and engage in learning activities (p. 150). She explains that learners may have difficulty understanding where to start in an online course especially given the diversity in how content may be delivered online, the variety of resources available, and new expectations for participating in a course (p. 112). Three types of procedural scaffolds that can help the learner persist include orientation, expectation, and resource scaffolds. An orientation is a great start to engaging learners and setting them up for success in your online course. Palloff and Pratt (2003) suggest the inclusion of internet basics, basic computer skills, strategies for success, such as time management, an explanation of role of interaction, how to provide feedback, the rules of netiquette, and support contacts in an orientation (p. 67). A faculty expectations statement can help learners become aware of your personal teaching style, the organization and pace of the course, important due dates, and specific policies as they apply in the online setting. Finally, if you are integrating the use of any specific processes such as a critical thinking or writing model, developing resource scaffolds to outline how to use the processes and templates to guide learners’ thinking will help support your learners.

Metacognitive scaffolding that supports learners’ development of thinking skills is especially important for online learners given their diverse previous experience with education, their potential gaps in education, as well as their potential new exposure to the new forms of learning online. Metacognitive
scaffolding strategies support learners’ planning, monitoring, and evaluating skills. An important step in planning is to help learners establish goals throughout the course and plan for the achievement of those goals. Course overviews, roadmaps, scoring guides, and self-reflections can be used to help students develop metacognitive strategies to ensure student success.

Conceptual scaffolding guides learners about “what to consider” during learning especially in the case of complex concepts (Hannafin, Land, & Oliver, 1999). Advance organizers, study guides or questions, definitions, graphical organizers, outlines, and hints are examples of conceptual scaffolding strategies you may implement to support learners development of new knowledge (Stavredes, 2011). Knowledge maps are another effective type of conceptual scaffolding. O’Donnell, Dansereau, and Hall (2002) explain that knowledge maps scaffold learning by reducing cognitive load, facilitating the representation of relationships, providing many paths for knowledge retrieval, supporting learners with low verbal skills, and supporting the communication of knowledge (p. 74).

Strategic scaffolding supports learners in completing specific learning tasks or problems specially focusing on multiple alternative approaches (Hannafin, Land, & Oliver, 1999). Stavredes (2011) focuses strategic scaffolding as a just-in-time strategy for supporting individual learner performance (p. 147). In the online courseroom, this just-in-time approach requires frequent dialogue, that Palincsar (1986) argues “has a critical role to play in scaffolded instruction, facilitating the collaboration necessary between the novice and expert for the novice to acquire the cognitive strategy or strategies” (p. 95). She discusses the importance of supporting learners’ contributions, linking learners’ ideas to new ideas, providing focus and direction, making instruction explicit, and moving learners’ responses from negative statements to more constructive statements (p. 96). Stavredes (2011) also suggests using worked examples, expert advice, and alternative explanations to help learners delve deeper into the learning tasks at hand.

Conclusion

In order to support engagement for online learners, it is important to understand factors that contribute to them dropping out and develop effective strategies to support learners persist in achieving their educational goals. Using cognitive scaffolding to help learners navigate the online environment, plan, monitor, and evaluate their learning, develop understanding of concepts, and strategically support learners just-in-time can reduce stress, help them develop effective academic skills to support their learning, and stay engaged throughout a course to completion. Together, these strategies assist online instructors in addressing many variables that effect persistence and learner engagement and provide them with valuable tools to support their learners in achieving their educational goals and completing their program of study.

References


**About the Presenters**

**Tina Stavredes** is the Vice President of Online Education at Ultimate Medical Academy. Previously she served as the chair of the psychology program in the School of Undergraduate Studies at Capella University. In 2010 she received the Harold Abel Distinguished Faculty Award. In addition, she served as the Director of Curriculum Development for Capella University. Dr. Stavredes holds a PhD in Educational Psychology with an instructional technology emphasis from the University of Minnesota. She has numerous publications and presentations to her credit. She has recently completed a book with Jossey-Bass titled "Effective Online Teaching: Foundations and Strategies for Student Success" that was published July, 2011.

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