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Quality Design to Support Learner Persistence

OBJECTIVES

After reviewing this chapter, you should be able to

- Analyze persistence models to identify challenges and barriers online learners must overcome to be successful in their programs of study to lay the foundation for effective course design.
- Analyze the role of course quality standards in course development to support the creation of effective online courses.

Online learning is at a crossroads. More and more individuals and institutions are turning to online learning as a way to meet a variety of learner, faculty, and administrative needs. According to the Sloan Consortium (2013), an organization dedicated to online education leadership, more than 6.7 million learners are taking at least one online course and 69.1 percent of higher education institutions state that online learning is critical to their long-term strategy. Financial pressures of dwindling enrollments, decreased funding, and high overhead costs are causing institutions to do more with less and look for alternative delivery methods for their curriculum. According to Allen and Seaman (2013), "online courses are those in which at least 80 percent of the course content is delivered online. Face-to-face

instruction includes courses in which zero to 29 percent of the content is delivered online; this category includes both traditional and web-facilitated courses. The remaining alternative, blended (sometimes called *hybrid*) instruction has between 30 and 80 percent of the course content delivered online" (p. 7).

Institutions are offering a variety of instructional modes to meet the increasing demands from learners working full-time and needing flexible programs that meet their personal and professional goals.

With the rapid growth of online education, the focus has become the quality of learning outcomes from online courses. Reports show higher attrition rates for learners taking online courses so there is a growing need to understand factors that contribute to learner persistence in an online environment. The focus of this book is on the design of online courses that support learners' ability to persist in the online environment. Throughout the book, we refer to important concepts and strategies to support learner persistence. We also look at quality standards to support the design of an online course. In this beginning chapter, we present information on different persistence models that are relevant to online learning and help you understand important factors that may affect a learner's ability to successfully complete the course. We also discuss research on quality standards for online learning to help you create a quality online course that supports learners in achieving the intended learning outcomes.

DEFINING PERSISTENCE

Retention and *persistence* are sometimes used interchangeably, but they are not the same. *Retention* is the ability of the institution to retain learners from matriculation through graduation. *Persistence* is learners' ability to persist in their educational journey to degree completion. Learners can persist but may not necessarily be retained by the institution. For example, learners may decide they are interested in a different program of study offered at another institution or they may decide that they are not a fit with the institution and decide to change schools. They are actually persisting because they are continuing their education, but the institution's retention numbers decrease as a result of learners transferring. Therefore, focusing on persistence can help us better understand the factors that contribute to a learner completing a course or dropping out. Research shows that when learners complete a course, they are more likely to persist in the

next course (Billings, 1988), so focusing on learners' completion course by course can set them up for additional success throughout their program. Persistence models help us identify critical learner needs and integrate effective teaching and learning strategies to support learners' continued success.

PERSISTENCE MODELS

There is a long history of research and conceptual models to explain learner behavior and perceptions related to persistence. Among these models are several that focus on the design of online courses and support online learner persistence—Billings (1988), Kember (1995), and Rovai (2003).

Billings Persistence Model

Billings's (1988) model focused on correspondence courses; however, there are a couple of important insights that helped drive some key design elements in the effectiveness of today's online courses. First, Billings talked about how learners who submit assignments early on in a correspondence course often persist longer than those who wait a couple of months to submit their assignments. This demonstrated that structured activity deadlines in a course, especially early on, would help learners continue to persist. He also correlated persistence with higher entrance examination scores, higher GPA, and higher courses completed with greater chances of persistence. Therefore, the more successes learners have, the more likely they will continue to be successful. This makes a case for designing an online course experience that provides a high level of support to help learners successfully complete the course. Additionally, Billings discusses the importance of learners' intentions to complete as a variable in persistence. He believes that learners can overcome other factors that may lead them to drop out if their motivation to complete is strong. This indicates a strong need to build motivational elements into an online course to help learners develop and sustain their momentum.

Kember Persistence Model

Kember's (1995) model focuses on adult learners in an open learning model of distance education. This model provides a nice linear path for learners in a course. The model starts with how learners' entry behavior and early experiences

lead them down one of two paths—a positive path or negative path. A positive path leads to social integration and academic integration in which learners adopt a deep approach to learning and the goal is not simply to complete the course or get a good grade but to gain knowledge and tap into motivations related to self-improvement and enrichment. A negative path leads to a focus on excuses for their performance based on external issues such as insufficient time, distractions, or unexpected events that get in the way. This path results in a surface approach to learning in which the focus is not on gaining important knowledge that will have a positive impact on their lives but on simply completing the course. Motivation is based on external rewards rather than the joy or benefits of learning. This indicates the importance of setting up early experiences for encouragement and creating a support system inside and outside the course as well as the need to connect coursework to activities relevant to learners' personal and professional goals.

Rovai Persistence Model

Although the Billings and Kember models provide us with some important insights into persistence and course design, Rovai's (2003) model provides us with a comprehensive look at the variables that affect learners' persistence in an online learning environment. Rovai evaluated several persistence models relevant to nontraditional and online learners and developed a composite model to explain persistence of learners enrolled in online courses (exhibit 1.1).

Rovai integrates Tinto's (1975) student integration model and Bean and Metzner's (1985) learner attrition model, in particular, which are both grounded in early psychological models on persistence and the idea of learner-institution fit as a key indicator of persistence. He builds off of Tinto's and Bean and Metzner's learner characteristics prior to admission, such as age, ethnicity, gender, intellectual development, academic performance, and academic preparation, and adds skills learners need to develop to successfully navigate the online environment including computer literacy, information literacy, time management, reading and writing skills, and online interaction skills. In course design, these are elements that you can use as a basis to build in personalization and scaffolding to help learners achieve the learning outcomes regardless of their starting point.

Once learners are admitted to a program of study, there are additional factors external and internal to the institution that can affect learners' ability to persist. Rovai (2003) includes Bean and Metzner's external factors such as issues

Exhibit 1.1 Rovai Composite Persistence Model

Rovai Composite Persistence Model (Rovai, 2003)	**Variables prior to admission**	Learner characteristics: • Age, ethnicity, gender • Intellectual development • Academic performance • Academic preparation Learner skills: • Computer literacy • Information literacy • Time management • Reading, writing skills • Online communication skills
	Variables after admission	External factors (Bean & Metzner, 1985): • Finances • Hours of employment • Family responsibilities • Outside encouragement • Opportunity to transfer • Life crises
		Internal factors: • Tinto (1975): Academic integration, social integration, goal commitment, institutional commitment, learning community • Bean and Metzner (1985): Study habits, advising, absenteeism, course availability, program fit, GPA, utility, stress, satisfaction, commitment • Workman and Stenard (1996): Learner needs: clarity of programs, self-esteem, identification with school, interpersonal relationships, accessibility to support and services • Kerka and Grow (1996, as cited in Rovai, 2003): Learning and teaching styles

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. He also cites internal factors affecting learners after admission including variables researched by Tinto (1975), Bean and Metzner (1985), Workman and Stenard (1996), and 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. According to Bean and Metzner, these internal factors include study habits, advising, absenteeism, course availability, program fit, current GPA, utility of the course, stress, satisfaction, and commitment. Rovai (2003) then added the work of Workman and Stenard (1996), who also analyzed learners' needs that

influence persistence, and include consistency and clarity of online programs, policies, and procedures; learners' sense of self-esteem; ability to identify with the institution and not be looked at as "outsiders"; the need to develop interpersonal relationships with peers, instructors, and staff; and the ability to access academic support and services. Finally, the model shows that online learners expect their learning experiences to match their learning style, so attention to the use of a variety of instructional strategies is important to meet the individual learning styles of learners.

You may not be able to address all of these variables within the course design, but you can at least address the institutional factors such as helping learners feel like a part of the institution and directing them to the appropriate support resources. You can also help learners develop strategies to cope with external factors that require good time management strategies and ways to build a support network with their family and friends to support their learning. Finally, you can build relevant and engaging courses that help learners integrate into the learning community and build skills and knowledge relevant to their personal and professional goals. We discuss strategies to integrate these elements and the other persistence variables throughout the book.

QUALITY ONLINE COURSE STANDARDS

Because the quality of online learning has been debated in the field for some time now, there have been many efforts to define what elements go into a quality online course. More and more institutions are turning to quality programs and rubrics to ensure consistency among their online offerings. The difference between the practices we present in this book compared to these quality rubrics, however, is the focus on the design decisions. Most quality standards focus on learner satisfaction as a measure for what defines a quality course. In this book, we have focused on specific elements of the course design that contribute to greater learner persistence. A review of these standards can further support the design, especially if your institution subscribes to a specific quality rubric.

There are many different rubrics for evaluating the quality of online instruction. Many of the rubrics were created by individual universities or initiatives related to developing instructor knowledge and skills for designing effective online learning. The Illinois Online Network (1998–2006) is a faculty development initiative that provides professional development for online teaching and learning. They

created a "Quality Online Course Initiative Rubric and Checklist" that focuses on seven categories—instructional design, communication, interaction and collaboration, learner evaluation and assessment, learner support and resources, web design, and course evaluation. California State University, Chico (2003), also developed a rubric with categories for learner support and resources, online organization and design, instructional design and delivery, assessment and evaluation of student learning, innovative teaching with technology, and instructor use of learner feedback to help define what a high-quality online course looks like. The Monterey Institute for Technology and Education (2010), an educational nonprofit organization, created the "Online Course Evaluation Project" to help assess and compare online courses and focuses on course developer and distribution models, scope and scholarship, user interface, course features and media values, assessments and support materials, communication tools and interaction, technology requirements and interoperability, and developer comments.

Currently, the most well-known rubric is the Quality Matters' rubric. The Quality Matters program is a "faculty-centered, peer-review process designed to certify the quality of online and blended courses." Funded by the US Department of Education Fund for the Improvement of Postsecondary Education, Quality Matters has become a leader in ensuring the quality of online education and received national recognition for its approach and improvement of online education and student learning (Quality Matters, 2011). Their rubric is based on extensive research in online learning and is composed of eight general standards and forty-one specific standards and includes annotations that provide examples of the application of the standards and the relationships among criteria. The eight standards include course overview and introduction, learning objectives (competencies), assessment and measurement, instructional materials, learner interaction and engagement, course technology, learner support, and accessibility (Quality Matters, 2011–2013).

As you can see from these few examples, although there are multiple rubrics available, the themes related to best practices and effective design for online learning are clear. Throughout the book, we integrate many best practices related to effective online learning design and supporting learner persistence based on the research on persistence and quality standards. Exhibit 1.2 describes these quality standards that are addressed in the book. Then, in chapter 12, you will do a final review of your course using a checklist of the criteria listed in the exhibit.

Exhibit 1.2 Quality Standards for an Online Course

Course Introduction
• The course follows university standards (insert specific standards in this review guide). • On entering the course for the first time, learners can easily locate information to help them understand what to do (i.e., a "start here first" document). • If the course is not based on a standard university template, you have provided a course orientation to the various course components and their function. • There is an introduction to the course in the syllabus or faculty expectation statement describing the intended course outcomes. • There is an introduction to how the course is structured in the syllabus or the faculty expectation statement (how long units are, weekly activities, deadlines). This may also be included in a course orientation if you have developed one. • There are clear expectations for learners in a syllabus or faculty expectation statement (including required days in the course per week, expectations for discussions, absences from course, policies including plagiarism, code of conduct, and netiquette rules, due dates, and extensions). • There is specific information about the minimum technical requirements for the course including hardware, software, and preferred browser. • It also includes the minimum technical skills needed to participate fully in the course (i.e., ability to create and save files, attach documents, etc.). • The instructor clearly communicates expectations regarding how to communicate with him or her as well as turnaround time for returning learner calls, e-mails, and so on. There are also descriptions of expectations for when discussions and assignments will be graded and returned to learners.
Course Outcomes, Competencies, and Objectives
• Course outcomes and competencies are clearly stated in a format that communicates the relevance of each outcome to the real world. • Learning objectives clearly align to course outcomes and competencies. • Learning activities clearly align to course outcomes and objectives. • The prerequisite skills required for the course are clearly stated and are reasonable and appropriate to the learner population.
Instructional Resources and Materials
• All instructional resources and materials map back to the stated program outcomes and competencies. • Clear instructions help learners understand how the instructional resources support the achievement of specific competencies and objectives. • The instructional materials are written at a level understandable to the learner population. • All instructional resources and materials have all required copyright clearance. • All instructional materials are accessible to all learners following ADA standards such as screen readability and alternative presentation of materials. • Multimedia elements are relevant to the course outcomes and competencies. • Multimedia elements engage learners in the subject matter. • The course effectively engages learners in the use of online resources.
Instructional Strategies
• Instructional strategies promote critical thinking. • Instructional strategies promote improvement of writing skills. • Instructional strategies are relevant to real-world application. • Clear instructions include an explanation of how course activities fit within the structure of the course and its intended outcomes.

Exhibit 1.2 (*continued*)

Assessment and Feedback
• Course assessments are relevant to real-world application. • Assessments clearly align to course competencies. • Scoring guide criteria clearly align to course competencies. • Assessment strategies provide appropriate opportunity for learners to demonstrate content knowledge and skills.
Course Introduction
• Assessment strategies provide appropriate opportunity for learners to demonstrate performance standards. • Learners have opportunity for relevant practice prior to assessment of competencies. • The course adequately prepares learners for practice activities. • Learners have opportunity for formative evaluation prior to final assessment of competencies. • The course adequately prepares learners for final learning outcome assessments. • The course provides opportunities for instructor and peer feedback in a timely and consistent manner.
Presence
• The course provides opportunities to develop social presence. • The course provides opportunities to develop instructor presence. • The course provides opportunities to develop cognitive presence.
Course Structure
• The course structure is well organized with clear and logical flow from one topic to the next. • The course presentation is consistent throughout units. For each unit of study, there is consistency in the layout of course materials and activities, including consistency in the nomenclature for headings and other elements of the course.
Clear Instructions
• Instructions are clear and concise. • Instruction is formatted for easy on-screen reading. • Instruction includes templates, worksheets, and examples to support learner success.
Course Workload
• The course contains an appropriate amount of coursework for the level of the course (complete course workload map to determine this criterion). • The course workload is consistent throughout the course (complete course workload map to determine this criterion).
Use of Technology
• The course uses delivery methods appropriate to the learning activities. • Learners have a clear understanding of the technology used in the course and how to use it.
Learner Support and Resources
• The course provides links to appropriate academic support resources (e.g., library, writing center) to enhance the learning experience. • The course includes information regarding learner support services to resolve administrative and technical issues.

Action Steps

To help you apply the concepts in this chapter, complete the following:

- Think about the reasons you are pursuing online learning and the pressures at your institution. Consider what you would like to accomplish as you dive into designing an online course.
- Review the persistence models and the variables identified and note your initial reactions. Consider the following questions:
  - Are there particular variables that seem to resonate with the experiences you've had with your learners?
  - Are there particular variables that don't seem applicable to your particular population of learners at this time?