



Learning in an Online Environment

Learners in the twenty-first century have been Web consumers for much of their lives, and are now demanding online instruction that supports participation and interaction. They want learning experiences that are social and that will connect them with their peers.

West & West, 2009, p. 2

Engaged learning is not a new instructional approach. It has been written about under various terms such as *active learning*, *social cognition*, *constructivism*, and *problem-based learning*, all of which emphasize student-focused learning within an instructor-facilitated environment.

A century ago, Dewey recognized the importance of active learning with the instructor in a supportive role as a facilitator. Dewey (1916/1997) emphasized the

value of the individual experience in the learning process as well as collaboration with others in order to define the learning environment. Dewey's work was predominantly in the primary and secondary school environment but was extended to adult learners by Malcolm Knowles's concept of andragogy (1980), which considers the adult learner to be self-directed and desirous of an active learning environment in which his or her own experiences play a part.

Other learning theorists such as Bruner, Vygotsky, and Piaget all embraced the philosophy that humans do not learn in a vacuum but rather through interaction. Bruner in his work with Bornstein (1989) stated that "development is intrinsically bound up with interaction" (p. 13), which built on his earlier definition of reciprocity as the "deep human need to respond to others and to operate jointly with them toward an objective" (Bruner, 1966, p. 67).

Vygotsky (1981) believed that social interaction helped students learn from the viewpoints of others in order to build a more complex worldview. One of the cornerstones of Vygotsky's work is the "zone of proximal development," which is the difference between the problem-solving ability of an individual independently and the individual's potential ability when working with an adult or more advanced peer. Vygotsky saw instruction as effective only if it stimulated those abilities and helped the learner across the zone of proximal development.

Piaget's philosophy emphasized that learning must be connected to the learner in order to be meaningful (Piaget, 1969). He described engaged learning (constructivism was his term of choice) as how we come to know our world, with knowledge built on prior experiences and affected by new experiences. Unlike Vygotsky, Piaget proposed that development would be more likely to occur when two equal partners collaborated in finding a solution than when a more skilled partner dominated the task. Piaget believed effective discussions were only possible when there was symmetrical power between the discussants. Peer-to-peer discussion was more valuable than adult-to-child discussion because equals were more likely to resolve the contradictions between each other's views than were partners of unequal authority.

The emergence of problem-based learning (PBL) was an evolutionary step along the engaged learning continuum. In a PBL environment, a problem is posed to learners who work together in teams to define the nature of the problem and determine its resolution. Through this process, learners can "develop intellectual curiosity, confidence and engagement that will lead to lifelong learning" (Watson

& Groh, 2001, p. 21). As with the work that preceded it, PBL is based on interaction and meaningful learning.

Although interaction is a thread that runs through many learning theories, constructivism considers it central to learning and addresses epistemology within the context of the individual and within social constructs. According to Smith and Ragan, (1999, p. 15), the key assumptions of individual constructivism are the following:

- Knowledge is constructed from experience.
- Learning results from a personal interpretation of knowledge.
- Learning is an active process in which meaning is developed on the basis of experience.
- Learning is collaborative with meaning negotiated from multiple perspectives.

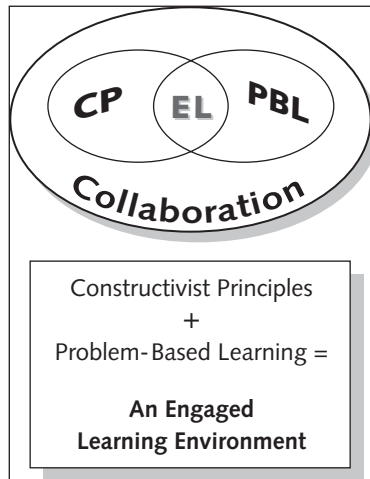
This collaborative acquisition of knowledge is one key to the success of creating an online learning environment. Activities that require student interaction and encourage a sharing of ideas promote a deeper level of thought.

In his summary of social constructivism, Weigel (2002) cautions that focusing on content acquisition defeats the overall purpose of education. “Content is the clay of knowledge construction; learning takes place when it is fashioned into something meaningful. Creativity, critical analysis, and skillful performance are inextricably linked to the process of creating more viable and coherent knowledge structures” (p. 5). In the online environment, collaborative activities are what allow the clay to take form and have meaning for the learner.

As illustrated in Figure 1.1, the combination of constructivist and problem-based learning philosophies within a collaborative context result in an engaged learning environment. Engaged learning is focused on the learner, whose role is integral to the generation of new knowledge. In an engaged learning environment, each learner’s actions contribute not only to individual knowledge but to overall community knowledge development as well.

Must you be an adamant constructivist to believe in learner engagement? No. As Collison, Elbaum, Haavind, and Tinker (2000) point out, “There is strong evidence to suggest that learners learn best when constructing their own knowledge. However, there is also a right time to clearly guide learners or simply give

Figure 1.1. An Engaged Learning Model



them a critical piece of information to help them move forward” (p. 97). What is important is to value the desired outcome of the constructivist approach, which is that the acquisition of knowledge is centered on the learners and their interactions and not solely on a lecture-focused, instructor-centered approach.

ENGAGED LEARNING IN THE ONLINE ENVIRONMENT

While the history of education has been filled with instances in which students and teachers were focused on student-oriented learning, today’s pedagogical evolution has added technology to the equation. New media offer a wealth of opportunities for interaction, yet many times are employed in a non-interactive mode that tends to focus on creating an online lecture. Lecture is effective for knowledge transmission, but if it is the primary strategy used in the online environment, the course becomes a digital correspondence course with potential problems of learner isolation and high dropout rate.

The involvement of the learner in the course, whether one calls it interaction, engagement, or building community, is critical if an online course is to be more

than a lecture-oriented course in which interaction is primarily between the learner and the content or the learner and the instructor. Norris, Mason, and Lefrere (2003) emphasize that content may have been the primary focus of the past but the time is coming when interactivity will drive learning (p. x).

Engaged learning stimulates learners to actively participate in the learning situation, and thus gain the most knowledge from being a member of an online learning community. Activities can also serve as memory cues. On several occasions, students have reported remembering the lessons learned from an activity in order to trigger long-term memory relative to the recall of basic concepts. One learner stated that she could not answer a key midterm question until she thought about the associated activity, this caused her to remember the concepts that the activity presented, and the activated memory allowed her to organize and respond to the item in question.

Over the past decade, more knowledge about the value of engaged learning in an online environment has emerged (Palloff & Pratt, 1999, 2007; Collison, Elbaum, Haavind, & Tinker, 2000; Salmon, 2002; Woo & Reeves, 2007; Thorpe, 2008), but additional guidelines are needed to help instructors assist learners in evolving from their traditional role of receiving knowledge to a role that focuses on their generating knowledge for themselves and others.

Kearsley (2000) points out that “the most important role of the instructor in online classes is to ensure a high degree of interactivity and participation. This means designing and conducting learning activities that result in engagement with the subject matter and with fellow students” (p. 78).

Students cannot be passive knowledge-absorbers who rely on the instructor to feed information to them. In an online course, it is imperative that they be active knowledge-generators who assume responsibility for constructing and managing their own learning experience. In a learner-centered environment, the traditional instructor responsibilities such as generating resources and leading discussion shifts to the learners. Success in an online learning environment depends on the use of instructional strategies that support the shift in roles and the development of self-direction.

If the learners are to succeed in their new role as an active partner in knowledge generation, Weimer (2002) contends that the power inherent in a learning environment should be shared so that “faculty still make key decisions about learning, but they no longer make all decisions and not always without student input”

(Weimer, 2002, p. 28). The benefits of power sharing include energized learners who are motivated to stay with a course when the going gets rough. This also means that online power-sharing instructors may not have to struggle as much to keep learners engaged in the course. Online facilitators set the stage for power sharing to occur in the way they approach learners and provide feedback. When an online facilitator invites learners to be a part of the process, more often than not, learners rise to the occasion.

Leaders in the field of online education such as Draves (2000, 2009), Palloff and Pratt (1999, 2007), Moore and Kearsley (2004), and Simonson, Smaldino, Albright, and Zvacek (2008) all agree that learner interaction is the key to an effective online course. However, interaction and collaboration are not intuitive to many adult learners who grew up under the competitive model of education where learners had to outshine one another to be successful. Initially, a learner may be more comfortable in the perceived safe role of a passive student and will need guidance and the opportunity to exercise leadership and direction-setting in an online learning environment.

Engaged learning is a collaborative learning process in which the teacher and student are partners in constructing knowledge and answering essential questions. This strategic approach includes setting goals, establishing timelines, and creating and assessing authentic products. Key elements of engaged learning in an online environment include the following:

- Students establishing their own learning goals
- Students working together in groups
- Exploring appropriate resources to answer meaningful questions
- Tasks that are multidisciplinary and authentic, with connections to the real world
- Assessment that is ongoing and performance-based
- Products that are shared with an audience beyond the classroom so students are able to add value outside of the learning environment (Johnson, 1998)

The distance education pioneer Charles Wedemeyer (1981) asserted that learners must be highly self-motivated in order to be effective distance learners. While this is still true in today's online learning environment, the instructor also

has the responsibility to support and promote a learner's internal motivations through external strategies. An engaged learning educational approach for instructors involves modeling, reflecting, actively involving the student, and developing a community of fellow learners.

Engaged learning requires a cognitive and affective learner connection with the methodology before it can occur. Gagne and Driscoll (1988) state that the following external learning conditions are needed to maximize the influence of engaged learning:

- The strategy is described or demonstrated.
- Numerous opportunities for communication and demonstration of the strategy are provided.
- An expectation of success associated with incorporating the strategy and attitude of engagement is presented.
- Informative feedback is provided as to the creativity and originality involved in learner actions as well as their successful performance by an engaged learner.

We would add the following items to this list:

- A safe student-centered learning environment is provided.
- Opportunities for self-assessment are provided.

Before a learner can effectively demonstrate the skills of an engaged learner, he or she must understand engaged learning and be amenable to adopting the strategy. Only then can a learner be expected to form a community with others in the online learning environment.

GUIDING LEARNERS TO ENGAGE ONLINE

The student's role as an engaged learner develops over time. Interaction and collaboration is not intuitive to many adult learners who have been educated in a predominantly lecture-based environment. Initially, a learner may be more comfortable in a passive student role and will need guidance and the opportunity to become more involved in an online learning environment. An online learner

must quickly establish comfort with the technology, comfort with predominantly text-based communication, and comfort with a higher level of self-direction than in a traditional classroom. If this comfort level is not reached, the learner will walk away from the course in frustration.

In addition to these elements, learners have the additional uncertainty of having to quickly build trust and interdependence with others that they may never meet face to face. It becomes the instructor's responsibility to make sure that the learners find others in the learning environment with whom they can build a collaborative relationship. To do this, the online instructor must design course elements that encourage the growth of learners in these new relationships.

When courses first moved online, it seemed that more time was needed for an instructor to manage a successful course online than had been needed in the traditional classroom setting. The Phases of Engagement framework initially began as a desire to manage the level of online communication and focus learners and instructors on performing their new roles in the online environment.

This framework provides a means of developing appropriate activities and introducing them in an effective sequence. The framework includes introductory community-building exercises, which build trust and help a group learn how to work together. As learners gain more confidence and expertise, they can be guided to move through additional phases of engagement (see Table 1.1).

During Phase 1, the instructor and learner begin the course in the more traditional role of deliverer-receiver, with the instructor setting the initial tone of the course as being one in which he or she will be a guide. The students need to be informed that others in the community will be just as important as the instructor, if not more so at times. This tone can be set by an initial e-mail from the instructor or by having the first activity of the course be an icebreaker introduction that requires learners to learn about and interact with one another in a nonthreatening manner. There may be a tendency for new online instructors to rush through this initial phase, to get to what they may consider the heart of the course—the content. However, experienced online instructors have found that interaction is actually the essence of the course (Draves, 2000; Palloff & Pratt, 2007). The rest of the course will go much more smoothly if care is taken to promote the appropriate frame of mind in Phase 1 of the engagement process.

Table 1.1. Phases of Engagement

<i>Phase</i>	<i>Learner Role</i>	<i>Instructor Role</i>	<i>Weeks</i>	<i>Process</i>
1	Newcomer	Social negotiator	1–2	Instructor provides activities that are interactive and that help learners get to know one another. Instructor expresses expectations for engagement in the course, provides orientation to the course, and keeps learners on track. Examples: icebreakers, individual introductions, discussions concerning community issues such as Netiquette rules in a virtual lounge.
2	Cooperator	Structural engineer	3–4	Instructor forms dyads of learners and provides activities that require critical thinking, reflection, and sharing of ideas. <i>Examples:</i> Peer reviews, activity critiques.
3	Collaborator	Facilitator	5–6	Instructor provides activities that require small groups to collaborate, solve problems, reflect on experiences. <i>Examples:</i> content discussions, role playing, debates, jigsaws.
4	Initiator/ partner	Community member/ challenger	7–16	Activities are learner-designed or learner-led. Discussions begin to go not only where the instructor intends but also where the learners direct them to go. <i>Examples:</i> Group presentations and projects, learner-facilitated discussions.

After establishing an appropriate climate for engagement to occur in Phase 1, the instructor becomes a structural engineer who is responsible for organizing and facilitating the growth of the student as a cooperative participant. Based on information from the introductory activity, the instructor pairs students in working dyads. This approach minimizes the threat of communicating with a large group of unknown peers. Phase 2 may begin in a social tone similar to Phase 1, but it must then turn the learners toward more academic exchanges.

In Phase 3, the peer partners are combined into collaborative teams in which members support one another and are responsible for one another's learning. Our experience as online instructors is that it takes about four weeks for most learners to feel comfortable enough with technology-mediated communication and their cyberpeers to move into this phase. Is Phase 2 necessary, or can learner teams be formed immediately? Teams can be formed sooner under the following conditions:

- The size of the learning community is small (less than twenty members).
- There was a high degree of interaction in Phase 1 activities.
- Teaming is tightly structured with contracts and feedback rubrics provided by the instructor, or the majority of the learners are experienced online collaborators.

An instructor encourages learners to move to Phase 4 by introducing opportunities for individuals and teams to lead activities. In this phase, the instructor participates in the learning environment like any other member of the learning community, as another knowledge generator.

Movement through each of the initial phases is facilitated by the “activity architect,” the instructor, who, through activities, provides increasing opportunities for learners to know and trust one another, with the goal of learners gradually being able to turn to a community as opposed to a single instructor for information and support. Not surprisingly, younger students may adapt more easily than older adults to meeting others online, but both groups may initially have difficulty shaking off the passivity of the lecture-based paradigm and turning to one another as sources of knowledge. Again, providing enough time to move through

each of the phases is vital to effectively developing a fully engaged frame of mind in the learner.

APPROPRIATE ACTIVITIES FOR EACH PHASE

Designing and utilizing activities that are appropriate for the various engagement phases of specific learners can promote confidence and success and may even move a learner through the phases more quickly. Table 1.2 provides examples of phase-appropriate activities.

The Phase 1 example activity focuses on introducing peers to one another in a creative and fun manner. The Phase 2 example activity focuses on two peers working together, while the Phase 3 example demonstrates a reflective activity. The “Group Choice” example activity for Phase 4 exhibits how learners can be provided with the opportunity to lead an activity in the online community.

It is important to note that content-related engaged activities should not begin until a learner has completed Phase 1 and moved solidly into Phase 2. This is not to say that content-related activities cannot be done by a Phase 1 learner, but the most appropriate activities at this point would be individual rather than peer-related.

What if learners are experienced in the online environment? Can phases be skipped? While it may be possible to move more quickly through the phases, it is still recommended that the instructor use at least one activity from each phase in order to help learners become oriented to the course and become familiar with the new set of peers who will be working together in the online environment.

Part Two of this book provides additional examples of activities for each phase. Chapters Four and Five provide activities for Phase 1, Chapter Six for Phase 2, and Chapter Seven transitions the Phase 2 learner into Phase 3. Chapters Eight and Nine provide activities for Phase 3, and Chapter 10 for Phase 4.

SUMMARY

Engaged learning is not a new theoretical approach, but its application in an online environment requires special consideration in order to maximize learning. The challenge both educators and learners face is how to facilitate the

Table 1.2. Activity Examples for Each Phase of Engagement

<i>Phase</i>	<i>Learner Role</i>	<i>Instructor Role</i>	<i>Activity Example</i>
1	Newcomer	Social negotiator	<i>Exercise Title:</i> One Thing That Describes Me <i>Task:</i> Student uses a symbol to describe himself or herself <i>Objective:</i> To introduce a student's interests and background to others in the class <i>Learner Instructions:</i> Look around and find an object or a digital image that represents you, or your reasons for taking this course or even something about your research interests. Post a digital image of your chosen object—for example, a scanned image, digital picture, or a Web-linked image—on the discussion board. Explain why you chose the item. Your explanation of the posted object should include a brief description of your expectations of the course and/or the perspective you contribute to the learning community. After you enter your description, comment on the descriptions posted by at least two of your peers.
2	Cooperator	Structural engineer	<i>Exercise Title:</i> Pair Share <i>Task:</i> Peers discuss reading questions <i>Objective:</i> To process content <i>Learner Instructions:</i> After completing this week's reading, take a moment to answer the assigned questions (instructor provides content-related questions). Contact your assigned peer and discuss any questions you might have about the reading. What are your common perceptions? Where do you differ? Post your response in the discussion area.

Table 1.2. Continued

<i>Phase</i>	<i>Learner Role</i>	<i>Instructor Role</i>	<i>Activity Example</i>
3	Collaborator	Facilitator	<i>Exercise Title:</i> Summary Words <i>Task:</i> Student reflects on the course or unit so far <i>Objective:</i> To provide feedback to the instructor and classmates on the shared experience <i>Learner Instructions:</i> Take a few minutes to reflect on your reactions to this week's class (or identified unit). What two or three word expressions come to mind? Enter a brief expression into the subject line of a discussion board thread. Post as many words or expressions as you can think of in five minutes. This is not the time to analyze your input; just key and post. Wait twenty-four hours, then review the responses of your peers. Choose one word or expression that speaks directly to you. Post a response to your peer and instructor explaining why this word has special meaning in defining the class experience for you.
4	Initiator/ partner	Community member/ challenger	<i>Exercise Title:</i> Group Choice <i>Task:</i> Team designs class activity <i>Objective:</i> To process content <i>Learner Instructions:</i> Your team will be required to develop and lead an activity that relates to the following objectives (instructor provides objectives). Be prepared to lead your activity during Week 8 of the course.

transition between the mindset that was reinforced in the traditional lecture-based learning environment and the one required to be an engaged online community member.

Engaged learning does not simply happen. It requires “architectural engineering” by the instructor. Planning and utilizing activities that assist a learner in moving through the developmental phases of engaged learning ensures that learners are motivated and able to successfully interact and collaborate in an online learning environment and eventually engage in independent knowledge building.