



Learning, Live Online

With mounting experience in the online environment, an increasing number of learning professionals are now ready to find ways to add life, and the magic of real-time interaction, back into the learning process. In the vast movement to transition campus-based experiences to the online realm, the immediacy and value of live interaction have often been sacrificed to a perception that the Web is no place for anything that is not “anytime, anywhere.” Though “anytime” or asynchronous modes of communication have been an empowering factor in allowing learners to transcend traditional limits of place and time, not every learning objective or need can be met in the absence of real-time human interaction.

Situations that call for proximity to others, even figuratively, are found all across the learning continuum from collaboration to skills development to community-building or just-in-time support. Learning environments that have shied away from any form of real-time interaction may be unnecessarily limiting the overall potential of what each student can learn, and what the institution can offer.

Rapid improvements in technology and Internet connectivity, coupled with increasing comfort levels and support in using basic online communication and

learning tools, have impelled educators to tap back into the fostering of relationships with students in real time that have been the hallmark of their on-campus teaching experience. Most important, a renewed focus on the quality of instruction and student engagement that has followed the first wave of online learning (Palooff and Pratt, 2005) inevitably means a greater consideration of tools that humanize the learning experience, efficiently teach and gauge performance-based skills, and cultivate natural means for collaborating and learning in real time.

SYNCHRONOUS INTERACTION ACROSS THE LEARNING CONTINUUM

Perceived by many as merely a means to deliver formal instruction or lectures online, real-time or *synchronous* venues actually play a much broader role across the entire learning continuum. In physical settings, live conversations and real-time human interaction are the lifeblood of academic life and adult learning. Remove from the equation things such as

- Unplanned chats among peers over lunch
- Lively in-class discussions or debates
- Student-led presentations or performances
- Study group, team, or committee gatherings
- Hallway conversations with classmates or colleagues
- Impromptu exchanges between a student and instructor after class or during office hours
- Timely and personalized guidance from a reference librarian, advisor, or coach
- Serendipitous meetings on campus

and what remains are course materials, reading assignments, and isolated, independent study—none of which provide the kind of supportive, dynamic, and human environment that helps learners be engaged, motivated, or successful. If the first wave of moving courses online has taught us anything, it is that opportunities for interaction and collaboration are crucial elements of successful learning environments. Not considering opportunities to add human interaction—in any

form—to online programs or courses summarily dismisses a vital form of communication for learning, skill development, support, and community-building.

NEEDS SERVED BY SYNCHRONOUS INTERACTION

Although consideration of synchronous interaction might first turn to instructor-led activities or lessons, real-time interaction and learning can take as many forms and happen in about as many different kinds of contexts *online* as it does in our physical learning settings. At least five major functions are served by real-time, online interaction within a learning environment:

- Instruction
- Collaboration
- Support
- Socialization and informal exchange
- Extended outreach

Instruction encompasses any of the kinds of learning that happen when faculty members, knowledge experts, or facilitators meet with learners, usually in a planned manner in a specific online venue, to guide them through the achievement of learning objectives. This is a very broad category, and there are at least as many methods and pedagogical approaches to engage in live online instruction as there are in any other setting, online or off. Nonetheless, this book places a greater emphasis on an active or constructivist (Piaget, 1969) approach to instruction within synchronous settings. People need not be present concurrently with an instructor to simply have information passed on to them, yet the active construction of knowledge by learners through a process of real-time give-and-take is well-served in a live online setting.

Collaboration is a key element to the success of an online learning environment (Conrad and Donaldson, 2004). It is also, as I discuss later, a skill that has become part of a global working environment. Although the presence of a facilitator can guide collaborative activities, these interactions tend to be more egalitarian in nature and can happen at any time, in both structured and informal settings, with two or more people present. Live online settings offer an immediacy that not only

allows collaboration to begin instantaneously but also contracts the actual time spent on task.

Support is a crucial element for retaining and motivating learners, whether it is provided by just-in-time assistance from a peer, instructor, tutor, advisor, or librarian. No other form of online communication can give personalized human support faster or at the moment it is most needed than a live exchange with the right person.

Socialization and informal exchanges are activities whose contributions to the learning process are most difficult to quantify. Interactions in this realm often dispense with formality and can even be short of substance, yet without them a crucial foundation on which to build instructional activities is lacking. The proliferation of instant messengers, online chat rooms, and mobile messaging in social contexts (Shiu and Lenhart, 2004) alone affirms that live online venues are an increasingly common and comfortable form of live interaction. In learning environments, they help build community and create a friendly and safe environment in which people can feel like people.

Extended outreach is an important aspect of any institution's connection to the world beyond its gates. Admission information sessions, alumni relations, online conferences, multicampus professional development, and lifelong education programs are among the many reasons for the use of synchronous online communication outside of the formal instructional arena.

Various Purposes, Various Venues

There are almost as many online tools and venues for synchronous interaction as there are activities that call for their use. With instant messengers, chat rooms, online reference desks, interactive Webcasting platforms, and virtual classrooms, offices, and meeting rooms there is no shortage of available options to meet and interact live online. The ultimate question is what we do in these spaces that helps us achieve communication and learning objectives not realized as ideally in any other manner.

Why Live?

When it comes to instruction, course content and communication can be channeled through many forums and formats. The online environment offers a vast array of permutations for interacting and sharing knowledge with students. E-mail,

discussion threads, Web resources, blogs, online reading materials, and recorded audio or video are just a few of the more common means to reach learners online. With so many tools and media formats available, the choice to “go live” online should be a deliberate one based on what can uniquely be accomplished when people congregate in real time. A successful real-time, online learning experience begins with a clear and confident answer to the question: *Why live?*

A prerequisite to the effective use of synchronous tools is that the decision to use these tools was made to support a cause worthy of the live medium. If the purpose can better be achieved through the dissemination of a document, via a link to a recorded lecture, or by a simple e-mail to students, it should. Synchronous learning should be deployed when synchronous learning is uniquely suited. Not adhering to this basic principle can damage learners’ trust in an instructor’s instructional prerogatives and dampen learner motivation.

THE SYNCHRONOUS COMPACT

Live online experiences must start with an implicit or even explicit compact or agreement between an instructor or facilitator and participating learners. In this “synchronous compact,” learners agree to minimize the distractions they have around them and to make every effort to contribute meaningfully to the experience. The instructor’s half of this bargain is to remember at every moment of every live session that there is a group of people assembled in real time who have set aside the same precious hour out of their day and to make every effort to use the time together in a manner that takes advantage of the fact that all are present in real time.

Meeting the Threshold to Go Live

In deciding whether or not to call for a live online session, it is extremely instructional to ask one’s self: “Why am I asking my group to all login at, say, 3:00 P.M. on a Wednesday? Why is it important that they all stop what they are doing to take the same exact hour to be online together with me or with each other? In light of all my available options, why is this the right way to go?” The lack of an answer that is compelling to you or that would be to your learners should be an immediate indicator to reconsider the alternatives. The full potential of any learning experience cannot be achieved when learners are led to ponder, *Tell me again, why am I here?*

New Opportunities

In addressing these questions and moving instructional experiences online, exciting new opportunities exist to rethink and improve upon old paradigms. One such tradition, for example, is the live lecture, which has been “baked” into the academic structure of most institutions for centuries. Taking a course—or aspects of a course—online need not be seen as requiring a direct translation of the thrice-weekly lecture to the online realm. The evolution of instructional design to include the use of synchronous online tools offers a great impetus to reinvent how instructors spend time with learners.

Using a real-time environment to lecture learners can be an expedient use of a virtual classroom environment, but it neglects some of the most creative possibilities of a tool that essentially “wires” all learners to the instructor and to each other. Such “connected” learning—the combined use of real-time polling, drawing, annotation, text chat, Web exploration, rich media, and visual, voice, and video tools with two or more people online—can open the door to new and unique ways to achieve learning objectives.

The synchronous realm of learning offers a variety of unique attributes, such as

- Immediate and just-in-time access to peers, instructors, and knowledge experts
- The ability for multiple people to interact and share ideas with one another concurrently
- Hands-on tools through which learners can react to presented concepts or apply knowledge in real time
- Direct connections to real-world situations and primary resources
- The means to demonstrate and assess real-time skills and analytical thinking
- The ability to include a more diverse learner population in real-time discussions
- The capacity to bridge guest expertise into the learning environment

The unique potential of synchronous instruction and real-time communication online must be recognized if the tools are going to be used effectively and truly make a difference in learner outcomes. Despite the growing use of synchronous tools in instruction, many years of experience suggest that the tools are still seen primarily as a means to replicate traditional, campus-based instructional activities—for good

or bad—rather than to explore new avenues of improving student learning. An uninspired slide lecture delivered on campus will be at least as unappealing in the online environment, where the learner’s opportunities for distraction are greater.

Real-time, online instructional tools hold great promise. At their core is the potential to expose online learners, even at great distances, to the impassioned understanding and the contagious appreciation that instructors, and often peers, bring to the subject at hand.

The presence of a live instructor, combined with the use of the human voice and a rich set of facilitation and collaboration possibilities, opens up a new world for those who love to teach and who know that fostering moments of epiphany often requires the presence and real-time give-and-take of a guide present at one’s side. The use of synchronous tools among peers for both informal and formal instructional activities personalizes learning and provides a needed support framework. It is also closer in many ways to the mode of interaction through which many learners will need to apply their education in their professional lives, where demonstrating knowledge will often happen on the fly and via effective communication that will not always be asynchronous. I will discuss the role played by real-time environments in developing these kinds of learner skills in the next chapter.

INDICATORS FOR REAL-TIME ONLINE LEARNING

What are some of the indicators that a live online interaction may be the preferred means for communicating with learners online?

- *Lessons are best learned from group discussion or collaboration.* For an instructor, few things are as rewarding as watching the exploration of a topic take flight as learners discuss, collaborate, construct knowledge, and work together to solve problems. Many live online environments are well suited for this kind of learning experience and often offer greater efficiency than asynchronous alternatives. There are times when a real-time dialogue that unfolds over a five-minute period might take five days in an asynchronous format. Shades of meaning that are misinterpreted in asynchronous interactions and send groups on unnecessary tangents are resolved quickly in real time, and more relevant ground is covered.

- *Sparkling deeper appreciation for and understanding of the subject matter is desired.* A good instructor not only teaches but also inspires. In offline settings,

that inspiration is often conveyed through the conviction of the human voice, spirited explanations, and impassioned gestures. Spontaneity, humor, and direct invitations to engage learners in the here and now of discussion are all ingredients for the kind of contagious enthusiasm that arouses a learner's deeper understanding and appreciation for the subject matter at hand. Real-time learning tools help expedite the generation of these sparks.

- *A safe environment for exploration and sharing and a sense of community are vital to achieving learning objectives.* The proper exploration of some topics relies on candid dialogue and sharing among learners. Ethics, counseling, politics, and nursing are but a few disciplines in which learners are often asked to share their personal opinions, biases, and feelings. A sense of community—where members of a group trust each other and their facilitator and feel willing and comfortable enough to contribute—can help expedite sharing activities. Live online settings can be safe places to quickly and efficiently build that sense of community and cooperation.

- *Learning involves the rehearsal, demonstration, and assessment of particular skills.* Whether it be oral communication, analytical thinking, real-time problem solving, software proficiency, information literacy, or any number of performance-based skills, real-time venues afford opportunities to provide instruction and assess learner aptitudes in ways that are highly impractical, if not impossible, in an asynchronous manner.

- *Information is complex and guidance is necessary.* A knowledgeable instructor can walk learners through material that is difficult to absorb independently and teach them methods for deciphering complex information they may encounter later on their own.

- *There is a need to adjust the level or complexity of material on-the-fly based on learner feedback.* Learners can come to the table with an uneven understanding of the material before them. Even when official course prerequisites have been satisfied, good instructors often gauge the comfort level of their learners with the level of the material being taught and then adjust their lesson and approaches accordingly. The efficiency with which this kind of adaptation can happen in a real-time environment often exceeds what can be done in any other online format.

- *Comprehension must be ensured before learning proceeds.* Real-time interaction with learners can often yield a better assessment of learner comprehension than a formal evaluative instrument, such as a quiz, survey, or homework assignment. Observing in real time things such as the amount of time it takes a learner

to respond to a question, the degree of self-confidence in a spontaneously crafted response, the reliance of the learner on third-party supports in explaining a concept, or the accuracy of the underlying thought process revealed by watching or listening as a problem is solved are all subtle yet powerful instructional techniques much more readily put to use in synchronous online situations than asynchronous ones. Merely getting an answer correct—as one might do by luck on an exam—does not mean that the learner grasps the concept. Real-time online interaction with students can draw out the true level of comprehension and shore up cracks in the foundation on which future lessons will depend.

- *Questions and trouble spots cannot necessarily be predicted.* No amount of advance preparation can allow one to predict all questions that learners will have when they review course material. A live online session takes the guesswork out of knowing learner trouble spots and allows for an efficient real-time response to keep learners on track. The presence of an instructor in real time to aid learners at exactly the point they might otherwise get frustrated and quit can lead to improved learner retention and outcomes.

- *Information is fast-changing.* Many disciplines see innovation and change overnight. To keep these courses relevant and compelling to learners—even within the context of a semester-long course—an instructor often wants to bring current events, news, or information into his or her online courses. The agenda for technology, economics, or political science courses grounded in current events or practices, for example, can morph in an instant. Preparing asynchronous materials to describe new concepts in such short time frames can be overwhelming or unwieldy. Real-time tools can provide a suitable alternative, allowing the instructor to orchestrate discussions of late-breaking information with learners in a less formal context than prepared, standalone materials or asynchronous exchanges might require.

- *Ensuring participation and improving learner retention is paramount.* There is nothing like knowing that a real person is waiting at a specific time to conduct a class—and is expecting your attendance and participation—to motivate online learners and get them to show up and participate. As a retention and motivation tool, live online sessions can “anchor” an overall learning program and provide achievable milestone moments that keep a learner engaged and progressing through a course or workshop. How many of us have shown up for a class because we did not want to let down an instructor? Interactive, live sessions can also help

those learners who are disinclined to self-paced exploration or who do best when led by the hand through new material. The increased comfort level that comes from working together with an instructor or in a group can be the difference between sinking out at sea alone or swimming to the safety of understanding and course completion.

- *A guest expert is available to interact with learners for a limited time.* Instructors who enhance their courses by securing participation from a guest expert may find that their subject matter specialist can only commit to a brief “appearance.” Rather than ask the expert for the kind of ongoing or open-ended commitment that might characterize participation in a discussion board, an instructor might use a real-time interactive forum and consolidate the guest’s interaction with students to a set hour on a specific day.

- *Dialogue or debate among learners is required.* Observing and participating in debate or dialogue with instructors or peers who have different perspectives or opinions can be a meaningful aspect of a learning experience. Few course communication options can convey or allow the immediacy and spontaneity of debate that synchronous tools offer.

- *Distance-based learners and campus-based learners need access to the same experts.* Hybrid courses that simultaneously serve on-campus and distance-based students can make good use of real-time communication tools to bridge classroom-based experiences to remote learners. If the right tools are selected and deployed wisely, distance-based students can enjoy just as much interaction with instructors, peers, and guest experts as their on-campus counterparts.

- *The situation calls for personal, real-time attention.* Some learning situations simply call for interaction that is as human as humanly possible. Reacting to a learner’s present state and concerns and providing encouragement, support, and reinforcement appropriate for the moment of need are skills more aptly dispensed by a person in real time than in a time-shifted manner or by a computer program. Certainly, the expression of humanity within a course is not purely the domain of synchronous environments. But when it comes to allowing instructors to behave naturally, convey their sense of humor, tell stories, express themselves vocally, lend a listening ear, or use other subtleties of human communication to connect with learners, real-time online environments most closely resemble the physical spaces traditionally home to such personal forms of expression.

LEARNER SKILLS DEVELOPED AND ASSESSED LIVE ONLINE

Much attention is given to the kinds of *content* that are suitable for learning in synchronous environments, but real-time venues are also uniquely suited places for the learning, practicing, and assessing of certain performance-based *skills*. Sometimes these skills are the primary purpose of a synchronous interaction; other times they are beneficial byproducts or outgrowths of exploration of a topic at hand. Many of these learner aptitudes are difficult to teach or measure without the concurrent presence of both learner and instructor, and often peers as well, especially when collaborative techniques are being gauged.

Assessing Skills and Abilities

The most common methods of assessment in higher education today are traditional approaches such as problem-based examinations or essays (Juwah, 2003), which do not “adequately test for imponderables like independent critical thinking, creativity” (Elton and Johnston, 2002, p. 7), confidence, performance, or oral mastery. In the online realm, this has not changed significantly, although one trend toward electronic portfolios or e-portfolios—the collecting and assessing of a body of student work rather than one particular exam or assignment—is showing promise in some institutions. E-portfolios can provide a more holistic and richer view of student achievement and development, which aids in learner evaluation (Chen and Mazow, 2002). Although some e-portfolios do incorporate rich media such as audio and video projects created by students, the approach is still asynchronous in nature and therefore excludes the portrayal of those student accomplishments and skills that are performed in real time or that require the presence of others to adequately demonstrate.

An assessment of abilities needed by learners to succeed in today’s world offered by the Partnership for 21st Century Skills suggests that real-time collaboration, learning, and interaction can help advance the cause of skill development across a range of categories, such as “global awareness,” “interpersonal learning,” and “information and communication technology (ICT).” This is not to say that the use of synchronous tools is the only method to prepare our learners with skills essential for success in today’s workplaces and communities, but they are undeniably well-suited and should be seriously considered as we craft learning experiences that prepare students for today’s real-world challenges. This book’s companion Web site

(www.learninginrealtime.com) includes an excerpt from the twenty-first century skills report of some of the specific performance-based abilities that are well-served by real-time online activities.

Skills Assessed Uniquely Live Online

In very concrete terms, there are some aptitudes or skill areas for which training or assessment by any other means would be artificial, inefficient, or simply impossible. Here are some skills and situations for which many synchronous environments seem tailor-made:

- Public speaking or presentation skills
- Real-time problem solving and analytical thinking
- Listening and reading comprehension in native and second languages
- Composure in reflecting and responding under pressure
- Well-reasoned conversations on discipline-specific topics; offering cogent responses in a timely manner
- Persuasive, well-articulated, and well-spoken oral arguments; practicing the art of oral rhetoric
- Storytelling skills
- Debate
- Proficiency in software skills or other real-time applications or processes
- Demonstration of how certain results are achieved in math or accounting or other fields where it is essential to be able to “show your work” and consciously replicate results
- Appropriate speech with clients, colleagues, or patients exhibiting proper etiquette or bedside manner
- Effective use of one’s voice to convey shades of meaning or to perform, such as with music, in drama, or poetry
- Fluency in a second language, including proper pronunciation
- Immediate application of material learned to real-world problems or contexts
- Role-play in simulated situations in preparation for real-world scenarios

- Comfort and competence in ICT skills for collaboration and communication
- Ability to work well and collaborate with others in team activities
- Demonstrated leadership skills in developing, fluid situations

Although they are appearing increasingly and with great success, the teaching and gauging of performance-based skills like these are still relatively rare among the body of courses currently online. Courses or entire programs may not even be considered for online delivery when learning objectives include the need for the development, demonstration, or mastery of such skills. Sometimes this is because instructors still lack access to real-time online tools that would support performance-based instruction and assessment, or they may be unaware of the potential of synchronous venues. Although understandably we may be wary of visiting a surgeon whose entire repertoire was learned online, mounting experience in real-time online venues suggests that as instructors we should be open to the great capacity that these tools offer for teaching collaborative, communication, problem-solving, and other vital twenty-first century skills online.

