BlendKit Reader

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Chapter 1: Understanding Blended Learning

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Questions to Ponder

- Is it most helpful to think of blended learning as an online enhancement to a face-to-face learning environment, a face-to-face enhancement to an online learning environment, or as something else entirely?
- In what ways can blended learning courses be considered the "best of both worlds" (i.e., face-to-face and online)? What could make blended learning the "worst of both worlds?"
- As you consider designing a blended learning course, what course components are you open to implementing differently than you have in the past? How will you decide which components will occur online and which will take place face-to-face? How will you manage the relationship between these two modalities?
- How often will you meet with students face-to-face? How many hours per week will students be engaged online, and how many hours per week will students meet face-to-face? Is the total amount of student time commitment consistent with the total time commitment of comparable courses taught in other modalities (e.g., face-to-face)?

What is Blended Learning?

Blended courses (also known as hybrid or mixed-mode courses) are classes where **a portion of the traditional face-to-face instruction is replaced by web-based online learning.**

How much of the face-to-face instruction must be replaced by online coursework? This question will vary greatly by class, discipline, and learning objectives. The Sloan Consortium (a professional organization dedicated to postsecondary online learning) defines blended learning as a course where 30%-70% of the instruction is delivered online. While this is a useful guideline, it may not be sufficient to cover every blended learning configuration.

The EDUCAUSE Learning Initiative provides many useful resources related blended learning, including a report on a national focus session and a framework for faculty workshops. The National Center for Academic Transformation has done a significant amount of work related to course redesign, including the innovative use of technology for blended learning.

The addition of technology to any academic program must be accompanied by fundamental process re-design. With funding from the Next Generation Learning Challenges (NGLC) program, the Blended Learning Toolkit web site has been designed to provide an infrastructure for participating faculty and institutions that includes innovative technology, curricular reinvention, participant training, and ongoing assessment support, all of which are necessary for meaningful, sustainable, *disruptive* transformation.

Benefits of Blended Learning

Blended course have proven to be among the most popular choices for students at institutions where they are offered. At first glance, this popularity seems intuitive because blended courses allow students and faculty to take advantage of much of the flexibility and convenience of an online course while retaining the benefits of the face-to-face classroom experience.

Although fully online learning has become well established in higher education, many institutions appear to be struggling with conceptualizing and implementing blended learning. Yet, where blended courses have succeeded, they have most often done so when strategically aligned with an institution's mission and goals. The development and delivery of blended courses can be used to address a variety of institutional, faculty, and student needs.

- For universities, blended courses can be part of a strategy to compensate for limited classroom space, as well as a way to think differently about encouraging faculty collaboration.
- For faculty, blended courses can be a method to infuse new engagement opportunities into established courses or, for some, provide a transitional opportunity between fully face-to-face and fully online instruction.
- For students, blended courses offer the conveniences of online learning combined with the social and instructional interactions that may not lend themselves to online delivery (e.g., lab sections or proctored assessments).

If an institution's blended learning strategy can be designed to address the needs and dynamics of all three constituencies (institution, faculty, and student) simultaneously, then blended learning can become a powerful force for institutional transformation.

As cited in the U.S. Department of Education's (2010) "Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies," "Students in online conditions performed modestly better, on average, than those learning the same material through traditional face-to-face instruction" (p. xiv) and, notably, "Instruction combining online and face-to-face elements had a larger advantage relative to purely face-to-face instruction than did purely online instruction" (p. xv). Not only do students perform better in blended courses, but the electronic resources inherent in the modality offer other advantages as well. For example, student performance analytics can be used to study and better understand student learning. Data analytics can also identify students who need early

intervention, thus increasing retention. The online tools available in blended courses can also significantly enhance student engagement, ensuring that all students participate in course discussions and benefit from collaborative learning.

When properly implemented, blended learning can result in improved student success, satisfaction, and retention. For instance, the University of Central Florida has consistently seen such results over the 13 years of their own blended learning initiative. Since beginning this initiative, UCF has delivered over 5,030 UCF blended course sections and blended offerings have increased 475%. [For a summary of these data, see http://blendedlearningtoolkit.org/about/benefits-of-blended-learning]

Designing Blended Learning Courses

Arguably, we seek to understand blended learning so that we might identify whether it has any benefits to offer us. Such affordances are perhaps made most evident by considering the range of approaches to blended learning design. However, designing any course is an exercise in balancing control and emergence.

Blended Learning Design as a Controlled Process

"Blended learning is hot and understandably so, combining the best features of online learning (e.g., 24/7 accessibility) with the best features of classroom instruction (e.g., live, face-to-face interaction). No doubt it's here to stay. But why do so many blended initiatives turn into frustrating boondoggles, consuming far more time... than anyone anticipated?" (Troha, 2002). Unfortunately, the undesired outcomes often appear during the implementation of the course, or even long after substantial amounts of time, effort, and enthusiasm have been expended. How can the practicing teacher avoid blended learning pitfalls?

This section develops a model of best practices to reduce the potential headaches and realize the promise of blended learning. The importance of planning is reinforced. At each stage, control needs to be maintained from the beginning of the planning stage to ensure desired results. It is assumed that a course design process is being pursued that starts with learning objectives and that includes a general outline used to guide the development of the course, its delivery and evaluation. Guiding questions such the following are helpful to keep in mind: "What's the best mix of traditional, live, teacher-led presentation and synchronous or asynchronous, technology-driven methods of teaching?" It is important to determine your role as a teacher in the learning process. Should it be one that is primarily directive or facilitative? Also, decide the importance of interaction amongst the students. These questions may be answered differently depending on the teaching/learning context. In any event, blended learning lends itself to learner-centered, teacher-guided (as opposed to teacher-directed), interactive, and student-collaborative learning.

Content and learning activities that provide for ample practice must be introduced into the course if the student is to achieve course goals. Blended learning is advantageous to the learner. Research has shown

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the limitations of applying a generalized style of teaching, rather than modifying lesson plans to fit the needs of the student. "Increasingly, organizations are recognizing the importance of tailoring learning to the individual rather than applying a 'one-size-fits-all' approach." (Thorne, 2003) Of course, common needs exist, but blended learning allows the teacher to look for creative ways and use a variety of media to address the specific needs of his students.

When a teacher designs his lesson plan, it is important to note the type of learning activity (e.g. lecture, case study, role play, simulation, game, etc.) that best conveys the objectives of the lesson. There are two reasons for listing traditional teaching methods only at this point, instead of both classroom and online activities:

1. We as teachers usually establish on paper the "ideal" learning experience when you work under a more familiar, traditional style of teaching. It is live, face-to-face, instructor-facilitated and student-collaborative.
2. Once you have established the lesson plan for the "ideal" learning experience, you can systematically analyze the elements that can be delivered online without compromising learning effectiveness. You will discover here what might be best left in a classroom setting.

Blended learning is not simply adding an online component to a face-to-face course. Technology in a course should be used wisely - to facilitate student learning. Technology should not be used just to show off technology. Excellent opportunities exist for teachers to make learning interactive, dynamic, and fun when used properly. The technology aspect of a lesson should be like a good baseball umpire - it (like the umpire) is good if it (he) goes unnoticed.

"Since the intent of blended learning is to enhance learning by combining the best of both worlds...elements of the outline that appear to lend themselves to self-study online should be highlighted. Such elements tend to include easy-to-interpret, straightforward information that is relatively easy for the (student) to accurately grasp on his/her own." (Troha, 2003) Students should be able to perform required tasks online with little or no prompting by the instructor. Of course, teachers should guide their students along, but when a student can accomplish a task online with limited assistance, that student encounters a learning experience that is deeper and more rewarding.

Blended learning courses are dynamic by their very nature. Revisions will need to be made to adapt to the learning needs of its students. Knowing what works and what does not comes with experience. The best resource for teachers to create and implement a blended learning course is another teacher or a network of teachers who have had experience with launching such courses.

With purpose and context in mind, the designer can select, combine, and organize different elements of on-line and traditional instruction. Carman (2002) identifies five such elements calling them key "ingredients" (p. 2):

1. **Live events.** These are synchronous, instructor-led events. Traditional lectures, video conferences, and synchronous chat sessions such as Elluminate are examples.
2. **Self-Paced Learning.** Experiences the learner completes individually on her own time such as an internet or CD-ROM based tutorial.
3. **Collaboration.** Learners communicate and create with others. E-mail, threaded discussions, and wikis are all examples.
4. **Assessment.** Measurements of learners' mastery of the objectives. Assessment is not limited to conventional tests, quizzes, and grades. Narrative feedback, portfolio evaluations and, importantly, a designer's reflection about a blended learning environment's effectiveness or usefulness are all forms of assessment.
5. **Support Materials.** These include reference material, both physical and virtual, FAQ forums, and summaries. Anything that aids learning retention and transfer.

It is useful, though ultimately reductive, to think of the interaction between context and ingredients for a given learning objective as a rectangular matrix. The intersections suggest the method the designer should use. The danger of this metaphor is the suggestion that each purpose, context, and ingredient combination deterministically lead to a matching method. Such is not the case. The point to the designer is to think in terms of those conditions, and others unique to her particular circumstance, as she orchestrates learning activities and creates her blended environment.

For Learning Objective α					
	Live Events	**Self-Paced Learning**	**Collaboration**	**Assessment**	**Support Materials**
Audience	$method_1$	$method_2$	$method_3$	$method_4$	$method_5$
Content	$method_6$	$method_7$	$method_{etc}$		
Infrastructure					

Blended Learning Design as an Emergent Process

The following section is excerpted from "Planning Your Online Course" by June Kaminski and Sylvia Currie in the Commonwealth of Learning's *Education for a Digital World* in compliance with the Commonwealth of Learning's legal notice and may not be re-mixed apart from compliance with their repackaging guidelines.

Can you make patterns from clouds?

"Part of the plan is knowing that the situation will compel you to change your plan". – Vella (2006)

A course plan can take on a variety of shapes, and is always informed by context: the audience, the venue, and the resources you have available to you. It is also informed by the educational values, beliefs, and philosophies of the design team. With so many possibilities and unknowns, how can we work towards a common language of what planning is all about?

The most basic question to begin with is*, why design* an online course. The emphasis here can be on the word *why*, or on the word *design*. A very common response to the question *why* is that learners will be geographically distributed, and having a course online is an obvious solution. However, an online course, or a course enhanced with online resources and communication tools, will add educational value to any face-to-face course by making resources available to learners and by providing opportunities to deepen learning through dialogue and sharing. In this sense the divisions between online courses and campus-based courses are becoming hazy. So the question of *why* is shifting from technology as a means to change the delivery method to technology as a means to enhance learning.

A more philosophical but very practical question emphasizes the word *design*. Is it important to create a structure in a virtual environment? How much design work should be done before involving the learners in the curriculum process? These questions have challenged educators for some time, and they seem especially complex when applied to designing online courses. Where then do we turn for guidance?

Some would argue that instructional design literature does little to guide the process of planning online courses because there is insufficient consideration for the social context of learning (Le Blanc, 2003). Furthermore, the recent advances in technologies to support networked learning, or more informal connections among people and information, are challenging our notions about advance planning and fixed design of online spaces. [For interesting discussions and resources related to networked learning see the work of Leigh Blackall http://leighblackall.blogspot.com] Consider this description by George Siemens:

> By recognizing learning as a messy, nebulous, informal, chaotic process, we need to rethink how we design our instruction.

Instruction is currently largely housed in courses and other artificial constructs of information organization and presentation. Leaving this theory behind and moving towards a networked model requires that we place less emphasis on our tasks of presenting information, and more emphasis on building the learner's ability to navigate the information—or connectivism.

Blogs, wikis, and other open, collaborative platforms are reshaping learning as a two-way process. Instead of presenting content/information/knowledge in a linear sequential manner, learners can be provided with a rich array of tools and information sources to use in creating their own learning pathways. The instructor or institution can still ensure that critical learning elements are achieved by focusing instead on the creation of the knowledge ecology. The links and connections are formed by the learners themselves. (Siemens,2002)

The best plan will anticipate learner experiences, but provide plenty of opportunities for learner-defined goals and assessments. In broad terms, this would be called design for flexible learning. However, in practice, a systems and linear approach is often favoured because it ensures consistency and is more easily administered and supported at the organizational level. By planning out each module carefully in terms of instructional goals, content, assignments, and assessments, each course can undergo rigorous quality control.

Flexible and systems approaches represent opposite ends of the course planning spectrum, one more learner-centred (or more favourably referred to by Jane Vella (2001) as learning-centred), and the other more teacher-centred. With each approach there are obvious considerations for your own context. While a systems approach may require substantial resources, it may be more effective for managing quality control and for preparing and supporting instructors. Brent Wilson (1995), a pioneer in e-learning, has been cautioning online course designers about the downside of a systems approach for the past decade: An environment that is good for learning cannot be fully prepackaged and defined A more flexible approach will open the doors to more possibilities based on learner goals and needs. However, as pointed out by Bates and Poole (2003), "a flexible approach requires a high level of skill to be effective".

So to revisit the central question: Can we work towards a common language of what planning is all about? What are the patterns in the clouds?

There are many helpful models to guide the design process, each informed by learning theory and each providing a set of actions by phase (often overlapping) in the design process. There are too many to expand on in this short chapter—an Internet search on "instructional design models" will yield a dozen or more. [See http://carbon.cudenver.edu/~mryder/itc_data/idmodels.html for a comprehensive list.]

A model is useful for providing a framework for managing course design and ensuring that all decisions are attended to. Furthermore, a good model is cyclical so that evaluation and reflection on

implementation will always inform the next iteration of the course design. Keep in mind that while learning theory and prescriptive models help to guide the work, a model "should be used only to the extent that it is manageable for the particular situation or task". In other words, context is always at the core of the planning and design process.

Prepare by considering these four tips:

1. Begin with relevant metaphors for learning. Often the language commonly used to describe e-learning dismisses the notion that learning with technology is a valuable experience in its own right. When we speak about "distance learning", "covering course content", and "delivering courses" we are imposing an intent and framework for learning that calls for little involvement from the learner.

2. The focus should be first on the learning, and second on the technologies that will support that learning. Think of your primary role in the planning process as keeping learning, and not technology, at the centre of the design process. Plan to include team members in the design process who can provide the expertise required to carry out your plan and also take full advantage of the medium.

3. Creating good online learning experiences requires effort. While the basic planning guidelines are the same for both face-to-face and online courses, "the process of planning a quality e-learning experience is very likely to be more complex and time-consuming than planning a conventional classroom experience. (Anderson & Elloumi, 2004)

4. Context is king! You can choose an instructional model that suits your project and personal beliefs about teaching and learning, but always be prepared to adapt.

Two Case Studies of Blended Learning Design
Perhaps it will be helpful at this point to consider how blended learning design principles are implemented in practice. Following are two case studies that are quite different in style, scope, and in subject matter/class size of the courses described. What patterns do you see?

Blended Learning Case Study 1: Broad Conceptualization
McCracken and Dobson (2004) provide an example of how learning purpose, context, and blended learning ingredients lead particular learning methods. They propose a process with "five main design activities" (p.491) as a framework for designing blended learning courses. The process is illustrated with a case study of the redesign of a class at The University of Alberta called Philosophy 101 (pp. 494 - 495):

- **Identifying learning and teaching principles.** The teaching and learning goals were described as requiring active participation, sustained discussion, and, most importantly, inquiry and critical analysis.
- **Describing organizational contexts** Team teaching with three professors and up to eleven graduate teaching assistants to engage a class of 250 students in dialogue around ethical and political philosophy.
- **Describing discipline-specific factors** The designers are described as being concerned about stereotypes of philosophy as "bearded men professing absolute truths" (p.495). The desire was to represent philosophy as an activity, not a set truths to be absorbed.
- **Selecting and situating appropriate learning technologies** Learning activities focused on the process of engagement: presenting and defending a thesis and responding to opposing views. For example, a face-to-face lecture would feature contemporary ethical dilemmas with newspaper headlines or a video clip. Or, the instructors would stage a debate in which they would assume the role of a philosopher under study and then argue from the philosopher's point of view. Online threaded discussion supplemented small group seminar sections.
- **Articulating the complementary interaction between classroom and online learning activities** In the Philosophy 101 example, it was noted how the face-to-face engagement was complemented by more deliberative, asynchronous discourse.

Even this simplified description illustrates the multilayered, multifaceted nature of blended learning environments. With such a large canvass, the most important design principle might be to start small. "Creating a blended learning strategy is an evolutionary process." (Singh and Reed, 2001).

Blended Learning Case Study 2: Detailed Personal Reflection

The following section is excerpted from "Looking Forward: Stories of Practice" by Susan Crichton and Elizabeth Childs in the Commonwealth of Learning's *Education for a Digital World* in compliance with the Commonwealth of Learning's legal notice and may not be re-mixed apart from compliance with their repackaging guidelines.

A story of blended instruction

Typically described as an instructional strategy that incorporates the best of face-to-face learning and online content and discussion groups, blended instruction often meets with mixed success. A key challenge to designing blended learning strategies is to sort out what content is best suited to which format—online or face-to-face. If that decision is not well considered at the design level, the workload for both the teacher and students may seem overwhelming, and the learning experience may be inconsistent with the curricular goals.

In blended learning, typically the face-to-face component is supported by supplementary online content. This is usually contained within an LMS, often with asynchronous discussion groups and synchronous sessions, and it may take the form of blogs, podcasts and multimedia simulations. Conversely, a blended course might exist primarily online, with a few face-to-face meetings for more experiential learning opportunities such as labs, visits to specific sites, or face-to-face orientation sessions so students can meet each other and the instructor.

In winter of 2004 I [Susan Crichton] had the opportunity to design a campus-based course for pre-service teachers. It was entitled Distributed Learning: Teaching and Learning Online. The desire to build and teach this course came directly from my personal experience as a K–12 online educator, as well as my research into the practices of K– 12 online teachers. I felt the course had to model excellent practice and leverage emerging technologies, as it would introduce blended and online learning to preservice teachers.

The course, an elective, met on Friday mornings for three hours, and it was assumed that students would work an additional three hours per week independently. Further, all similar electives within the program, required students to complete an inquiry paper based on action research.

Before the semester started, I met with the students and determined that none of them had taken an online course before. The majority had very limited technology skills and were actually enrolled in the course to gain them. Therefore, I started the design of the course by considering the amount of time available (13 weeks) and listing the learning experiences that I wanted the students to have; I then organized the content to fit those constraints. I sorted the content into experiences that I felt were best shared, either face-to-face during the Friday sessions or online during the expected independent study time. Further, I modified the inquiry paper to include the development of a student-negotiated learning object.

I planned for the final face-to-face class to be a celebration of learning where the students could share their learning objects and talk about their successes and challenges. Therefore, I was left with 11 sessions to present content, develop technology skills, and model more student-centred approaches to learning.

Assuming the first session and the last were orientation, introduction and celebration, respectively, I distributed specific content to each of the other 11 sessions, covering topics such as roles and responsibilities for online educators, content development, issues of pedagogy and assessment, characteristics of asynchronous and synchronous learning, global issues—digital divide, employment opportunities, and universal design. Paralleling each topic were weekly online content structured within the LMS and opportunities for students to practise moderating the discussion forum. The face-to-face sessions became workshop opportunities, with matching software complementing the various topics.

For example, the week on content development was supported by concept mapping using Inspiration software for storyboarding and an introductory, hands-on session in digital filmmaking.

The most critical design decision on my part was where on the continuum (Figure 31.3) I should start. As our program is inquiry-based, I felt it would have been inappropriate to start with online instruction only. Further, because there was an existing face-to-face expectation, the facilitated online instruction model would not work either. The choice rested with a blended approach or a studio-based approach, and I chose blended, designing the face-to-face sessions as a studio-based model in terms of the hands-on learning and open critiques of the products and process.

Continuum Type	Online Instruction	Facilitated Online Instruction	Blended Instruction	Studio-based Instruction
Role of teacher / student	Teacher-prepared content Teacher-directed instruction Teacher has minimal or no direct involvement with students Need for students to participate online	Teacher-prepared content Teacher-directed instruction Interaction between teacher and students Need for both to participate face-to-face and online	Teacher-prepared content Teacher-directed instruction Increased interaction among teacher and students Opportunity for student-negotiated tasks Need for both to participate face-to-face and online	Teacher-prepared learning environment and initial problems / task Student-centred approach Active interaction between students / teachers Changed role for teacher and student
Online Approach	Asynchronous teaching / learning Learning controlled by time— fixed start / stop time	Synchronous teaching / learning options Asynchronous options Collaborative options Learning controlled by teacher	Synchronous teaching / learning Increased opportunities for asynchronous learning Opportunity for face-to-face Collaboration Learning controlled by teacher	Asynchronous learning with synchronous support Collaboration Online gallery with forum for crits Learning negotiated by teacher / student
Example of software	Content managed in learning management system (LMS) such as Blackboard,	Content in LMS, support via email or synchronous software	Online discussions, LMS, synchronous conferencing Physical	Collaborative software (e.g., CMAP, shared whiteboards); simulations, VR,

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	D2L, Moodle, WebCT; assessment via computer-marked quizze	(e.g., Elluminate Live, MSN Messenger); online discussions	classroom/lab environment	LMS, synchronous conferencing
Instructional strategy	Lecture / information transfer	Lecture, discussion	Lecture, discussion, task negotiation	Lecture, discussion, task negotiation, problem-solving
Evaluation	Testing / computer marked (true or false, multiple choice, short answer)	Formal testing / teacher marked	Formal testing / teacher marked, potential for alternative, more open-ended assessment (essay, project, etc.)	Authentic assessment using checklists / rubrics for project assessment
Link to Bloom's Taxonomy	Knowledge level	Knowledge level Comprehension level	Knowledge level Comprehension level Application level Analysis level	Potential for all levels, including the higher-order thinking tasks of synthesis and evaluation
Role of Media See Dale's Cone of Experience for additional information on the relationship of media for to teaching and learning— http://teacherworld.com/potdale.html	Text to read Audio files (podcasts to hear) Images to watch	Text to read Audio files (podcasts to hear) Images to watch Exhibits to explore Simulations to engage with	Text to read Audio files (podcasts to hear) Images to watch Exhibits to explore Simulations to engage with Demonstrations to discuss	Potential for all media to be used Use media to dramatize personal experiences Use media as a starting point for personalized learning and individual demonstration of understanding Create own media

Figure 31.3. Continuum of Instructional Practice Typically Found in Online and Blended Learning

This course has been offered each year since its introduction in 2004, and students have been hired directly from the course for jobs in online teaching for the local school board. Each year, the course content has changed as new technology emerges. In the last offering, I included podcasting, wikis, and blogs, and I am still exploring options for the upcoming course. The course has exceeded my expectations, and the evaluations have been excellent.

During the first offering, a graduate student (Shervey,2005) researched this course for her thesis. The study was positive and reaffirming, as it revealed that the students' perceptions of promise and potential of online learning changed as they experienced them firsthand.

Blended learning worked well for the Distributed Learning course. For example, it allowed me to share asynchronous technologies during the sessions on asynchronous and synchronous learning. Rather than attend class, I encouraged the students to connect from home during the Friday class, letting them experience what it felt like to be learning along from home. One of the most successful sessions was the discussion of employment. I invited colleagues who work in various online professions to join the discussion forum. I created a forum topic for each of them, introducing them to the course and explaining to the students how I knew them or had worked with them, thereby personalizing these potentially anonymous guests. Each guest then posted a description of their work and invited the students to ask questions. And question they did, asking everything from who are you, to how much do you make, and are you lonely sitting at home.

Over the three offerings of this course, I have done little to change the structure or my instructional strategies, which appear to be working well, but the design is flexible enough to allow me to change the content as new things emerge. I cannot imagine offering this course in anything other than a blended approach, as I have learned that our face-to-face time is as important as our online time.

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Chapter 2: Blended Interactions

The following chapter is adapted from "New Learners? New Educators? New Skills? " in the Handbook of Emerging Technologies for Learning by George Siemens and Peter Tittenberger under the terms of a Creative Commons Attribution-NonCommercial 2.5 Canada license. Portions of the following chapter labeled as the property of the Commonwealth of Learning are used in compliance with the Commonwealth of Learning's legal notice and may not be re-mixed apart from compliance with their repackaging guidelines.

Questions to Ponder

- Is there value in student-to-student and student-to-instructor interaction in all courses regardless of discipline?
- What role does interaction play in courses in which the emphasis is on declarative knowledge (e.g., introductory "survey" courses at the lower-division undergraduate level) or, similarly, in courses that cultivate procedural knowledge (e.g., technical courses requiring the working of problem sets)?
- As you consider designing a blended learning course, what kinds of interactions can you envision occurring face-to-face, and how might you use the online environment for interactions? What opportunities are there for you to explore different instructional strategies in the blended course than you have in the past?
- What factors might limit the feasibility of robust interaction face-to-face or online?

Introduction

The National Survey of Student Engagement's 2007 report advocates for high impact activities where learners "interact with faculty and peers about substantive matters" (Moore, 2007). High impact activities increase learner engagement and results in greater success in learning. EDUCAUSE Center for Applied Research reports many younger students prefer an appropriate balance of technology and face-to-face contact with faculty (EDUCAUSE Center for Applied Research, 2007). Even though technology enables greater learner control and autonomy, learners generally value social contact and faculty guidance, especially when entering a new field or course of study (de Laat, 2006). In fact, some might argue that student interaction with faculty and with other students in the context of learning is an expression of a basic human need.

Extrinsic Motivation: Interaction with Experts

We will consider models for blended interactions from two vantage points. First, we will explore the apparent dichotomy between faculty guidance and learner self-direction from the stand point of designing learning environments. Then, we will consider how students' own need for personal expression may be leveraged in blended learning.

Minimal or Guided Learning?

Kirschner, Sweller & Clark (2006) question the tenets of problem-based learning, highlighting the unsettledness of the debate between instructor or learner control in learning activities. They argue that the constructivist views of learning are accurate, but the "instructional approaches suggested by constructivists" are not necessarily effective. Of particular concern for the authors of the paper is the degree of instructor (or expert) presence during the learning process. They assert that minimal guidance is not as effective as guided instruction due to different approaches evident in how experts function (epistemology) in a domain and how learners best learn.

Gardner (2006) states that the distinction between an expert and novice is found in how information and ideas are related to each other: "But shorn of their connections to one another, to underlying ideas, to a disciplined way of construing this pile of information, facts are simply 'inert knowledge'" (p. 28). The conceptual network of an expert is more richly connected, nuanced, and diverse than that of a novice.

In contrast with strong guidance, Sugata Mitra (2007) details an experiment he conducted in India (now commonly known as the "hole-in-the-wall" experiment) where he placed a computer with an Internet connection in a wall facing a ghetto. Within days children aged 6-12, with minimal education and limited understanding of English, were able to browse the web and perform other tasks – such as drawing - on the computer. The self-taught, minimally-guided nature of the experiment led Mitra to the conclusion that children do not require direct instruction to acquire basic computer literacy skills. [See a video of Mitra describing his work on TED talks.]

Research by Darken and Sibert (1996) on "wayfinding" explores a similar theme of the learner-in-control approach to learning; how participants in large virtual worlds orient themselves in their environments in order to achieve certain tasks or arrive at certain locations. With wayfinding, the effectiveness in achieving objectives for learners/participants is determined by the design and incorporation of environmental cues. Whether self-directed and initiated (Mitra's research) or aided through advance consideration of design (Darken and Sibert), it is clear that many learning objectives can be achieved without direct guidance.

The concern of minimal guidance in learning is compounded by the growth of online content created by amateurs. The criticisms leveled at knowledge sources created by the self-organizing "masses" are often applied to the concept of learner-directed activity. Two significant challenges arise when considering learning as being largely under the control of learners themselves. The first is generally found in some variation of "how will the learners know what they need to know?" The second relates to the rapid decentralization and distribution of most of societies channels of communication - newspapers, television, radio, and, more recently, academic publishing – and raises concerns of how learners are to make sense of information in a field that is fragmented and distributed, rather than well organized and coherent (such as information found in a traditional textbook).

Personal learning environments (PLEs) offer a future model of learning that incorporates a greater range of tools, largely under the control of the individual. PLEs are "not a piece of software...[but] an environment where people and tools and communities and resources interact in a very loose kind of way" (Wilson, 2008).

The Role of Educators in a Networked World

The role of the educator and the process of instruction have been under pressure to change for over a century (Egan, 2002). While camps, as discussed, often fall into conflict on principles of minimal or guided instruction and instructivism or constructivism, the nuanced and complex nature of learning suggests each approach may have value in different contexts.

Several educators have put forward models of educator and learner roles and interaction in a technologically-enabled era:

- John Seely Brown's notion of studio or atelier learning
- Clarence Fischer's notion of educator as network administrator
- Curtis Bonk's notion of educator as concierge
- George Siemens' notion of educator as curator

Atelier Learning

John Seely Brown (2006) draws inspiration for his atelier model of learning from artists and architects and describes learning as "enculturation into a practice". An art studio is generally an open space where students create their paintings, sculptures, and other art forms in full view of fellow artists. The "master" is then able to observe the activities of all students and can draw attention to innovative approaches. Students are not limited to learning based solely on the expertise of the instructor. The activities of all students can serve to guide, direct, and influence each individuals work. Blogs are particularly amenable to the atelier model of learning. For example, a class on creative writing – where each students posts their work in their own blog – permits the educator to highlight (and comment on) exceptional instances of writing. Students are able to read each other's work and gain insight from both instructor and their fellow students.

Network Administrator

Clarence Fisher (n.d.), blogger and classroom teacher, suggests a model of "teacher as network administrator": Just as our mind is a continuously evolving set of connections between concepts, so our students and their learning can become placed at the centre of a personal learning network which they construct with our help. Helping students to gain the skills they require to construct these networks for learning, evaluating their effectiveness, and working within a fluid structure is a massive change in how the dynamics of classrooms are usually structured.

In Fisher's model, a primary task of the educator is to assist learners in forming connections and creating learning networks. As learners encounter new information sources, they are encouraged to critically evaluate the source's suitability as part of a holistic and diversified learning network. Gaps in the learning network are addressed by both learner (self-directed by active participation in the network and through self-reflection) and educator (through evaluating, with the learner, the nature and quality of the learning network (external) and how key concepts are related and understood (conceptual)).

Concierge Learning

Curtis Bonk (2007) presents a model where the educator is a concierge directing learners to resources or learning opportunities that they may not be aware of. The concierge serves to provide a form of soft guidance – at times incorporating traditional lectures and in other instances permitting learners to explore on their own. He states: "We need to push students into the many learning possibilities that are ripe for them now. Concierges sometimes show you things you did not know were available or possible. Teachers as concierges can do the same things. We need to have quick access to such resources, of course, but as this occurs increasingly around the planet, so too will we sense a shift from prescribed learning checkboxes toward more learner designed programs of study. Now the Web of Learning offers this chance to explore and allow teachers to be their tour guides."

Curatorial Learning

Curatorial Learning (Siemens, 2007) acknowledges the autonomy of learners, yet understands the frustration of exploring unknown territories without a map. A curator is an expert learner. Instead of dispensing knowledge, he creates spaces in which knowledge can be created, explored, and connected. While curators understand their field very well, they don't adhere to traditional in-class teacher-centric power structures. A curator balances the freedom of individual learners with the thoughtful interpretation of the subject being explored. While learners are free to explore, they encounter displays, concepts, and artifacts representative of the discipline. Their freedom to explore is unbounded. But when they engage with subject matter, the key concepts of a discipline are transparently reflected through the curatorial actions of the teacher.

Blending Expertise and Learner Control

The four models presented above share a common attribute of blending the concept of educator expertise with learner construction. The concerns of instructivist and constructivist education are addressed in the focus on connection-forming in learning. Whether seen as master artist, network administrator, concierge, or curator, the established expertise of the educator plays an active role in guiding, directing, and evaluating the activities of learners.

Intrinsic Motivation: Interaction as Human Need

Kelly and Cox (2008) use the term "techno expression" to refer to "a technology-based process by which one or more people, either individually or collaboratively, use words and/or media to articulate ideas or

thoughts" (p. 414). They hold that this is merely a manifestation, in our networked age, of an intrinsic "to express their ideas and viewpoints, both within and outside the context of their coursework" (p. 414).

The following section is excerpted from "Techno Expression" by Kevin Kelly and Ruth Cox in the Commonwealth of Learning's Education for a Digital World in compliance with the Commonwealth of Learning's legal notice and may not be re-mixed apart from compliance with their repackaging guidelines.

Considering Techno Expression During Course Design

In this section we focus on those aspects of course design that relate to interaction and expression. We will give some examples and strategies for providing students with opportunities for expression in any scenario, face-to-face courses with online supplements, hybrid courses, and fully online courses. We will also discuss our own experiences with, and preferences among, these three scenarios.

When you design your own online course environment, keep interaction in the front of your mind. Many people new to using the online environment start the course design process by planning what materials they want to upload. For example, many instructors state "I just want to upload my syllabus for now." This is a logical place to start. After all, you want the students to know up front what your expectations are, whether they are the course learning objectives, your course policies, or your grading plan. It does not take much more, though, to give students an opportunity to state their own expectations for the course. Create a threaded discussion or wiki assignment, asking students to review the syllabus and then to write one or two things that they would like to get out of the course, how the material could be made more meaningful to them or for their goals, and even their preliminary opinions about some of the main course themes or topics.

Even if you are not completely familiar with the online environment, you can go beyond just uploading a syllabus by including course materials, such as readings, presentations and lecture notes. Again, it will not require a huge effort to create one general threaded discussion to let students tell you about the applicability of the materials to their lives or studies or to express their opinions about different aspects of the content itself.

In addition to giving students an opportunity online to discuss the course overall and its different components, we recommend giving students an opportunity to talk about themselves. Many face-to-face instructors devote some portion of the first class meeting to an icebreaker activity or student introductions. You can do the same thing online. Create a discussion forum, blog, or wiki assignment for students to state how the class will help them meet academic or professional goals, or what they expect to achieve personally. An online activity like this allows you to return to it throughout the term, assigning student reflections about their own progress towards the previously expressed goals. The assignment can also enable other student techno expressions, such as photos, brief descriptions of where they are from, or even a sense of "in the moment" place (e.g., "From my computer, I can see the

pine tree in my yard through the San Francisco fog each morning").These activities can be limited to individual student-to-teacher communication, or they can be public, so other students can provide encouragement, feedback, related stories or resources, and more.

Online Asynchronous Expression in Blended Learning

Asynchronous activities allow students to enter more deeply into the material or an idea. There is time to look up facts, to draft an outline of what to say, and to revise mistakes before others respond. For students who speak English as a second, third, or fourth language, asynchronous activities give them time to translate instructions or other students' ideas and to refer to other resources before they communicate their own thoughts. Provided that they have done some preparation, students can be more confident in their work. This aspect of student expression should not be underrated.

On the flip side, some people feel that going through a course with only asynchronous forms of communication can cause students, and even instructors, to feel disconnected. While I have participated in some amazing discussion forum sessions in which students have demonstrated genuine care for their peers, I recognize that we were in a hybrid class that got to meet in person half of the time. Students may drop out of a fully online class, even if it is past the drop deadline, if they do not feel a connection to the instructor or at least to some of the other students. At the beginning of an online course we've found it useful to ask students to talk about what fosters their learning. We share a script of online discourse from a previous semester and cast roles. After the script is read, we ask students to describe what they heard. They often respond by describing the voices as "respectful, collaborative, and caring", or "thoughtful and insightful—I could really hear that people took time to respond". How opinions are shared can be crucial to sustaining a safe environment that all will participate in. Hearing what a democratic dialogue sounds like can help to set a valuable tone and move a group from being a group of learners towards becoming a learning community.

Even in math- or science-related fields, students can express opinions. For example, you might create a wiki for the entire class or small groups to solve problems together over time. The first part of the assignment could be for each student to state the best way to solve the problem, to provide a rationale, and to vote on the one the group will use. For problems with more than one solution pathway, this could generate some interesting dialogue. Be sure to read all the winning solution pathways so you can steer groups in the right direction if no one got it right, or if the group chose the wrong pathway.

Face-to-Face Synchronous Expression in Blended Learning

Synchronous activities can provide a sense of community. We co-teach a hybrid class about distance education, where five of the ten class meetings are conducted online. The first classroom meeting is face-to-face. At this meeting, we ask students to use pastel pencils and construction paper to draw a symbolic representation of how they see the educational process. At the same meeting we use a focused listing activity, first asking students to list five to seven characteristics of the best course they

ever took, and then to compare those lists with a neighbour to find similarities. We go through these two exercises back-to-back. It is always interesting to see how they yield some similar results, confirming what the students think, and some different results, perhaps due to the fact that the students are using a different part of their brains. The same is true for you. Provided that your students have equal access and ability to use various media applications, you can ask your students to use different methods to express their ideas.

If you have a choice, we recommend designing a hybrid course over a fully online course. Even if it means having only two face-to-face sessions—one to launch the course by setting course norms and expectations and by reading a script of online discourse to set tone, and one to close the class—this will improve students' abilities to express themselves freely to peers.

Similarly, it is important to mix it up, with respect to the work that you assign. Apply the good lessons that we have learned from those who have explored online community building, such as those that tell us to assign community roles, assign rotating facilitation, and incorporate assignments that ask students to engage in experiences offline and then to report back to the instructor or the class.

Construct Assignments That Encourage Expression

You may already have dozens of ideas, or you may have some difficulty thinking of assignments that require students to express their points of view. Below are some questions that you can use to get started during the course design process.

To Whom Will Students Express Themselves?

There are a number of potential audiences to whom students could express themselves: to the instructor, to an expert in the field, to a small group of peers, to the entire class, to prospective employers, and to the public.

No matter what size the audience or who is in it, students should be prepared to make their case, to state their opinions, and to answer follow-up questions. This means that over the course of a term, you should mix up the audiences for various assignments to give students practice in expressing themselves differently. For instance, a marketing student creating a video advertisement presentation will most likely behave differently for a group of peers than for an advertising professional. A special education credential student writing a reflective weblog entry about a classroom observation only for the supervising faculty member might use different language than for the public at large. These types of experiences will prepare the students not only for future coursework but also for job interviews.

How Will Students Express Themselves?

The question of how students can express themselves was discussed earlier. During the course design process, your task is to identify the best method for students to achieve the learning objectives. If you want to assign reflection activities, consider using ePortfolio, a blog, or a podcast. These reflections can

ask students to describe why they did something a certain way, or they can ask for opinions about a topic. If you want to have students work in groups to perform research, use a wiki and ask students to state their viewpoints in addition to the facts related to the research topic. If you want students to give a presentation, either live or online, then use podcasts or VODcasts, have students post PowerPoint slides with audio, or have them give the presentation using an online meeting space.

Why Will Students Want To Express Themselves?

Many students will want to express themselves, but not everyone is built the same way. Some students may feel uncomfortable and others may not have much experience making their own thoughts public. Therefore, it will help if you choose meaningful assignments, define the expectations, and provide examples of good work.

Provide Guidelines for Students

There are a number of ways that you can help students—before, during, and after the assignment. Before, the assignment, write clear instructions, including information about your policies on academic integrity and plagiarism. Provide examples of prior students' work.

If this is the first group to do this type of assignment, go through the assignment yourself to create a model of what you consider to be good work. Let students know what could happen to their work if someone else were able to change it.

Acknowledge Student Views

It is not enough to just create an assignment that gives students a chance to give their opinions. For this to be a part of the learning process, we need to acknowledge the students' points of view and provide feedback. If workload is a factor, then try acknowledging just one or two ideas in the face-to-face setting. You can choose these at random, or you can pick the ideas that have generated the most discussion. The point is to let the students know that you are aware of their work and that you value their opinions.

Technology-Mediated Interactions and FERPA

While space does not permit a full treatment of this important topic, we would be remiss if we did not acknowledge that, in the United States, many technology-mediated course interactions are subject to the Family Educational Rights and Privacy Act (FERPA). Some institutions have provided direction to faculty in how to comply with FERPA. Many institutions have not. An introductory treatment of this topic along with examples of faculty FERPA statements excerpted from several course documents are available at: http://topr.online.ucf.edu/index.php/FERPA_Statements

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Chapter 3: Blended Assessments of Learning

Questions to Ponder

- How much of the final course grade do you typically allot to testing? How many tests/exams do you usually require? How can you avoid creating a "high stakes" environment that may inadvertently set students up for failure/cheating?
- What expectations do you have for online assessments? How do these expectations compare to those you have for face-to-face assessments? Are you harboring any biases?
- What trade-offs do you see between the affordances of auto-scored online quizzes and project-based assessments? How will you strike the right balance in your blended learning course?
- How will you implement formal and informal assessments of learning into your blended learning course? Will these all take place face-to-face, online, or in a combination?

A blended learning class is like any other - when lessons are presented, it is imperative that assessment is given to check the depth of learning. Looking back at the learning objectives and design documents (e.g., Course Blueprint) can help answer assessment questions. "Is my test content-valid, based upon the methods of lesson presentation?" "Should my test include a short review time via a traditional classroom setting, or would an online review better prepare my students for assessment?" "Should the test be performed online or in the presence of the teacher?" Online tests make for easy and quick grading by the teacher. Security of the test, however, might be diminished depending on the software and implementation methods used by the teacher. Tests taken exclusively in the classroom setting, however, negate the affordances of technology. Teachers who evaluate their students' performances by using a mixture of tests - some online, some offline - have experienced more fruitful outcomes. Supplying examples to read as text online or offline proves to be helpful. Presenting video explanations or examples online, where students can view a snippet of the lesson repeatedly gives enough exposure to solidify an idea or concept. Any tool that can be afforded the student should be considered to improve retention.

The most crucial step needed in each lesson is the preparation of transfer of learning strategy. If learning is not transferred from the place of learning to practical application, there can be no positive return on investment of the time needed to create, implement, and evaluate the lesson. Students are smarter than we might think. If the lesson doesn't apply to something tangible or if it can't be used in real life, you can expect them to ask, "When are we ever going to use this stuff?" Make sure that your

objectives are made clear to the students. The learning standards must be addressed, yes, but also find a real life application to better your students' understanding of the materials covered. If this is not done, much of your time, and your students' time, has been greatly wasted. A second look to ensure that students have indeed learned the objectives might trigger revisions, allowing for more (or better) class activities and teacher feedback. This should be done before any evaluation strategy. Technology is useful in simplifying this task of transferring the learning strategy. Many times a lesson taught with the use of online instruction or with technology as its main tool provides a built-in application. Students see more clearly how the concepts are used in real life situations, and because the lesson was applied practically, the student retains the information and skills much longer.

Caution must be practiced when using online assessment in a blended course. If this method was never practiced during the teaching of the lesson, the student finds himself at a bit of a disadvantage when being tested. Instead of devoting proper time to the non-technical concepts taught, the student might be fighting his way through the technical tool he must use to perform the task at hand. However, the online environment does provide blended learning instructors with opportunities to develop and create a multitude of assessments using new and innovative tools. This section reviews two types of assessments, formal and informal, that can help shape how you assess your students online.

1. **Formal assessments** provide a systematic way to measure students' progress. These types of assessments also contribute to the final grade, which indicates a student's mastery of the subject, *e.g.,* midterm, and finals.
2. **Informal assessments** generally provide the faculty member the ability to gauge their students' comprehension of course material. It does not involve assigning grades. Furthermore, they can be used to allow students to practice the material prior to a formal assessment, *e.g*., self-tests.

Formal Assessments

Quizzes/Tests

Multiple choice and short answer tests (or quizzes) are useful for assessing students' abilities to recognize and recall content. They are also fairly easy to grade; and when faced with a large class size, you can make the grading automatic depending on the question type. However, these online tools also arguably provide students with "more ways to be academically dishonest" (Watson and Sottile, 2010).

In the design of effective assessments of learning, Hoffman and Lowe (2011, January) note that the "focus must be on student learning, not student control." Particularly when dealing with online assessment (e.g., the ubiquitous auto-scored multiple choice quiz tools within course management systems) it is tempting to design a testing environment in which all variables are controlled and student responses do naught but reveal students' mastery of course objectives. However, as Dietz-Uhler and Hurn (2011) note, "the evidence, although scant, suggests that academic dishonesty occurs frequently and equally in online and face-to-face courses" (p. 75). It is counter-productive to adopt an adversarial

stance as we attempt to fence in students to prevent them from cheating (in any modality). Nevertheless, there are steps we can take to make online testing more effective. Many of these are applicable to face-to-face environments as well.

Creating Effective Online Tests

Hoffman and Lowe (2011, January) identify a number of techniques for creating effective online assessments. These are grouped into online assessment tool features and assessment design strategies.

Online Assessment Tool Features

Online quizzing tools typically provide some affordance for **randomization** of test items. Depending upon how the instructor uses the tool, this may range from merely randomizing the order in which the same set of items appears to each student all the way to sophisticated alternative test versions in which test items in various content categories and at different levels of difficulty are dynamically-generated for each student (i.e., each student receives a different test, but each version is equivalent). The instructor may impose **assessment time limits** such that the test is only available within a certain window of opportunity (e.g., an entire week or just one evening). Additionally, time limits can also be placed on the period between the opening of the quiz and its submission (e.g., a few minutes to multiple hours). Related to this restriction, the instructor can also allow students to see the entire test at once or only one test item at a time. Supported by the online quizzing tool, the instructor may choose to establish **rules for assessment completion**. For instance, students may be required to complete the quiz in one sitting once the quiz is launched, or they may have the option to start the quiz, log-out, and come back later (within whatever time restrictions have been established). Online assessment tools also support **proctoring** if the instructor (or institution) chooses to undertake the logistical arrangements involved in vetting proctors. An approved individual receives a password to unlock the quiz and then he remains present while the student takes the test. The proctor may be asked to verify the student's identity and/or ensure compliance with certain test-taking protocols (e.g., open/closed book, etc.).

Assessment Design Strategies

Apart from the affordances of the online testing tools, online auto-scored assessments may also benefit from well-designed multiple-choice items with an emphasis on application and higher-level thinking. While many online quizzes (especially many of those available as supplemental instructor resources) focus on low-level factual recall, multiple-choice items may be written at the higher application, analysis, synthesis, or evaluation levels. Such items often involve some sort of scenario aimed at promoting learning transfer from one context to another. Additional strategies might require students to view a chart/graph and select the most accurate interpretation from among several alternatives or even to collaborate with classmates in selecting the best justification statement for why a given answer is correct prior to individually submitting their quizzes.

For detailed information on the kinds of assessment design strategies summarized above along with numerous supporting resources, you may wish to visit Hoffman and Lowe's (2011, January) web page at http://bit.ly/online_assessment. In particular, if you would like a refresher on writing effective multiple choice items at various cognitive levels, you may wish to review the following PDF documents:

- Using Bloom's Taxonomy to Create Multiple-Choice Questions
- Effective Assessment Examples
- Question Improvement Suggestions

Many of the above techniques for creating more effective assessments are relevant for online quizzes, traditional face-to-face exams, and online testing implemented in a face-to-face environment; a range of automated assessment options in a blended learning course.

Essays/Academic Prompts

Assessments that require a subjective analysis are often more difficult and time consuming to grade, however this type of assessment is appropriate for gauging how well students are able to apply the concepts learned in class. Within most course management systems (CMS) there are a variety of tools to facilitate these types of assessments. Such tools typically include the following at a minimum:

1. **Discussion area** –often used for generating student-to-student interaction based on an instructor-specified critical thinking challenge.
2. **Assessment tool** – can be used to construct essay-type questions (which must be manually scored).
3. **Assignment tool** – can be used to submit papers, essays, or other types of assignments.

Projects/Authentic Tasks

The following section is excerpted from "Assessment and Evaluation" by Dan O'Reilly and Kevin Kelly in the Commonwealth of Learning's *Education for a Digital World* in compliance with the Commonwealth of Learning's legal notice and may not be re-mixed apart from compliance with their repackaging guidelines.

Authentic student assessment strategies for the online environment

Often when we talk of assessment in an online environment, we think of automated quizzes and grade books. While useful in many circumstances, automated quizzes do not always accurately reflect a student's abilities, especially when you are asking them to achieve a higher level of difficulty in the cognitive learning domain, to demonstrate a physical skill in the psychomotor learning domain, or to evaluate attitudes in the affective learning domain (see description of learning domains and degrees of difficulty at http://www.nwlink.com/~donclark/hrd/bloom.html). Authentic assessment—assessing student abilities to apply knowledge, skills, and attitudes to real world problems—is not only possible in an online environment; it is getting more popular.

When you consider what types of online assessment strategies to choose, the list will be very similar to the print-based strategies that you know and already use. However, there are a few additional assessment strategies that the online environment makes possible. The list below is not comprehensive by any means. It also does not show which tools could be used to facilitate the different types of assessment strategies. Some of these activities may require students to have access to equipment or software applications to complete.

Table 14.1. Assessment strategies and disciplines that may commonly use them

Type of assessment strategy	Disciplines that might use each assessment strategy
text-based	
essay	multiple
glossary	multiple
lab manual	physical sciences
computer code	computer science
technical writing	technical and professional writing
reflection	teacher education, health education, social work
observation log	teacher education, nursing, laboratory sciences
media	
image gallery	art, industrial design
web page or website	multiple
presentation	business, public administration
audio	language acquisition
video	theatre arts (monologue), marketing

Notice that some assessment strategies require participation by someone other than the student. For example, a K–12 master teacher would submit an observation log for a credential student performing his or her student teaching. Similarly, a health clinic supervisor would submit an observation log for a nursing student related to his or her abilities to draw blood for testing. A theatre arts student may need someone to record his or her monologue.

Some assessment strategies allow students to get creative. It is important to make sure that students have access to, or ability to use the technologies required to complete the tasks, but once you do that, you could ask students to create a video advertisement that demonstrates the application of marketing principles, an audio recording that demonstrates mastery of inflection and tone when speaking Mandarin Chinese, or a PowerPoint slide show with audio clips that demonstrates competency with

teacher education standards. The age-old practice of storytelling has been "remastered" as digital storytelling through blogs, wikis, podcasts, and more. Students are taking advantage of these new media formats to illustrate that they have met certain requirements. In some cases, each product becomes an "asset" or "artifact" in a larger electronic portfolio that contains items for a single class, an entire program or department, or all curricular and co-curricular work that a student does.

Regardless of what products students provide to show their abilities, you need a way to evaluate their work.

Defining Expectations

After determining how students will show how they can meet the learning objectives, it is time to choose an evaluation method. You can use a number of tools, ranging from a simple checklist of criteria to a rubric that contains the same criteria as well as a range of performance and degrees to which students meet the criteria.

You can use qualitative or quantitative degrees to evaluate criteria (see Table 14.2 for an example of each). Share the checklist or rubric with students before they begin the assignment, so they know what will be expected of them. In some cases, instructors create the entire rubric, or portions of it, with the students.

Table 14.2. Portion of a student presentation assessment rubric

Criteria	Range			
	4	3	2	1
Student supports main presentation points with stories or examples.	Student effectively used stories and/or examples to illustrate key points.	Presenter used stories and/or examples somewhat effectively to illustrate some key points.	Presenter used some unrelated stories and/or examples that distracted from key points.	Presenter did not use stories or examples to illustrate key points.
	Comments:			
Cover project completely, including: 1) Needs Assessment Objectives, 2) Extant Data Analysis, 3) Data Collection Methods, 4) Brief Summary of Data, 5) Collected Data Analysis, 6) Recommendations	Presentation covered all 6 of the areas to the left.	Presentation covered 4 or 5 of the areas to the left.	Presentation covered 2 or 3 of the areas to the left.	Presentation covered 1 or 0 of the areas to the left.
	Comments:			

Preparing an Assignment for Assessment

The first step to assessing online work is to prepare each assignment. Since students may not have you around to ask questions, you need to anticipate the types of information that students need. There are some standard items to include in your instructions for all types of online assignments:

- Name of the assignment (This should be the same name as listed in the syllabus).
- Learning objective(s) to which this assignment relates.

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- When the assignment is due.
- Any resources that you recommend using to complete the assignment.
- Expectations (length, level of effort, number of citations required, etc.).
- Level of group participation (individual assignments, group or team projects, and entire class projects).
- Process (how students turn in the assignment, if they provide peer review, how peers give feedback, how you give feedback).
- Grading criteria (include rubric if you are using one).

By including these items, you give students a better idea of what you want them to do.

Informal Assessments

Informal assessments are an integral part to any quality course. Many blended learning faculty incorporate these types of assessments into their courses to increase their presence in the online environment and to keep track of their students' learning using tools within the course management system (CMS) or publicly-available alternatives if necessary. For instance, some CMSs (or free online tools) allow faculty to create practice assessments/self-tests for students to complete. While unscored, these informal assessments often provide data for the instructor to review as one indicator of student learning. Additionally, summative and formative evaluations can be conducted by collecting anonymous input from students during and after the course using either a survey tool within the course management system or one of the many free web-based survey tools.

The following section is excerpted from "Evaluating and Improving Your Online Teaching Effectiveness" by Kevin Kelly in the Commonwealth of Learning's *Education for a Digital World* in compliance with the Commonwealth of Learning's legal notice and may not be re-mixed apart from compliance with their repackaging guidelines.

One-Sentence Summary

The one-sentence summary is another classroom assessment technique that I adapt to the online environment. Designed to elicit higher level thinking, a one-sentence summary demonstrates whether or not students are able to synthesize a process or concept. Students answer seven questions separately: "Who? Does What? To Whom (or What)? When? Where? How? And Why?" Then they put those answers together into one sentence. Angelo and Cross (1993) also describe this exercise in their book about classroom assessment techniques. Examples I have seen include assigning nursing students to write a one-sentence summary of a mock patient's case, as nurses are often required to give a quick synopsis about each patient, and asking engineering students to write a summary about fluid dynamics in a given situation.

It is fairly easy to use this technique online. You can set up a discussion forum to collect the student entries. The online environment also makes it fairly easy to engage students in a peer review process and to provide timely feedback.

When looking at the results of the students' summaries, you can identify areas where large numbers of students did not demonstrate an understanding of the topic or concept. The most common problem area for students revolves around the question "Why?" Figure 24.4 is an example of a one-sentence summary submitted via discussion thread. The instructor's reply gives suggestions for improvement and shows the student how the instructor interpreted the sentence components.

My Sentence
by Student B—Friday, 2 September, 12:35 PM

In order to adequately address teaching effectiveness an instructor needs to use an effective tool to measure specific activities or deficiencies in student performance by using techniques including but not limited to: surveys, analysis of performance, and questionnaires.

> Re: My Sentence
> by Instructor—Sunday, 4 September, 08:31 PM
> This is a good start. WHEN does it happen? Keep in mind that the process does not end with using a data collection tool. There is analysis of the
> process before the course begins, and after collecting the data. Also, WHERE does it happen? Is this online, in the classroom, or both?
> -----
> In order to adequately address teaching effectiveness [7 WHY] an instructor [1 WHO] needs to use an effective tool to measure specific activities
> or deficiencies [2 DOES WHAT] in student performance [3 TO WHOM] by using techniques including but not limited to: surveys, analysis of performance, and questionnaires [6 HOW]

Figure 24.4 Example one-sentence summary student submission with instructor's repl*y*

Student-generated test questions

Ask students to create three to five test questions each. Tell them that you will use a certain number of those questions on the actual test. By doing this, you get the benefit of seeing the course content that the students think is important compared to the content that you think they should focus on. You can make revisions to your presentations to address areas that students did not cover in their questions. If there are enough good student questions you can also use some for test review exercises.

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Chapter 4: Blended Content and Assignments

Portions of the following chapter are adapted from "Teaching Blended Learning Courses" in Best Practices in Online Teaching by Larry Ragan under the terms of a Creative Commons Attribution 2.0 license and "New Learners? New Educators? New Skills? " in the Handbook of Emerging Technologies for Learning by George Siemens and Peter Tittenberger under the terms of a Creative Commons Attribution-NonCommercial 2.5 Canada license.

Questions to Ponder

- In what experiences (direct or vicarious) will you have students participate during your blended learning course? In what ways do you see these experiences as part of the assessment process? Which experiences will result in student work that you score?
- How will you present content to students in the blended learning course you are designing? Will students encounter content only in one modality (e.g., face-to-face only), or will you devise an approach in which content is introduced in one modality and elaborated upon in the other? What will this look like?
- Will there be a consistent pattern to the presentation of content, introduction of learning activities, student submission of assignments, and instructor feedback (formal and informal) in your blended learning course? How can you ensure that students experience your course as one consistent whole rather than as two loosely connected learning environments?
- How can specific technologies help you present content, provide meaningful experiences, and pitch integration to students in your blended course? With your planned technology use, are you stretching yourself, biting off more than you can chew, or just maintaining the status quo?

Content + Assignments = Modules

Having given due attention to articulating learning outcomes (Chapter 1) and designing assessments of learning (Chapter 3), it behooves us now to turn to the direct means of facilitating student learning: content and assignments (learning activities). In many face-to-face courses, students come to class to hear content and then leave class to complete their assignments which they then submit in the next class session. In blended learning courses, this process can be more confusing for students. However, if pursued with the module structure common in online teaching, blended courses can bring about higher levels of student engagement and face-to-face time management.

O'Reilly and Kelly (2008) see course assignments as an extension of the assessment process and bound up with an array of possible technology-based tools, noting that it is important "to facilitate the student work in the online environment, or to provide avenues for students to submit their work to you. More online tools emerge every day, it seems, and with them come new opportunities for students to perform activities related to the learning objectives and for us to assess student performance" (p. 241).

Online materials are central to a blended course's success, and the students' work online must be relevant to the in-class activities. Aycock, Garnham, & Kaleta (2002) at the University of Wisconsin's blended learning effort revealed the importance of integration:

> "The project's participants emphasized this point repeatedly. When asked, 'What would I do differently?' they were united in their response: 'I'd devote more attention to integrating what was going on in the classroom with the online work.' This was true even though the project's faculty development sessions repeatedly emphasized the importance of connecting in-class material with out-of-class assignments. One instructor responded emphatically, 'Integrate online with face-to-face, so there aren't two separate courses.' We found it impossible to stress integrating face-to-face and online learning too much" (Lesson #4 section, para 2).

Students can be critical of blended instruction if they felt the face-to-face and time-out-of-class components of the course were not well integrated.

In fact, if implemented consistently, online modules provide a platform for ensuring integration of the face-to-face and online environments within blended learning courses. For instance, if students know that they can always find the details of the assignment introduced in the last class session by turning to the online modules or that they will always submit assignments via a particular online tool, students are likely to perceive the course as one consistent whole. However, it is important to remember that it is the manner of implementation, rather than any affordance of the modality itself, that will bring about this perceived consistency. As Kaminski and Currie (2008) note:

> "A uniform approach to presenting the units of study not only makes sense, but helps reinforce learning. A common mode of organization is a hierarchical *module—sections—lessons—supportive activities* approach. Within each learning activity, uniformity also helps to guide students through the content" (p. 205).

Dee Fink (n.d.) observes that we can more effectively facilitate learning (face-to-face or online) when we plan for students to encounter content, participate in active experiences, and engage in sharing their personal reflections. He summarizes these ideas in Table 1 below:

Table 1. Learning activities for holistic, active learning

| | GETTING INFORMATION & IDEAS | EXPERIENCE | | REFLECTIVE DIALOGUE, with: | |
		"Doing"	"Observing"	Self	Others
DIRECT	• Primary data • Primary sources	• "Real Doing," in authentic settings	• Direct observation of phenomena	• Reflective thinking • Journaling	• Dialogue (in or out of class)
INDIRECT, VICARIOUS	• Secondary data and sources • Lectures, textbooks	• Case Studies • Gaming, Simulations • Role Play	• Stories (can be accessed *via:* film, oral history, literature)		
ONLINE	• Course website • Internet	• Teacher can assign students to "directly experience _____." • Students can engage in "indirect" kinds of experience online.		• Students can reflect and then engage in various kinds of dialogue online.	

Having already discussed interaction in Chapter 2, we will now consider the design of learning activities in a blended learning context and then examine options for developing or adapting technology-mediated content. In both the face-to-face and online portions of a blended learning course, technologies can play supporting roles in the ways learning activities are experienced and content is encountered by students.

Technology Affordances

Technology extends the classroom walls (see Image 13) and thins the structure of courses. Experts and resources outside of the university are readily available for educators to use. For example, a psychology course directing learners to view a presentation of the Stanford Prison Experiment is much more vivid and meaningful than reading an article about the experiment alone. Technology can open doors closed by geographical distance or time.
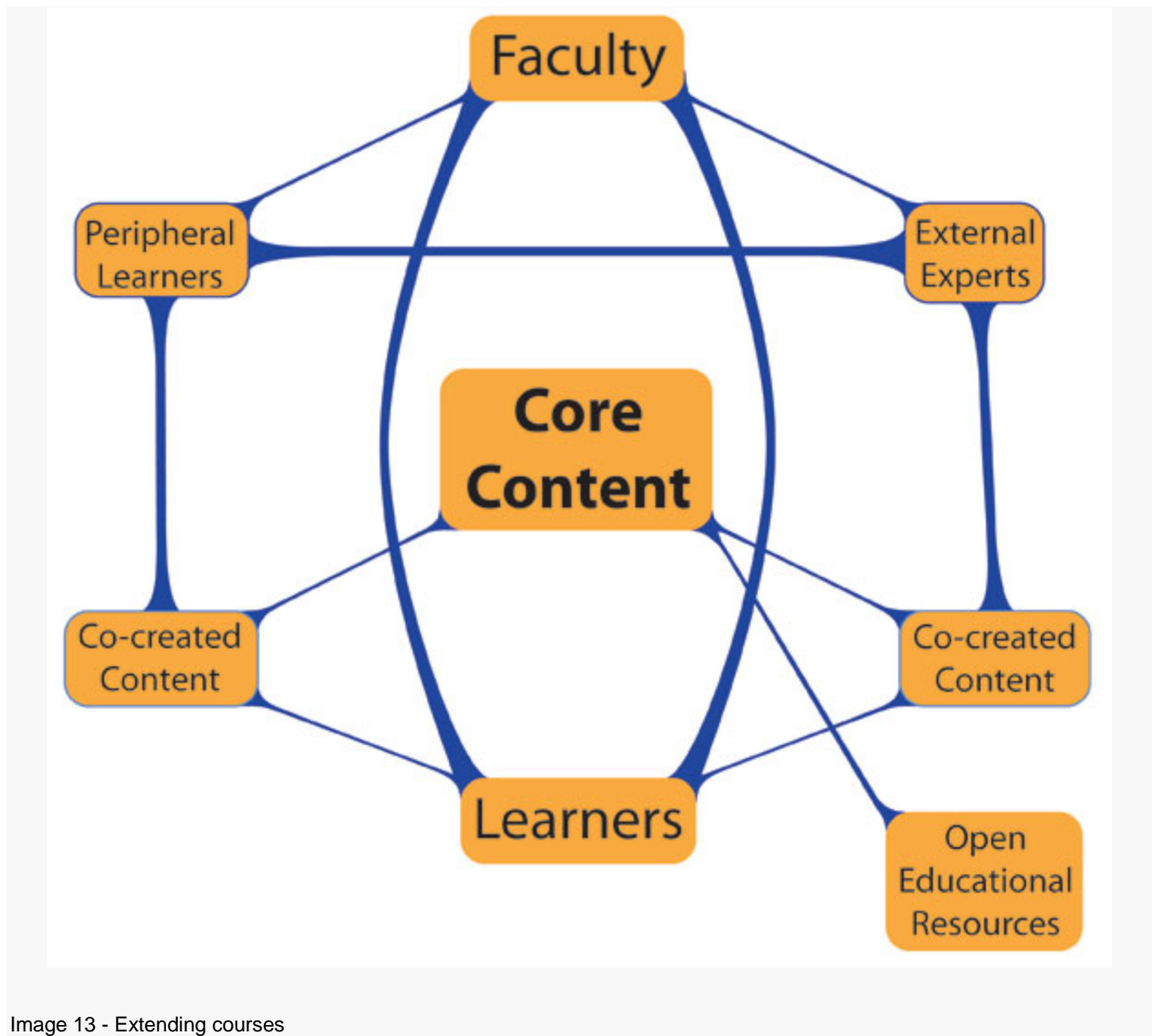
Image 13 - Extending courses

Learning Activities in Blended Learning

Littlejohn and Pegler (2007) in *Preparing for Blended e-Learning* outline five learning activity techniques based on Laurillard's Conversational Model. They produce the following matrix (reformatted):

Table 2. Learning activity types with technology-integration ideas

Type Of Learning Activity	What Is It?	Media Forms	Technologies	Tools	Technique (How)
Assimilative	processing narrative media - managing and structuring information	lectures, DVD's or reading texts	concept mapping, brainstorming, buzzwords, crosswords, defining, mind maps, web searchtexts	word processor, presentation software, text, image, audio, video	CMAP, Hot Potatoes, Google, Office Products, Social Bookmarking, Blogs, Wikis, Pageflakes, Google Reader
Adaptive	an environment that changes according to learner input	simulations, games	modeling	virtual worlds, models, simulations, games	Second Life, MMORPG
Communicative	discussing	asynchronous or synchronous discussions, chats, text messages	reasoning, arguing, coaching, debate, discussion, negotiation, performance	electronic whiteboards, email, discussion boards, chat, instant messaging, voip, video conferencing, web conferencing, blogs, wikis	online bulletin boards, Skype, IM, Facebook, Social Bookmarking, Blogs, Wikis
Productive	learners producing something	creating, producing, writing, drawing, composing, synthesizing, remixing, mashups	artifact, book report, thesis, essay, exercise, journaling, literature review, multiple choice questions, puzzles, portfolio, product, test, voting	creative applications (image editing, CAD, design software) computer aided assessment tools, electronic learning environments	InDesign, Photoshop, YouTube, Google Video, Office Software, Sketch-Up
Experiential	interactive activities that focus on problem solving	practicing, applying, mimicking, experiencing, exploring, investigating, performing	case-study, experiment, laboratory, field trip, game, role-playing, scavenger hunt	virtual lab, 3D immersive environment	Google Earth, MMORPG, Second Life

Learning Activities + Technology

As McGee and Diaz (2007) have observed, technologies are adopted more readily when cast in the "context of existing teaching and learning activities." Perhaps a simple framework of the traditional activities associated with teacher and learner roles is useful at this point.

Table 3. Teacher and learner activities

Teacher Role	Learner Role
Communicate	Read/listen
Assess	Present a point of view
Provide Feedback	Search/collect/analyze information
Observe	Practice
Present Information	Create
Organize Activities	Respond

Each of the educator and learner tasks can be augmented through use of different technologies. For example, educators can provide a short lecture via a podcast, learners can respond to course materials through a blog post or through a short recording in a tool like Jing. For many educators, however, the task may appear onerous or too complex. Small scale experimentation - with high payback - can be motivating. Adopting and exploring additional tools and concepts is more inviting once you've had success with certain tools.

Planning Blended Learning Activities

The use of technology for learning and instruction requires demarcation between what learners can (and should) do for themselves and what the instructor should do for learners. Traditionally, in a lecture format, the instructor provides motivation (scheduled class time) and content in pre-planned units according to the course's relation to the program of study. As information has become more public and

distributed, the role of instructor as organizer and dispenser of information has shifted. Learners can readily access online lectures, articles, podcasts, and other resources to augment the information provided by the instructor.

Media have certain affordances which define their potential use. When applied to learning, certain activities can be utilized to greater effect when appropriate matching occurs between: the technology used, the learning desired, the context of use, the learner experience, the instructor experience, and the nature of content.

Creating (and Finding!) Content for Blended Learning

Tools for creating content for online learning have improved significantly over the last few years. Articulate Presenter, iSpringFree, Audacity, Jing, and Camtasia are just a few examples of content-creation tools that novice users can master in a short period of time. An instruction booklet [pdf file; size=767kb] for quickly using many content-creation (and interaction) tools is provided by UCF's Faculty Center for Teaching and Learning.

While textbook publishers often provide valuable tutorials or simulations, the increased proliferation of freely available online learning resources provides an opportunity for educators to either link to or create derivative works based upon many educational resources. Projects such as MIT's OpenCourseWare initiative, Connexions, OpenLearn, OERCommons and others often provide excellent materials, videos, or podcasts. (For more structured guidance, you may wish to review an annotated list of discipline-specific open content sources compiled by UCF instructional designers. You might also find it useful to explore further the possibilities afforded by open educational resources (OER). The online (or print) text *Opening Up Education* provides a good foundation for doing so.)

Finding Your Place

The prominence of social media has created an opportunity for educators to increase the level of learner-learner and faculty-learner dialogue and, indeed as noted above, extend the dialogue beyond the traditional course structure to involve outside experts and peripheral learners. Interaction can occur with content, with others around ideas/content, or simply as open discussions.

New options to create and share information have significant implications. How we as educators teach, present content, allow learners to interact with content and with each other, and how we keep content sources current require new approaches. If we are open to combining the best of online and face-to-face courses, we may come to realize the promise of blended learning.

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Chapter 5: Quality Assurance in Blended Learning

Questions to Ponder

- How will you know whether your blended learning course is sound prior to teaching it? How will you know whether your teaching of the course was effective once it has concluded?
- With which of your trusted colleagues might you discuss effective teaching of blended learning courses? Is there someone you might ask to review your course materials prior to teaching your blended course? How will you make it easy for this colleague to provide helpful feedback?
- How are "quality" and "success" in blended learning operationally defined by those whose opinions matter to you? Has your institution adopted standards to guide formal/informal evaluation?
- Which articulations of quality from existing course standards and course review forms might prove helpful to you and your colleagues as you prepare to teach blended learning courses?

Blended Course Quality

A definitive statement of what constitutes the best combination of online and face-to-face learning experiences is impossible. No such statement exists for the best combination of traditional practices much less for the newer world of blended learning. Singh & Reed (2001) state "Little formal research exists on how to construct the most effective blended program designs" (p. 6). However, observers have begun to collate principles that, at least anecdotally, lead to greater success.

It is not uncommon to speak, in generic terms, of "good" or "bad" blended learning courses, without specifying the attributes that contribute to these designations. Neophytes may do this because they have no basis for a more differentiated description, while those intimately acquainted with blended courses may use such labels as a shorthand reference. However, as seasoned blended course instructors/designers know, there are countless nuances that distinguish one course from another (and, for that matter, that distinguish one semester's offering of a course from another semester's offering of the same course). Until such time as patterns within these characteristics are identified and associated with positive or negative outcomes, though, it is difficult to justify labeling a blended course with such simplistic descriptors. Nevertheless, administrators and faculty feel pressured from time to time to compare one course to another or one instructor to another in their attempts to ensure that blended courses produce various desirable outcomes (e.g., sufficient enrollment, adequate retention, academic rigor, student success, student satisfaction) at rates comparable to face-to-face courses (as if meeting

face-to-face is, itself, a mark of excellence) or to the level of satisfaction of an accrediting agency. (Students might be motivated to make such comparisons between course modalities as well, but, undoubtedly, the qualities in which some students are interested will vary markedly from the interests of faculty and administrators.) Thus, there is likely always to be some degree of comparison since it seems that there is always someone concerned with whether this course is "good enough," and it is certainly appropriate to ensure that baseline acceptability is met across specific domains. If this were not enough, some individual faculty, motivated by their own enlightened self-interest, look for guidance in determining what improvements might be made to their courses. In either case, however, the question is whether we have justification for the judgments we make about online courses.

Accrediting bodies (e.g., Southern Association of Colleges and Schools, Western Association of Schools and Colleges, Northwest Commission on Colleges and Universities, etc.) and education compact organizations (e.g., Southern Regional Education Board, Western Interstate Commission for Higher Education, Midwestern Higher Education Compact, etc.) have articulated broad requirements or statements of good practice for academic programs in higher education (including online courses if not blended courses). Such statements typically define levels of *minimum acceptability* for particular dimensions (e.g., curriculum and instruction, institutional context and mission, evaluation and assessment, etc.) of institutional offerings. While some statements have direct implications for what happens within courses, these guidelines are necessarily broad in order to facilitate compliance at the institutional level. Articulating analogous quality standards at the course level is difficult for at least three reasons. First, there is no one authoritative body that can (or is willing to) address minimum levels of acceptability for blended learning in all its manifestations within the diversity of approaches found in even one state's higher education institutions. Thus, there are no universal standards for blended course quality. Second, if such standards *did* exist, it is difficult to create an evaluative tool which could be used consistently across all courses, programs, and institutions. Third, if such a tool were available, it is actually quite time consuming to evaluate an individual course. It is difficult to imagine an organization willing to commit to such an undertaking for all higher education institutions within its jurisdiction.

Online Course Standards

In recent years, course-level standards have begun to emerge for online courses even if comparable standards have not been articulated to the same degree for face-to-face courses or blended learning courses. (Perhaps it is because of the ubiquity of face-to-face courses and the lack of a consistent definition of blended course that these modalities have not received the level of attention given to online courses. However, some online course standards do identify areas of relevance for blended learning courses.) Nevertheless, online course standards do provide the closest analogue to articulations of quality for blended learning courses. An overview of online course standards follows.

Specific standards of online course quality have emerged not from traditional authoritative bodies but from for-profit companies (e.g., Blackboard's Exemplary Course Program, groups of institutions (e.g.,

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[Quality Matters](#)), or, more typically, from individual institutions. Most of these groups embed their standards in a review form (i.e., a checklist or rubric) and include a summative, ordinal rating. The advantage of such review forms is that, ostensibly, they are quite easy to implement for faculty, designers, and administrators for whom time is already in short supply. After reviewing an online course with a review form, one is usually left with a "punch list" of items on which to focus one's attention, making evident how a course may be improved before it is taught next. Table 1 provides a selection of online course standards/review forms.

Table 1. Selected examples of online course standards

Title	URL
Quality Matters	http://www.qmprogram.org/rubric
Blackboard's Exemplary Course Program	http://www.blackboard.com/Platforms/Learn/Resources/Community-Programs/Meet-Your-Peers/Exemplary-Courses.aspx
Online Course Evaluation Project	http://www.montereyinstitute.org/ocep
CSU Chico's Rubric for Online Instruction	http://www.csuchico.edu/celt/roi
Michigan Virtual University's Standards for Quality Online Courses	http://standards.mivu.org/standards (Best viewed in Internet Explorer)
Texas Virtual School Network's Scoring Rubric for Online Courses	http://www.txvsn.org/AboutTxVSN/CourseReview/ReviewProcess/iNACOLStandards.aspx
Mountain Empire Community College's Online Course Quality Review Form	http://www.me.vccs.edu/forms/peer-review.pdf
Florida Gulfcoast University's Principles of Online Design	http://www.fgcu.edu/onlinedesign

Limitations of Online Course Standards

Sets of standards such as those described above do have their limitations vis-à-vis online course quality. These limitations have to do with the prescriptiveness, credibility, scope, and atomism of such standards groupings. Each of these will be addressed in turn.

It is the nature of standards to *prescribe* how things should be. However, it is challenging to formulate prescriptive statements in such a manner as to fit *all* contexts which give rise to online courses. For instance, the statement, "evaluating and validating Web-based information in completing assignments" certainly applies to many online courses, but if a course does not feature assignments that require students to consult Web-based resources, this standard is obviously irrelevant. Also, in prescribing what should be, there is a tendency to focus on minimum acceptability to the exclusion of excellence or innovation. Review instruments which incorporate actual rubrics (e.g., CSU Chico's Rubric for Online Instruction) mitigate this limitation by presenting upper-end requirements as a counterpoint to the "bare minimums," but one has to question whether it is likely that the usefully finite number of categories in such rubrics will account for all manner of innovations.

The provenance of standards affects their credibility. For instance, most online course standards are written by small groups of individuals with some personal experience with online teaching and learning. Although there is nothing wrong with a group's expertise serving as the basis for such standards, it is not uncommon for online course standards to be accepted uncritically, with no recognition that they arose from a particular context with its own idiosyncratic needs. Interestingly, there are numerous instances in which standards from one review instrument have been copied-and-pasted into new review instruments as if the standards are axiomatic. There are rarely any explicit connections made between standards and theory-based or research-based frameworks. If online course standards are to have enduring significance in addressing quality, they must be credible.

Nearly all sets of online course standards bear the imprint of an overt instructional design emphasis (e.g., instructional objectives, constructivist influence, technology-dominated, etc.). While, of course, it is reasonable for this field to leave its mark on what is deemed acceptable in online courses, such an emphasis typically leads to a focus on the designed environment of the course *to the exclusion of* the experience of instructors and students in the teaching/learning process. The problems this causes can perhaps more easily be seen if we look for an analogous set of relationships within a different setting. For instance, one can design and construct a building, a house, or a classroom. But such constructions are intended to support the lives of those who interact, who live, within their walls. While a tour of an unoccupied kindergarten classroom and an inventory of its resources might provide some indication of the nature of the teaching and learning that occur there, it is the *lived experiences* of the students and teachers, their actual interactions, in which teaching and learning are made manifest. Limiting the scope of online course quality to considerations of the designed environment results in a significant blind spot. This should be avoided.

The final limitation of online course standards to be presented here is the necessity for such standards to be atomistic. That is, online courses are viewed only as an aggregation of disparate parts, reducible to simple "should" statements. As discussed above, the activity of reviewing courses in any kind of collective way necessitates having a scalable process. This includes using a review instrument that is

relatively quick to complete. However, it must be observed that, by their nature, atomistic approaches lend themselves to quantification, sums, and scores. Holistic approaches, by contrast, result in one, integrated complete-as-possible picture which is more difficult to quantify (i.e., nominal classification). Thus, it is unlikely for a simple course review instrument to reveal the complexities of an online course instructional experience, but, with the above caveats in mind, such an instrument is likely to reveal whether some agreed-upon minimum acceptability has been achieved. (By contrast, see the [Online Course Criticism Model](#) (Thompson 2005) for a holistic, non-standards-based, robust approach to evaluating online courses. Further, the [Online Course Evaluation Project](#) provides a rare balance between most checklist-based reviews and the intensity of the criticism model.)

Apart from institutional efforts to foster quality in online and blended courses, perhaps the best use of quality standards is by individual instructors in self-assessment and informal peer-reviews of teaching effectiveness. A consideration of teaching effectiveness appears below.

Teaching Effectiveness

The following section is excerpted from "Evaluating and Improving Your Online Teaching Effectiveness" by Kevin Kelly in the [Commonwealth of Learning's](#) [Education for a Digital World](#) in compliance with the [Commonwealth of Learning's legal notice](#) and may not be re-mixed apart from compliance with their repackaging guidelines.

Teaching effectiveness describes instructors' ability to affect student success. It is usually defined according to several factors, such as how well instructors organize courses, how well they know the course material, how clearly they communicate with students, how frequently they provide timely feedback, and other criteria. In the classroom, effectiveness sometimes depends on the instructor's enthusiasm or disposition. During fully online and blended learning courses, students often need more structure and support to succeed because their course activities usually require them to take greater responsibility for their own learning success. Therefore, many of the criteria take on even more importance when evaluating online teaching effectiveness.

Online teaching is often held to higher standards than classroom teaching, and sometimes these standards have nothing to do with the teacher's ability. For example, a technological breakdown can have a negative impact on students' evaluation of an instructor's work, though the instructor is rarely responsible for the technical failure.

To succeed, you should find some allies to help. If you are new to online teaching and learning, let your students know. They will usually give you a lot of leeway. Some of the students may offer to help you set up or facilitate technology-based activities or at least respond positively to your requests for technological help. Overall, you will find it well worth the effort to evaluate and improve your online teaching effectiveness.

There are many ways to evaluate teaching effectiveness in either the physical or virtual environments. Getting pointers and advice before the term begins can save you from making revisions later. Formative feedback, collected during an ongoing course, improves that specific course. Summative feedback, collected after a course ends, improves the next iterations. Feedback that applies to the instructor's process can also improve other courses.

Ask a peer to let you review an online course to see what you like or do not like about how it is constructed, how the instructor(s) provide feedback, how students are assessed, and so on. If you are inheriting an online course from someone else, try to get feedback about what has already been done. Before your course begins, you should ask a peer to tell you about how appropriate the learning objectives are for the topics, as you might do for a face-to-face course.

Depending on your school district or campus, seek additional people who might provide comprehensive feedback in a faculty development centre or an academic technology unit. You might also try to find a fellow teacher who has supplemented face-to-face instruction, taught a hybrid course, or taught a fully online course. Even if this person works in a different department or unit, it is helpful to share your online teaching experiences with someone who has gone through the process.

If this is your first time teaching an online course, or using online components for your face-to-face or hybrid course, you do not have to use every online tool or strategy. Instead, choose one or two strategies based on your learning objectives

Writing personal teaching goals is one more practice you can try as you prepare the online environment and the materials and activities to go in it. Creating an online teaching journal allows you to track your thoughts and actions over time. Including personal teaching goals among the first entries will get you off to a good beginning.

You can conduct formative feedback for a number of reasons: to check how things are going at a certain point; to evaluate the effectiveness of a specific assignment or resource; or to gauge student attitudes. The frequency with which instructors obtain feedback can range from once per session to once in the middle of the term. Direct methods to collect formative feedback include, but are not limited to, the following: peer review and self-evaluation, online suggestion box, one-minute threads, polling, and focus groups.

As important as student engagement can be, student evaluations by themselves are not sufficient. Solicit peer review of specific resources, activities, or assessment strategies, your course structure, your communication strategies, or anything else about which you might have concerns. If you cannot find anyone in your school, department or college who is also teaching online you can ask school or district administrators, academic technology staff members, or faculty development centre staff members to

identify prospective peer mentors for this type of feedback. In some cases, the staff members themselves may be able to help you as well.

Another strategy is to create benchmarks for yourself and take time each week to see how you are doing. For example, if you set a goal to answer a certain number of discussion threads in a particular forum, keep track of how many replies you submit, and make adjustments. If you want to return all students' written assignments in a certain amount of time, note how many you were able to complete within your self-imposed deadline. This will help you create more realistic expectations for yourself for future assignments.

Conduct summative feedback for a number of reasons: to check how things went, to evaluate the effectiveness of a specific assignment or resource, or to gauge student attitudes about the course as a whole. The summative feedback will be a useful set of data for course redesign. While the current students will not benefit from any changes you make, future students will have a better experience.

Online Survey

Similar to the formative feedback surveys, you can use a closing survey to find out what students feel about specific aspects of your online teaching or their overall experience. There are numerous survey tools out there. Some are stand-alone, online survey tools and some are integrated into learning management systems.

Most importantly, do try again. Regardless of how you feel about your first attempt at online teaching, it will get better each time you try. Online course offerings provide students with more flexibility. Hybrid, or blended learning, courses can combine the best of both worlds. Online environments that supplement fully face-to- face instruction can help students to stay on task, to plan ahead, to access resources at any time of day, and more. In all three types of online learning, the pros outweigh the cons. Most students will appreciate your efforts, which is a good thing to remember if you ever question why you are teaching online in the first place.

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