

New Tools of the Trade

“Each medium, independent of the content it mediates, has its own intrinsic effects which are its unique message.”

—Marshall McLuhan,
Understanding Media: The Extensions of Man

In 1964, Marshall McLuhan first articulated what has become a mantra of the Information Age: “The medium is the message.” The tools that support the interactions of your distance learning program are more than a collection of functions and features; they create more complex challenges than access or costs. Your choice of tools and how you use them will impact which students come to you, how successful they are, and the subtle messages you project about the value, purpose, and goals of your program.

The role of media in how information is received, absorbed, and processed should not be underestimated. Consider a somewhat extreme example:

Scenario 1: Employee enters the human resources (HR) director’s office for a private meeting. The HR director says, “Jane, you’ve been doing an outstanding job. As you know, though, we’re moving toward a complete restructuring of your department, and your particular job is going to be eliminated. I’d like to talk with you about the options, both for accepting severance and utilizing our job search services.”

Scenario 2: Employee receives an email from the HR director, which states:

Subject line: We need to meet

Jane, you’ve been doing an outstanding job. As you know, though, we’re moving toward a complete restructuring of your department, and your particular job is going to be eliminated. I’d like to talk with

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you about the options, both for accepting severance and utilizing our job search services.

Sam Smith
Director of Human Resources
Widget Co.: Excellence is our Passion!

It's a bad day in either case, but put yourself in Jane's position: Which communication makes you more willing to work with the person presenting the information? The same words are used, but the impact is quite different if they're said by a person rather than having the employee read the news on a screen. The medium is an inextricable component of what is communicated.

A distance learning instructor needs to have an understanding of the following factors:

- Tools potentially available
- Impact the tools of choice may have on the delivery of a course and on student and instructor satisfaction
- Availability
- Budget
- Applicability of available tools to the needs of a particular project

This chapter will discuss the characteristics of the various tools that a distance instructor may decide to use, including pros, cons, and uses of each.

However, an essential consideration for any communication tool is the ease of use for the recipient of the message. Therefore, a fundamental question is always, "What are the expectations, skills, and norms of my students?" New methods of communication are constantly introduced into our networked world, and different audiences adopt these tools at different rates. When I was researching the first edition of *Teach Beyond Your Reach* in 2005, I would not have incorporated instant messaging into a learning toolkit aimed at mid-career professional adults because I wouldn't have been sure about their comfort level with the tool. However, by 2012, I don't hesitate: I believe that this audience is now more comfortable with such tools for effective communication.

This variability creates exciting times for instructors, with opportunities to grow and learn new skills. If you embrace that change, it will help your teaching and interactions become that much more creative.

Who Chooses Your Tools?

You may have no control over the tools you are able to use. You may be hired to teach a course and then handed a particular platform or set of tools for delivering the instruction. Or you may be in a situation of creating a learning environment entirely on your own without a budget or any technical support. Any teaching scenario will involve some requirements that are more or less out of your control.

Regardless of the degree of control you have over the tools, however, understanding all the variables involved and the pros and cons of each tool will enable you to make effective instructional choices to achieve your goals with your students.

But at the outset, it's important to keep a basic set of assumptions in mind about the technology, orientation, and comfort of both you and your students:

- *Connected online:* Business, social lives, and education have all irrevocably moved online. Using email or text messaging is as commonplace as using the phone for voice calls (or more so). You and your students have at least one internet-connected communication device (PC, laptop, smartphone, or tablet computer) for personal use.
- *Access level:* At least some of the web is accessible to you and your students, although you may have to address firewall issues and/or content that requires authentication to access (with IDs and passwords, or other form of validation). An additional assumption is that you and your students have high-speed access to these resources.
- *Comfort:* You and your students undergo some degree of online interaction—with colleagues, peers, or friends—through personal choice and because it is an increasingly comfortable medium.

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- *Customization:* You and your students increasingly expect to have the option of customizing an online experience to your preferences, such as delivery methods (e.g., access via a website or having summaries emailed), priority topics, or the ability to share online material with selected contacts.

This is a fundamentally different set of assumptions than I used in the first edition of *Teach Beyond Your Reach* (published in 2006) or what I would have presented two years ago. The combination of technology advances, deeper penetration and adoption of online tools, and a generation entering the workforce that has been raised in an always-connected world has created this new—and exciting—environment in which we all interact.

Common Distance Learning Platforms

As more organizations are incorporating distance learning into their outreach, training, and support, more adults have become familiar with the most common platforms now being used. In a corporate environment, for example, it's common to have training or education delivered via web conference platforms such as WebEx (www.webex.com) or GoToMeeting (www.gotomeeting.com). In an educational setting, common platforms include complete course management or learning management systems such as Blackboard (www.blackboard.com) or Moodle (www.moodle.com; see Figure 1.1).

These certainly are not the only packages out there, but they are the most commonly used, and it is likely that you—and your students—have encountered them at some point or will soon.

If you don't have access to these options, don't worry: Many of the functions are available on their own through other providers. Following this brief overview of the full-featured platforms, we'll take a closer look at each of the key functions, how you can use them to their best advantage, and where you can find them for your courses.

Web-Based Meeting Package

A web-based meeting package usually includes screen sharing, integrated voice conferencing, integrated recording capabilities, participant polling,

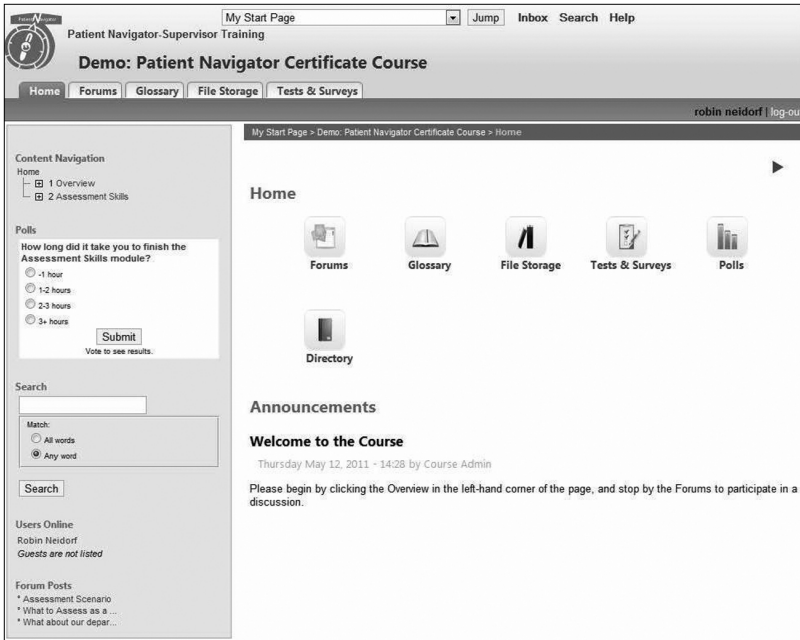


Figure 1.1 The Patient Navigator Online Certificate Program was built and hosted by Talance, Inc. on the Moodle platform.

questions, and text chat functions. Some packages also include additional collaborative capabilities, such as a shared whiteboard. They support multiple presenters, and presenters can pass the control of the environment to each other. Most packages also include the ability to manage registrations and to automatically email reminders prior to an event and follow-up materials after an event, as well as post-event reporting on participation levels and interactions during the session (e.g., questions asked, attentiveness to the screen during live sessions).

Online Education Platform

An online education platform typically includes asynchronous discussion, private journals, electronic attendance and presentation, gradebooks, group functions that enable and enhance teamwork among dispersed students, file sharing, live event capability, whiteboards, lecture postings, links to other resources and readings, and library or online

resource connections. Courses often offer in-class email systems and/or a “digest” feature that allows instructors to collect responses to given discussion topics and distribute them automatically via email to class participants, turning a “pull” communication (one that a user has to go out and get) into a “push” communication (one that a user receives directly). Some vendors also make course content available in the form of a course library that instructors or organizations can access and implement “off the shelf” or with some customizations.

And, of course, proprietary web-based classrooms have the benefits offered by any web-based solution: access to other web-based resources with the click of a mouse.

If you are teaching under the aegis of a university, association, corporation, or other entity that offers a significant portfolio of learning opportunities, you will probably use one or both of these platforms or packages to deliver instruction.

Effective Educational Components

Although distance learning platforms and web-based meeting packages have a full suite of tools embedded in them, you may decide that you want to use some elements but not others, and it’s always helpful to have a clear idea of when and how each component in the platform will be most useful to you and your students.

Furthermore, you may want to adapt some materials to move from a complete distance learning platform to other environments—for example, to take course materials from one institution or program to another—and laying out your tools and options will help you make that leap.

As virtual teamwork, distance collaboration, and distance learning have become more commonly recognized, a number of tools are now on the “most likely to be used” list. You’ve probably already thought about these or even used them as a professional, instructor, or student at some point. It’s helpful to have them laid out in detail to establish a clear understanding of when and how to use each in a thoughtful manner. They are ordered here based roughly on my preferences for their usefulness to the distance instructor.

And don't forget: The medium is the message. The choices you make regarding delivery of instruction are interwoven with the messages of instruction itself.

Asynchronous Discussion

When any participant can access class discussion at any time, from anywhere he or she has a computer connected to the internet, that's called asynchronous discussion (AD). AD is the heart and soul of many distance learning programs. Proprietary web-based course management systems incorporate AD as part of their standard feature sets.

But AD is neither complex nor expensive. In fact, it is an increasingly common form of communication through LinkedIn, Facebook, and other social networks for professional and personal use. As these tools have become commonplace in usage, students of all kinds take to them quite naturally, but they've existed in other guises for a long time.

Professional associations have fostered AD for years through online bulletin boards and listservs, which can incorporate online discussions, as well as email "digests" of recent posts and/or subject lines, to push the conversation out to participants. Other free tools can be found through such providers as Yahoo! Groups. The basic AD format follows the same flow of interaction: A point for discussion is posted as a new message. A participant can reply to all by posting a response to the message. Another participant can reply to the first response. The entire discussion appears as indented entries, one after another, under the main "thread" established by the first posting. The result is anytime, anywhere access to the interactions and activity of the classroom (Figure 1.2).

AD is a critical component of distance learning in its online forms because of the immense benefits it offers students and instructors—benefits that cannot be matched in the face-to-face classroom. While many traditional classrooms rely on discussion to deepen the learning of participants and share information, the potential for thoughtful contribution from diverse groups of students is far greater in online AD because it

- Benefits students who tend to hang back in face-to-face discussions, preferring to think through their responses before jumping in.

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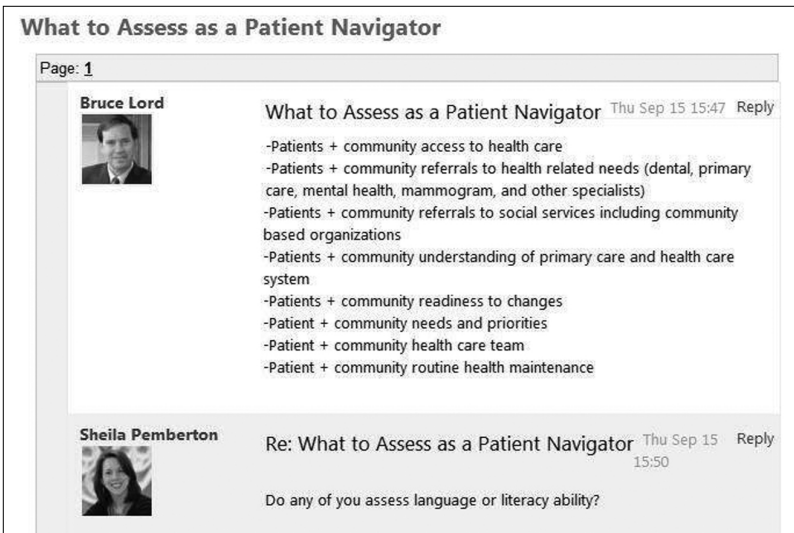


Figure 1.2 The Patient Navigator Online Certificate Program fosters an asynchronous discussion environment.

- Benefits students who tend to learn through reading rather than through listening.
- Offers greater flexibility to students, which contributes to the diversity in the classroom. As an instructor, I find this diversity to be particularly stimulating, bringing my own thinking to places I never expected to go.
- Enables simultaneous discussions on multiple topics, adding to the richness and depth of the dialogue.
- Enables use of linking and bringing nontext content into the discussion.
- Automatically archives all contributions for later review (making it easier to grade on the basis of what actually took place rather than your recollection of what took place) and allows searching and sorting by date, contributor, topic, etc.

If AD represents the excellent potential of online distance learning, it is also the proving ground for many of its weaknesses, including:

- *Lack of immediacy:* Yes, it's a recurring theme in the challenges of distance learning, but I repeat it because it's so often a source of anxiety and dissatisfaction for participants. If you wait 24 hours for a response to a discussion contribution, it can dampen the spark of your intellectual excitement.
- *Poor written communication skills:* Frequent typos, ignorance of grammar rules, flat-footed attempts at humor that turn into gross interpersonal misunderstandings ... You'll see it all. And not just with new students.

Despite the challenges of AD, it is an invaluable tool for distance learning. For me and for many distance learning instructors, incorporating AD into a new program isn't a decision; it's a given.

Asynchronous Discussion Quick View

Pros: Widely accepted; if you have any students who have already been involved in distance learning (and even some who haven't), they are likely to have experienced AD. Easy to incorporate into a system with other features or as part of a comprehensive course management system. Appropriate for all levels and all topics of study. Available low-cost options often included with a larger package.

Cons: Some learning curve at first to understand how best to use the tool and how to respond effectively and efficiently. (A busy class can mean a lot of reading and responding. You may find yourself acting as a de facto writing and communication coach, in addition to teaching your actual subject. And if your own typing/writing communication skills need work, there are a number of distance learning courses you can look into to improve your skills ...)

Works best for: In-depth discussion among multiple students; group dialogue.

Messages it sends: Convenience and flexibility; words matter and "neatness" counts.

Collaborative Online Workspace

Collaborative online workspaces were a mystery to most people 5 years ago. Today, they are better understood by many adult learners as more and more organizations have introduced them into the workplace. It's easier than ever for teams of people to collaborate online to access documents, spreadsheets, and presentations, and these technological and cultural advances have enabled collaborative online workspaces to adapt to the needs of distance learning.

Within a collaborative online workspace, an instructor can designate core content components, establish team projects, track assignments, and manage deadlines. Participants can chat in real time about documents or projects, or add comments to materials for others to review. Workspaces also maintain a history of changes, so individuals can go back to review who made changes to a document or resource and what those changes were.

Costs for these systems range from free (Google Documents, for example) to more expensive proprietary platforms. Some hosted solutions charge by the seat; others offer licenses for small and mid-sized groups, and there are enterprise editions that handle users in the thousands.

Perhaps the biggest challenge of using a collaborative web space for an instructional program is that the software was not originally designed to solve the particular problems of distance learning. Education-focused solutions such as course management platforms were built from the ground up with the needs and interests of instructors and students in mind; collaborative web space lacks this focus and may need some heavy handling to get it to behave the way you want.

Collaborative Online Workspace Quick View

Pros: Allows many different kinds of interactions and a multiplicity of ways to present and interact with materials. Creates pages and resources "on the fly," in partnership with students.

Cons: Despite broader acceptance, there is still a learning curve involved, particularly for participants who haven't

used such a workspace before. Software is not designed with educational applications in mind.

Works best for: Student groups (and instructors) who are comfortable with technology and visually literate.

Messages it sends: Convenient and active classroom; geared toward collaborative learning experiences; students will be an active part of creating the space in which learning will take place.

Video and Multimedia

In the first edition of this book, I counseled against relying too heavily on video or multimedia because of the production costs involved. At the time, an instructor who invested time and resources in video or multimedia needed to be ready to stay with that material for a long time.

But what a difference a few years can make! Video is now incredibly easy to create, manipulate, and make available online. YouTube dedicates an entire section of its site to educational offerings (www.youtube.com/education; Figure 1.3), where you can find everything from university lectures to homemade “how-to” demos.

Video—yes, even *good* video—can be captured with a cell phone or basic digital camera. One of my favorite software publishers is TechSmith (www.techsmith.com), which publishes a variety of tools including Snagit, Camtasia, and Jing, enabling anyone to capture activity as you complete it on a computer screen. Jing is even free and quite simple to use.

High-quality, professional-grade multimedia is still a more expensive and complicated proposition, but you can approximate it better by using the software for recording audio and visual and then adding instructional components such as callouts, highlighted text, and even user-driven actions (e.g., click a button to make the next action happen). Some tools will even create a transcript of your audio.

Video and multimedia have so many potential applications and uses that it would be impossible to list them all here. You can now

- Record segments of an audio or video lecture to post online for students to view and add comments.

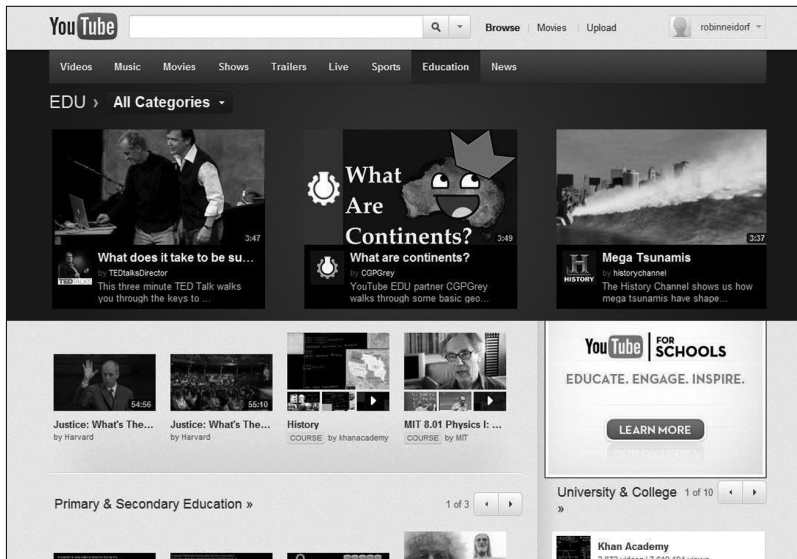


Figure 1.3 In the education section on YouTube, instructors and organizations can create their own channels to share video content.

- Demonstrate tasks, project steps, calculations, and anything that's easier to show rather than to describe.
- Provide alternative formats of instructional materials to meet the needs of different learning styles (more on learning styles in Chapter 2).
- Record live web-based meetings or conference calls to share with others who cannot attend.

And all of this is cost-effective and easier than ever. The once-significant barriers are no longer obstacles.

Video and Multimedia Quick View

Pros: Creates a “see, touch, and do” environment and enables easy capture of material that’s better suited or

more compelling to convey in a nontext format. Meets the learning needs of students who prefer demonstration instead of text-based learning.

Cons: Depending on the degree of complexity, expensive to create and update (though the costs decrease all the time). Although students can interact with the content itself, they do not interact with an instructor or other students unless other media (e.g., email, links to web-based chat or discussion, opportunity to turn in results, or other form of response mechanism) are incorporated into the program.

Works best for: Instruction that benefits from visual elements, simulation, or demonstration.

Messages it sends: Sophisticated experience.

Synchronous Chat

Synchronous chat is another medium that has gone from unusual to commonplace in a very short time. Voice-over-internet protocol (VoIP) has brought voice communications online, and a variety of platforms have channeled voice, text chat, and file sharing into the environment as well. The best known of these is Skype (www.skype.com), a free tool now owned by Microsoft that enables one-on-one synchronous interaction or group interactions with anyone who has a free account. Synchronous chat is also found integrated into Google (Google Chat and Google Voice), Facebook, and lots of customer service applications.

Synchronous chat was once limited to typing messages into the chat window to share. Skype, Google Chat, and other providers have added reliable video to their chat functions, as well as the ability to share screen views and files. Additionally, chat software keeps records of the chats, making handy references for later viewing.

I often use synchronous chat in my business to discuss project details with partners in Europe and Australia, as well as throughout North America; my students often use synchronous chat to conduct learning team meetings to divide assignments and check in on any problems. I've also used chat to connect with support services, including those associated

with distance learning, to troubleshoot and resolve issues that inevitably come up while using complex software and tools.

As with AD, one of my favorite benefits of synchronous chat is the documentation it creates. I can pull up the record of a chat and search it, as I would any document, for words or phrases, and thus return very quickly to the place in the chat where someone shared a key idea or a critical instruction.

Synchronous Chat Quick View

Pros: Many synchronous chat options available at no cost with immediacy and an ability to archive results. Availability of web-based resources during chat for reference and research. Some synchronous chat systems can be accessed with a cell phone or tablet computer, making it an extremely portable tool.

Cons: Learning curve for anyone not used to using it, although the programs get easier all the time and the likelihood that students have used it is always increasing. However, as with any software requiring download or updates, challenges (particularly around incompatibility) can arise. Requires everyone to be online at the same time, with a functional account, access to compatible IM systems, and reliable internet access. Can be hard to follow in-depth discussion among many participants. Participants logging in from business or government locations may not be able to use free chat tools due to security restrictions.

Works best for: Focused team projects; quick one-on-one updates; just-in-time coaching.

Messages it sends: Instant, sometimes at the expense of depth.

Web-Based Conferencing

Web-based conferencing, web-based meetings, and webinars are commonplace tools of training today. WebEx and GoToMeeting are two of the

most popular platforms that enable one or more presenters to share screens, video captures, and interactive tools such as surveys or polls with groups of people, all sitting at their own computers anywhere in the world (Figure 1.4).

For instructors, web-based conferencing provides some of the benefits of a live classroom, coupled with features for chat, managing questions, and integrated recording (handy if you want to share the session with others who couldn't attend). However, in practice, instructors should be aware of what corporate trainers and presenters have long known: Those “participating” in a web-based conference may actually be updating their Facebook pages, reading blogs, or checking email. The interactivity you build into the session is essential for maintaining participation.



Figure 1.4 This screenshot shows the active presentation plus the webinar management interface for a GoToMeeting instructor. Through the interface, the instructor can see what participants see, monitor attentiveness, review submitted questions, ask and answer questions with the whole group or privately, administer polls, and record the session. [Used with permission from “Pricing Philosophies: Understanding Approaches to Content Pricing and Licensing,” created by FreePint Webinars (www.freepint.com)]

Because there are many moving parts to a web-based conference (potentially including video, web access, presentation slides, Q&A, polls, etc.), rehearsal before a session, particularly for new instructors, is a must. In a very complex session, you may want to consider hiring an assistant who can help keep the classroom running, freeing you to teach.

Finally, let's not forget that there are many instructors who could use a bit of coaching on their in-person presentation style. Someone who is merely dull in a live classroom becomes practically coma-inducing in a web-based session.

Web-Based Conferencing Quick View

Pros: Can approximate the visual and audio stimulation of a classroom. Enables far-flung groups to see and hear one another in a synchronous environment. Offers a number of additional features such as chat, questions, polling, and integrated recording to enhance and archive the session.

Cons: Can be complex to run all the pieces; usually requires local software installations, which can be difficult for some students (or impossible, depending on IT requirements). Participants tend to multitask during the session unless it is very well-planned and well-executed.

Works best for: Presentational sessions (though be sure to incorporate interactivity); geographically distributed groups; lectures you want to archive for later viewing.

Messages it sends: High-tech can also be personal; anywhere, anytime instructional experience.

Email Correspondence

Email is such an integrated part of our everyday world today that it's almost hard to remember when using it was novel and unsettling. I remember the first time I emailed an article to an editor rather than faxing

it or bringing it to an office. We were both giddy with the thrill and were completely amazed that it worked.

Email is an instructional tool used in just about every educational environment you can think of. However, when considering email as a planned component of a distance learning program, think of it in terms of how it can build relationships among members of a group, as well as between an instructor and an individual student.

It is possible to develop an entire distance learning program based solely on email usage, just as instructors have created distance learning programs based solely on traditional correspondence. The advantage of email over snail mail, in addition to the speed of response, is the relative ease of adding additional people into a dialogue, creating an opportunity for shared communal experiences rather than just one-on-one interactions.

Email Quick View

Pros: Almost universally accessible. Fast response and the ability to create group discussion. An expected component of any professional relationship today. Free, or at least very cheap.

Cons: May encourage “off-the-cuff” responses from both student and instructor. Managing group dialogue can be challenging, especially if responses run long. Many individuals feel overwhelmed with email, especially with spam so rampant, and may tune out email communications.

Works best for: Smaller discussion groups (up to about five) and as an integrated component of other distance media; one-on-one instruction, turning in assignments, informal instruction, or mentoring, etc.

Messages it sends: Quick, easy, and convenient.

Snail-Mail Correspondence

The original distance learning program was the mail correspondence course. It's unlikely to be a model that you choose today, but you shouldn't immediately dismiss the place of physical mail in your bag of tricks.

When I was writing the first edition of this book in 2005, snail mail was still a more commonly used tool than it is today. Real, tangible paper is invaluable for making handwritten notes on an assignment and exchanging materials that do not travel well by digital methods (such as original artwork), and nothing but nothing in the digital world can match “real” mail for posterity. I completed my Master of Fine Arts in creative writing through the Bennington Writing Seminar's low-residency program, organized around monthly packets of writing mailed back and forth between student and writing mentor; though nearly 10 years have passed since I completed that degree, I still have every single letter my instructors sent to me during my tenure in the program. Had I received their comments via digital means, I know I would not have them anymore. The instruction I was not yet ready for 10 years ago is now a valued part of my self-awareness as a developing writer.

Mail continues to have its place and special uses, despite the shift many of us have made to communicating electronically. In fact, I was pleased to learn that as of 2012, the Bennington Writing Seminars still requires the exchange of physical, snail-mail packets between student and mentor as part of the degree program. The rise of electronic communication has actually enhanced the status of “real” mail as the medium to use when posterity matters.

Snail-Mail Quick View

Pros: Universally accessible. An important form of personal touch in a context that can otherwise be impersonal. Relatively cheap for both implementation and usage.

Cons: Snail mail moves like, well, a snail. Not as effective for communication between multiple parties. Long delays in sending, receiving, and responding, which can be an instructional challenge.

Works best for: Mentored relationships that require primarily a one-to-one interaction between a student and instructor; material with an archival component—something that you or your students would want to keep.

Messages it sends: The work is worth taking time over, so don't rush; rather, consider how to create something worth printing, copying, and mailing.

Flexible Combinations: Blended Learning

Any and all of these tools can be part of a distance learning program. In fact, most of them can be part of a nondistance learning program. Many traditional classrooms today incorporate a web component, and even elementary school students may now incorporate online collaboration for group projects or access a remote desktop to submit assignments. As learning and education continue to evolve, the distinctions between teaching techniques are quickly becoming difficult to detect.

For our own work as instructors (and indeed, as students of what it means to be instructors), the keyword is *flexibility*. Evaluate what you want to impart to a group of students, their readiness (and yours) to use different tools, your budget, and your technical resources. Then examine all the potential options to create the right combination of interaction, presentation, teamwork, research, creative thinking, response, and feedback. You may find a combination that feels right and comfortable for many kinds of teaching situations; you also may find that you need to start from scratch with each course you design.

I've presented these tools as if there were bright lines separating one from another. In reality, the boundaries are quite a bit fuzzier. Evolutions and revolutions in telecommunications technology are blurring the borders between teleconference and webinar, between AD and a collaborative web space. My experience with a wide range of students and tools suggests that the readiness factor will dictate the usability of a technology for a given project even more than the functionality of the technology itself.

For example, I once worked regularly with a group of professionals on nonprofit marketing skills and knowledge. This group was very comfortable with a teleconference and very *uncomfortable* with a web-based conference. My efforts to push them into moving our teleconferences online met with enormous resistance. Still, I would find ways to incorporate some elements of web-based communication by asking them to at least be online during our calls so that we could look at the same page at the same time. They started to see the possibilities and developed a greater level of readiness to take the next step.

You have to know your student population and how to introduce tools, train them on usage and interaction, and have the appropriate level of support to ease their fears and trouble-shoot the inevitable hiccups that happen at the most inconvenient times. The merging of technologies is exciting and creates enormous possibilities for instruction. But developments in technology often outpace our human ability to adjust. There are two things to keep in mind: “Focus on Function” and the continuum concept. Focus on Function tells us to identify what we want to *do* with a tool or technology and then get advice on the best match for our needs. The continuum concept reminds us that technology moves along a continuum from simple to complex, and human willingness to *use* technology also moves along a continuum from unwilling to enthusiastic. The best pairings of technology with users are the ones where the willingness to use the tools meshes with the complexity of the tools.

Right Tool, Right Place: A Few Sample Approaches

Still having trouble visualizing what your distance instruction toolkit might look like in practice? The following sample combinations of tools and instructional approaches may help you think about how best to use various tools in different situations.

Low-Tech, Low-Cost Professional Writing Workshop

Description: This is a 3-week workshop for a targeted group of professionals seeking to improve their writing skills.

Tools used: Email discussion list, teleconference, collaborative workspace, and private email exchange

Approach: The course begins with a teleconference in which the participants and instructor introduce themselves and discuss their personal goals for the course. The instructor uses the call to lay out the four key content areas they will cover with lectures emailed and posted to a collaborative workspace, email discussion, and peer-to-peer mentoring work. After the call, the instructor emails the first lecture (textual) and assignments, and posts them to the collaborative workspace. The participants conduct discussion via email on the topics in the lecture and can post comments directly to the collaborative workspace. They email their assignments directly to the instructor, who makes detailed notes on the assignments and emails them back. (One student has trouble viewing the comments; the instructor faxes a copy of the marked-up document for her review.)

Throughout the progress of the course, the instructor monitors discussion and directs students toward additional resources for deepened learning. New topics are introduced with emailed lectures and assignments, which are simultaneously posted to the collaborative workspace. The participants also work in pairs to review and edit each other's work, which they exchange via email. A second conference call allows the instructor to pull together the threads of activity and direct participants on a final project. Final projects are emailed to the instructor, as well as to the entire peer group.

Introduction to Marketing for Small and Micro-Businesses

Description: Small-business owners and one-person operations take part in a 6-week workshop on marketing strategy and tactics.

Tools used: Email, private online asynchronous chat with digest features, web-based conference, and synchronous chat

Approach: Following a launch meeting via a web-based conference, the participants interact primarily through a Google Groups AD space. The instructor posts threads to Google Groups for personal introductions, discussion topics, and questions. Lectures in core topics are posted to the group and also emailed to participants to ensure receipt and review. Participants discuss the lecture and assignments within the group; Google Groups automatically creates a daily summary document—a digest—and emails it to all participants.

Participants also email and call the instructor with individual questions on an as-needed basis. They complete a team project by meeting via

Skype every few days; an archive of each Skype session is copied into Google Groups for later reference and review.

The instructor is able to incorporate live links to other websites into the group, assembling an excellent online collection of business references, and participants can add on other resources. One assignment involves sending participants to several of these resources to conduct specific research tasks.

The final projects are presented by teams in a web-based conference. Prior to the teleconference, each team emails a presentation and hand-outs, but during the session itself, the entire group is able to view the same documents at the same time and share feedback via the platform's integrated chat features and through audio connections.

Leadership Development Program: Peer Training on Data Visualization Tools

Description: The research center of a management consultancy licenses content from a number of publishers that all provide powerful tools for data visualization and analytics. These tools enable analysts and consultants to perform complex queries on the company's financial and economic data, but most do not take advantage of these capabilities because they are not familiar with them. As the firm's information strategy is to empower end users to do more of their own analysis, the research department creates a voluntary 4-week "leadership learning" program to encourage analysts and consultants to master these tools.

Tools: Web-based meetings, video archive of examples, exercises based on actual client work shared via collaborative workspace

Approach: A senior researcher in the center takes ownership of the project and first reviews the 4 databases to document the similarities and differences in how their visualization tools are set up. She then creates the agenda for the first meeting, focusing her comments on the similarities and inviting participants to look for these features in the reporting and analysis functions of the tools.

Participants then submit the specs and requirements for actual projects to the collaborative workspace set up for the program. They share with each other, with some pushing from the research center staff, suggestions for approaches on addressing each project, based on the tools at hand.

Over the next 4 weeks, the research center staff record brief (2–4 minutes) screen-capture videos demonstrating how to use the advanced visualization and reporting features of each product. These are posted to the collaborative workspace, where participants can post questions for each video if anything isn't clear. The senior researcher also hosts four more web meetings: Each involves a closer look at the unique elements of each product under consideration—what makes it different from the others—and then walks through a use case based on the client work of one of the participants. All of these web meetings are also recorded and transcribed; both video and text are posted to the collaborative workspace.

To complete the program, each participant submits a final report, demonstrating use of the advanced analysis features of at least one of the products, with a brief description of how this work product differs from what her approach would have previously been. Peers comment on each other's work in the collaborative workspace, and the case studies are also added to the research center's intranet portal as training and reference tools for other employees.

After they have submitted the final project, participants are able to update their HR files to document their completion of a “leadership learning” credit.

As you can see, the combinations are limited only by your creativity, the willingness of you and your students to use the tools, and your budget. The tools will support almost anything you might want to try to implement quality instruction, and the functionality is available to make just about any distance learning program succeed.

A View to the Future

Distance learning builds upon the technological developments taking place all around us. What's possible today was hardly dreamt of 5 years ago, and the evolution is accelerating. I don't have a crystal ball, but I can offer perspective on what to watch for.

More Social Interaction

The encroachment of social tools into our lives is deepening every day and changing the way we think about relating with people, with ideas, and

with organizations. The ease with which people can share through social tools makes them more likely to do so; in an instructional setting, this might start to translate into increased peer-to-peer learning.

More Mobile Tools

Apple released the first iPad in January 2010. While the digital world was already becoming more mobile with each new hardware release, the introduction of tablet computers fundamentally changed the place of mobile content in professional, educational, and personal lives. Smartphones, a wider range of tablet devices, ereaders and ebooks, and further development of resources specifically designed to be used via mobile devices are continuing this evolution. Watch for more mobile-enabled tools to deliver instruction and more students who ask for mobile-enabled versions of your distance learning program.

More Ease of Use

Tools are becoming more user-friendly with every iteration. Next-generation tools will be more intuitive and continue the trend toward graphic-driven interfaces that look and feel similar to software and systems that users are already familiar with.

Deeper Integration

As evolutions in technology continue, the boundaries between one type of tool and another will continue to be blurred and even erased. At the same time, technology tools will become a more seamless part of the educational experience; educators and trainers will find ways to deepen the learning experience by integrating tools like web-based collaboration, AD, and listservs into the “standard” curriculum.

Shorter Learning Curve for New Students

The pool of adults who have already participated in some form of distance learning is growing all the time; even those who have not participated in distance learning are gaining more experience with the technology that enables educational interaction at a distance. As we all

gain more experience, the learning curve will no longer be overwhelming for new students. They will be adapting existing knowledge rather than engaging with an entirely new process.

At the same time, the youngest generation of adults participating in distance learning will have a greater presence in more classrooms. This generation is extremely tech-savvy and quite comfortable experimenting with tools to get them to work. As we see more and more of this generation showing up for educational opportunities, they will push their instructors to explore even more potential directions for their learning experiences.

Just-in-Time Learning

Here is where instruction will start to merge with knowledge management (KM); businesses in particular are looking for learning solutions that deliver the right educational experiences at the moment they are needed and in the most useful format. Course management systems can be tied into KM database systems, as well as into software designed to intelligently “discover” what a person is working on and suggest learning modules that can help.

If KM systems are populated with targeted learning modules, and if those modules can be accessed and uploaded to a course delivery tool in response to a user’s query, I can think of quite a few enterprises that would be very satisfied by the result.

As our expectations of education shift to accept distance models as part of the norm, we’ll be able to choose between tools much more easily, even unconsciously, similar to the way we choose today between picking up the phone, sending an email, or transmitting an instant message. Earlier in my career, sending an email (especially with an attachment) was a project; I usually had to call recipients to be sure they received the message and were able to read it. Today, I barely notice when I’m choosing one communication tool over another. One day soon, we’ll feel similarly about choosing tools for distance instruction.

Worksheet 1.1 on the following pages will help you organize your thoughts about choosing distance learning tools. Visit web.freepint.com/go/research/learning to request a download of this and other worksheets and planning tools.

Worksheet 1.1 Needs and Readiness for Distance Learning Tools

Use this worksheet to help you determine what you may need in a distance learning tool and how ready you may be for technology.

1. Budget

Do you know your budget for a distance learning tool? Y/N
Budget is approximately: _____ per _____
course
semester
year
student
other: _____

What factors influence the budget?

2. Functional Needs

Which of these functions does your distance learning program require?

Functions: Communication and Classroom	No Need	Could Use	Must Have	Don't Know
Email				
Asynchronous discussion				
Synchronous discussion/IM				
Teleconference				
Webinar				
Collaborative online workspace				
Online whiteboard				
Blog				
VoIP				
Videoconferencing				
Multimedia (web-based)				
Multimedia (CD/DVD-based)				
Custom applications				
Other:				
Other:				

Worksheet 1.1 (cont.)

Functions: Administrative	No Need	Could Use	Must Have	Don't Know
Electronic gradebook				
Attendance				
Usage monitoring				
Secure payment				
Secure registration				
Student records access				
Instructor access to course controls				
Scalability				
Other:				
Other:				

Of the functions you have listed as "must have," which are the highest priorities?

What systems or tools have you used, demo'd, or observed in action?

Please rate your agreement with the following statements, where 1 = completely disagree and 5 = completely agree:

	1	2	3	4	5
I am comfortable learning to use new technology.					
I need to use tools that are extremely easy to get started.					
Budget is the most important factor in my decision about which tools to use.					
It is important that I choose a tool that does not require high-speed internet access.					
It is important that I not rely too heavily on technology.					
My students are comfortable learning to use new technology.					
My students have access to appropriate technology.					

When you have completed the worksheet, review again the information presented in Chapter 1 to determine which tools are most appropriate for your needs and readiness. Visit web.freepint.com/go/research/learning for a web-based tool that will make recommendations based on your responses.