Applying Instructional Systems Processes to Constructivist Learning Environments

BY BILL BRANDON

Oxy·mo·ron *(n)* a figure of speech in which opposite or contradictory ideas or terms are combined (Ex.: jumbo shrimp, constructivist design)

Believe me, this is an article I have approached with trepidation. There is more than a little paradox involved in the term, "constructivist design." In my most recent articles, I've introduced the basic theory behind constructivism and reviewed some of the tools that learners can use to construct knowledge. The essential difference between the constructivist approach to learning and more traditional models is that in constructivism the point is not to precisely transfer knowledge from the instructor to a group of learners, but to facilitate the individual learner's ability to build on and extend existing knowledge within a given domain. In that sense, it seems presumptuous to speak of designing constructivist e-Learning, in advance, for a mass audience.

However, because the rubber has to meet the road somewhere, pristine theory must inevitably be drawn into contact with squalid practice, and so in this article I shall show how to start designing e-Learning along constructivist lines. I'll provide links to multiple resources, models, and discussions about this process online and elsewhere. You, Dear Reader, may then resolve the irony in this undertaking for yourself and in your own way.

Similar to traditional design of instruction in which the designer has a choice from among many step-by-step procedures for building a course, in construc-

If you've spent years learning to use Instructional Systems Design processes to create e-Learning, the slight anarchy inherent in constructivist design may leave you feeling a little dizzy. Before you decide that constructivism has nothing to offer your organization, read this article to get a more complete perspective on the techniques and the resources available. You'll be glad you did!

Extra Insights
on page 8

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tivist practice there are guidelines of vari-
ous kinds that can be followed. Each
of these sets of guidelines represents
someone's way of dealing with the para-
dox of thinking about design while re-
maining true to a subtly anarchical set
of principles.

Probably the most frequently-refer-
enced set of guidelines used to create
constructivist-based e-Learning are those
provided by David Jonassen for Con-
structivist Learning Environments, or
CLEs. You will find several References to
these in the list at the end of this article.
However, there are many practitioners
who create successful constructivist sys-
tems for learners, and whose approach-
es to design are different in significant
ways from Jonassen's.

It is likely that there will never be a
universal constructivist design framework
such as ISD (Instructional Systems
Design), Gagne's Events of Instruction,
or Dick and Carey's model provides for
the objectivist approaches. However, by
paying careful attention to developments
within the community of practice and to
the body of work done by constructivists,
designers can build up their own knowl-
edge and toolkit of the principles that
work. My purpose here is simply to open
the introduction to the community of
practice and to suggest places to start.

Benefits of constructivist design

One of the questions that a designer
might reasonably ask is, "Why should I
consider a constructivist approach to
learning?" Perhaps it would be well to
take a little time to give my answer to
that question.

First, please be aware that I am not
advocating replacing your current design
model completely with constructivism.
The traditional approaches to designing
and delivering instruction (sometimes
referred to as the "objectivist approach-
es") work quite well for many learning sit-
uations, as long as they are appropriate-
ly selected and correctly applied. In
some cases, either an objectivist ap-
proach or a constructivist approach
would provide satisfactory results, de-
pending on the maturity of the learners.
But there are many situations you face
as a designer, when you will find that you
need to support learning in domains or
for audiences where an attempt to trans-
fer knowledge or skill from a subject mat-
ter expert's head to a learner's head is
doomed to fail. Those are the times to

reflect on constructivism and its many
benefits, and to ask, "Should we do
something different?"

It's good to reflect that people learn
all the time, every day, and that most
learning takes place outside of a formal
setting. People add to what they know
and to what they can do, and for the
most part without any "e-" being involved
in the learning at all. It's clear that the
mechanisms by which these learnings
take place are different from those used
to teach in a traditional setting, and that
the mechanisms are powerful. Much of
constructivism is based on careful study
of those "other" mechanisms. In many
cases, information and communication
technology — the Web, computers, and
software — will make it possible for
learners to leverage the other mecha-
nisms in ways that are not possible even
on the best day in a classroom.

Of course, part of the challenge to this
day-to-day learning process is that peo-
ple also get things wrong, perhaps more
often than they "get it right." They don't
know how to check what they've learned
for validity, for exceptions, or for applica-
tion guidelines. A substantial part of con-
structivist practice has to do with helping
people learn how to learn, including how
to test, verify, and validate new knowl-
edge and skills and so to increase their
own autonomy.

Constructivism is concerned with
engaging people in meaningful learning.
While there are various details provided
by constructivist theoreticians about
what makes learning "meaningful," one
of the keys is that meaningful learning is
also mindful learning. Ellen Langer (see
the list of Resources and References at
the end of this article) has introduced
this term in a very specific way, drawing
from the concept of mindfulness. A mind-
ful approach, she points out, has three
characteristics: the continuous creation
of new categories, openness to new
information, and an implicit awareness
of more than one perspective.

There are many benefits of a mindful
approach for psychological and physical
wellbeing. The alternative, mindless
approach to learning and living can trap
people in old categories and in automatic
behavior that operates from a single per-
spective and keeps a person from
attending to new signals. There are sig-
nificant consequences in a changing
world to the choice between adopting
either mindfulness or mindlessness.

James Atherton says that although constructivism has received more attention in education and the schools for the reasons just given, it is important in two additional ways to those who design for learners in other organizational settings and for "post-compulsory" education. Atherton, a Principal Lecturer in Education at De Montfort University, Bedford, in the United Kingdom, asserts that constructivism provides an excellent approach to facilitate professional development, and to deal with resistance to learning.

Learning through reflection in professional practice

"Continuous learning" has received much attention in the training press in the last decade, mainly in an organizational context. We understand from this attention that many businesses believe that continuous learning can bring competitive advantage in a changing world. However, Atherton points out that, in 1983, the late Donald Schön showed how continuous learning as a result of reflection on one's

actions is one of the defining characteristics of professional practice.

Schön was a professor at the Massachusetts Institute of Technology (MIT) when he wrote an important series of books around the processes and development of reflective practitioners. These works provided a close examination of what practitioners in different professions actually do, with the focus being on "an analysis of the distinctive structure of reflection-in-action." Schön's work quickly became influential as many educators involved in the development of professionals took it up.

A key part of Schön's contribution was his insight that "Technical Rationality" — his term for the model of professional training that loads learners up with content while they are students, so that they can apply it when they enter practice — has never been an accurate description of how professionals "think in action," and that this model is a poor basis for practice in a fast-changing world.

Helping learners discover how to

reflect in action (both while doing something and afterward) is an important feature of constructivist practice, and one that has major applications for developing professionals.

(For more information on Donald Schön and his contributions to the theory and practice of learning, see his biography in the Encyclopaedia of Informal Education, at http://www.infed.org/thinkers/et-schon.htm.)

While professionals have an understandable interest in learning to be successful in their practice, other learners are more resistant. Atherton has some insights to offer regarding ways in which constructivism can address failure to learn.

Dealing with resistance to learning

Atherton contrasts "supplantive learning," which questions current knowledge or skills and then replaces them, with "additive learning," which simply adds new knowledge or skills to an individual's current set. He makes the point that, when people fail to learn, the failure may be due to lack of motivation,
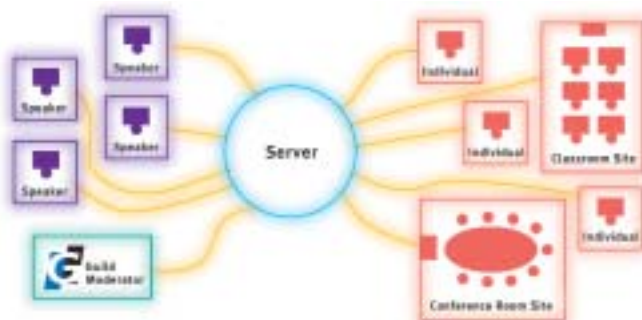
lack of ability, lack of aptitude, or to poor teaching. A fourth factor, which he says is often not recognized, is the psychological cost of change. This cost may come into play when an apparently competent, experienced adult is required to change or realizes that change is necessary.

Supplantive learning becomes problematic when it is forced, or if the individual has a significant emotional investment in the prior beliefs or skills. Where supplantive learning does not create problems, the learner may at least feel a bit demoralized because of a temporary loss of perceived competence. If the supplantive learning does become problematic, the demoralization intensifies, sometimes to "crisis" proportions. This

combination makes it difficult to learn, and the learner may well simply go back to the old way of doing things.

Over time, the learner who does not just "give up" will become re-oriented through learning. The reorientation can be sparked in several ways. For example, there may be an external crisis that forces the change. In an extreme case, the individual may have the sense of "bottoming out," so there is no way to go but up. Or, the learner may find himself or herself in a "facilitating environment," where the learner is supported and safe, and where the change is not forced.

The function of learning under the constructivist model is to provide that supportive, safe, motivating environment.

The designer's job is to create such an environment.

Guidelines for constructivist design

If you look for a definitive flowchart that shows "how to design constructivist e-Learning," you won't find one. That's because:

• Constructivism isn't an approach to learning that can be outlined in a flowchart and applied the same way to all learning, over and over;

• Constructivism is about how individuals create meaning and knowledge, by extending and modifying current personal knowledge and skills; and

• Constructivism is not a specific approach to design — it's a way of thinking about design.

However, you can find plenty of guidelines. These are useful because constructivist ideas can be incorporated into the typical instructional design process without impairing the project management and quality-control functions.

Brent Wilson, James Teslow, and Rionda Osman-Jouchoux provided an extensive set of ideas in their 1995 chapter on the impact of constructivism on instructional design (ID) fundamentals (again, please see the Resources and References section at the end of the article). They also gave a great summary of the theoretical background and research underpinning constructivism, and I recommend reading that summary along with my earlier articles.

Wilson, Teslow, and Osman-Jouchoux make an important observation when they say that, "Traditional ID models succeed largely because they provide for the management of a team of workers engaged in a complex project. ... management goals and design goals are often in tension with each other. For an ID model to work in the real world, it must combine these two critical functions into a workable methodology: effective, creative design on the one hand and efficient management on the other. ... the point is that we need a balanced set of safeguards and constraints that assure careful design and accountability, but which are flexible enough to allow the project to safely 'fly'."

Constructivist learning environments

I have already mentioned David Jonassen and his work with the design of Constructivist Learning Environments,

or CLEs. A CLE is a framework that provides a supportive, safe, motivating environment in which learners can solve problems, interact with others, and assess their learning. Within a CLE, a designer can provide any resources the learners may need, from problem-based or case-based experiences to microworlds and virtual realities, subject to also taking into account some of the issues in constructivist design to be discussed later in this article.

Sidebar 1, "Attributes of meaningful e-Learning" (below) is a summary of Jonassen's list of design attributes for meaningful learning, some details of the elements and considerations within each of those attributes, and my ideas about the kinds of technology a designer might provide to support each attribute.

You will find more about the details of CLEs in the online article, "Welcome to the Design of Constructivist Learning Environments (CLEs)" and in Jonassen's *Learning to Solve Problems with Technology: A Constructivist Perspective*.

Guidelines (not rules) for designs

Another key element Jonassen provides is a list of the components of CLEs that the designer should try to include:

• A problem or project context: Learners should receive a clear problem statement, with the context surrounding the

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> — Wilson, Teslow, and Osman-Jouchoux

problem shown as clearly as if it were real life.

• A problem or project representation: Simulate the situation in a natural context, and recreate the same type of interesting cognitive problems the main players would face in the real world. Tasks assigned should replicate the actual activity structure, and the physical setting should provide the same constraints and advantages that would exist in the real world, including the tools.

• The problem or project manipulation space: Learners should be able to manipulate things — tools, product, or environment — in a meaningful way.

Learners must be able to test hypotheses about their problems.

Instructional activities will also be necessary in a CLE. Sometimes learners do not possess enough knowledge structure in the domain to begin building or constructing new knowledge. Instructional activities must be supported in three ways: modeling, coaching, and scaffolding.

Modeling is mainly a matter of demonstrating to the learner how (and why) to perform the necessary activities needed to complete a task. In other words, provide one or more examples, and then ask the learner to explain what he or she is thinking about while going through

SIDEBAR 1 *Attributes of meaningful e-Learning*		
The primary goal of constructivist design is to engage learners in meaningful learning, which has five interdependent attributes. Technology — e-Learning — should support these same attributes.		
Attributes	**Elements**	**Technology**
Meaningful learning is ACTIVE	Learners are engaged in mindful processing of information, where they are responsible for the result. Learners manipulate objects and parameters of the environment they are working in and observe the results of their manipulations.	WebQuests, Office-type applications
Meaningful learning is CONSTRUCTIVE	Learners integrate new ideas with prior knowledge in order to make sense or meaning. Learners articulate what they have accomplished and reflect on their activity and observations: they construct increasingly complex mental models.	Web logs, mind maps, concept maps
Meaningful learning is INTENTIONAL	When learners are actively and willfully trying to achieve a cognitive goal, they think and learn more because they are fulfilling an intention. Technology should help learners articulate their learning goals, and then support them.	Web logs, WebQuests, concept maps, mind maps
Meaningful learning is AUTHENTIC	Learning tasks that are situated in meaningful real-world tasks or simulated in a case-based or problem-based learning environment are better understood and more consistently transferred to new situations. Technology should support learners in solving complex and ill-structured problems as well as simple and well-structured problems.	Office-type applications, hypermedia
Meaningful learning is COOPERATIVE	Collaboration requires conversation, and technology can support this at any scale. Cooperation and collaboration are the most difficult attributes to support, especially if learning is evaluated on an individual basis.	Wikis, community systems, hypermedia, content maps, course maps,

Based on Jonassen (2002 and 2003) and on Brandon (June 14, 2004). See references on page 7.

each step.

Coaching involves intervening at critical points in the instruction. Each intervention provides learners with encouragement, diagnosis, direction, and feedback.

Scaffolding adjusts the task for the learner, so that the task is matched to what the learner can do. Eventually all scaffolding will be removed.

The constructivist design team and process

Wilson, Teslow, and Osman-Jouchoux suggest that essentially the same cast of players will be involved in constructionist design as is involved in objectivist (traditional) design. In other words, subject matter experts (SME's), designers, instructors or facilitators, and learners will all take part. The difference is that all of them are part of each step in the process. SMEs help design the learning experiences. Designers can serve as model learners and teachers. Teachers and students may help define or select content and then design their own learning experience. This mixing of roles requires care in implementation.

The actual design process, from a project management point of view, may not look so different from the steps in a traditional project. Again, Wilson, Teslow, and Osman-Jouchoux provide a breakdown that includes all the major activity steps, from needs assessment to evaluation, with specific tips for incorporating constructivist methodology and concerns in each step.

Online resources

Many designers may find it more useful to start their first project by looking at some of the activity types typically included in a constructivist design. Susan Colaric has created a wonderful resource that will assist in this process. Please see Sidebar 2: Susan Colaric's Knowledge Base, below, for the details.

As you use the various resources, take a minute to read over the article by Joseph Petraglia, "The Real World on a Short Leash: The (Mis)Application of Constructivism to the Design of Educational Technology." Petraglia teaches at the Georgia Institute of Technology, and he makes some important points about how to design problems and task environments for learners.

Examples

Another way in which many designers learn is to look at examples of the work of other designers. While I was unable to find any complete constructivist programs on line, I did find several articles that may be useful to you.

- Mahnaz Moallem has provided an outstanding example of the way in which his team combined elements of traditional instruction and constructivist environments in order to deal with a learning situation in which part of the answer required prescriptive solutions, and part of it required learner control of the environment. Mahnaz is Associate Professor of Instructional Technology at the University of North Carolina at Wilmington.
- Mark Guzdial, at Georgia Institute of Technology, created CaMILE (Collaborative and Multimedia Interactive Learning Environment) as a Web-based collaboration tool for use by students. Mark is also responsible for development of the Swiki, another anchored collaborative learning environment.
- Brent Wilson and May Lowry, both professors of Information and Learning Technologies, University of Colorado at

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SIDEBAR 2 *Susan Colaric's Knowledge Base*

Susan Colaric, now an assistant professor at East Carolina University, created a knowledge base covering the instructional systems process, as a component of her doctoral examinations at Penn State University. This knowledge base is available on a Web site and it can be an extremely useful resource for designers who are learning about different approaches to learning. The URL for the portal to this resource is at http://www.soe.ecu.edu/ltdi/colaric/KB/index.html (verified June 26, 2004).

The knowledge base incorporates 427 files, 213 pictures, and 2088 internal hyperlinks. Among the resources that will be of interest to readers are eleven articles relating to constructivist design.

Topic	URL
Constructivism	http://www.soe.ecu.edu/ltdi/colaric/KB/Constructivism.html
Problem-Based Learning	http://www.soe.ecu.edu/ltdi/colaric/KB/PBLs.htm
Case-Based Reasoning	http://www.soe.ecu.edu/ltdi/colaric/KB/CBR.htm
A Web-Based Case Library to Support Learning	http://www.soe.ecu.edu/ltdi/colaric/KB/CBRarticle.htm
Anchored Instruction	http://www.soe.ecu.edu/ltdi/colaric/KB/AnchoredInstruction.htm
Scaffolding	http://www.soe.ecu.edu/ltdi/colaric/KB/Scaffolding.htm
Goal-Based Scenarios	http://www.soe.ecu.edu/ltdi/colaric/KB/GBS.html
Situated Learning	http://www.soe.ecu.edu/ltdi/colaric/KB/SituatedLearning.htm
Cognitive Flexibility Theory	http://www.soe.ecu.edu/ltdi/colaric/KB/CogFlexibility.htm
Constructivist Learning Environments (OLEs) - Jonassen	http://www.soe.ecu.edu/ltdi/colaric/KB/CLEsJonassen.html
Open Learning Environments (OLEs)	http://www.soe.ecu.edu/ltdi/colaric/KB/OLEs.html

Denver, compiled a very useful set of links, including links to actual projects, in their paper "Constructivist Learning on the Web."

• Finally, the IBM Watson Research Center has published a number of papers from its Collaborative eLearning projects, and these name actual organizations involved in work-place training programs that make use of collaborative learning on the Web.

How to get started

Many designers find it easier to start adding collaborative elements one at a time to course designs, rather than to try to design a complete constructivist model all at once. I would recommend starting with a simple case-based approach in a single module. Susan Colaric's Knowledge Base has enough information in it to make that possible.

Another way to begin would be to add a WebQuest to a synchronous e-Learning program, following the guidelines on Bernie Dodge's WebQuest page. Then have the learners work together to create their own WebQuest, based on the model you have provided. I also recommend looking over all of the Web sites mentioned here, and contacting the authors.

This summer, we will also be publishing an article on Problem-Based Learning that you will not want to miss. Problem-Based Learning is one of the most effective of the constructivist methodologies. In the meantime, good luck with your efforts!

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Additional information on the topics covered in this article is also listed in the **Guild** *Resource Directory.*

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Unsticking Hands-on Activities
How to think outside the monitor

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Consider creating online instruction for the following purposes: transitioning from one email client to another; teaching managers to write legally defensible performance reviews; facilitating use of common project management tools. In high-quality classroom instruction, hands-on activities allow learners to practice achieving certain results. How do you do these same hands-on activities online? Think it's hard to do? It's time to get unstuck!

When we design instruction, we want learners to be able to DO something, not just look at content or answer basic (and often not especially useful) questions about it. In a project management course, is it more important that people learn to *use* project management tools (Gantt charts, for example), or that they be able to *recall* definitions for tasks, duration, milestones, and dependencies (which they can easily look up as needed)?

Let's look at the three proposed instructional modules for a moment and pull out a few learning outcomes we might hope to achieve. (See the table below.)

If we truly want learners to achieve these and other performance-based outcomes, we need to provide instructional activities that involve learners in using the content as it is used in real life. Answering a multiple-choice question that asks the learner to pick the menu in which the attachment options are located does not meet this test. A drag-and-drop exercise to match performance language with the correct policy, or to pair up Gantt chart column heads with the correct definitions, doesn't go far enough either.

If these instructional situations were classroom-based, the desired outcomes would be achieved with realistic hands-on practice activities and plenty of opportunities for meaningful feedback. I have never heard a good instructor respond, "Incorrect. Try again."

How do we DO hands-on online?

Quizzes, drag and drop, links... are those the main activities we can do in online instruction without advanced programming skills and mega bucks? No! Some folks think real hands-on activities can't be done in online instruction, or can be done only at great expense and skill, but that kind of thinking results in anemic and ineffective online instruction. We have to be able to allow people to practice, not just think about the concepts, or what's the use of the instruction? If we really can't do that in online instruction, or have to spend a fortune to do it, online instruction doesn't have much value. The truth is that it's the thinking that's a problem, not the online learning.

Here are two errors in thinking that result in online instruction containing few, or less meaningful, activities.
• Error 1: Hands-on has to cost a lot to build and requires loads of multimedia programming expertise.
• Error 2: If the course is online, ALL the activities must be online.

In the classroom, most hands-on activities involve practice, questions, sharing, and feedback. This can also happen in e-Learning: online, using discussion and collaboration tools, and offline, in field experiences away from the computer, or on the computer but not necessarily inside the course.

I especially appreciate the ability to create simple application simulations using a tool like RoboDemo that allows learners to try applications. Users can also open the application itself, and while inside the actual application they can use performance support tools and job aids. They can post questions for a designated expert in a discussion forum. If they get stuck they can go ask the designated advanced user down the hall. These kinds of hands-on (but not necessarily online) activities could help people learning to use the new email system.

Most critical hands-on activities can easily occur, but not necessarily online. In the case of the performance review training, why not allow learners to write a real review for a real person and have a human resources expert provide online feedback (through email or a discussion board) or in person? The same approach would likely work for project management tools training. Let learners build a Gantt chart, for instance, use it, and debrief their use with others and with content experts. These debriefings could take place online in a discussion forum or other collaborative environment, or in small group meetings.

Getting unstuck

In most cases, hands-on activities happen easily with blending. Blend what the computer does well with what the person does well. Blend performance support and real applications. Blend conceptual instruction online with real life coaching in person.

How would you deliver these online?

Proposed instruction	Selected desired outcomes
Transition from one email system to another.	Move contacts and mail to new format. Send email.
Write legally defensible performance reviews.	Write legally defensible language. Apply ratings that follow policy manual guidelines.
Use common project management tools.	Build a Gantt chart for a project. Determine the effect of delays.

The eLearning Guild™ is a global Community of Practice

Through this member-driven community of designers, developers, and managers of e-Learning, the Guild provides high-quality learning opportunities, networking services, resources, and publications.

Guild members represent a diverse group of instructional designers, content developers, web developers, project managers, contractors, consultants, managers and directors of training and learning services – all of whom share a common interest in e-Learning design, development, and management. Members work for organizations in the corporate, government, academic, and K-12 sectors. They also are employees of e-Learning product and service providers, consultants, students, and self-employed professionals.

The more than 12,500 members of this growing, worldwide community look to the Guild for timely, relevant, and objective information about e-Learning to increase their knowledge, improve their professional skills, and expand their personal networks.

Resource Directory
The Guild hosts the e-Learning industry's most comprehensive resource management system that includes more than 4,500 (and growing) e-Learning related resources in a searchable database. Guild Members can post resources and can update them at any time.

Surveys & Studies
The eLearning Guild conducts continuous polls and more than a dozen surveys and studies each year – including an annual salary survey. Guild Members have unlimited access to all data and analyses.

The eLearning Developers' Journal
The Journal provides in-depth articles about how e-Learning professionals can make e-Learning more successful in their organizations. It's a weekly online publication in PDF format and Guild Members have unlimited access to the searchable archive of every issue published.

Job Board
The Guild Job Board should be your first stop for solving employment related issues. Whether you are an employer looking to fill a key position or an e-Learning professional looking for a new job, you'll find success here.

Info Exchange
The Info Exchange enables members to ask questions of, and get feedback from, other members around the world in a discussion board format.

Member Discounts
Guild Members receive a 20% discount on all optional services offered by The eLearning Guild that are not included in your membership. These services include all face-to-face and online events produced by the Guild, special publications, and other services as they are developed.

The Online Forum Series
e-Learning for e-Learning professionals! *The Guild Online Forum Series* enables you, or your team, to explore the most pressing issues facing e-Learning professionals today with some of our industries smartest people – right from your desktop or conference room.

Engaging Symposia
The Guild's unique and focused symposia drill into the most critical issues for e-Learning designers, developers, and managers. These are intensive learning events with limited enrollment. Participate in person or online, as an individual or as part of a team.

Annual Conference
The eLearning Producer Conference, held in the fall each year, offers comprehensive and in-depth content for all e-Learning professionals in a collegial environment conducive to learning and sharing.

Event Proceedings
If you attend a Guild event, you have immediate access to all event proceedings. If you do not attend, as a Guild Member you still have access to the proceedings 90 days after an event ends.

Guild e-Clips
A Guild Members-only publication sent by email every week. It's short, easy to read, and includes "clips" designed to keep members connected to the latest information about Guild publications, surveys & studies, and learning events.

eLearning Insider
The *eLearning Insider* is sent by email every other week and includes current e-Learning industry news, excerpts from Journal articles, highlights from Guild surveys, e-Musings, and information on Guild matters.

Professional Development Through Active Engagement

In order to maintain a vital community and provide relevant information, The eLearning Guild seeks the active involvement of all Guild Members and Guild Associates. Consider these ways to engage:

Speak at Guild Events: Members and Associates are encouraged to submit presentation proposals for any and all Guild events.

Write for the Journal: *The eLearning Developers' Journal* articles are written by industry leaders and practitioners just like you who are working in this field every day.

Join the Program Advisory Committee: This committee works to craft the program content of all events produced by the Guild.

Join the Research Advisory Committee: This committee works to identify the topics for Guild surveys and studies, and also develops the survey instruments.

The eLearning Guild organizes a variety of industry events focused on participant learning: