

# THE **e**LEARNING DEVELOPERS' JOURNAL

Strategies and Techniques for Designers, Developers, and Managers of eLearning

## THIS WEEK — MANAGEMENT STRATEGIES

### Faster, Better, Cheaper: Improve Corporate e-Learning Content Management with MERLOT

BY JOANNE MOWAT

**F**aster — better — cheaper." Those three words have long expressed the dream of project managers, instructional designers, and corporate executives. While none of us will ever attain the ultimate goal of instant, perfect, and free e-Learning, if we look at the words as comparative adjectives, we can always do better on these measures than we are currently doing. In this article I'll introduce you to a system that is already supporting such improvement in the education field, and offer some thoughts on how it can work in both private enterprise and government institutions.

The Multimedia Educational Resource for Learning and Online Teaching (MERLOT) project is both a community of practice and an international cooperative of educational content available as an online, searchable collection of links to learning objects. (Please refer to sidebar 2, "A Learning Object Lexicon" for definitions of unfamiliar terms.") Participants use the MERLOT Web site (<http://www.merlot.org>) as a database of reliable resources and high quality materials. Instructional designers can quickly and easily incorporate these into a course or curriculum.

Secondarily, MERLOT is a place where members of the community of practice can contribute materials and receive recognition for their work.

MERLOT is not a content repository. Rather, MERLOT provides an easily searchable database of seven categories of links to content housed on the originator's site. The database provides links to thousands of learning resources from around the world. Since MERLOT does not house the actual materials, the organization is not responsible for the content or for the upkeep of the host sites.

*If there is one constant in the life of the e-Learning professional, it is the search for better methods that will reduce costs and speed up development. Unknown to many in business and government, a system named MERLOT has been delivering these results to designers in the education community. In this article, a skilled e-Learning producer explains the system and outlines the keys to making it work in your organization. This system may be the answer to your questions about using learning objects successfully!*

A publication of



**Publisher** David Holcombe

**Editorial Director** Heidi Fisk  
**Editor** Bill Brandon

**Copy Editor** Charles Holcombe

**Design Director** Nancy Marland

**The eLearning Guild™ Advisory Board**

Ruth Clark, Conrad Gottfredson, Bill Horton,  
Bob Mosher, Eric Parks, Brenda Pfau,  
Marc Rosenberg, Allison Rossett, Lance Dublin

Copyright 2005. **The eLearning Developers' Journal™**.  
Compilation copyright by The eLearning Guild 2005. All  
rights reserved. Please contact **The eLearning Guild** for  
reprint permission.

**The eLearning Developers' Journal** is published weekly  
by **The eLearning Guild**, 525 College Avenue, Suite  
215, Santa Rosa, CA 95404. Phone: 707.566.8990.

**The Journal** is included as part of **Guild** membership.  
To join the **Guild** go to [www.eLearningGuild.com](http://www.eLearningGuild.com).

**The eLearning Developers' Journal™** is designed to serve as a catalyst for innovation and as a vehicle for the dissemination of new and practical strategies and techniques for e-Learning designers, developers and managers. The **Journal** is not intended to be the definitive authority. Rather, it is intended to be a medium through which e-Learning practitioners can share their knowledge, expertise and experience with others for the general betterment of all.

As in any profession, there are many different perspectives about the best strategies, techniques and tools one can employ to accomplish a specific objective. This **Journal** will share different perspectives and does not position any one as "the right way," but rather we position each article as "one of the right ways" for accomplishing a goal. We assume that readers will evaluate the merits of each article and use the ideas they contain in a manner appropriate for their specific situation.

The articles contained in the **Journal** are all written by people who are actively engaged in this profession — not by paid journalists or writers. Submissions are always welcome at any time, as are suggestions for articles and future topics. To learn more about how to submit articles and/or ideas, please visit:  
[www.eLearningGuild.com](http://www.eLearningGuild.com).



Today, only educational institutions use MERLOT. However MERLOT's standards, structures, and approaches can apply to and provide value in a corporate setting. A MERLOT-based approach will work outside of education and can provide an alternative to other enterprise-wide content management solutions.

The basis for much of the content here is in the References at the end of the article. I will not cite all of them individually, but each of the authors deserves credit for his or her contributions.

### **The need for reusable content**

I'd like to begin by asking two questions about the need for reusable content and for a database to manage such content. Can learning objects help corporations achieve operating efficiencies, increase product flexibility, reduce time to competence in performers, and increase a corporation's competitive advantage? If so, what is the best way to manage objects in a corporation?

### **The case for learning objects in corporations**

Knowledge leaves corporations every day, carried away in the minds of employees who retire, become redundant, or who make a career change. As Allison Rossett and Kendra Sheldon point out, knowledge "is being frittered away through carelessness and attrition." This drain helped identify the need for a better way to define, store, and use corporate knowledge — a way to identify, capture, and disseminate best practices to employees who need the information.

Learning objects are an efficient way to categorize, contextualize, and tag this knowledge and to make the knowledge accessible in a variety of training, documentation, reference, and support venues. As Ruth Colvin Clark explains, "Learning objects provide an effective way to improve knowledge capital in an organization."

It is expensive to store large amounts of content in traditional, hard-copy format, and storage itself consumes large amounts of space and time. To make matters worse, accessing specific information in hard-copy storage can be daunting.

Storage of learning objects is far less costly since large physical structures are not required. It is also much easier to access and display learning objects at a variety of points on a network. Learning object tags make maintenance, searching, and management simpler.

Corporations traditionally develop instructional content for single use, event-based

interventions. In the last few years the amount of corporate content created as reusable learning objects has grown for a number of reasons, including:

- Reducing the cost of learning development
- Ensuring message standardization (the same information is consistently presented)
- Enabling timely customization and personalization of learning to meet specific needs

Learning objects make it possible to customize content quickly, through their context-free and chunked design. The designer simply establishes the desired criteria and searches a database for the matching learning-object meta-tags.

The learning object concept has parallels in many well-established business practices. For example, manufacturing processes assemble stand-alone components into products. Stand-alone components provide flexibility and allow for rapid product creation and modification to respond to market demands. In fact, several manufacturers may use the same standardized stand-alone components in a variety of different products. This approach will also work with an asset such as corporate knowledge.

This is the purpose of learning object design. Designers can compile objects into many different learning sequences. Furthermore, performance support systems can use the component parts of those learning objects (the "assets" — images, text, audio files, etc.) to support employees with the exact procedure needed at any given moment. This supports a larger objective, the delivery of appropriate content to performers at the moment of need, in the format required, using the most available device (Web, mobile phone, PDA). Learning objects offer the potential to help develop new products and penetrate new markets more quickly, by leveraging content, personalizing learning and communication, and streamlining learning maintenance. Some organizations are already realizing this promise.

### **The need for a database**

As with academia, for shared resources to work in a corporation all those who are involved in a project must share a set of needs and problems that can be addressed most effectively through collaboration. Use of a common technology leverages investments made by each part of the organization, achieving greater benefit and reducing costs for the organization. The learning object database becomes a common tool for individual work groups to meet their content needs, giving each group back more than they have contributed.

For a collaborative database to work, corporate participants at every level will have to perceive that there is an equal participation and a fair share in decision-making. The database needs to be visible, accountable, and sustainable to build the level of trust required for the necessary level of participation, both in terms of submissions and in terms of use of objects.

Corporations that manage content often do so through a learning content management system (LCMS). These systems not only provide access to content but they also house the content, manage the learner interface with the content, and handle learner and learning administration activities. They are most often enterprise-wide applications that receive information feeds from the Corporation's human resource management system. LCMSs require significant funding both to purchase and to implement and, since they link to existing corporate systems, there can be security and integration issues which extend timelines, resource requirements, and cost. MERLOT, on the other hand, is a web site implementation. The Web site simply accesses a database of links, does not hold content, and does not manage learners or learning administration. As a result, a MERLOT-based approach to content management is faster, easier to scale, and requires fewer resources to implement and administer.

To determine whether MERLOT could effectively meet a medium to large-size corporation's needs, the challenges encountered with MERLOT in academia need to be considered and reviewed from the perspective of the corporation. I will review the challenges at the end of this article, after I briefly explain how MERLOT works. In addition, Sidebar 1, at right, offers a real example.

## How MERLOT works

MERLOT's creators made the basic assumption that thousands of colleges and universities cover the same content. This duplication needlessly consumes time, money, and resources. This assumption is equally valid in corporations where several departments or business units each create their own version of a course without being aware of materials already developed in other organization units.

MERLOT represents a form of market economy among universities based on the reuse of interoperable, accessible, and structurally sound learning content, so that the value of the content increases with every use. These learning objects are modular and nonconsumable. The owners of the content can sell the objects to an infinite number of institutions who then house them in their own

repositories as part of their own course offerings. Allowing objects to compete in the MERLOT market economy increases the availability of effective and functional learning content. It also increases the likelihood that authors are rewarded for the quality of their materials while protecting intellectual property rights.

Locating suitable learning materials for a specific topic or teaching point on the Web is difficult due to the unmanageable number of links and because evaluating search results takes time. Once designers locate and evaluate a potential exercise, document, or application, the next question is whether the

materials will function in the designers' technical environment. In response to these issues, MERLOT's structure and processes simplify access to content.

MERLOT's structure provides optimum access and flexibility while limiting the amount of central administration and responsibility for content maintenance. Designers can search for subject area, material type, technical formats, or primary audience. The system provides a list of resources, sorted so that peer-reviewed, highly rated items appear first. Content is open-source, public, and coded and tagged to work in AICC- and SCORM-com-

### SIDEBAR 1 *A case in point*

While writing this article, I had an opportunity to work with a government directorate implementing a MERLOT-like approach to content management. The client has several content developers; a high volume of content to create and manage; a need to reduce development time and increase consistency across learning products; and, significant on-going maintenance costs. Based on a feasibility study which proved the value of moving to a learning object design approach, the client investigated options for object storage and management. It soon became obvious that an LCMS would not be in the budget for many years so we considered other less complex and costly options.

The organization implemented a MERLOT-like approach in which their information technology support team created a database which serves two functions:

1. It allows content authors to use free-form fields and drop-down menus to assign tags to content files created in any Microsoft Office product
2. It supports keyword and tag-based searches through a database which return a list of matches and a link to the relevant content on the server.

While this solution is not readily scalable due the software used to create it, and due to directorate security issues, it more than meets the short and medium term needs of the instructional design team. This simple, MERLOT-like solution lets them tag, store, easily identify, and retrieve content while leaving control of the content with the originator.

The screenshot shows the MERLOT Learning Resource Detail View for 'The Internet Picture Dictionary'. The page has a navigation bar with links for Home, Communities, Browse Materials, Contribute Material, Member Directory, and Help. Below the navigation bar, there are tabs for Local View, Peer Reviews (1), Member Comments (0), Add, and Assignments (0), Add. The main content area displays the title 'The Internet Picture Dictionary' and a small image of a green chalkboard. To the right of the image, there are fields for Average Rating, Type (Reference Material), Location (http://www.p3dictionary.com), Primary Subject Category (Languages/World Languages/Multilingual Resources), and Author (p3dictionary.com). Below these fields, there is a description of the resource, submitted by Margarita Espinoza Hodge, and technical details such as Primary Audience, Technical Format, Language(s), Cost Involved with Use, and Copyright and Other Restrictions.

**Figure 1** MERLOT Learning Resource Detail View Reproduced with permission from the MERLOT repository at <http://www.merlot.org/artifact/ArtifactDetail.po?oid=101000000000025300> (September, 2004)

pliant learning management systems.

Selecting a link in the MERLOT database opens an information page on the resource. (See Figure 1 on page 3.) This page provides user comments, peer reviews, assignments, and any ratings available for the resource. Other details include information on copyright restrictions, the target audience, and the format of the digital resource. MERLOT also checks the host site to see if there are any licensing regulations or costs associated with the use of the resource. The resources are not all free, nor are they all free of restrictions. However, MERLOT is not responsible for the collection of fees or the policing of restrictions. Responsibility for content management remains with the originator, to limit the administrative burden on the central organization.

Membership in MERLOT requires only the completion of an online form available on the Web site. Membership is free and anyone, whether a member or not, may access the resources. However, only members can contribute resources, search the networking

directory, post comments, and create personal collections of resources. Interestingly, members can add content created by others. When someone other than the author adds content, the system advises the resource owner by email.

The MERLOT links connect to content designed and packaged as learning objects: chunks of context-free learning facilitating the reuse of content across many situations for different purposes. Learning objects are a cost-effective way to design learning or to include alternate explanations, activities, and examples in classroom based or e-Learning courses. By only linking to learning objects, MERLOT is ensuring that, by definition, materials will be reusable and transportable, and chunked and designed for ease of reuse.

## Challenges

In any system that supports collaboration and sharing across different (and sometimes competing) organizations, there will be challenges to efficient functioning and even to survival of the system. MERLOT is no differ-

ent. In fact, there are four important challenges that any organization must keep in mind. I will summarize these challenges here, describe how MERLOT meets them, and suggest some methods that may be useful in the corporate setting. Table 1, at left, compares the four challenges and suggests how to address each.

### Challenge One: Ensuring content quality

It is important to ensure the quality of materials linked from MERLOT, in the same way that scholarly journals closely control the quality of articles they publish in order to establish and maintain credibility. John Nesbit, Karen Belfer, and John Vargo contend that establishing learning object validity through third-party evaluations is key to promoting reuse and increasing the efficacy of searches.

To address this challenge, MERLOT established a peer review process in which qualified faculty, sitting on panels organized by related disciplines, evaluate contributions, against published standards. The process is transparent: identities of the reviewers are known and the reviews are posted. Each Disciplinary Community has an editorial review board responsible for developing evaluation standards and conducting peer reviews of materials for that discipline. There is also a Discipline Editors' Council that oversees the activities of the Disciplinary Communities.

The discipline-based processes used in traditional scholarship and research provide the model for MERLOT's peer review process. The process seeks to ensure that materials accessible through MERLOT are contextually accurate, pedagogically sound, and technically easy to use. Panels rate materials on a scale of 1 to 5 in each of these three categories. "This nuanced three-pronged approach to rating materials is invaluable when it comes to choosing materials for a concrete learning situation in the real world, where conditions such as user computer literacy or bandwidth limitations can vary considerably," according to Barbara Knauff. Over 90% of the peer reviewers use the MERLOT rating.

Unfortunately, to date only a small number of the available materials have been peer reviewed. Trade offs between the volume of materials reviewed and evaluation quality have been inevitable. Nesbit, Belfer, and Vargo point out that, "A costly model that returns highly accurate evaluations is of little use to the individual user if it can only be applied to a small fraction of a collection."

**TABLE 1** Comparing four challenges

Challenge	How MERLOT Addresses the Challenge	How Corporations Might Address the Challenge
Ensuring Content Quality	Peer review committees organized by discipline with established review standards and a governing board.	Establish a process whereby a panel of stakeholders assigned by participating units evaluate all learning objects.
Sponsorship and Funding	MERLOT is a partnership of over 20 systems and institutions of higher education, each of which provides funding and resources based on its level of participation.	There are several realistic funding models, each of which requires support and funding at the executive level. Selection of a funding model would depend on the corporate culture, legal structure, and financial requirements of an organization.
Sustaining Participation	Not successfully addressed by MERLOT. Many individual members of MERLOT do not return to the site after their initial visit. Of those who do return only a few access materials and post reviews. If MERLOT is to continue to be viable This challenge must be addressed.	Participation would be engendered and maintained through the quality of the available content, the ease of access, the flexibility, and the reduction in time and resources to create learning. Content sharing would be encouraged by allowing originating units to retain control of their own content. Corporate-wide recognition and potential cost-recovery could be provided to units contributing the most widely used, or the highest quality, objects.
Administration	Handled by California State University which contributes the management, planning, and operation of processes and tools. As the administrative and coordination burden increases this level of commitment by the founding member of the community may not be sustainable.	Administration is closely linked with sponsorship and funding. Most likely either the human resources or information technology group centrally manages it.

While the MERLOT team has streamlined the peer review process, each review still takes considerable time and effort.

MERLOT's peer review process has a second purpose: It serves as a mechanism to recognize contributors who are developing high quality materials. For example, the department heads of Faculty whose work is of the highest quality receive notices. In addition, each Editorial Board selects one peer-reviewed resource in its discipline to receive the MERLOT Classics award. The Editor's Council reviews recipients of the Classics awards and designate those who are to receive MERLOT's highest honor, the MERLOT Editor's Choice Award.

Peer review is as critical for corporate knowledge management and learning objects as it is for educational ones. Object consistency, technical viability, and relevance need to be established and maintained if the database is to provide value to the corporation. Mirroring academia, corporations could establish a process whereby a panel of stakeholders would evaluate all submitted learning objects. This would require panel participation by each organizational unit involved in the initiative. Panel members could be learning or knowledge professionals or experts in the line of business.

Nesbit, Belfer, and Vargo recommend a two-cycle review process in which evaluators first independently evaluate the submission and then justify their assessments under the management of a moderator. The choice of a moderator could be problematic since the organizational unit contributing this resource would be losing a significant number of person days per year from their group. In addition, the moderator would need to be credible and acceptable to all participating areas in the corporation.

### **Challenge Two: Sponsorship and funding**

Sustaining MERLOT takes significant funding. In 2002 MERLOT realized total revenues (from grants, partner fees and contributions, and conference proceeds) of \$3,391,000 USD. Coincidentally 2002 also saw total expenditures of \$3,391,000 USD which, since MERLOT is a non-profit organization, is entirely appropriate.

"A universal issue ... is how to acquire funding and/or revenue to sustain the organization beyond initial project status," according to Albert Darimont. MERLOT overcame this challenge by structuring the community of practice as a partnership of over twenty institutions of higher education. Partnership takes one of three forms: Institutional

Partner, Campus Member, and Sustaining Partners, each of which provides a level of support. Institutional partners contribute \$25,000 USD per year along with in-kind contributions to support six to eight faculty members as peer reviewers. The commitment to support peer review amounts to approximately a 25% reduction in workload at the sponsoring institution. Campus members contribute \$6,500 USD per year. While this level opens the door for some smaller universities, colleges, and high schools to participate, the cost is still prohibitive for many educational institutions. Lastly, sustaining partners contribute \$50,000 USD per year.

In a corporation, sponsorship has two intertwined aspects: executive support and funding. Darimont suggests several possible funding models for corporations. I will discuss three of these. Each of the three models requires support at the executive level. Each of the models could realistically apply to a corporate implementation of a MERLOT-based approach to learning object management. Selection of a funding model would depend on the corporate culture, legal structure, and financial requirements of an organization.

### **The subsidized model**

In the subsidized model, the organization as a whole funds the infrastructure, administration, and initial work to establish schema, content standards, and templates.

Organizational units (departments, functions, etc.) have access to these tools. All content accessed through the Web site links is available to anyone in the corporation. A significant side benefit of this model would be the standardization of approach and content consistency across the organization.

Standardization would ensure transportability, a consistent degree of granularity, and the availability of content for reuse across organizational units. An issue with this model might be sustaining sponsorship and funding commitments. Would the management and on-going administration of the Web site and database remain a corporate priority as markets and organizational leadership change?

### **The pay-per-use model**

In another model, pay-per-use, the organization is still responsible for establishing and administering the Web site and database but each organizational unit would pay a fee. Considering this model in light of how MERLOT handles funding, it becomes apparent that each organizational unit could be charged a fee for placing objects in the repository or for using objects from the repository, thus allowing the repository to operate as a profit center with revenues being used

to sustain its continuous funding. While pay-per-use models require a system or process to levy and collect fees, revenues could cover the cost of such a system. A pay-per-use approach could also serve to increase the value placed on the objects and curtail flooding of the Web site and database with unnecessary or poorly designed objects. A potential issue with pay-per-use is that it makes interacting with the content an operating expense: an overt cost. When budgets are constrained would organization units opt to use internal resources to create learning, even if materials already exist, since employee time is a sunk and static cost?

### **The member organization fees model**

The third model, member organization fees, is the one closest to the MERLOT model. In this model organizational units that want to participate pay an annual fee. This fee allows for cost recovery and provides a stable source of revenue to cover administration and maintenance. Under this model the Web site and database would be self-funding or, depending on the annual fee, operate as a profit center.

### **Challenge Three: Sustaining participation**

Member participation is critical to the success of sites such as MERLOT which, philosophically and technically, are based on a community of practice. Unfortunately, many individual members of MERLOT do not return to the site after their initial visit. Of those who do return only a few access materials and post reviews.

In order for a content management Web site to flourish in a corporation, appropriate and technically viable content must be contributed, reviewed, and used. The MERLOT approach could eliminate one of the barriers to content sharing often found in corporations. But while working with client organizations, the author has observed a high degree of reluctance to share courses, lessons, or even job aids with other units in the same organization. Originating units express a reluctance to lose control of the content and to allow others to use what they have paid for (investment of time and resources) with no benefits to the originator. Using the MERLOT approach each corporate unit would contribute links to objects which remain housed on the originating unit's Web real estate. Content remains under the control of the originator who also retains the responsibility for content maintenance. Object usage would be tracked and corporate-wide recognition given to units contributing the most widely used, or the highest quality, objects. Depending on the

funding structure, organizations that implement pay-per-use would generate funds shareable with originating units. As was seen in the educational context, the quality and quantity of available objects, along with the veracity of the review process, will influence continued participation in organizations over time.

### Challenge Four: Administration

California State University handles the administrative and coordination functions required to support MERLOT. It contributes the management, planning, and operation of processes and tools. As membership and participation in MERLOT increases so does the administrative burden. James Rutledge says, "It is recognized that the scope of coordination activities and the requirements for sustaining MERLOT is rapidly increasing, and a new, neutral coordinating organization needs to be established."

Within a corporation, administration should be closely linked with sponsorship and funding and be centrally managed. As with other enterprise applications such as SAP, a knowledge management or learning content database would likely be controlled and managed by the information technology group responsible for system standards, protocols, access,

and standardized corporate platforms. Conversely a corporation could place the control and management of a learning content Web site and database under the control of the human resources or knowledge management function, with emphasis on the standards and controls required for clear, appropriate, and reusable content creation, management, and dissemination.

### Conclusion

The MERLOT approach to learning object contribution, review, management, and dissemination is a viable alternative for many corporations. MERLOT represents an approach to content management that does not require a major capital investment in an enterprise-wide learning content management system. Nor does MERLOT require centralization of learning and knowledge objects under one locus of control. This flexible approach allows for centralized sponsorship, funding, and administration while maintaining the decentralization of content development and maintenance. This flexibility may also decrease resistance to resource sharing between organizational units by allowing each unit to retain control of their intellectual capital. Since MERLOT is, from a technical per-

spective, a Web-accessed database of links to objects, it is possible to avoid the application integration issues that plague LCMS implementations.

Under this model each organizational unit would access objects to integrate into their learning pieces. They would not need to reach cross-unit agreements on topics, lessons, or courses, only on templates to provide some consistency to those accessing the end-product: the learning. Agreement on, and creation of, instructional design and technical development standards, required schemas, and a peer review process will be a challenge no matter what approach is taken to corporate-wide content management. 

### References

References related to MERLOT are almost exclusively from educational sources since there appears to be little or no work on-going which explores the application of this approach to corporations. The MERLOT references cited are those closest to the project (for example the MERLOT Web site) and those writers most closely involved in the project or most often cited by those involved in the project.  
Anonymous. (2003). *MERLOT: The educa-*

## e-Learning for e-Learning Professionals...

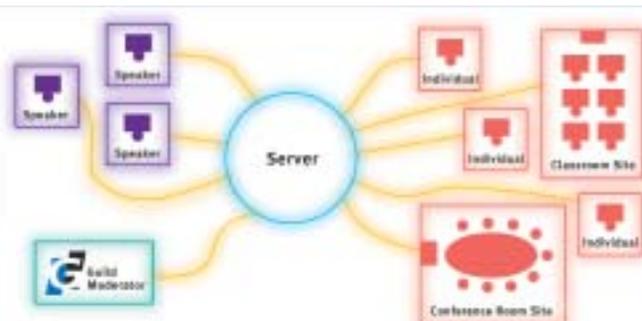
# The eLearning Guild's ONLINE FORUM™ SERIES

The eLearning Guild has created *The Guild Online Forum Series*, a new series of online events that will be held throughout 2005. You can register to participate as an individual or as a group in a one-day "virtual conference" every month that includes four highly interactive seventy-five minute sessions designed to explore a specific topic.

### Here's how the Online Forums work:

#### Individual or Site Registration:

*Participate as an individual or you can pay a site fee, set up your meeting room, and have your e-Learning team participate in an Online Forum as a group!*



*Here's a brief description of the next Online Forum in the series...*

**AUGUST 25, 2005**

### Effective e-Learning Project Management

In many ways managing an e-Learning project is very different from managing a traditional training development project. This Online Forum will look at what the differences and similarities are. You will learn how an e-Learning project is structured, what the key milestones are, how to track and report the progress of your project, how to manage multiple projects, and what skills an effective e-Learning project manager needs.

**Target Audience:** *Managers, supervisors, project managers and others who need to learn what it takes to run an effective and efficient e-Learning project.*

*To learn more about each upcoming Online Forum and to register, go to:*  
**[www.eLearningGuild.com](http://www.eLearningGuild.com)**

- tor's Google. BizEd 2 (6), 52-54.
- Bratina, Tuiren A., Hayes, Darrin, and Blumsack, Steven L. (2002). *Preparing teachers to use learning objects*. Faculty and Staff Development. Retrieved October 6, 2004, from <http://ts.mivu.org/default.asp?show=article&id=961>
- Bunter, Donna J. and Ladner, Betty. (2002). *MERLOT Multimedia educational resource for learning and online teaching*. Retrieved October 3, 2004, from [http://www.library.uncc.edu/files/9/merlotdemo\\_files/frame.htm](http://www.library.uncc.edu/files/9/merlotdemo_files/frame.htm)
- Cafolla, R. (2002). *Project Merlot: Bringing peer review to Web-based educational resources*. Society for Information Technology and Teacher Education International Conference 2002(1), 614-618. Retrieved October 1, 2004, from <http://dl.aace.org/10843>
- Darimont, Albert W. (2002). *Environmental scan of pricing models for online content, Report II: Business models for object repositories*. Retrieved October 6, 2004, from [http://www.edusource.ca/craw/RPT\\_Pricing\\_Model201.htm](http://www.edusource.ca/craw/RPT_Pricing_Model201.htm)
- Degen, Brian. (2001). *Capitalizing on the learning object economy*. [Retrieved October 1, 2004, from <http://www.learningobjectsnetwork.com/>
- Downes, Stephen. (2000). *Learning objects*. Retrieved October 2, 2004, from [http://www.newstrolls.com/news/dev/downes/column000523\\_1.htm](http://www.newstrolls.com/news/dev/downes/column000523_1.htm)
- Friesen, Norm. (2003). *Three objections to learning objects*. Retrieved October 1, 2004, from <http://phenom.educ.ualberta.ca/~nfriesen/>
- Hanley, Gerard L. (2001). *MERLOT: Tool for CLOE*. Retrieved October 6, 2004, from <http://it3.uwaterloo.ca/CLOE/1>
- Hanley, Gerard. (2003). *Online resource: MERLOT: Peer-to-peer pedagogy*. Syllabus. Retrieved October 2, 2004, from <http://www.syllabus.com/article.asp?id=7780>
- Hanley, Gerry. (2003). *Sharing learning objects: Serving MERLOT to higher education*. Retrieved September 20, 2004, from <http://tast.merlot.org/>
- Hobbs, Samantha. (2000). *Learning Objects and Construction Components*. Educational Technology & Society, 3(2).
- Knauff, Barbara. (2001). *MERLOT promises efficiency and quality control*. Spotlights. Retrieved September 20, 2004, from <http://www.dartmouth.edu/~Webteach/spotlights/merlot.html>
- Malloy, T.E. and Hanley, G.L. (2001). *MERLOT: A faculty-focused Web site of educational resources*. Behavior Research

## Do you have an interesting strategy or technique to share?

Get It Published in...

# THE **e**LEARNING DEVELOPERS' JOURNAL™

This publication is by the people, for the people.

That means it's written by YOU the readers and members of **The eLearning Guild!** We encourage you to submit articles for publication in the **Journal**.

Even if you have not been published before, we encourage you to submit a query if you have a great idea, technique, case study or practice to share with your peers in the e-Learning community. If your topic idea for an article is selected by the editors, you will be asked to submit a complete article on that topic. Don't worry if you have limited experience writing for publication. Our team of editors will work with you to polish your article and get it ready for publication in the **Journal**.

By sharing your expertise with the readers of the **Journal**, you not only add to the collective knowledge of the e-Learning community, you also gain the recognition of your peers in the industry and your organization.

### How to Submit a Query

If you have an idea for an article, send a plain-text email to our editor, Bill Brandon, at [bbrandon@eLearningGuild.com](mailto:bbrandon@eLearningGuild.com), with the following information in the body of the email:

- **A draft of the first paragraph**, written to grab the reader's attention and identify the problem or issue that will be addressed.
- **A short outline of your main points** addressing the problem or resolving the issue. This could be another paragraph or it could be a bulleted list.
- **One paragraph on your background or current position** that makes you the one to tell this story.
- **A working title** for the article.
- **Your contact information:** name, job title, company, phone, email. This information is to be for the writer of the article. We are unable to accept queries from agents, public relations firms, or other third parties.

All of this information should fit on one page. If the topic fits our editorial plan, Bill will contact you to schedule the manuscript deadline and the publication date, and to work out any other details.

Refer to [www.eLearningGuild.com](http://www.eLearningGuild.com) for Author Guidelines.

- Methods Instruments & Computers, 33, 274-276.
- MERLOT. (2002). *MERLOT annual report*. Retrieved September 20, 2004, from [http://taste.merlot.org/documents/annual\\_reports/MERLOT-annual\\_report-0102.pdf](http://taste.merlot.org/documents/annual_reports/MERLOT-annual_report-0102.pdf)
- MERLOT. (2003). *2003-2004 Campus partner application for the freshman year participation in MERLOT*. Retrieved September 20, 2004, from [http://conference.merlot.org/documents/applications/MERLOT-campus\\_freshman-0306b.pdf](http://conference.merlot.org/documents/applications/MERLOT-campus_freshman-0306b.pdf)
- MERLOT. (2004). *MERLOT Web site*. Retrieved September 20, 2004, from <http://www.merlot.org>
- Monroe, Wanda. (2000). *Online instructional materials offered through new partnership*. The University Record. Retrieved September 21, 2004, from [http://www.umich.edu/~urecord/0001/Sep05\\_00/11.htm](http://www.umich.edu/~urecord/0001/Sep05_00/11.htm)
- Nash, Susan Smith. (2004). *Learning object production and implementation: UT Telecampus*. E-Learning Queen. Retrieved September 21, 2004, from <http://elearn-queen.blogspot.com/2004/09/learning-object-production-and.html>
- Nesbit, John, Belfer, Karen, and Vargo, John. (2002). *A convergent participation model for evaluation of learning objects*. Canadian Journal of Learning and Technology 28(3). Retrieved October 3, 2004, from [http://www.cjlt.ca/content/vol28.3/nesbit\\_et\\_al.html](http://www.cjlt.ca/content/vol28.3/nesbit_et_al.html)
- O'Dell, Carla and Grayson, C. Jackson Jr. (1998). *If only we knew what we know*. New York: The Free Press.
- Richards, Griff. (2002). Editorial: *The challenges of the learning object paradigm*. Canadian Journal of Learning and Technology 28(3). Retrieved October 3, 2004, from <http://www.cjlt.ca/content/vol28.3/editorial.html>
- Roberts, Joni R., and Drost, Carol A. (2003). *Multimedia educational resource for learning and online teaching (MERLOT)*. College and Research Libraries News 64 (6).
- Robson, Robby. (2001). *All about learning objects*. Retrieved September 16, 2004, from <http://www.eduworks.com/LOTT/tutorial/learningobjects.html>
- Rosenberg, M.J. (2001). *e-Learning: Strategies for Delivering Knowledge in the Digital Age*. New York: McGraw-Hill.
- Rosset, Allison, and Sheldon, Kendra. (2002). *How can we use knowledge management? In The ASTD e-learning handbook*. New York: McGraw-Hill.
- Rutledge, James. (2001). *MERLOT Multimedia educational resource for learning and online teaching*. Retrieved September 16, 2004, from <http://www.spcollege.edu/central/maa/proceedings/2001/rutledge.pdf>
- Smith, Mark. (2003). *Multimedia educational resource for learning and online teaching (MERLOT)*. Retrieved September 20, 2004, from <http://www.bowdoin.edu/~samato/IRA/reviews/issues/jun03/merlot.html>
- The COHERE Group. (2002). *The learning object economy: Implications for developing faculty expertise*. Canadian Journal of Learning and Technology 28(3). Retrieved September 20, 2004, from <http://www.cjlt.ca/content/vol28.3/cohere.html>
- Ward, Lynn. (2003). *MERLOT overview*. IHETS. Retrieved September 20, 2004, from <http://old.ihets.org/learntech/merlot/index.html>
- Weech, Terry L. (2002). *MERLOT: Multimedia educational resource for learning and online teaching*. Retrieved September 20, 2004, from <http://ecommerce.lebw.drexel.edu/eli2002Proceedings/papers/Weech145MERLO.pdf>
- Werbach, Kevin. (May-June, 2000). *Syndication: The emerging model for business in the internet era*. Harvard Business Review.
- Wiley, D. A. (2000). *Connecting learning objects to instructional design theory: A definition, a metaphor, and a taxonomy*. In D.A. Wiley (Ed.), *The instructional use of learning objects* (pp.1-35). Retrieved January 4, 2004, from <http://www.reusability.org/read/chapters/wiley.doc>
- Young, Jeffrey R. (2000). *Merlot project brings peer review to Web materials for teaching*. The Chronicle of Higher Education. Retrieved October 4, 2004, from <http://chronicle.com/free/2000/06/2000060101u.htm>

## SIDEBAR 2 *A learning object lexicon*

- AICC:** Aviation Industry CBT (Computer-Based Training) Committee (AICC). An international association of technology-based training professionals that has established guidelines for the aviation industry related to the development, delivery, and evaluation of e-Learning.
- Content repository:** A database that stores and manages pieces of information or learning that has been created using XML, and labeled with a set of meta-tags.
- e-Learning:** Learning delivered via internet technology.
- Knowledge objects:** Context independent, transportable, and reusable pieces of information (not learning) which are digitally managed and delivered.
- Learning Content Management System (LCMS):** An application that supports the creation, storage, assembly, selection, and delivery of content to the learner.
- Learning objects:** Digitally managed and delivered context independent, transportable, and reusable pieces of instruction.
- Open-source:** Computer programs for which the source code is publicly available.
- Performance support systems:** An on-line repository of task-related materials that provide performers with the exact information or tools required.
- SCORM:** Sharable Courseware Object Reference Model. SCORM is a set of technical standards that allow web-based learning systems to find, import, share, reuse, and export content in a way that can be used across systems.
- Tagged:** Provided with digital descriptors of their content and use.

## Author Biography

Joanne Mowat, President of The Herridge Group Inc. ([www.herridgegroup.com](http://www.herridgegroup.com)) has over seventeen years of experience in the design, development, delivery, and management of learning and performance interventions. She specializes in learning object design, e-Learning, and integrated performance support systems.

Joanne is a regular presenter at the International Society for Performance Improvement, On-Line Learning/Performance Support, The eLearning Guild, and North American Simulation and Gaming Association conferences. She holds a Masters degree in Educational Technology from Concordia University, a Management Certificate, and a Bachelors Degree in Geography from McGill University, and is currently a Doctoral candidate (ABD) in Design of On-line Learning at Capella University in Minnesota.

Contact Joanne by phone at 416-694-2510 or by email at [herridge@herridge.ca](mailto:herridge@herridge.ca)

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

# About the Guild



## 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 18,000 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 industry's 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 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.

### eLearning Insider

The *eLearning Insider* is sent by email every week to Guild Members and Associates and includes current e-Learning industry news, excerpts from Journal articles, highlights from Guild surveys, e-Musings, and information on Guild matters. It's short, easy to read, and includes access to industry news, activities, and sponsors that are important to you.

### 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:

#### Online events...



Thursdays



July 27-29, 2005



October 5-7, 2005



TBD

#### Face-to-face events...



November 15-18, 2005



April 18 - 21, 2006



2006 dates/  
location TBD