

# MERLOT: Multimedia Educational Resource for Learning and Online Teaching

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## Abstract

The paper discusses the Multimedia Educational Resource for Learning and Online Teaching (MERLOT) project <http://www.merlot.org>, which is designed to provide faculty with a source for peer evaluations of online learning modules in specified disciplines. The various aspects of the web based MERLOT are explained and suggestions are made as to how librarians and educators can use MERLOT in their work. Special emphasis will be placed on how librarians can utilize MERLOT to educate faculty on access and assessment of online learning modules and integrate library resources into the curriculum in academic institutions.

**Keywords:** Online Teaching, Evaluation of learning modules, Review on Teaching Materials, Library-College Concept, Library Use Instruction.

## Introduction

The role of libraries in academic institutions has been rapidly changing during the past decade. With more emphasis on using the internet for retrieving information and presenting courses over the web in distance education courses, the academic library has been challenged to keep up with the new developments. Digital collections of journals and books have also changed the traditional role of the librarian as an information mediator and facilitator. Questions have been raised as to whether libraries and librarians will continue to have a role in the digital world of information. It is the assumption of this author that libraries and librarians will continue to have a significant role in assuring access to information. But in the course of the developments in providing information electronically, changes will occur. One such change may be in the relationship between faculty involved with developing course learning module for delivery on the web and the librarian as a partner in coordinating and assessing access to new information on innovative web based learning modules. It may be time for librarians and faculty to revisit a concept developed many years ago, that of the "Library-College" concept. A database called MERLOT may be an appropriate vehicle on which to base the renewal of this concept.

## What is MERLOT?

MERLOT stands for the Multimedia Educational Resource for Learning and Online Teaching database.

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This is a database of instructional materials organized by subject disciplines intended for use of faculty and administrators in academic institutions. (see <http://www.merlot.org>). MERLOT is a place for teachers and learners worldwide to join an academic discipline-based online community where they can:

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- Find learning materials for teaching and learning
- Find learning materials that other educators have evaluated
- Find learning materials that have assignments attached
- Find learning materials that users have commented on
- Add learning materials
- Add assignments to learning materials
- Add user comments to learning materials
- Discuss teaching and learning issues with colleagues located anywhere
- Collaborate with colleagues by creating and sharing materials, comments and reviews

MERLOT is the collection of learning materials and a community of people. The collection of learning materials is constantly growing. To ensure high quality items, these materials are reviewed by faculty who teach in that discipline, using review techniques based on the peer review of scholarly materials model. MERLOT also includes examples of assignments related to the learning materials and the opportunity for users of the learning materials to make comments. As faculty use the learning materials, they can add their successful assignments, linking them to the learning materials to share "what works" with the MERLOT community. The User Comments are similar to those found on web pages of online bookstores when readers are invited to post their own reviews of the materials available for purchase.

The MERLOT database, however, is not selling anything commercially. The database is supported by a consortia of over 20 partners. The purpose of the database is to provide a means of evaluating the quality of instructional materials developed for use in teaching in institutions of higher education. It also serves as a repository of examples of the best practices in online instructional units. Online and web based instructional materials are solicited for review by peers in the subject field and the instructional materials and the reviews are added to the database, which is available on the internet.

The MERLOT database can provide both faculty and administrators in institutions of higher education (from community colleges to four year and graduate degree granting institutions) with a resource of instructional materials for adaptation in specific classes, as well as a qualitative assessment of the quality of the instructional materials developed. The quality assessment is modeled on the type of peer evaluation that scholarly research papers receive when submitted to referred journals in the various disciplines.

In January 2002, MERLOT consisted of 22 institutional partners representing over 1,400 institutions and over 350,000 faculty. For 2001-2002, thirteen disciplines were selected for peer reviews. (Biology, Business, Chemistry, Engineering, Health Science, History, Information Technology, Mathematics, Music, Physics, Psychology, Teacher Education, and World Languages).

### ***What is a "PEER REVIEW" in MERLOT?***

A "peer review" is an evaluation of the QUALITY OF CONTENT, EASE OF USE, and POTENTIAL EFFECTIVENESS of a learning material ("a learning module"). The evaluation is communicated in a report which summarizes the positive and negative features of the learning materials. The evaluation also awards "stars" to provide a relative evaluation among the learning materials, with five stars being the highest rating. When a module is peer reviewed in MERLOT, the overall rating (1 to 5 stars) is displayed next to the module title. MERLOT users can click on the overall rating for more details about the evaluation. Peer reviews are considered to be one of the most important features of MERLOT.

## ***Why are PEER REVIEWS so Important to MERLOT?***

Peer reviews are the means through which MERLOT users can quickly identify modules of high quality. PEER REVIEWED modules are listed first on MERLOT, with the highest rated items listed first. Authors are recognized for their scholarly contributions to teaching when their module/s are PEER REVIEWED. Additionally, reviewers also receive recognition for their contributions toward developing resources that benefit their discipline.

## ***Who Conducts Peer Reviews?***

MERLOT has an Editorial Board for each of its thirteen discipline communities. The Editorial Board has two Chief Co-Editors and eight to fifteen members. Each peer review is conducted by at least two reviewers. Reviewers are qualified faculty from institutions of higher education that are partners with MERLOT. All reviews are coordinated by a Chief Co-Editor and members of the discipline community's Editorial Review Board. The Editorial Review Boards have developed evaluation standards and processes for their own MERLOT Discipline Communities. The Board Members also recommend modules for review and conduct PEER REVIEWS. The Board is responsible for selecting and coordinating reviews with External Reviewers who can participate in the PEER REVIEW process.

## ***How is the Editorial Board selected?***

The systems and institutions of higher education which provide funds to MERLOT also support members of the Editorial Review Board through a variety of methods (i.e. course release, stipends, graduate assistance, recognition). Co-Editors and the Editorial Review Board members are selected on the basis of qualifications including expertise in the discipline, excellence in teaching, experience with technology, participation in professional organizations, and willingness to serve. Board members also participate in training, workshops, and on-going support provided by the MERLOT Administrative Team.

## ***What is an External Reviewer?***

In order to increase the number of modules that are peer reviewed and to ensure adequate coverage of all disciplines, the members of the Editorial Review Board can invite an External reviewer to participate in the review process. External reviewers are qualified faculty from institutions of higher education who:

- Are selected by the editorial board and approved by the Co-Editors.
- Can come from any institution of higher education (they do not need to be MERLOT sponsors).
- Will be partnered with and mentored by editorial board members for their first reviews.

## ***How does One Become an External Reviewer?***

1. Chief Co-Editors and Editorial Board Members can recruit potential External Reviewers. In addition, persons interested in becoming an external reviewer can also apply without being personally recruited.
2. Applicant creates a MERLOT MEMBER PROFILE that contains a narrative summarizing their discipline expertise, teaching excellence, use of technology in teaching, and connections with professional organizations. Applicant should select the subject/discipline areas that s/he is qualified to review.
3. Applicant emails Chief Co-Editor about her/his interest in being an External Reviewer
4. Chief Co-Editor(s) contacts applicant and provides applicants with information regarding the Editorial Review Boards evaluation standards and review processes.

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5. Chief Co-Editor(s) requests applicant to apply the MERLOT –Discipline Community evaluation standards to 2 or 3 different learning materials, write up reviews, and post reviews as USER COMMENTS. All contributors to USER COMMENTS are instructed to describe the methods they used to review the materials as well as evaluate the quality of content, potential effectiveness for teaching and learning, and the ease of using the technology (similar to the peer review criteria).
6. Chief Co-Editor or designated member of Editorial Board will review the applicant's MEMBER PROFILE, review the posted USER COMMENTS (which are linked to in MEMBER PROFILE), and discuss the peer review process with the applicant. Acceptance of the applicant as qualified and prepared to be an External Reviewer is the decision of the Chief Co-Editor(s).
7. If applicant becomes an external reviewer, the Chief Co-Editor will assign an experienced member of the Peer Review Panel to work with and mentor the external reviewer on the next peer reviews. Chief Co-Editor can also provide feedback to applicant to improve reviews so the reviews meet team standards.
8. Chief Co-Editor or the designated member of Editorial Board will define expectations for timely delivery of reviews. Communications with External Reviewers will occur via emails and telephone calls.
9. The External Reviewer will receive a letter of welcome as External Reviewer from the MERLOT Administration Team.

### ***How can MERLOT be used to Benefit Instruction?***

MERLOT can provide examples that faculty can adapt for their own classes as well as provide an evaluative source of peer assessment of learning units faculty submit to MERLOT for review, encouraging faculty to maintain and improve their instructional units and provide them with a reward for doing so.

### ***How can Librarians Play a Role in Expanding Access to MERLOT?***

Librarians can improve access to MERLOT by becoming involved with curriculum development in their institutions of higher education. Working with faculty on coordinated web based instructional modules:

- 1) start with workshops for faculty about 2/3ds of the way through the semester (term) when faculty are developing courses for the next academic terms. Identify MERLOT based modules that may be relevant to courses being taught and then assist faculty in accessing the modules
- 2) look at areas that need applications (subjects not currently covered by peer review) and engage the faculty in submitting instructional modules for possible review
- 3) check out criteria for promotion and tenure to be sure that peer review of instructional modules be included.

### ***The Library-College Concept***

The Library-College concept could be a basis for librarians to utilize MERLOT as a means of integrating library support into the teaching process. According to Michael Lorenzen, the library-college concept may have started as early as 1880 in an article by Justin Windsor, followed by papers by Louis Shores in 1935 and H. Branscomb in 1940. The library-college concept is based on the belief that that students should be taught in the library. Rather than lecturing to students, faculty and librarians would emphasize problem solving within a liberal arts curriculum. The library would be the laboratory where students would discover knowledge with the aid of the librarian and professor. (Lorenzen, 2002, Historical Overview of Active Learning section, para. 5)

Patricia Knapp published in 1966 the results of the Monteith project, an experiment in the library-college concept. Monteith College was an experimental college within Wayne State University. Under this ex-

periment, students learned largely through independent study and a concentration of instruction in the use of library resources. Knapp implemented a plan for integration of the use of the library into the curriculum by working with faculty to be sure that faculty conveyed the value of library use to students. (Worrell, 1996, para. 1)

With the publication of the results of the Monteith project, other colleges and universities started experimenting with the integration of librarians into instructional faculty teams with faculty and librarians involved in the planning for specific courses in the various disciplines. The University of Illinois at Springfield (then called Sangamon State University) adopted a model similar to that of Monteith College. Librarians were hired with the understanding that they would be assigned to specific faculty to develop instructional models that would integrate library resources into the instructional units taught to students. This model was pursued for several years until it was abandoned in the 1970s.

Another institution that adopted a form of the library-college model was Earlham College in Richmond, Indiana. Earlham still maintains many of the elements of the Monteith plan as outlined by Patricia Knapp in 1966. The following from the web page of Earlham College provided some confirmation of this method.

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#### "Instruction

The librarians actively promote course-integrated instruction with the College, Earlham School of Religion, and Bethany Seminary classes. We work with faculty to develop assignments and to make sure that we have appropriate and adequate resources to meet course objectives. Periodically the librarians conduct workshops for faculty on new information resources and research processes.

In our instruction program, librarians work with students and faculty to understand and provide the resources necessary for high-quality student research in all of our disciplinary areas. The program's ultimate goal is to develop liberally-educated students, capable of accessing and using information resources to inform their activities as citizens making a difference in our society. Our instruction program is part of Earlham's General Education program, and shares its goal of preparing students for life-long learning. Individual assignments and instruction are planned in the context of this overall program, providing students with experiences using increasingly sophisticated research tools and processes. Methods of evaluating information resources are also essential skills included in the program.

For each assignment, librarians design effective library instruction and teach students the appropriate research concepts, skills, tools, and means of evaluating resources. The diversity of course assignments creates a wide range of needs, from basic background information to extensive research. Instruction can include class sessions in the library, hands-on experience in the computer labs, work with small groups, individual consultations, and resource lists, both print and electronic, customized for each course.

A call or e-mail to any one of the librarians will put a faculty member in touch with the appropriate librarian." (Earlham College Libraries, 2001, Instruction Section, para. 1-4)

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Why spend time discussing the "Library-College" concept? With the emphasis on retrieving information from search engines on the internet and the focus on digital libraries, librarians are sometimes struggling to re-define their role in academic institutions. It is the proposal of this paper that by utilizing the MERLOT database to assist faculty in integrating innovative web based learning modules into their teaching, librarians can extend the basic premise of the "library-college" concept to include not only the integration of instruction in the use of the library into the college curriculum, but also the integration of the academic library into learning module development and evaluation in specific courses taught in a variety of disciplines.

If librarians monitor innovative learning modules in disciplines where they have an interest and some expertise, the library can become a partner in the instructional development activities of the faculty within their institution. Faculty, who may not have the time or inclination, to surf for new learning modules that might be applied to their courses will be more likely to appreciate the potential role of librarians and libraries in the instructional mission of their academic institution. As the faculty come to know and appreciate library staff as partners in course content development, the opportunity to further integrate the library and its resources into the curriculum of the institution becomes more likely. In addition, the possibility of faculty being encouraged to submit learning models in their discipline to MERLOT for review may lead to a greater recognition of teaching and curriculum development as a function that both librarians and faculty should be involved in, as they are now often involved in research related to scholarly publication. So just at the time when questions are being raised about the future of libraries and librarians in the electronic and digital world of information retrieval, MERLOT may provide an opportunity for librarians to re-define themselves as partners in the educational enterprise in higher education. Whether this happens will, of course, depend on the openness of librarians to work with faculty as partners in the curriculum development and in assessments of learning modules. The "library-college" concept provides a basis on which the integration of libraries in the instructional activities of academe might be extended. MERLOT provides a database that will help facilitate this integration as more instruction becomes web based and more faculty are called on to develop appropriate web based learning modules.

## **Conclusion: The Future of MERLOT**

Web Based Education appears to be here for good, both in the traditional classroom of the residential institution and the virtual classroom of distance education. But the future of MERLOT is not assured. As education institutions experience financial cuts and more emphasis is placed on providing additional revenues to support educational activities, cooperative non-profit consortia such as MERLOT may find ever greater challenges to continue the support of the database on what has been the volunteer support provided by the 22 organization and institutions that have funded it to date. Questions are being raised as to whether MERLOT can continue as an open access database. Some interest has been shown by commercial entities in purchasing MERLOT for possible marketing as a for profit enterprise selling the innovative learning modules reviewed. The current partners and MERLOT administration are working very hard to maintain MERLOT as an open access database. But more support will be needed. Currently MERLOT is primarily a Canadian and United States based database. Perhaps what is needed is more international involvement and support. As web based education becomes more international, there may be both a greater need and greater interest in supporting such a database worldwide. Questions of language and learning styles would have to be answered before the international expansion of MERLOT could take place. But the value of a single source for peer evaluation of web based learning modules seems to be self-evident. With the assistance of librarians in academic libraries around the world, the possibility of realizing the integration of library instruction into the curricular development of web based instruction in the future is clearly a possibility.

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## Biography

Terry L. Weech's professional positions have included Head of Government Documents, Illinois State Library; Research Associate, University of Illinois Library Research Center; and teaching positions at the University of Iowa, University of North Carolina, Chapel Hill, Emporia State University, and the University of Illinois. At the Graduate School of Library and Information Science, University of Illinois he has been Coordinator of Advanced Studies and Director of Development.

His research interests include collection development, library systems and networks, library administration, economics of information, measurement and evaluation of library services, and delivering library education via distance education on the Web. He has been active professionally at the state and national level in areas of intellectual freedom, access to government information, and library cooperation. He currently teaches courses dealing with reference, library cooperation, and the economics of information. He has worked with the Mortenson Center for International Librarianship at the University of Illinois in training of librarians and library educators from around the world and presented papers and conducted workshops in France, Germany, Hungary, Lithuania, Poland, Russia, Slovenia, and Sweden.