Would you like to analyze a Bach fugue, determine the optimum ecological conditions for a prairie, or possibly follow the travels of Lewis & Clark? There are some resources that just might do the trick in MERLOT, essentially an enormous compendium of learning materials, or what some might call "learning objects," comprising a body of basic teaching units that focus on problems or ideas in particular fields of study. MERLOT is an attempt to pull these resources together into a directory representing the full gamut of academic fields.

The acronym MERLOT, which stands for Multimedia Educational Resource for Learning and Online Teaching, is clever too, given its California origins and the "hint of cherry and spice" brought about by its oenophilic reference. I suppose CHARDONNAY or ZIN could have worked, but they don't have the formulaic 4-6 characters that a good acronym requires. At any rate, MERLOT has plenty of offerings ready for the table and some significant special offerings in the cuvée.

Originally funded in 1997 by an NSF initiative to develop authoring tools for higher education, MERLOT was developed and continues to be maintained by the California State University Center for Distributed Learning (CSU-CDL, http://www.cdl.edu), in partnership since 2000 with a consortium of notable institutions and societies of higher education, such as the University of North Carolina, the National Institute of Multimedia Education (NIME) Japan, the Carnegie Foundation for the Advancement of Teaching, and ARIADNE, to name a few. Corporate affiliates such as WebCT, Macromedia and Blackboard also participate.

MERLOT is intended to be "a continually growing catalog of online learning materials, peer reviews, learning assignments, and user comments," that faculty may use to supplement their teaching, organized by major areas of study and supported by "discipline communities." Individuals as well as organizations are able to join and contribute to MERLOT, and all materials are available for free, save for the administrative software locked away for contributing partners.

MERLOT offers an interesting technology infrastructure designed to coordinate both content and learning community management, the idea being that faculty and other educators can retrieve, submit and, most importantly, peer review materials that make up the repository ("About MERLOT Technology," http://taste.merlot.org/technology/).

The consortium also sponsors an annual conference, each with its own corresponding web site and online proceedings. This year's conference, "Engaging the Global Community," will take place July 25-28, 2005 in Nashville, Tennessee (http://conference.merlot.org/conference/2005/).

Learning objects are designed to act as educational building blocks that can be integrated into larger modules or
thematic units. To programmers these are analogous to snippets of code or applets that are found in numerous online code depositories with glorious "geekonyms" such as SourceForge and freshmeat. Here’s a typical description of a physics learning object found on freshmeat.net: "Molevolve is a library for running a genetic algorithm to model the 3-dimensional structures of peptide chains from amino-acid sequences." Those who pay attention to the syntax of things might call this an application, but the possibility of including it into a larger module maintains its learning object integrity. Ideally, learning objects should be format agnostic and somewhat interchangeable, but in practice this is not always so easy to accomplish.

The learning object idea is at the heart of MERLOT, but only a few materials designated as LOs are actually found in the overall MERLOT database. Rather, there are 11 primary "material types," including Simulation, Animation, Tutorial, Drill and Practice, Quiz/Test, Lecture/Presentation, Collection, Case Study, Reference Material, Learning Object Repository, Event or Announcement. MERLOT consists of seven major subject collections, specialized discipline community sites, peer review and assignment areas, and a series of hyperlinked "Highlights" and "Services," including RSS feeds and an innovative federated search. The basic subject collections are Arts, Business, Education, Humanities, Mathematics and Statistics, Science and Technology, and Social Sciences. Currently there are 12,400 materials, the largest collection being Science & Technology (4726). MERLOT Discipline Communities (http://www.merlot.org/home/Sites.po) are structured as mini-MERLOT sites, organized around specific fields, such as Music or Teaching & Technology. Each community has its own set of sub-categories.

Users have the ability to browse MERLOT by drilling down into each collection, or they can simply create a keyword search or a more advanced search using subject and sub-category, material type, or various other data points. One interesting point of access allows users to search by course management system compatibility, represented by WebCT, Blackboard and Desire2Learn.

The MERLOT Detail View for each entry includes basic author, title, URL and descriptive metadata, one or several appropriate subject categories, a material type, technical requirements for playback, and a link for adding the resource to one's personal collection. In addition, a series of menu tabs allows the user to look at peer reviews, add member comments of one's own, or add the resource to an assignments list.

One fun example of a multimedia installation in MERLOT is "Sala de Música," an exposition of Macromedia Flash-based musical performances by faculty and students of the Conservatorio de Música de Puerto Rico (http://www.cmpr.edu/expo/), including several teaching examples used in music classes. The site is a useful collection of musical performances and canon lessons, although it seems more like an audio promotional tool rather than a musicological web site.

As creative as “Sala de Música” is, it is not really a learning object by common definition, and it points to some basic inconsistencies in MERLOT that are due to the overall editorial review process rather than the strengths or weaknesses of individual entries. In general, many sites have not yet received a peer review, but by searching for MERLOT modules that received "5" ratings, one comes across some fully interactive "MERLOT Classics" or an "Editor's Choice."

For instance, "The Fugues of the Well-Tempered Clavier" offers a focused interactive analysis of most of these essential compositions by J.S. Bach. The score of each fugue moves forward in coordination with a piano soundtrack and a graphical analytical chart that the user can manipulate. Here, one can witness the shifting tonalities of each key, hearing and watching as subject and countersubject develop in successive sections. Fugue no. 2 in C minor is
mogrification was complete. Images, shopping, phonebooks, maps, directions, groups, directories and now legitimate research. Type, click, done.

I know, I know… there weren’t loads of full-text articles, some of the citations were dated, and we had seined the pond with a net full of holes. But, damn, I was finding real stuff. Start with www.findarticles.com, add Google Scholar and fold in noodletools.com or citation machine and we are pretty much out of here. The last one to leave, shut out the lights. Naturally, the listservs lit up. There was hubbub all around, protective and predictably party-line in nature. I knew the lyrics.

I know, I know… libraries are about learning and critical thinking and evaluating information. Libraries are about identifying reliable sources, making meaning and using information effectively. But, for the student carrying 18 units, with an ex who doesn’t make child support payments, a car that won’t pass next month’s smog inspection, a boss who expects overtime, Google Scholar looks much better than the convoluted system we offer them.

Don’t get me wrong. I still think we’ve got the goods, and we’ve got the big picture. What we don’t have is a level playing field.

On my way to class, one of the basic English 1 sections, I decided I’d be guilty of professional malpractice if I didn’t talk a little bit about Google Scholar. The students were clawing their way up Maslow and their assignment was the typical 8-10 persuasive piece. They needed newspaper and journal articles, some reputable web sites and books (of course!) Between Academic Index and the web, I told them about Google Scholar, briefly explained how it worked and some of the advantages and disadvantages to it.

“Remember,” I said, “this is still in beta and like everything else you use, you have to be very critical of the information you find, regardless of the way you find it.”

“Now, for books, the library catalog….”

“Can’t we use Google to find books?” a student asked from the back row.

“No, Goog…” I started to say.

“Yeah,” a student chirped, “have you heard of Google Print?”

Uh oh.