Health sciences educators face a challenging task: how to harness the power and the promise of computer technologies and the World Wide Web for the development and application of instructional tools.

Using multimedia resources to enhance learning, while a laudable goal, creates additional demands on an already burdened faculty. Athletic training educators must determine how these resources can best be applied within the framework of extensive educational competency and clinical proficiency requirements.

Learning objects, knowledge communities

While some educators have sought to teach entire courses or units of material on the Web or via other multimedia resources, attention is being focused on the use of learning objects to meet specific learning goals. A learning object is smaller than a course, unit or section of material. It represents a small unit of instructionally sound content centered on a learning objective or outcome intended to teach a focused concept (Heins 2002).

The use of small, reusable chunks of content allows for technologies to be used as part of a hybrid instructional approach. Learning objects may present subject matter, allow opportunities for practice, contain simulations, allow for collaborative interactions or allow for student assessment.

The use of learning objects is not limited to the athletic training educator with lots of time and technological savvy. The convergence of available technology, instructional needs and a collaborative spirit has fostered the creation of shared knowledge communities.

A shared knowledge community is a Web-based repository of learning objects and supporting materials that can be manipulated to meet individual instructional needs. The material is categorized by discipline, organized using a key word and free for educational use. Learning objects are ideal to the knowledge community concept since they can be stored, searched and then applied in a variety of ways.

The merlot project

MERLOT (Multimedia Educational Resource for Learning and Online Teaching, www.merlot.org) is a free multi-disciplinary peer-reviewed resource for faculty and students. MERLOT includes a specific health sciences category.

A consortium of 23 systems and institutions of higher education, the National Science Foundation and the National Learning Infrastructure Initiative of EDUCAUSE support MERLOT. Unlike other information found online, MERLOT maintains a peer review process so material is reviewed and rated for quality, ease of use and potential effectiveness. It can be a needed scholarly outlet for faculty who develop multimedia content.

Merlot and at education

The NATA Educational Multimedia Committee is working to enhance the visibility of athletic training content on MERLOT. They have formed an ad hoc committee to work with MERLOT to establish better subject and content descriptions related to athletic training and sports medicine in general. They are developing a group of peer reviewers, and they have applied to be alliance partners with MERLOT. This important step allows health sciences professionals to see athletic trainers as experts in care of physically active people.

Educators and clinicians have developed multimedia resources for athletic training education. However, most of this material cannot be widely accessed, and the opportunities for commercial production are limited.

MERLOT can fill this void by providing an outlet for athletic trainers to both contribute and review content. From a practical teaching standpoint, sharing learning objects will allow athletic training educators to mix materials and activities they develop with those of others professionals to create and enhance course content.

Using merlot

To use MERLOT, register free at www.merlot.com. The navigation is user friendly. New members can learn about the history of MERLOT, browse the various materials or review the process for submitting material.

To get started, follow these easy steps.
– Go to www.merlot.org and find the “search” box at the top.
– Type any key word in the search box and hit enter.
– A list of results provides potential resources.
To search by subject:
– Go to the main menu and click “Browse material.”
– Click the plus sign (+) next to Science and Technology.
– Click “Health Science” to see its categories.

The current amount of applicable material may be small; however the potential for this project is unlimited. Through the work of the Educational Multimedia Committee and interested athletic training educators and clinicians, the MERLOT project can grow into a resource that will enhance athletic training education. In time we can develop a distinct athletic training education portal to a shared knowledge community that truly captures the power of technology and learning.

Andrew Winterstein is a member of the Entry-Level Education Committee. He can be reached at winterstein@education.wisc.edu.