Set Your Sights
E-learning standards around the world
By Robby Robson

Can we expect e-learning produced in one country to work in another? Do we need adapters so we can plug our e-learning content into a foreign learning management system? Just how global are e-learning standards?

Standards for assembling, packaging, cataloging, delivering and tracking digital learning content are being adopted worldwide by national education and training initiatives. To sample some projects that illustrate different approaches and uses of these standards, we’re going on a quick world tour. Fasten your seatbelt!

Education initiatives in the U.K.
Let's start in England, home of the National Learning Network. This national network is designed to eventually deliver e-learning to six million adult learners who are not enrolled in colleges. The content and learning support functions will be supplied by more than 500 colleges that are linked into a distributed network. The problem faced is ensuring that content created by one college can be delivered by another. The solution chosen is to let each college deploy any e-learning platform and provide any content it likes, as long as the platform and content conform to standards.

Another approach to a nationwide initiative is to deploy a single e-learning platform. In the U.K., this is being done by the University for Industry, the eUniversity, and the Scottish University for Industry. These programs collect content from many sources, so they require that their own platforms conform to standards and demand that the content they receive does the same.

The European Treasury Browser
Traveling eastward, we find the European SchoolNet, a partnership of 23 European Ministries of Education. This organization supports the use of information technology, the exchange of content and the establishment of communities for education in Europe. SchoolNet has several projects involving standards, one of which is the European Treasury Browser.

The European Treasury Browser offers learning resources for all schoolteachers in Europe and allows them to search an entire network of repositories through a single gateway. This approach is scalable and easy to maintain, but requires a standard way to connect and search repositories. SchoolNet published a metadata scheme to standardize search and discovery and a “repository integration kit” to make it easy for other repositories to connect. The metadata scheme is interesting because it illustrates how to mix different metadata standards (see “Metadata, Schmetadata,” May 2002, p. 48).

China, Japan and Singapore
As we continue to the east, we find diverse e-learning programs in Asia that are based on the same standards as those in Europe.

In China, the Chinese Distance Learning Standards Committee is spearheading efforts to enable e-learning on a national scale. The stakes for standards are high: E-learning is viewed as essential to educating the nation, and once standards are adopted in China, they are regulatory in nature.

In Japan, the Advanced Learning Infrastructure Consortium has 500 members from 300 industry and academic organizations. This consortium is cooperating closely with the E-learning Consortium Japan, an industrial consortium with 80 partners. These organizations are adapting and disseminating standards, building prototype standards-based learning technology, and contributing to international standardization efforts.

Singapore boasts a mix of public and private institutions involved in e-learning and has a strong commitment to international standards. Here the focus is on accelerating the adoption of standards and supporting the development of products that can compete in global markets. This translates into “training the trainers” and “developing the developers.” Singapore’s teacher education institute has established an E-learning Competency Centre. Government and industry together sponsored a June event at which vendors could test and demonstrate interoperability among their products.

Australia
Switching continents, we discover the Australian government has funded e-learning projects at all educational levels. The LeArning Federation is creating a repository of online learning objects for all K-12 teachers in Australia. The Australian Flexible Learning Framework is aimed at vocational education and training with the premise that e-learning is crucial to the development of a knowledge economy.
In Australia, each state and territory supports its own vocational education and training program. The Australian Flexible Learning Framework provides coordination and funding for projects that cut across and support all states and territories. Among these projects is one called “preferred standards” that has produced extensive and detailed tables showing which standards are to be used and when to use them—a great resource for anyone building a comprehensive learning technology platform.

The USA

Back in the United States, we find no equivalent to projects such as the U.K. National Learning Network or the Australian Le@rning Federation, but we encounter projects that have contributed heavily to the development of e-learning standards and are international in scope.

The IMS Global Learning Consortium is a prime example. This group has its roots in a project called the National Learning Infrastructure Initiative, sponsored by the educational technology advocacy organization now called Educause. The IMS charter was to enable interoperable learning technology. The IMS has grown into an international organization serving both corporate training and formal education. It has contributed many of the standards used by the projects we encountered on our world tour.

The Advanced Distributed Learning initiative is another effort that has been influential in promoting standards through its sharable object content reference model, better known as SCORM. The Advanced Distributed Learning initiative began as a federal initiative to address Department of Defense needs for scalable and reusable training. Its co-laboratories and Plugfests have helped vendors implement and test e-learning technology based on SCORM, resulting in more and more learning products worldwide that support it.

It's a small world

As we finish our tour, we can reflect upon the many national initiatives that are promoting the same e-learning standards. These standards may be adapted to meet local linguistic and educational needs, but using them ensures a basic level of interoperability. As e-learning standards spread, we can expect content developed in one country to work with a learning management system deployed in another, and that is encouraging.

Links to the initiatives mentioned can be found at [http://www.eduworks.com/worldstandardsrefs.htm](http://www.eduworks.com/worldstandardsrefs.htm).

Robby Robson is president of Eduworks Corporation ([www.eduworks.com](http://www.eduworks.com)), a consulting company specializing in e-learning products and standards. He also chairs the IEEE Learning Technology Standards Committee. He can be reached at rrobyn@eduworks.com. Please send comments to managing editor Laracella Sberidan at isberidan@elearningmag.com.