



IMS Global Learning Consortium, Inc.

Members Exchange <as of 27 August 2002>

26 September 2002 – Sheffield, UK
Magna Science Adventure Centre

The IMS Member Exchange presents an exciting glimpse of products and projects that utilize IMS Specifications. The Exchange will take place from 17.00-19.00 directly after the IMS Open Technical Forum. The Exchange and the Open Technical Forum are open to the public and more information can be found at <http://www.msglobal.org>

IMS Members including, Apple, Can Studios, Carnegie Mellon University, Click2Learn, Department of Education, Science and Training - Australia (DEST), FD Learning, GIUNTI Interactive Labs, IBM, Industry Canada, Joint Information Systems Committee (JISC), Massachusetts Institute of Technology (OKI), Microsoft, Open University, Scottish UFI, University for Industry (UFI), and WebCT are participating, as well as special guests, Advanced Learning Infrastructure Consortium (ALIC), and Schools Interoperability Framework (SIF). Parallel demonstrations / poster sessions will allow guests at the Exchange to visit several exhibits.

Look for the exhibits below and others at the Exchange.



Advanced Learning Infrastructure Consortium from Japan will focus on “*e-Learning Standardization Activities in Japan*”. The presentation will provide an introduction of Japanese activities in e-Learning standardization including conformance activities, development of standard specification based software and other topics of interest.

Apple will be highlighting, “Apple Learning Exchange: An Environment for Learning Content”. Apple has developed an online educational environment to facilitate the interchange of ideas among teachers, education leaders, visionaries, and innovators. The Learning Interchange provides the vehicle for reflective discussion of contemporary education practices through a network of organizations dedicated to improvement. A museum of online exhibits created by educators for educators showcases authentic teaching practices, leadership practices, virtual field trips, and educational events, all with media-based resources.



Can Studios will be showcasing “*Canvas Learning*”-- the cross platform QTI authoring and rendering tool. Canvas Learning consists of Canvas Learning Author™ and Canvas Learning Player™, which have been designed for use by both novice and advanced authors. Through the use of wizards and templates it enables authors to create and package content without any experience of XML or relevant SCORM/IMS specifications, whereas the advanced features offer flexibility and control to suit the needs of the professional developer.

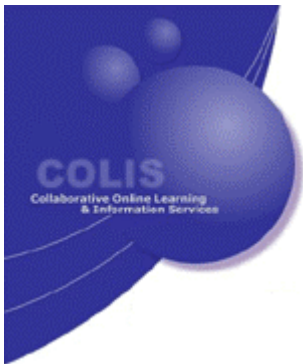
Carnegie Mellon

Learning Systems Architecture Lab

Carnegie Mellon will be highlighting “*Web Services for Learning: The Learning Services Stack*” - Come see and discuss the new service-based architecture for learning to glimpse the future of instructional systems. Services offer new possibilities for creating systems with interchangeable and replaceable behaviors— a big step forward from simply sharing data. We'll show operational services and demonstrate how they can be used in learning technology systems.

Carnegie Mellon will also showcase “*A Content Developer's Guide to SCORM, IMS Simple Sequencing and Metadata*” - The Content Developer's Guide is an introduction to SCORM and IMS Specifications for instructional designers and content developers. It includes recommendations on how to use learning object metadata, and a collection of composable templates and models that illustrates how to use the new IMS Simple Sequencing Specification to describe common course structures and behaviors.

The Department of Education, Science and Training will be demonstrating “*The COLIS Interoperability Demonstrator Projector*”. The COLIS (Collaborative Online Learning and Information Systems) Project is a collaboration of five Australian universities (Macquarie, Newcastle, UNE, USQ and Tasmania) together with a number of technology vendors (including WebMCQ, IPR Systems, WebCT, Fretwell Downing and Computer Associates) and is funded by the Department of Education Science and Training (DEST). One of the central purposes of the project is to investigate and demonstrate strategies for the incremental development of levels of technical interoperability in learning space application integration.



The first stage COLIS Demonstrator provides a bounded interoperability implementation including the linking of learning management systems to library e-services and learning content management systems (including implementation of components of the IMS Digital Repositories Working Group framework), incorporation of specified levels of digital rights management and seamless movement between applications.

FD Learning will present “*KOD - A collaborative project to apply and extend interoperability specifications for open-platform personalised learning*” The KOD project is the work of a consortium of European commercial and academic organizations that has applied and extended IMS Content Packaging, IMS Metadata and the SCORM Runtime Environment to create an implementation of a possible reference model for open personalised learning. We have attempted to minimise the extensions to specifications while permitting a wide range of personalisation possibilities. The model allows sequencing and selection based on learner characteristics, performance and progression routes. KOD also models a business process between a publisher and learner using software agents to perform mediation and smart-search functions via a brokerage service. KOD is an EU IST project.





Giunti Interactive Labs, will be presenting *“learn eXact LCMS (www.learneXact.com):content production, packaging, archiving, brokerage and multiplatform/multidevice delivery via IMS, SCORM 1.2. and the next to be released SCORM 1.3. specifications including LOM Indexing, QTI assessment, Content Packaging & Simple Sequencing from IMS. “*

Learn eXact from Giunti Interactive Labs (www.giuntilabs.com) is the first 2nd generation eLearning suite natively based on XML, Learning objects and IMS, SCORM 1.2. & next SCORM 1.3. full set of specifications for content authoring and delivery. learn eXact LCMS sub architecture fully supports learning objects templating, authoring, packaging and multiplatform & multidevice versioning(i.e. mobile, CD, WBT and ITV). Developed content may then be published on the complimentary SCORM 1.3. LMS submodule (eXact Siter) including a native XML Digital Repository for content archiving and management. Alternatively learn eXact LCMS interoperates with any pre-existing 3rd party LMS supporting IMS content packaging and SCORM 1.2. & 1.3.The Learn eXact suite also demonstrates Knowledge Management, Content Brokerage and Adaptive content modules. Additional info at www.learnexact.com.

IBM will highlight *“IBM Support for IMS Simple Sequencing and SCORM 1.3”*. This presentation demonstrates IBM support for the draft IMS Simple Sequencing specification with selected content examples. It also describes planned IBM support for the upcoming SCORM 1.3 release which will include IMS Simple Sequencing and related specifications.



Industry Canada will showcase *“EduSpecs: Facilitating the Creation and Adoption of E-Learning Specifications and Standards in Canada “*.

This presentation will feature information on current Canadian activities relating to e-learning specifications and standards. Specific emphasis will be on EduSpecs, an Industry Canada initiative that encourages the development and application of e-learning standards and specifications within the K-12, higher education, government, and private e-learning sectors.

The EduSpecs Technical Liaison Office, through British Columbia's Open Learning Agency, is leading Industry Canada's involvement in national and international e-learning specifications and standards development. Key activities include:



- Ensuring IMS involvement through Technical Board voting and representations on various specifications project groups;
- Identifying priority areas for Canadian involvement in national and international e-learning to ensure a coordinated and effective role for Canada;
- Serving as a focal point for coordinating and disseminating information on educational standards and specifications to learners, practitioners, and communities;
- Promoting and encouraging collaboration between key players in the field, both within Canada and internationally.

Other innovative Canadian projects relating to e-learning standards and specifications development, such as CanCore, will also be highlighted during the presentation.

JISC will be showcasing its programs, projects and initiatives that are implementing IMS specifications for the benefit of UK colleges and universities.

Through CETIS, the Centre for Educational Technology Interoperability Standards, JISC brings the experiences, requirements and viewpoints of universities and colleges across the UK into the development of global learning specifications and standards.

The projects funded by JISC are implementing a wide range of IMS specifications, and are in some cases the first to do so. JISC is also building communities of practice that bring together colleges, universities, vendors and publishers.

The logo for JISC, consisting of the letters 'JISC' in a large, orange, sans-serif font.

Currently JISC's IMS-related activities include:

- CETIS represents UK further and higher education on specification bodies, provides information on standards on its website, and builds communities of practice through its Special Interest Groups.

- The Managed Learning Environments (MLE) program supports the integration of management information systems, virtual learning environments, and content using IMS specifications.



This is a major ongoing program, with projects that range from single-college implementations to province-wide integration of learner information and courses. Two new projects will be among the first in the education sector to implement the IMS Learner Information Package specification.

- The Exchange For Learning (X4L) and FAIR programs are aimed at improving the use of digital resources for colleges and universities.

JISC will be presenting information about each of these efforts (and others) at the member exchange, and providing an opportunity to talk to CETIS representatives about current and future IMS-related projects in the UK.



HLSI (High Level Skills for Industry) , an IMS digital repository of learning Content and Authoring tools will also be shown at the JISC table. The project will demonstrate the application of a fully working repository of learning Content based on IMS specifications and using XML based standards (XSLT/Xlink). The presentation will demonstrate graphically semi-automated construction of manifest files, import and export of files and reauthoring/re use of Content.

The project partnership consists of Education and Training organizations throughout Yorkshire and the Humber region and has recently received significant further funding to implement the technologies and methods in the education and training supply chain.

Open University will be demonstrating *“Personalizing Teaching Materials with IMS Specs - The Trial-Solution Project”*. The Trial-Solution project aims to add personalisation services to existing teaching materials, notably to textbooks. The project is funded in part by the European Commission within the 5th Framework Program. It is carried out by 13 partners from 6 countries. Besides a library of about 30.000 learning objects, annotated with metadata, the project implements a series of tools for the reengineering and personalisation of textbooks. These tools decompose existing documents, support the automated or manual addition of meta data, keep the meta data system consistent and, last but not least, actively support learners and teachers in creating their personalized documents on the fly whenever they are needed and tailored to their actual needs.



The tools communicate by exchanging content packages according to the IMS Specification. Metadata are encoded in these packages according to a project specific specification that builds on the IMS Metadata Specification, but extends it by using structured thesauri and metadata inheritance. We will show the Delivery Tool and the Authoring Tool of the project. The new possibilities for the dynamic personalization of textbooks will be demonstrated. Results of data exchange with other projects can be shown.



Schools Interoperability Framework will be talking about *“The Impact of Interoperability: The Schools Interoperability Framework”*. The Schools Interoperability Framework (SIF) is the K-12 standard for sharing data quickly, dynamically and securely between school system applications. Implementing SIF-enabled applications helps to improve data quality, lead to more efficient and effective use of staff time, and make more relevant data available for reporting and decision making. Come learn about existing SIF implementations, the progress this initiative has made and how you can join SIF and participate in the future of K-12 interoperability.

WebCT will discuss *“Putting IMS Specifications to Work in WebCT”*

