



**alt lab 2005**  
Advancing Learning Technology  
Interoperability

20-22 June 2005

Royal Victoria Hotel

Sheffield, United Kingdom

**alt-i-lab 2005** continues a decade-long collaboration of organizations, companies and individuals to advance learning technology interoperability. The cross-industry, international hosts and sponsors of **alt-i-lab 2005** invite you to join the inventors, vendors, and users of 21<sup>st</sup> century learning technology in a laboratory meeting where you can evaluate hands on demonstrations of the state of the art and participate in no holds barred working sessions to plan and deliver the promise of elearning. This year, special workshops conducted by the developers of 21<sup>st</sup> century learning technologies have been added to the alt-i-lab program. These workshops will be held 23-24 June in the same venue.

**THIS IS THE FINAL PRELIMINARY PROGRAM, WITH FULL SESSION AND WORKSHOP DESCRIPTIONS**

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**alt-i-lab 2005** co-hosts include IMS, Digital South Yorkshire, ADL (Advanced Distributed Learning), ALT (Association for Learning Technology), Ariadne, CEN/ISSS, Department for Education and Skills, education.au, MERLOT, OKI, Sakai, and Schools Interoperability Framework.



alt-i-lab 2005 Sponsors include:

**Platinum:** Blackboard, JISC, Microsoft, Renaissance South Yorkshire, Ufi, and WhiteHat Management.



**Gold:** Pearson Education, Sun Microsystems, and WebCT.



**Silver:** British Standards Institute, Desire2Learn, and HarvestRoad



## Opening Session

A Strategic View of Learning Technology (tentative title)

*Professor Diana Laurillard, Head, e-Learning Strategy Unit, DFES*

Measuring the Impact of eLearning (presentations by)

*Dr. Paul Clark, Pro-Vice-Chancellor, (Learning and Teaching) The Open University*

*Dr. Bradley C. Wheeler, Assoc. VP for Community Source Initiatives & Dean of IT; Assoc. Professor, Indiana University*

*Dr. Edward Walker, Chief Executive Officer, IMS Global Learning Consortium, Inc.*

## Demonstrator

- Distributed Content
- Software Interoperability
- Learning Design

## Working Sessions

[1. Applications for Distributed Content](#)

[2. Assessment for Learning](#)

[3. A Common Cartridge for Robust Content Delivery](#)

[4. Information Management Infrastructure](#)

[5. Virtual Patients, Use Cases, and the Role of Repositories](#)

[6. Learning Design](#)

Read-ahead materials available at <http://members.imsglobal.org/forum/ims/dispatch.cgi/f.altilabwork>

## Workshops

Schedule, descriptions, and presenters available at <http://www.imsglobal.org/altilab/>

### *Thursday, 23 June: Workshops*

		Fee*
9:00-12:00	<a href="#">Open Source Portfolio Release 2</a>	£50
13:00-17:00	<a href="#">The Essential Guide to eLearning Repositories Services</a>	£50
13:00-17:00	<a href="#">Accessibility and eLearning</a>	£50
13:00-17:00	<a href="#">The Essential Guide to ePortfolios Services</a>	£50

### *Friday, 24 June: Workshops*

8:00-12:00	<a href="#">Mobilizing Market Forces for Creating and Distributing Learning Resources</a>	£50
8:00-12:00	<a href="#">Standards-based eLearning Procurement Best Practice</a>	£50
8:00-16:00	<a href="#">Applying the O.K.I. OSID Specifications – A Consultative Session</a>	£80
8:00-16:00	<a href="#">Implementing IMS Learning Design Specification: Creating Units of Learning with RELOAD</a>	£80

\* Participation fee is required to cover meeting materials, facilities, and food (excludes VAT at 17.5%).  
Lunch is provided with all workshops.

Registration: <http://www.divacreative.com/workshops>

Workshop registration closes on Friday, 17 June.

## Program Committee:

*Dr. Alun Hughes (Chair)*, Director of Learning & Information Services, UHI Millennium Institute

*Dr. Carole Barone*, Senior Fellow EDUCAUSE

*Dr. Edward Walker*, Chief Executive Officer, IMS Global Learning Consortium, Inc.

*Ms. Lisa Mattson*, Chief Operating Officer, IMS Global Learning Consortium, Inc.

## Working Sessions: Descriptions and Organizers

### 1. Applications for Distributed Content

Given the many efforts directed at providing content and repository interoperability and developing specifications to enable such interoperability, we must assume that the eLearning marketplace has achieved some level of practical value. What are the visible and measurable indicators that an educational technology marketplace, based on interoperability, is a reality? What are the highest priority problems limiting the expansion of that marketplace during the next year?

This year's Distributed Content Demonstrator exposes the current utility of the application/content/repository triple approach to interoperability. With that basis in concrete evidence, we will pursue a structured exploration of the market opportunities and technology or implementation shortfalls that impede the realization of a visionary open eLearning marketplace.

Authors, publishers, preservers, managers, and users of content all have a keen interest in driving this eLearning marketplace. How can each commercial, public or private participant fully exploit it? And how can each stakeholder constituency position itself to help lead today's market into the future? We will explore these and other questions through the activities of the Applications for Distributed Content Working Session.

#### Working Session Topics:

- a) What is the vision of the eLearning Marketplace based on interoperable applications, content and repositories?
- b) What level of interoperability has been achieved in currently available application and repository products and projects? This exploration will be made primarily through hands on review and discussion of this year's Repository Interoperability demonstrator. Presentation and discussion of other working examples of repository integration and content interoperability will be possible during the Technology Exchange and in the Working Session itself.
- c) What is the utility and impact of the following three major types of specifications and standards and how they can be used together, today, to achieve real results? What profiling activity is required to achieve particular interoperability goals of interest?

Data format Specifications: (including but not limited to Content Packaging, IEEE LOM, SCORM Content Aggregation, Dublin Core, METS, etc.)

Service Interface Specifications (including but not limited to Repository OSID, JSR 170)

Protocol Specifications (including but not limited to Web Services, SRW, DRI, Z.39.50, etc.)

- d) Which application/content/repository interoperability goals can be achieved in the near term through collaborative effort?

#### Working Session Outcomes:

- Documentation of key findings
- Agreement on where we should be by [alt-\*i\*-lab 2006](#)

#### Organizing Chairs:

*Jeff Merriman*, Senior Strategist - MIT/OKI project

*Geoff Hendrick*, [educaton.au](mailto:educaton.au)

### 2. Assessment for Learning

- Creating interactive questions
- Creating feedback for incorrect questions
- Response matching techniques
- Personalization through self-assessment
- Interpretation of rich non-verbal information in assessment

**Objectives for the working session include:**

- Defining more substantial student tasks than normally provided in online assessment systems into assessment questions.
- Developing a strategy for integrating new question types into the IMS QTI specification.

As part of the working session, there will be a demonstration of The Open University's OpenMark assessment system. OpenMark is an Open University computer-assisted assessment (CAA) system that supports the creation of interactive questions that go beyond the constraints of the question types typically offered by commercial CAA systems. OpenMark has its roots in 'assessment for learning' which is sometimes termed 'formative assessment' and the basic question design assumes that the author wishes to provide the student with instant feedback. A good interactive question is one that contains the author's expertise in exposing student misunderstandings, and includes remedial feedback that is instantaneously available to enable students to overcome their mental blocks there and then. Experienced teachers are often best placed to write 'good' interactive questions together with appropriate feedback. OpenMark can also provide a far more interesting learning environment than the old style computer-marked assignments on paper. Computers can indeed handle multiple choice questions, and in some subjects it is hard to avoid them, but computers are interactive devices that can do so much more and in doing so enable the author to stimulate students with varied question types that will keep them interested and strengthen their learning.

**Organizing Chairs:**

*Dr. Joel Greenberg*, Director of Strategic Development, Learning & Teaching Solutions, Open University

*Dr. Steve Lay*, Senior Manager, ICT Group, Assessment Directorate, University of Cambridge Local Examinations Syndicate

### 3. A Common Cartridge for Robust Content Delivery

*The Original Mission:* The IMS mission to accelerate the growth of elearning led the organization to create a set of specifications for content markup. Demand amongst educators for use of these specifications was initially high because they were viewed as a way to establish interoperability and maintain compatibilities between learning management systems with regard to elearning content. Customers were enthusiastic about the potential to preserve investment in content and achieve flexibility in how they deployed elearning content (e.g. reduced switching costs). Publishers applauded a standard that would allow them to "create once, and play anywhere" for high investment elearning content. The healthy cycle of customers demanding compliance of vendors began, and the industry effort was launched.

*Statement of The Problem:* It's five years later. The major elearning providers have implemented IMS specifications; many customers mandate compliance with some form of them. However, software vendors and suppliers, consumers, and maintainers of content have not worked together to create a detailed de facto understanding of what implementation means. So while elearning firms market "compliance" with IMS specifications, and some have been certified as compliant with a specific version of the specifications; the lack of practical interoperability has left us in a place not sufficiently different than where we were prior to the IMS specification effort began.

*The Proposed Resolution:* The time has come to revisit e-learning content standards and learn from the industry's first experience and current plans. Key objectives and proposed actions for a new effort would include:

1. *Content Cartridge concept:* while current specifications outline methods of storing abstract groupings of content, they are silent about the most commonly produced and consumed form of elearning content-the "content cartridge."

*Proposed:* To address this issue producing a specification for a "Common Cartridge" will be undertaken as a core part of the IMS interoperability mission. In short, the objective will be to define a "course or major course component level collection of content" and rules for interacting with it.

2. *Compliance testing:* rather than leaving vendors (and buyers) to interpret specifications and implement them at their discretion, the industry needs the simplicity of very clear tests which provide meaningful information regarding interoperability.

*Proposed:* The IMS will provide a compliance testing capability. In brief, this capability will test elearning software to ensure it can play a content cartridge certified under the new Common Cartridge specifications. In addition, the IMS will provide content publishers with tools and support necessary to verify that their published cartridges are compatible with the specification for Common Cartridges. With the blessing of both software vendors and content publishers, a formal program of certification by IMS, acting as the authorized agent of suppliers and consumers, also would result. Customers of elearning could request of vendors and publishers "Common Cartridge" compatibility with assurance that a meaningful assessment of interoperability could be obtained.

3. *Publisher involvement in creating standards:* the first effort at specification addressed the challenge of technical interoperability. While publishers were invited and involved in the discussions, the lack of effort directly dealing with publishing behavior (e.g. how cartridges are published and used) resulted in low publisher commitment to IMS. As the IMS mission expands to include a Common Cartridge format, this will necessarily change. There will need to be a forum for publisher involvement in charting the course of the Common Cartridge, building specifications for new forms of content and rules about how these can be extended to accommodate needs that may differ between publishers.

*Proposed:* The IMS will create a new Project Group led by Publishers that will own the specification for the Common Cartridge and will endorse and support compliance with the specification in the marketplace. Publishers interested in participating would join the IMS and send a delegate to the working group.

#### **Technical Objectives for the Common Cartridge Project:**

A guiding principle of the technical approach in this effort would be to exploit existing specifications where they function well, do no harm, and minimize the amount of new work that must be done to achieve business results.

*A very simple definition of what a Common Cartridge would be:*

1. The Manifest: this is basically a list of what elearning content objects are defined as part of the cartridge, where they are, etc. and various rules about how it should be installed, about managing behavior during playback, etc. For example, a new objective for The Manifest proposed is to set forward a simpler way to state Publisher's rights, to clarify what rights they pass along to their customers about using the content, and to provide rules for doing so.
2. The Content Objects: the textual and media content and rules of use that make up the major course elements (e.g. assessments). A key objective of the new Common Cartridge program would be solving problems of location and content refresh. For example, the manifest must be able to specify a location that includes a nationally hosted publisher website (where content might be protected by Publisher DRM, rather than elearning vendor DRM). And it must solve the problem of content updates (e.g. when a bug is found in content, allow publishers to get notification of an update, or ideally a content refresh to customers).

#### **Open Issues:**

How do we both specify a common cartridge for publishing content, and preserve individual Publisher's ability to innovate and extend their offerings?

#### **Organizing Chair:**

*Ray Henderson*, President, Central Media Group Pearson Education



## 4. Information Management Infrastructure

National and international projects and initiatives have been articulating and developing infrastructures which increasingly span previously-discrete domain areas such as e-learning, library services, e-science and administration. Initiatives include [SAKAI, OKI, the IMS Abstract Framework, ELF, OMII, etc.] and their commonality may be expressed through overlapping domain spaces, through the requirement for common middleware infrastructure services, or through the adoption of layered or service-oriented architectures. This session's aim is to map globally the initiatives and the areas where common agendas can be identified, and to articulate as far as possible common development agendas to be progressed for review at [alt-\*i\*-lab 2006](#).

Web service are becoming key infrastructure components for Information Management systems. From an e-learning perspective, web services must support the integration of management information systems, learning content systems, library systems, etc. There are many ways to construct web services to support these systems depending on the business and institutional needs.

Position statements from the e-learning and library communities will be followed by a scoping debate to establish areas of agreement and difference. Short presentations from a variety of stakeholders will then support the mapping of the problem space and the development of common agendas. To ensure best practice we need to look at:

- a) Profiling of the range of web service standards to meet the domain specific requirements;
- b) Agree the common services that underpin the application services;
- c) Identify who is doing what and why. Identify what is not being attempted and why;
- d) Identify the 'low lying fruit' that can be developed for the next 12 months.

### Organizing Chairs:

*Dr. Alun Hughes*, Director of Learning & Information Services, UHI Millennium Institute

*Dr. Colin Smythe*, Chief Specification Strategist, IMS Global Learning Consortium, Inc.

## 5. Virtual Patients, Use Cases, and the Role of Repositories

- Virtual patient use cases describing the interactions between students, teachers and learning materials.
- Use case documentation and the development of a common information model.
- The role of repositories and the content development process and how this informs strategies for sharing virtual patients and their resources.

### Organizing Chairs:

*Dr. David Davies*, Technical Director, IVIMEDS

*Dr. Megan Quentin-Baxter*, Medicine, Dentistry and Veterinary Medicine, University of Newcastle

## 6. Learning Design

The IMS Learning Design specification considerably broadens the scope of eLearning that can be addressed using open specifications. It does this supporting learning activities that make use of content, by providing support for the inclusion of learning services, by supporting learning flows that involve multiple participants, both learners and staff and each can play different roles, by providing properties and event driven conditions and support for notifications.

Its ambitious aim is to be able to support any kind of pedagogy and there has been debate over whether it can do this and if so, whether, because of its size, the tools will be able to interoperate. Now authoring tools and runtime systems are becoming available so we can begin to find out in practice what its capabilities are. The early signs on interoperability are also good, as will be shown in the LD Demonstrator also being presented at alt-*i*-lab 2005.

At least year's alt-*i*-Lab, the paper Learning Design Update was prepared for the LD Working Session. It outlined what was needed for adoption of the specification and concluded:

It takes time to move a specification out into the world, and Learning Design, being a large specification, can reasonably be expected to take longer than most. But an encouraging number of developments are underway that suggests that this timescale can be shortened. Such developments include:

- Open source reference implementations are being developed.
- Further commercial and open source developments are also under way.
- LD focused support groups and communities of practice are being put in place, supporting learning designer and learning providers as well as software developers.
- Support is in place for plugfests when sufficient systems are ready.
- Conformance testing is likely to be developed in 2005.
- ...and there is great interest in LD out in the community.

These elements coming together suggest that in a year from now a number of systems will be available and a thriving and activity Learning Design community will be in place.

#### **The alt-*i*-lab 2005 Working Session:**

Many of these are now in place or in progress, so the Learning Design Working Session has two aims:

1. To present or describe what has happened since this time last year, what projects are currently underway or starting soon.
2. Identify issues that are of common concern and participants and establish informal groups to collaborate on these over the next 6 months.

The first part will be through a series of short presentations which will:

- Provide an overview of the project and /or bring the picture up to date
- Briefly show products
- Set out work that is to be done in the project
- Identify key themes and issues for discussion

The second part will pick up on the issues and there will be break out sessions to:

- Work further on the issues and approaches to them
- Explore collaboration over the next 6 months

A basic understanding of LD will be useful, so check out the resources. For those wanting a practical introduction to Learning Design, there is also a hands-on LD workshop, using the RELOAD open source tools, being run at alt-*i*-lab.

#### **Organizing Chairs:**

*Dr. Rob Koper*, Director of Learning Technology Research and Development, Open University of the Netherlands

*Dr. Bill Olivier*, Director of Development (Systems and Technology) for JISC

*Dr. Colin Tattersall*, Educational Technologist, Learning Technology Research and Development, Open University of the Netherlands



## Workshops: Descriptions and Presenters

### Open Source Portfolio Release 2

This session will demonstrate Release 2 of OSP and describe a feature roadmap for the next year. We will review integration options with commercial and other open source projects, and examine progress towards implementation of the IMS ePortfolio specification and other open standards and specifications. We also will explore options for participating in the development and success of OSPI, both technical and academic.

#### Topics:

- State of Portfolio Software & Initiatives 2005 - Wheeler/Cambridge
- Opportunities, Progress, and Challenges
- Open Source Portfolio Release 2.0
- Functionality and demonstration - Lowden
- Technology and services architecture - Embry
- Data standards and portability (IMS) - Cambridge/Branjard/Arnett
- Development Roadmap
- Plans for 2.x
- Faculty and student wish lists
- Scaling software contributions
- Release management and integration with VLEs

#### Speakers:

- *Brad Wheeler*, Assoc. VP for Community Source Initiatives & Dean of IT; Assoc. Professor, Indiana University
- *Darren Cambridge*, Assistant Professor, George Mason University
- *Randall Embry*, Lead Portfolio Developer, Indiana University
- *Robert Lowden*, Group Manager of Development, Indiana University
- *Kari Branjard*, Director, Enterprise Application and Web Development, University of Minnesota
- *Chris Arnett*, Developer, University of Minnesota

### The Essential Guide to eLearning Repositories Services

This workshop *for decision makers, policy makers, and consultants* will provide key insights into the strategic value and deployment of elearning repository services to learners and organizations. Repositories store and provide powerful access capabilities to elearning information that is used in the authoring and learning or training processes. Excellent research and applied work in Repositories is coming from both the library and elearning community. This ½ day workshop, hosted by experts in the repository, research, deployment and standards communities, will include coverage of organizational and technical issues and best practice. Specific coverage will include, but not be limited to, GLOBE, ARIADNE, and CORDRA, the repository solution from ADL, which developed SCORM.

#### Topics:

- How are repositories used to solve strategic elearning issues?
- What are best practice findings from early adopters?
- How can Organizational and/or Regional localizations be supported?
- How might Repository Interoperability Projects, like Globe, ARIADNE, and CORDRA, advance elearning goals?
- How do the various repository efforts in the elearning and library community relate?
- What are the trends in open source and proprietary repository products?
- Procurement and Implementation Issues.
- Opportunities for collaboration.

#### Speakers:

- *Erik Duval*, ARIADNE
- *Griff Richards*, Simon Fraser University (Canada)
- *Kerry Blinco*, DEST (Australia)
- *Paul Jesukiewicz*, ADL
- *Stefaan Ternier*, ARIADNE
- TBA - UK JUROM Project - a repository service for all Further and Higher Education Institutions in the United Kingdom

## Accessibility and eLearning

This workshop will provide a state of practice overview of how to make elearning materials more accessible and will include demonstrations of available tools, best practice, forecast of standards efforts, and Q&A.

### Topics:

- Accessibility and eLearning - An Introduction and Current Issues
- IMS AccessForAll Specifications
- Vocabularies and ISO work
- Use with IEEE Learning Object Metadata Standard
- Blended Learning
- Accessibility Properties and Automated Tools using EARL
- Vocabulary Management Tools, IMS VDEX Specification and Accessibility
- Accessibility for Learner Information with Learner Portfolios

The workshop will look at how the IMS work on AccessForAll Specification's Meta-data and Learner Information can be used in a UK and multi-language context. This will include work on how vocabularies and vocabulary tools can be used to provide some cultural and language independence and integration with blended learning contexts.

### Speakers:

- *Andy Heath*, Sheffield Hallam University
- *Barry Kruger*, British Educational Communications and Technology Agency
- *David Weinkauff*, Assistive Technology Resource Center, University of Toronto
- *Fiona Henry*, Loughborough College
- *Martyn Cooper*, The Open University UK

*Organizer:* Andy Heath, Sheffield Hallam University; member IMS Accessibility Team; co-chair IMS ePortfolio Team; founder CEN-ISSS Learning Technologies Workshop Accessibility Properties for Learning Resources, co-editor ISO IEC JTC1 SC36 Individualized Adaptability and Accessibility in E-learning, Education and Training, Convenor BSI IST/43/-/5 (developing a British Standard for Technical Accessibility of eLearning systems and content).

## The Essential Guide to ePortfolios Services

This workshop for decision makers, policy makers, and consultants will provide key insights into the strategic value and deployment of ePortfolio services to learners and organizations. EPortfolios are solving important education, training, and organizational problems today around the world. EPortfolios will increasingly become a critical service in the elearning enterprise as more customized learning experiences become a common expectation and the mobility of the workforce continues to increase in importance for economic development. This ½ day workshop, hosted by experts in the ePortfolio deployment and standards communities, will include coverage of organizational and technical issues and best practice.

### Topics:

- How are ePortfolios used to solve strategic issues?
- What are best practice findings from early adopters?
- Developing reference models for ePortfolio services.
- What is the status and forecast for ePortfolio interoperability?
- Procurement advice.
- Operational issues.
- Opportunities for collaboration.
- The ePortfolio intersection between the Human Resource industry and education.
- Early experiences implementing ePortfolio standards and specifications.

### Speakers:

- *Darren Cambridge*, Assistant Professor, George Mason University
- *Peter Rees Jones*, University of Leeds, Convenor CETIS Learner Information Profile SIG

## Mobilizing Market Forces for Creating and Distributing Learning Resources

Lydialearn is a global collaborative network for connecting creators and consumers in a marketplace for digital and non-digital learning resources. If you create or use learning resources, this workshop will demonstrate how you can use Lydialearn to reduce costs and improve quality by engaging in creative collaboration among authors, developers and distributors.

The workshop will provide direct hands-on experience for participants to create composite learning resources in anonymous collaboration and deliver them to the marketplace. Compensation for purchased resources will be distributed.

In addition to the management of intellectual property rights among the distributed collaborators, participants will use some of Lydialearn's unique capabilities such as recognition of similarity between arbitrary elements of composite resources in real time and provide feedback to creators concerning the pedagogical quality and commercial value of their creations in context.

Participants are encouraged to bring a wireless enabled laptop supporting a USB 2.0 capability. Basic learning resources will be provided by the workshop organizer as a starting point for the collaborative exercise.

### *Speaker:*

- *Dr. Thomas H. Probert*, Executive Director, Lydialearn at White Hat Management

## Standards-based eLearning Procurement Best Practice

The workshop will provide procurement advice and best practice information for decision makers, project managers, and others involved in the acquiring of e-learning technology and content that is based on open standards and specifications. Speakers will represent both small to medium and large scale organizations.

### *Topics:*

- What standards to choose for inclusion in bids for tender? What are standards and what are specifications - and what bearing does it have for procurement?
- Examples of bids for tender.
- What if the standards are not there, yet?
- Is participation in plug fest (or codebash) like events possible requirements in bids for tender?
- The specification process and elearning standards as a moving target - what could you ask for in a bid for tender?
- Accessibility for all - what requirements should be met?
- The case of procuring learning management systems.
- The case of mandating the use of ICT in formal exams in schools (Norway).
- What happens if standards are overlooked and formal standards are mandated for example by EU regulations?
- What about quality standards and other standards that are not interoperability standards in procurements?

### *Format:*

The workshop will be interactive with time for participants to present their challenges and questions concerning procurement of e-learning technologies and content.

### *Speakers:*

- *Tore Hoel* is a head advisor at the Oslo University College and the founder of the Norwegian eStandards Project that he has coordinated since January 2003. The eStandards Project is funded by the Ministry of Education as part of their Programme on Digital Competencies (2005 - 2008). The eStandards Project is doing awareness raising and consultancy to the Norwegian educational community and authorities on interoperability standards, and is coordinating the Norwegian participation in international standards bodies in the field of e-learning. Tore Hoel is member of CEN/ISSS Workshop on Learning Technologies and active in liaison work between the international and Norwegian e-learning community.
- *John Taylor* - UK National Health Services

## Applying the O.K.I. OSID Specifications – A Consultative Session

This full-day interactive workshop will address how the O.K.I. Open Service Interface Definitions can apply to real service interoperability issues being tackled by the participants.

The speakers will begin with an overview and status of the Open Service Interface Definition (OSID) specifications, including information about the growing commercial uptake of the specs, and demonstration of products and projects that are utilizing the OSIDs today. Participants will then be encouraged to present and discuss interoperability issues to be investigated through structured consultative processes.

This workshop targets both commercial and not-for-profit/institutional participants. Product managers, systems integrators, technical project managers, educational software developers, and education technology decision makers will all benefit from this session.

### *Speakers/Facilitators:*

- *Jeff Merriman*, Senior Strategist, Academic Computing - MIT; Project Director - O.K.I.
- *Scott Thorne*, Systems Architect - MIT; Project Architect -O.K.I.
- *Jeff Kahn*, Senior Consultant - Verbena Consulting

### *Outline:*

#### Morning Session 1:

- Welcome
- Service Oriented Architecture for Interoperability
- OSID Overview

#### Morning Session 2:

- Current OSID Activity
- Industry Uptake
- Language Bindings
- Spec Maintenance
- Case Studies and Demonstrations

#### Morning Session 3:

- Discussion and identification of use cases for afternoon sessions

#### Afternoon Session 1:

- Structured consultation and discussion
- 4 or 5 interoperability use cases will be addressed (30 minutes each)

#### Afternoon Session 2:

- Wrap-up

## Implementing IMS Learning Design Specification: Creating Units of Learning with RELOAD

The aim of this workshop is to familiarize participants with the RELOAD environment and its function. The event will give participants the opportunity to gain “hands-on” experience of the editor through the creation of IMS LD -based units of learning and it is open to all who have an interest in the benefits gained from the IMS LD specification particularly teachers and administrators, learning designers, technical staff, eLearning course developers, teachers and learning providers. No technical background or prior knowledge in eLearning standards is required for these sessions but an understanding of IMS LD would be useful. The workshop will be led by Chris Kew from CETIS (Bolton University), one of the members of the project team of the UNFOLD project, which is a European Commission-funded project to support the adoption of open eLearning standards for multiple learners and flexible pedagogies.

### *Outline:*

Starting with a brief overview of LD in the form of a PowerPoint presentation, participants will be (re)acquainted with some of the fundamental details of Learning Design as they relate to the RELOAD LD editor. This will be followed by a brief introduction to the RELOAD project and the editor itself in terms of purpose and functionality.

Participants will then be invited to install both the RELOAD editor and player onto their machines and they will be provided with a number of resource files and worksheets for use in the creation of a Level A example Unit of Learning. These will include a narrative use case document which will form the basis of a discussion prior to the first “hands-on” session: “A Simple Learning Activity” an example Unit of Learning. This UoL will then be viewed in both the RELOAD player and editor in preparation of the activity proper.

The purpose of this first activity is to give participants an insight into the RELOAD software in the form of an interactive “walk-through” of both the player and editor and will involve a degree of editing. This will be followed by the reconstruction of a second unit of learning which will enable students to review and reinforce their knowledge of the editor prior to creating their own Units of Learning. This final stage will be preceded by a brief presentation on planning for the construction of a UoL, after which participants will be invited to create a narrative use case document and a fully functioning UoL (complete with resources) for subsequent viewing in the player.

### *Speaker:*

- *Mr. Christopher Kew* - UNFOLD project officer

### *Technical Requirement:*

- *Participants will have an opportunity to do hands-on work if they bring a WIFI (802.11b)-enable laptop.*