

Workshop 1 – The Functional Value of IMS Specifications ***Presented by Geoff Collier, Eduworks.***

Technical specifications are being used internationally as the underpinnings of robust and scalable e-learning initiatives and products. This workshop provides you with the functional information you need to make such specifications work for you. We look at case studies that illustrate how the specifications IMS has produced can be used to lower costs and improve stability in products and e-learning initiatives. We provide information on how to evaluate which specifications best suit your needs, on conformance programs, on available resources, and on what level of interoperability is available today. This course is a great introduction to e-learning specifications.

General Design Guidelines / Considerations:

- Use a consistent set of case studies throughout Workshop 1 (and may carry them into Workshop 2 as well).
- The idea in Workshop 1 is to describe meaningful functional models of e-learning interoperability, to describe compelling benefits of interoperability using these models, and then to clearly tie the specifications to those models and benefits.
- There will be a strong focus on global implementations and reuse of the IMS specifications. Reference models and examples will include companies and organizations in Europe (UK, Italy, Netherlands), Australia, Canada, Japan, China, Singapore, U.S. and possibly others.
- This workshop will contain six hours of content. Times shown below are initial estimates, and will evolve as the workshop is formalized. In general however, there is too much content in this outline to effectively include in a single workshop. We will be ‘cutting down’ the content as we go along to focus on the most important stuff, and on the best case studies.

WORKSHOP CONTENT

Introductions and Overview of the Workshop Contents (15 minutes)

- Presenter introduces self.
- We will not have each participant introduce themselves, this would be too time-consuming.
- Review content of Workshop 1, and also briefly describe content of Workshop 2.

The Interoperability Challenge / Value Proposition (30 minutes)

Define the problems / opportunities that the specification / standards bodies have been trying to address.

Why do different groups care about interoperability, what benefits does it provide?

- Content Developers
- Organizations delivering learning programs
 - Companies
 - Schools
 - National Initiatives
- e-Learning Product Vendors
- Authors
- Faculty

Introduce the case studies / examples that will be used throughout the day. Who are the organizations, what problems are they trying to solve, what benefits are they looking for? These case studies / examples illustrate how IMS and related e-learning interoperability specifications have been used to lower costs and improve stability in companies, schools, products and large learning initiatives.

e-Learning Interoperability Models (45 minutes)

Review three different models of e-learning, and describe where various specifications support e-learning interoperability in these models.

Show where different points of interoperability in these models

- Learning Technology Functionality model
- SCORM Content Life Cycle
- Learning Content Model

In this section, provide a very brief description of the various specifications, and show where they support these interoperability models. The specifications to be covered are:

- Content Packaging
- Metadata
- Runtime Content Communication (AICC / SCORM)
- QTI
- Enterprise
- Learner Information Package
- Simple Sequencing
- Digital Repository Interoperability
- Accessibility
- Competency Definitions (should this be covered??)
- Learning Design

The Specification / Standards Development Process (45 minutes)

- Describe the specification / standards development process from requirements to specification to adoption / profiling to standardization

- Position the different groups in this standards 'life cycle' IMS, ADL, IEEE LTSC, AICC, CEN / ISSS, ALIC, eGIF, OKI, SIF
- Clarify the meaning and role of market-specific Application Profiles – provide examples
- Characterize the adoption level, position in the life cycle of the standards listed above.
- Provide an overview of the evolution and current status of the SCORM application profile.

Functional Overview of Specifications (2 hours)

For each specification cover the following information:

- Theoretical model – purpose and capabilities of each specification,
- Review where the specification fits in the Interoperability models covered earlier.
- What does it do now, how far down the adoption path it is, what technology it uses.
- Functional description – data model, communication model, whatever model is appropriate for each spec.
- What organizations are involved, have been involved in developing the specification / standard.
- Focus on the organizational / operational / strategic benefits derived from the use of each specification.
- Point to examples of implementations / usage of the specification, linking back to the case studies where appropriate.

Major Application Profiles (30 minutes)

Describe the purpose and importance of application profiles as a logical way of extending and formalizing the use of specifications for a particular market.

Describe key application profiles, including:

- SCORM from ADL
- eGIF
- Others – to be determined?

Conformance Programs (15 minutes)

- Programs that exist today
 - AICC
 - IMS
 - SIF
- Development of IMS conformance programs
- Examples of conformance programs associated with application profiles
 - SCORM

- UK initiatives

Future directions (15 minutes):

- Next steps for various specifications
- Movement towards Web Services
- Development / expansion of reference models

Resources available for further information (15 minutes)

- Compliance / fitness programs
- IMS libraries
- User communities
- Best practice examples
- Etc. (this list will be developed)

Evaluating your potential use of e-learning interoperability specifications (30 minutes)

This section of the workshops will be designed to involve the audience a bit in discussion of this issue. If time is short, this discussion will not be encouraged.

So, how do you decide which specifications are relevant to you?

- Functional matrix – what parts of the e-learning functional models affect your organization and your technology?
- Picking an application profile / community.
- Reacting to / planning for future evolution of the specifications.
- Deciding when and how to get involved in the specification development process.