

Learning technology standards

Eric Kluijfhout

Open University of the Netherlands

Educational Technology Expertise Centre

Learning technologies

- Evolved over the past 2-3 decades
- Fast succession of technology generations
- Easily accessible and young field with few rules and regulations
- Wide variety of LT adoption levels and products between (and within) institutions

Why LT standards?

- Safeguard your investments in electronic learning resources
- Make learning resources accessible, retrievable and re-usable for colleagues and others
- Make learning resources interoperable between virtual learning environments
- Create interoperability between virtual learning environments, administrative systems, library systems, etc.

Standards on what?

- Data definitions (learning objects, student characteristics, etc.)
- Interoperability between systems (components):
 - Data formats
 - Packaging
 - Sequencing
- Learning Services Architectures
- Underlying infrastructural standards

What standards may do for you

- Prolonged shelve-life of e-content
- Sharing and distributing e-content
- Interoperability between systems and between domains
- Less dependency on one system/supplier
- Reference architectures: personalised services

What standards will not solve

- The production of inferior learning materials
- Sub-standard teaching practices
- Sloppy records keeping
- Ineffective organizational procedures
- Attitudes that foster the creation of 'kingdoms'
- High costs of education

Some existing LT standards

- Metadata
- Repository interfacing
- Content packaging and sequencing
- Assessment
- Student and course data
- Accessibility
- Learner competencies
- Learning activity modelling
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Problems with present standards

- There are too many of them
- Together they do not cover the full education domain
- Some are overlapping
- They are constantly changing
- Data definitions between standards are not harmonised
- Many only support the most basic pedagogical models
- Some are rather empty one-dimensional containers
- ‘Conformance to standards’ means different things to different people

Specifications, standards, and application profiles

- Specifications are typically drawn up by research communities (e.g. IMS, CETIS-SIGs)
- These are then tested by user groups (e.g. AICC)
- And finally submitted to official standards body (e.g. IEEE, ISO)
- Most LT standards are in fact still specifications!
- Application in real life: instantiation through the creation of application profiles

Considering the adoption of standards?

- Be sure why you want to apply them: what value will they add in your situation?
- Be sure you can explain this to the people who will have to work with them
- Standards should make life easier, not more complicated
- Not everything possible may be useful

Devise your implementation strategy

- Clarify the underlying business model:
 - Who will be the main beneficiaries?
 - Who will be doing most of the work?
 - Who will pay for it?
- Analyse workflow and role implications
- Decide on scope, phasing and upscaling strategy
- Decide on bottom-up and top-down drivers
- Secure active management support and local champions

For more info

- www.cetis.ac.uk/statis/standards.html
- www.imslobal.org

eric.kluijfhout@ou.nl

eric.kluijfhout@home.nl