

LETSI.ORG

A new type of standards organization focused on modernizing both learning systems interoperability and the standards development process.

Sponsors: Adobe, Booz Allen Hamilton, Korea's IT Promotion Agency, and the IEEE. LETSI is a program of the IEEE Industry Standards and Technology Organization.

Seeking a common framework for K-12, higher education, job training, and professional certification. Solutions and materials developed in healthcare training, for example, might find utility in high school biology.

Working with IEEE to change the standardization process: the process is too slow to support rapid innovation. Dozens of published standards have never implemented in a single product, and, despite conformance testing, true interoperability has rarely been achieved in the education sector. A "software product management" perspective is needed.

Content interoperability may be the wrong way to look at the problem.

The objectives:

- Cost savings from market expansion and content sharing and re-use
- Broad potential market justifies increase investment – better content.
- Reduced risk of vendor lock-in – accelerated adoption of new technology.

The assumptions implicit in today's content interoperability standards are out of date:

- Pedagogical assumptions reflect programmed instruction at best, PowerPoint at worst. E.g., online traffic school.
 - Constructive-, discovery-, and problem-based learning don't fit.
 - Mobile, collaborative, social, immersive learning environments don't fit.
- Technology assumptions are pre-web.
 - Software architecture assumes Enterprise Learning Management System delivery of content to an Enterprise LMS that manages content and permissions (billing), delivers learning experience, and keeps roster and records.
 - Popular open standards like MPEG and PDF have superseded proprietary elearning content formats.
- Realizing the potential of learning technology to improve and streamline education will require disruptive change in institutions and business models.

Unfortunately, the resulting standards-based content tends to be the lowest common denominator in terms of functionality.

Publishing and delivery paradigm – no longer works for newspapers, books, music, The writing is on the wall.

What is needed: a modern approach that allows all learning delivery applications (including hosted services) to exchange data with multiple management applications about resources (content), students (and other participants), and performance during an activity (in terms of competencies).

Why open standards?

Definition

- Open and transparent proceedings
 - Control by entrenched players is apparent
 - No “members only” exclusion period
- Unencumbered use and modification by Communities of Practice.

Inclusive of all stakeholders, even the most impoverished

Allow researchers, startup companies, and other small-time innovators to reduce barriers to market entry caused by the cost of integration with installed systems.

Allow communities of practice to modify standards as necessary for community-specific requirements or experimental innovations.

Sometimes formal standards are not the best interoperability solution. Worldwide web standards, for example are often not formalized - constantly evolving in open working groups.

Ideas for the US Dept. of Education

National student ID:

- Allows data interop across institutions and jurisdictions
- Key to breaking down data silos
- Could be extended to federated learner profiles for social learning apps

National competency framework, which impacts student records, curriculum standards, content descriptions, and even job descriptions. Perhaps to include formative assessment tools for students (which would in turn serve as extrinsic definitions of the competencies.)