Better Learning from Better Learning Technology™

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Agenda

1. IMS Global Mission
2. IMS Global Progress
3. IMS Global Community
4. IMS Global Work
1. IMS Global Mission
IMS Mission Statement

The mission of the IMS Global Learning Consortium is to advance technology that can affordably scale and improve educational participation and attainment.
Building the EdTech Innovation Eco-System

- Ed Tech Interoperability Standards
- Technical Foundation for Distributed Innovation
- Adoption of Innovation at Scale Toward Strategic Goals
- Large-Scale Adoption Projects
- Recognizing Impact on Access, Affordability, Quality of Education
- Annual Learning Impact Conference & LIA Awards

Purposeful Technology Innovation Applied to Improve Education
Is there a “platform”-neutral way to enable an effective ecosystem of educational content, apps, tools, etc? Yes. IMS.
Better Learning from Better Learning Technology

How Does IMS Enable Better Digital Learning Experiences?

Seamless plug & play integration
- Creates better user experiences & enables greater educational insight.

Agile open architecture & extensive ecosystem
- Enables flexibility, efficiency & choice

Effective member-based collaboration
- Means getting to the future sooner with sustainable progress.
2. IMS Global Progress
A New Architecture for Learning

by Rob Abel, Malcolm Brown, and John J. Suess

Published on Monday, October 7, 2013 | 0 Comments

If we are to support students and faculty as connected learners and instructors, we must rethink our approach to academic technology architecture. At the foundation and core of that architecture is information technology, in its role as the strategic enabler of connected learning.

Rob Abel is Chief Executive Officer, IMS Global Learning Consortium. Malcolm Brown is Director, EDUCAUSE Learning Initiative (ELI). Jack Suess is Vice President of Information Technology and CIO, University of Maryland, Baltimore County.
A New Architecture for Learning

http://www.educause.edu/ero/article/new-architecture-learning

What if...

✓ IT could safely integrate applications in a day rather than months?
✓ Faculty could seamlessly combine tools into a course with one click?
✓ Analytics data flowed easily from all learning resources and apps?
The Next Generation Digital Learning Environment

A Report on Research

Malcolm Brown, EDUCAUSE Learning Initiative
Joanne Dehoney, EDUCAUSE
Nancy Millichap, Next Generation Learning Challenges

ELI Paper
April 2015

Abstract
In partnership with the Bill & Melinda Gates Foundation, EDUCAUSE explored the gaps between current learning management tools and a digital learning environment that could meet the changing needs of higher education institutions.
IMS Global Learning Consortium Receives Grant to Accelerate Digital Learning Content, Tool and App Connectivity

Enabling greater choice of technologies that work together for students, faculty and institutions to support personalized learning is the goal of three-year grant from the Bill & Melinda Gates Foundation

Lake Mary, Florida - 29 October 2014 – IMS Global Learning Consortium is pleased to announce that the Bill & Melinda Gates Foundation has awarded IMS a grant to accelerate deployment of open standards that provide a foundation for connectivity of learning platforms, digital courseware, tools and resources so that they can be used together to support the needs of instructors and students. It is anticipated that the results from this grant will greatly increase the number of personalized learning solutions that can be readily integrated by suppliers and institutions, providing greater choice for students, instructors and institutions to improve educational participation and achievement.

The ease of use of digital content, courseware, tools, and apps within the institutional setting and the interoperability of data available from these same resources is key to enabling the future of personalized learning. Today most digital educational resources take months to integrate with institutional systems or are not integrated at all. As a result, the student learning data remains locked inside, where it is not readily usable by instructors or combinable with data from other systems. Thus, the student and the instructor are deprived of an integrated teaching and learning experience.

The grant will accelerate adoption of IMS Learning Tools Interoperability® (LTI®), which is already used to enable seamless integration of content, tools and apps into more than 30 learning platforms and the IMS Caliper Analytics™ Framework (Caliper), which enables secure learning data sharing and analysis. The grant will focus on adoption of LTI
Can Institutions Lead the Evolution to Digital Teaching and Learning? Yes, they Can - And they are via IMS Global!

Getting to Better Learning from Better Learning Technology Faster

Easier EdTech
Teachers, Students & Institutions Are More Likely to Use Technologies that Are Seamlessly Integrated into their Workflow and Lives!

Simple to Sophisticated
Begin to Transition to Integrated Digital Resources Today & Evolve to Sophisticated Data Analytics.

Agile & Responsive
Integrate Digital Learning Resources in Minutes Rather than Months to Improve Choice, Flexibility and Innovation.

Institutional Members Lead Adoption of the IMS Open Architecture for Educational Innovation

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Empowering Universities

Unizin is a consortium of like-minded institutions facilitating the transition toward collaborative digital education. We help universities provide teachers and students with more digital learning options. Our dynamic ecosystem provides analytics that can be used to track progress and improve student outcomes.

Our Ecosystem

Unizin’s ecosystem consists of a set of dynamically evolving software that supports digital teaching and learning.

Adaptable

By loosely coupling service providers, Unizin supports quick transitions can be made to the best-in-class tools and services. Our ecosystem integrates key tools for a seamless user experience.

Collaborative

As a consortium we leverage the knowledge and experience of our member schools by sharing best practices and content from our ecosystem’s members.

Insightful

Unizin provides data to universities surrounding every aspect of the ecosystem. Through many vendors, institutions have little or no access to their data. With reports and data, universities can make data-driven decisions.
Unizin: Content, Platform(s), Analytics

Owned Content
- Rights management
- Resource repository
- Courses via

Software Platform
Blend of Sources:
LMS/Flipped, Distance Ed, Badges, & MOOCs

Analytics
- Datasets
- Policies
- Models
- Assess
- Consulting

Direction
University Member Owners

Data
“UMBC joined the Connected Learning Innovation Community because we believe that it is essential to get vendors, institutions, and the open source community adopting a common set of standards to build the learning ecosystem. My hope is that by joining with IMS, my institution can be an early adopter and help lend support for the creation of innovative learning applications.”

– Jack Suess, Vice President Information Technology and CIO, University of Maryland, Baltimore County

The Connected Learning Innovation Community

http://www.imsglobal.org/leadingchange/
GradeCraft
Setting the framework for a gameful classroom by facilitating student engagement and aiding instructor workflow.

ChemVantage
Combining instructional videos with computer-graded quizzes, assignments and practice exams to support learning and student success.

OneSearch Lite
Searching the library databases to embed full-text articles directly into the learning management system.
Big Districts Pressure Publishers on Digital-Content Delivery

Students participate in classes at Houston’s Energy Institute High School, where a new system for using digital content is being tested.
—Photos by Swikar Patel/Education Week

By Benjamin Herold

Houston

A handful of large school districts are aggressively pushing big publishers and other providers of digital content to overhaul the way they deliver instructional materials, a movement that experts say could upend long-established purchasing patterns and help educators more easily access materials from multiple vendors.

The movement is being led by the 215,000-student Orange County, Fla., schools, which have declared they will no longer do business with content vendors that do not adopt "interoperability standards" put forth by the IMS Global Learning Consortium, a Lake Mary, Fla.-based nonprofit membership organization. Other prominent ...
February 9, 2015

Dear Educational Resources Providers:

This communication is to formally notify you of the Houston Independent School District’s (HISD) Expectations for Digital Educational Resources for the 2015-2016 school year. As you know, HISD has launched PowerUp, a district wide initiative aimed at transforming teaching and learning. PowerUp is about “powering up” all 282 of our schools serving 215,000 students. This is to promote a personalized learning environment for today’s 21st-century learners and to enable teachers to more effectively facilitate instruction, manage curriculum, collaborate with their peers, and engage today’s students. The PowerUp HUB is a digital teaching and learning platform (a service provided by itslearning) that is in the process of becoming the “hub” of collaboration, curriculum, instruction, and communication for HISD staff, students, and parents. When fully implemented, the HUB will allow all HISD educators to create and share instructional resources and assignments, enable students to tailor their classes to their own personal learning profile, and allow parents to track their children’s progress. More information can be found at http://www.houstonisd.org/hubinfo.

HISD is aligning our selection criteria for digital resources with the IMS Global Interoperability Standards. This will allow for mapping of learning objectives according to Texas and other
Companies Face Rising Demand for Bite-Size Chunks of Curricula

A district using modular digital content could search for a lesson on amphibians, and find an array of...
e-Assessment Revolution!

**QTI (official profiles)**
- Authoring Systems
- Delivery Systems
- Item/Test Bank Systems
- Item/Test Content

**APIP (official profiles)**
- Authoring Systems
- Delivery Systems
- Item/Test Bank Systems
- Item/Test Content
- PNP Systems
- PNP Files

[IMS GLOBAL CERTIFIED Logo]

[ims.cert.org]
Dutch Board of Examinations (the CvTE) Expanding Interoperability with Adoption of IMS Global’s Assessment Standards

November 2014

At the moment, the CvTE is responsible for national exams and tests in primary education, general secondary education and adult education, exams for students of Dutch as a second language, and secondary-level state exams held outside of schools in the Netherlands. Students are required to take and pass national examinations to ensure their proficiency in certain core skills. These exams are important for determining proficiency and preparedness for college studies. The Board of Examinations oversees the quality of those national examinations.

"Although the examinations and tests, which are administered throughout the year, are available in

The CvTE began their search by looking at standards provided by both the IMS Global Learning Consortium and the ADL Sharable Content Object Reference Model or SCORM. "We looked at the 2.1 version of IMS’ Question and Test Interoperability (QTI®) standard, as well as the maturity of both standards. Based on our conversations with the IMS staff, and their moving toward development of the 2.1 version, it gave us the confidence that QTI was the best standard to adopt," said Rob Looij.

The CvTE, Cito and IMS joined forces and agreed to establish a special regional group for Dutch organizations working with the CvTE on this project, called the Dutch Exam Profile workgroup. The actual
IMS Global Announces Ground-Breaking Initiative by Leading Organizations to Create a Highly Interoperable Assessment Ecosystem to Accelerate Transition to e-Assessment

Newly Formed Group of Executives Pledge to Establish a Highly Interoperable End-to-End Assessment Architecture to Enable Growth of e-Assessment Content, Applications, and Innovation

Lake Mary, Florida – 4 May 2015 - IMS Global Learning Consortium (IMS Global/IMS), the world leader in EdTech interoperability and impact, announces the formation of the Executive Board on Assessment (EBA). The EBA’s mission is to set industry direction for years to come and to accelerate the transition to e-assessment by building on the success of the QTI®v2 (Question & Test Interoperability® v2) and APIP® (Accessible Portable Item Profile®) standards to improve content portability, outcomes data interoperability, enable deeper integration with assistive technologies, and remove barriers to accelerate industry adoption of assessment standards.

Over the last several years there has been aggressive movement toward digital assessment that is being spurred by state and national programs, such as Race to the Top Assessment (RTTA) in the U.S. Indeed IMS Global has seen great progress in the market over the last three years as a result of industry adoption of the IMS QTlv2 and APIP standards, as demonstrated by PARCC in delivering to date over 7.5 million tests using QTI and APIP. There is now additional demand by states and school districts to evolve the standards to improve portability and interoperability of assessment content and to remove the barriers to achieving industry-wide conformance.
3. IMS Global Community
A Successful Standard

- Buyer awareness & support
- Enabling standard that delivers
- Viable Consortial Standard
- Community commitment
- Perceived market opportunity
The IMS Community

- Acquire products adhering to standards to achieve strategic goals
- Research & development on standards & interoperability
- Set standards to ensure progress
- Create and/or adhere to standards to enable market efficiency and opportunity
- IMS GLC Mirrors The Market Ecosystem

Education Institutions, Districts, Systems

R&D Education Institutions

Government Organizations

Suppliers
Leading the Change We Wish to See in the World

IMS Global Community

IMS Innovation Architecture

Open EdTech Ecosystem

Models for Transformation of Education

IMS Global Learning Consortium
IMS Global Learning Consortium Growth

IMS Member Organizations End of Year

2015 to date
Learning Platforms that Accept IMS Apps!

http://imscatalog.org/
4. IMS Global Work

The Future of EdTech Starts Here™
IMS Open Standards Make Your Products Better - and Your Customers Happier!

EdTech Needs to be Easier
Teachers, Students & Institutions Are More Likely to Use Technologies that Are Seamlessly Integrated into their Workflow and Lives!

Start Simple, Evolve to Sophisticated
Begin to Transition to Integrated Digital Resources Today & Evolve to Sophisticated Data Analytics.

Focus on Innovation
You can keep wasting time and money on myriad custom integrations - or you can invest instead in teaching and learning innovation.
More/better Functionality

More/better Insight
Caliper Learning Analytics
Enabling Ecosystem Spanning Data Interop + Analytics
Caliper Events

Learning Event

- Learning Context
- Action
- Activity Context

Learning Graph

- IMS LIS Profile (Person, Course, etc.)
- IMS Metric Profile
  - Activity Metrics
  - Activity Information Model
  - Engagement and/or Performance metrics
- Learner
- Course
- Learning Objectives
- Learning Apps
- Outcome
- Activity
- Lesson
IMS Caliper Analytics™ Interoperability Standards Reach Candidate Final Release Status

Candidate final code and development resources for world’s first educational data analytics interoperability standard created by and for the educational community released to the IMS Global Learning Consortium membership

Lake Mary, Florida, USA - May 6, 2015 - IMS Global Learning Consortium (IMS Global / IMS) today announced that the IMS Contributing Member organizations have progressed the breakthrough Caliper Analytics interoperability specification to candidate final release. The goal of Caliper Analytics is to reduce the cost of obtaining quality analytics data from digital educational products by orders of magnitude. As the educational community of institutions and suppliers cooperate on adopting Caliper the data needed to help students succeed and educational institutions improve will become readily available, thus delivering on the promise of digital teaching and learning.

Caliper has progressed through successful alpha and beta specification and software releases, providing code to enable data collection, known as Sensors (or the Sensor API) and data models (known as metric profiles). A developer community web site has been set up for IMS Members while the Caliper v1 work is offered as a candidate final release.

The Caliper workgroup in IMS is led by D2L, Elsevier, Intellify Learning, Learning Objects, McGraw-Hill Education, Penn State University, and the University of Michigan. Over the last 18 months implementations of the Caliper Sensor API and metric profiles have been tested across a wide range of products and are now operational at scale in several well-known educational products. Thus, the confidence level in the candidate final release is high.
IMS Global Announces Initiative to Establish Digital Badges as Common Currency for K-20 and Corporate Education

IMS partners with Mozilla Foundation to accelerate adoption and interoperability of badges in the education and workforce sectors.

Lake Mary, Florida, USA – April 21, 2015 – IMS Global Learning Consortium (IMS Global / IMS), the global leader in education technology interoperability and impact, today announced the formation of the IMS Digital Credentialing Initiative. IMS Digital Credentialing aims to further the adoption, integration and transferability of digital credentials, including badges, within institutions, schools, and corporations.

IMS will leverage existing experience, expertise and momentum. IMS Digital Credentialing will complement and further IMS’s leadership in competency-based learning, including partnerships with AACRAO and the Competency-Based Education Network (C-BEN) to define extended digital transcript and CBE interoperability. The Digital Credentialing initiative will augment current IMS interoperability standards and extend Open Badges as needed to support deeper integration and exchange within extant systems, while exploring new models of badge system design, storage, usage, and evaluation in the institutional context.
Hartelijk Bedankt
Thank You Very Much!

Better Learning from Better Learning Technology™