A Plug & Play Architecture, Ecosystem and Community for the Purpose of Advancing Educational Innovation

2014 Fiscal Results & Progress
Accelerating Membership and Revenues of IMS Global Indicates the Importance of Open Standards to Enable a New Age of Educational Technology Innovation

Financial and Member Growth Highlights:

◊ IMS membership and revenues achieved record levels for the ninth year in a row, finishing the year with 274 member organizations and revenues of $2,790,679.

◊ IMS revenues have grown at a compound annual growth rate (CAGR) of 11.0% over the last nine years. Membership has increased over the same period at a CAGR of 20.8%.

◊ 2014 was the single largest year of growth in IMS membership in history, adding 56 net new members.
To IMS Global Stakeholders Worldwide,

We are pleased to present the IMS annual report for calendar and fiscal year 2014. Thanks to our members, the IMS community achieved record levels of support and adoption of IMS interoperability standards in 2014, a ninth straight year of progress. Additionally, the IMS organization achieved record levels of membership, revenue, and net assets. Notably, IMS added 56 net new members – the largest growth in a single year of our history.

The IMS member community has developed a unique approach to enabling the acceleration of educational technology innovation. Our approach is to foster collaboration among the world’s leading education providers and technology suppliers to design and maintain a common foundation, or “architecture” that removes the barriers to adoption and innovation. Via this “architecture for educational innovation” leading organizations contribute to a base set of open standards and open source code libraries that improve by a factor of 10-1000 the ease with which educational software platforms, content and apps can be connected - thus enabling the education sector to focus on what matters: platforms and applications to support teaching and learning innovation.

We believe that the accelerating growth of IMS Global, upon what is already a very strong base of support, is an indicator of the compelling value proposition of IMS to help bolster the education sector worldwide. Leading institutions, governments and suppliers are finding that aggressive adoption of the IMS architecture is accelerating their leadership in enabling better educational experiences and outcomes.

This report provides highlights of IMS progress during 2014. The progress is a result of the leadership of the IMS member organizations, especially our Contributing Members shown on the back cover of this report. IMS is honored to be the non-profit association that has helped facilitate such truly breakthrough work.

We would also like to recognize the lifetime achievement of our retiring Chair, Dr. William H. Graves. Bill was there in the mid-1990’s to help lead the launch of IMS (and numerous other higher education initiatives). We have learned so much and been inspired by his tireless commitment and unique insights toward improving education worldwide!

Rob Abel, Ed.D.,
Chief Executive Officer

Jack Suess
Chairman of the Board of Directors
IMS Enables an Architecture, Community and Transformative Models for Educational Innovation

What is Needed to Achieve, Scale and Sustain Educational Innovation?

Digital education innovation is here, but not evenly distributed. We have shining examples, but their glow seems to reach a limited few. Scaling of innovation to the level needed to significantly impact national and state educational goals around the world is not happening.

Why?

Without community effort there is not enough resources invested in innovation. Most providers of education, even the largest and most prestigious universities (of which there are relatively few), have limited resources to invest in educational technology innovation.

Without architecture, innovation is easily lost and difficult to scale. Community progress requires a foundation for community efforts—technology that works together; digital tools, apps and content that can be shared; and common approaches that reduce investment in table-stakes integration.

Without transformative models it is unclear where we are going. Literally no one believes that current educational models are adequate for the future, so we need to create and enact bold alternatives that have diversity, personalization and lifelong self-actualization as guiding principles.
Can the worldwide education community of suppliers and institutions voluntarily collaborate to develop and deploy an architecture for educational innovation? Yes they can—and they are—via the IMS Global Learning Consortium.

IMS’s unique focus on technology and interoperability for Learning Impact, now led by more than 290 member organizations across the globe, leads to a unique result … systemic change in the deployment time, cost, usability and data richness of educational platforms, tools, applications and digital content.

The resulting open architecture, created and maintained by all sector participants, is a true enabler for sustainable and scalable innovation, which the education segment is yearning for to improve teaching and learning.

In 2014, the IMS Global community continued nearly exponential adoption of the open standards that underlie the open architecture.
2014 Achievements: Educational Technology Innovation is Expanding via the IMS Interoperable Architecture and Ecosystem

- IMS Learning Tools Interoperability® (LTI®) continues to expand across the learning technology sector, resulting in dramatic improvements in integration among a wide variety of learning platforms and digital resources. More than 40 learning platforms and 100 learning tools have now been LTI certified.
  developers.imsglobal.org/catalog.html
- IMS LTI v2, which enables 1-click auto-negotiated integration of learning resources has been released with several initial conformance certifications granted. In addition, IMS LTI service extensions for rich outcomes and rostering are in early release and addressing key needs across K-20.
  imsglobal.org/toolsinteroperability2.cfm
- IMS introduced the Thin Common Cartridge®, a standard that enables manifests of LTI and web links to be passed as a search index to learning platforms, portals and learning object repositories. The standard includes support for a variety of metadata, including a specific U.S. K-12 metadata profile that can be mapped to existing metadata frameworks. IMS also announced a partnership with the Dublin Core metadata initiative and IDPF to ensure coordination of learning metadata.
  imsglobal.org/cc/
- IMS Learning Information Services (LIS) was extended to provide interoperability for Course Planning & Scheduling (CPS) Systems with Student Information Systems. LIS is also now being applied to K-12 Student Information Systems and Learning Platforms by a leading group of suppliers, states and school districts.
  imsglobal.org/lis/
- IMS Caliper Analytics™, which provides click stream data from learning resources, tools and platforms, achieved alpha release. Caliper is the first open standard for analytics driven and owned by the education sector. IMS has also been developing standards for privacy of student data to support Caliper and other data exchanges in education.
  imsglobal.org/caliper/index.html
- IMS’s work in e-Assessment including Question & Test Interoperability® (QTI®) and Accessible Portable Item Protocol® (APIP®) has enabled the evolution to digital assessment as a more responsive and reliable alternative to paper-based testing. Twenty conformance certifications were issued for QTI and APIP in 2014 confirming the initial establishment of the global e-assessment sector.
  imsglobal.org/question/
- IMS and IDPF (International Digital Publishing Forum) released EDUPUB v1, which is the education sector next generation replacement for PDF combining native web content formats with IMS standards: Caliper, LTI and QTI.
  imsglobal.org/edupub/
- IMS Global was awarded a three-year grant from the Bill & Melinda Gates Foundation to accelerate deployment of IMS Learning Tools Interoperability and Caliper Analytics to provide a foundation for connectivity of learning platforms, digital courseware, tools and resources.
  imsglobal.org/pressreleases/pr141029.html
- 2014 Community Reach: 855 attended face-to-face IMS events; 1,735 individuals participate in the IMS member community; 32,541 individuals are subscribed to the IMS public mailing list; IMS presented at 41 conferences; @LearningImpact (Twitter Account for IMS) has 1,354 followers; IMS Connected Learning Innovation Community has 1,137 subscribers.
Super Charged Year for the Connected Learning Innovation Community, Apps and Platforms

The mission of the Connected Learning Innovation Community (CLIC) is really quite simple: accelerate the development and use of education apps and platforms built on open standards, APIs, and services. Launched in late 2013, we saw a good bit of progress in 2014 by the community to encourage the development of a cross-platform ecosystem that supports plug-and-play interoperability as demonstrated by the following milestones.

¡Mi casa es su casa! From Concept to Reality
Imagine if faculty had thousands of peer-curated learning tools right at their fingertips, sourced from a vast ecosystem of vendors, universities, and other developers, capable of being added into their course site without any development or system admin work. Today this is a reality thanks to UCLA for leading collaboration to create the first peer-to-peer open source reference implementation of CASA that will enable institutions to crowdsource the best learning apps.

Annual IMS App Challenge Launched
Out of 22 total submissions, five innovative apps emerged as the winners for their creativity, ease of integration enabled by the adoption of the LTI specification, and potential for enabling connected learning in the classroom and online. The following winners each received a $1,000 prize.

- **1st Place**: Hoot.Me
- **2nd Place**: SoftChalk Cloud
- **3rd Place**: LeaP – Learning Path
- **4th Place**: QuestionPress
- **5th Place**: VoiceThread

Through the adoption of LTI, these applications can easily integrate into any of the 40+ conformance certified learning platforms (developers.imsglobal.org/catalog.html).

Institutional Leadership Community Grows
The CLIC community grew to over 1,100 members strong in 2014. The purpose of this community is to feature enterprise learning apps, share the latest connected learning institutional successes, and to work together to establish some baseline policies to help guide institutions in determining how, why and when to implement LTI apps and CASA instances.

Learn how you can participate in the Connected Learning Innovation Community at imsglobal.org/leadingchange.
Growing Push by Districts for Adoption of Digital Curriculum Interoperability Standards

As districts transition to digital curriculum to evolve personalized instruction, they are increasingly challenged with integrating quality content and tools from a wide variety of internal and external sources. To address these challenges, IMS Contributing Members Houston ISD, Houghton Mifflin Harcourt (HMH), Orange County Public Schools, and SAFARI Montage collaborated in 2014 to create a variation of the Common Cartridge standard called the Thin Common Cartridge.

The Thin CC features LTI and web links, with each described by a specific set of metadata. A content provider publishes a Thin CC that is, in essence, an index to the potential entry points within a larger body of content hosted on a secure server. The learning platform, LOR, or any district system that supports the Thin CC standard can then search for, manipulate and launch teachers and students directly to a learning object of interest.

This push for digital curriculum interoperability standards is a game changer for evolving personalized learning, and we expect to see continued momentum by districts and states to advance collaboration around the adoption of digital curriculum, apps and tools that are integrated into the teaching and learning experience.

Leading Transformational Change

“By contractually obligating publishers and other content providers to conform to IMS Global standards, it has become possible for teachers and students to seamlessly access quality digital content from a variety of sources in a single window. As a result, we are able to provide quality, standards aligned resources from multiple providers that enable personalized learning.”

— George Perreault, Director, Instructional Technology and Library Media, Orange County Public Schools

Digital Curriculum Revolution

“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.”

— Benjamin Herold, EDUCATION Week

EDUCATION Week, Big Districts Pressure Publishers on Digital Content Delivery, December 1, 2014, www.edweek.org/ew/articles/2014/12/03/13techstandards.h34.html
The IMS Learning Impact Awards and Leadership Institute

The Learning Impact Awards program is an annual competition that was created in 2007 by IMS Global for the purpose of recognizing outstanding applications of technology that address the most significant challenges facing the global education sector. Utilizing a unique evaluation process, the Learning Impact Awards program aims to identify repeatable implementation of projects and practices that can help institutions and educational authorities provide greater access to educational opportunities, create affordable personalized learning environments, and/or improve the quality of teaching and learning.

The Evaluation Process
A unique aspect of the Learning Impact Awards (LIA) program is that it was designed to evaluate the use of technology in context at an educational institution based primarily on evidence as defined by eight dimensions of potential “learning impact”:

» Access
» Adoption
» Affordability
» Accountability

» Quality
» Organizational Learning
» Interoperability
» Innovation

Another unique aspect of the LIA program is that it focuses on understanding the application of technology to scale and support new educational models. As a result of this focus on new models and evidence of impact, the LIAs recognize the effective uses of technology that have the potential to transform education.

To win an award a nomination must describe impact within a specific educational context, as this is the essence of the evidentiary component. Winners were announced at the conclusion of the 2014 Learning Impact Leadership Institute in New Orleans, Louisiana, an annual global conference focused on developing leaders and ideas to help shape the future of educational technology.
2014 Learning Impact Award Winners

**Platinum Medals**

*Degree Compass™ at the Tennessee Board of Regents*

Personalized course recommendation tool that uses predictive analytics to guide students’ course selection in a way that enhances the rate of academic success and drives on-time completion of their degree.

*The Content Automation Tool (CAT) – Florida Virtual School*

CAT effectively removes the administrative burdens of maintaining multiple internal LMSs, dramatically improves efficiency of internal processes, streamlines Florida Virtual School (FLVS) client use and maintenance of content, and introduces a new recurring revenue model.

**Gold Medals**

*Southern New Hampshire University (SNHU) and McGraw-Hill Education (MHE)*

MHE and SNHU worked with Blackboard to further the development of v2.2 of the MHE building block to include automated course provisioning and centralized user pairing to remove instructor involvement from the course setup process. Additionally, time on task data is now shared from MHE to Bb, providing SNHU’s advisors with an early warning system.

*Improving Teacher Efficacy and Student Learning One Camera at a Time – SAFARI Montage and Newton County Schools*

Using 552 VIEWPath classroom technology systems throughout the district in an effort to improve teaching, learning and safety. The systems were implemented following a pilot program that showed an increase in teacher effectiveness, decreasing student misbehavior by 58%.

**Silver Medals**

*SpeakApps at the Universitat Oberta de Catalunya*

An innovative integration of open source tools and materials specifically designed so that language learners can practice their speaking competences in a foreign language online.

*Broadband-Enabled Traineeships in Interactive Design*

Lightmare Studios and The Gordon teamed up on a pilot educational model developed for Years 10 and 11 secondary school students to deliver traineeships in an interactive game design.

**Bronze Medals**

*DegreeMap at Austin Community College*

Application from Civitas Learning allows advisors and students to access and compare academic degree requirements, enabling personalized learning pathways.

*Learning Cell Knowledge Community – Beijing Normal University*

Compared with the general online learning systems, Learning Cell Knowledge Community uses semantic ontology technology to organize learning resources that can also be attached with social cognitive network properties.

Additional information about the 2014 Learning Impact Award winners, including videos and brochures for each winning project, is available online at: [www.imsglobal.org/learningimpact2014/liafinalists.html](http://www.imsglobal.org/learningimpact2014/liafinalists.html)
The Learning Impact Report is an annual report that provides a thorough analysis of the Learning Impact Award winners to help educational authorities identify impactful projects and potentially repeatable implementations of educational technology to achieve institutional goals, such as increasing access, creating personalized learning environments, or improving student success.

The 2014 Learning Impact report identified five key trends that can help institutional leaders determine whether their institution, district or state has considered a wide range of potentially impactful technology innovation. The key trends included:

- Growing ecosystem of educational apps are enabling rapid integration of innovative learning tools for teachers and students
- Emphasis on student success and outcomes-based learning paving the way for GPS-like products
- Gaming and simulation entries reinforce the power of games to improve student engagement through experiential learning
- Evolution of robust digital learning networks that are scalable and flexible continues thanks to learning platform innovation and open infrastructures
- Scaling pedagogical knowledge and practice to help teachers innovate in the classroom is gaining significantly in K-12 via new digital platforms

The 2014 Learning Impact Award Evaluators

**Christien Bok**  
SURF  
The Netherlands

**Gary Driscoll**  
Educational Testing Service  
United States

**Michael Feldstein**  
eLiterate  
United States

**D. Patches Hill**  
Indian River School District  
United States

**Gary Driscoll**  
Educational Testing Service  
United States

**Lisa Mattson**  
IMS Global Learning  
United States

**Robin Robinson**  
Framingham State University  
United States

**Christi Segal**  
Ellucian  
United States

**Jason Levin**  
Western Governors U.  
United States

**Jeff Swain**  
Penn State University  
United States

**Karen Vignare**  
University of Maryland University College  
United States

**Stavros Xanthopoylos**  
Fundação Getúlio Vargas  
Brazil

**Tsuneo Yamada**  
Open University Japan  
Japan

**Tom Ingram**  
Escambia County School District, United States

**Tricia Kennedy**  
Gwinnett County Public Schools, United States

**Colin Smythe**  
IMS Global Learning  
England

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**Count by Country/Region 2007-2014**

- **USA, 37**
- **Australia, 16**
- **UK, 13**
- **Canada, 11**
- **Europe, 11**
- **Brazil, 3**
- **Singapore, 2**
- **Korea, 10**
- **China, 1**
- **Taiwan, 1**
- **New Zealand, 1**

**Platinum**

**Total**

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IMS Board of Directors

A majority of the IMS Directors are elected by the Contributing Members. They serve to represent the membership as a whole and its diverse interests.

- Rob Abel, Ed.D., Chief Executive Officer, IMS Global
- Mark Armstrong, VP, Higher Education Product Development, Oracle
- Jeremy Auger, Chief Strategy Officer, D2L
- Timothy Beekman, President & Co-Founder, SAFARI Montage
- Malcolm Brown, Director, EDUCAUSE Learning Initiative (ELI), EDUCAUSE
- Michael Chai, Chief Digital Officer, Pearson North America
- Paul Czarapata, Ed.D., VP & CIO, Kentucky Community & Technical College System
- William Graves, Ph.D., IMS Board Chair Emeritus
- Steve Flynt, Ph.D., Chief Strategy and Performance Officer, Gwinnett County Public Schools
- John T. Harwood, Ph.D., Associate Vice Provost for IT, Penn State
- Rick Johnson, VP Product Dev. & Sales Engineering, Vital Source, Inc.
- Mark Jones, Senior Vice President and Chief Product Officer, Ellucian
- Michael King, Vice President, Global Education Industry, IBM
- Stephen Laster, Chief Digital Officer, McGraw-Hill Education
- Bruce Maas, Vice Provost for IT & CIO U. of Wisconsin-Madison
- Jason Palmer, Deputy Director, Postsecondary Success, Gates Foundation (Observer)
- Laura Patterson, Associate Vice President and CIO, U. of Michigan
- Mark Stiles, Emeritus Professor, Staffordshire U., & Chair of JISC-CETIS
- Jack Suess, Chairman of the Board, VP of IT and CIO, University of Maryland, Baltimore County
- Linda Thomas, VP, Strategy and Research, SMART Technologies

Executive Technical Advisory Board

The IMS Executive Technical Advisory Board is responsible for identifying and prioritizing the technical work of IMS Global.

- Brent Bailey, Director, Technology Strategy, Elsevier Education
- Gary Driscoll, Senior Strategic Advisor, ETS
- Alfred Essa, VP, R&D and Analytics, McGraw-Hill Education
- David Gappa, Software Architect, SAFARI Montage
- Brian Knotts, Senior Vice President, Global Architecture, Ellucian
- Liz Pisney, Director of Product Management, Follett Higher Education Group, Follett Corporation
- Mahfuzur Rahman, Director of Standards & Technology Enabling, Samsung Research America
- Rose Rocchio, Director Education and Collaborative Technologies, Office of Information Technology, UCLA
- Tim Tomlinson, Vice President, Core Services Product Development, Blackboard
- Chris Vento, CEO, Intellify Learning
- Jennifer Whiting, Sr. Manager Product Development, Florida Virtual School

Executive Strategic Council

The Executive Strategic Council serves as an advisory body to IMS Global’s leadership to highlight major challenges facing the learning community worldwide, both current and future, and help guide the strategic priorities of the IMS member community to advance technology to support innovative models for improving outcomes.

- John Cavanaugh, Ph.D., President and CEO, Consortium of Universities of the Washington Metropolitan Area
- Marie Cini, Provost, University of Maryland, University College
- Antonette “Toni” Cleveland, Ph.D., President and CEO, HERDI (Higher Education Research and Development Institute)
- James DeVaney, Assistant Vice Provost for Digital Education & Innovation, University of Michigan
- Dae-Joon Hwang, Ph.D., CEO, IMS Korea, Provost, Planning & Budgeting and Professor, School of Information & Communication Engineering at Sungkyunkwan University
- Steve Klingler, Vice Chancellor, Center for Learning Innovation, Argosy University
- Dr. Bernard Luskin, CEO, Moorpark College, President, APA Society for Media Psychology and Technology
- Felice Nudelman, Chancellor, Antioch University
- Gary Shapiro, Chief Executive Officer, Collegiate Retail Alliance/RATEX Business Solutions, Inc.
Connected Learning Advisory Council

The goal of the Connected Learning Advisory Council is to advance effective use of innovative technologies to support teaching and learning, including adoption of “efficient IT’’ practices that make the sharing of data from various sources easier and more actionable, thus supporting the efforts to scale educational attainment.

• Sean DeMonner, Executive Director, ITS Teaching & Learning, University of Michigan
• Max Davis-Johnson, Chief Information Officer, Associate Vice President Office of Information Technology, Boise State University
• Jeff Henry, Director, Academic Computing and Media Services, UC San Diego
• Patrick Laughran, Chief Information Officer, Framingham State University
• Robbie K. Melton, Ph.D., Associate Vice Chancellor for Mobilization and Emerging Technologies, Tennessee Board of Regents
• Terence N. O’Heron, Director of Operations and Program Manager, ANGEL, Teaching and Learning with Technology, Information Services, The Pennsylvania State University.
• Ken Tothero, Associate Director of Educational Technology, Center for Teaching and Learning, University of Texas at Austin
• Karen Vignare, Ph.D., Vice Provost, Center for Innovation in Learning, University of Maryland University College

I3LC Advisory Council

The mission of the Instructional Innovation through Interoperability Leadership Council (I3LC) is to enable collaboration among district and state leaders who are creating and implementing technology integration strategies that enable continuous improvement in instruction and personalized learning.

• Marty Bray, Chief Technology and Information Officer, Forsyth County School District, GA
• Leo Brehm, Chief Information Officer, Newton Public Schools, MA
• Steve Buettner, Director of Media and Technology, Edina Public Schools, MN
• John Connolly, Technology Education Director, Chicago Public Schools, IL
• Hal Friedlander, Chief Information Officer, Academic Solutions, New York City Public Schools, NY
• Robert J. Gravina, Chief Information Officer, Poway Unified School District, CA
• Joe Griffin, Chief Technology Officer, Keller ISD, TX
• D. Patches Hill, Technology Systems Manager, Indian River School District, DE
• Tom Ingram, Director of IT, Escambia County School District
• Tricia Kennedy, Executive Director of eCLASS Transformation, Gwinnett County Public Schools, GA
• Kurt Kiefer, Assistant State Superintendent for the Division of Libraries and Technology, Wisconsin Department of Public Instruction
• Barbara Nesbitt, Director of Instructional Technology, School District of Pickens County, SC
• George Perreault, Director, Instructional Technology & Library Media, Orange County Public Schools, FL
• Serena Sacks, CIO, Fulton County Schools, GA
• Lenny Schad, Chief Technology Information Officer, Houston Independent School District

IMS Staff

A highly experienced core staff supports and facilitates our member organizations around the world in the full range of IMS activities.

• Rob Abel, Ed.D, Chief Executive Officer
• Hap Aziz, Connected Learning Facilitator
• Chris Chung, K12 Community Facilitator
• Sandra DeCastro, Vice President Community Programs
• Tracy Fandel, Manager, Finance and Administration
• Mark Leuba, Competency Based Education Facilitator
• Lisa Mattson, Chief Operating Officer
• Mark McKell, Project Manager
• Charles Severance, Architect
• Colin Smythe, Chief Architect
• Stephen Vickers, Project Manager
IMS Global Contributing Members

Contributing Members are the voting members of IMS and provide over 90% of the support for the work of the IMS community. By being a Contributing Member an organization demonstrates superior leadership and dedication to the IMS mission of establishing an open foundation for seamless, agile and information-rich educational technology integration.

See the full list of more than 290 IMS members at all levels: imsglobal.org/membersandaffiliates.html

The views expressed in this report are solely those of the authors and do not represent the opinions of those persons or organizations named herein.

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