



# Creating the Future EdTech Ecosystem Together

## 2016 Annual Report

*Fiscal Results & Progress*



**IMS GLOBAL**<sup>®</sup>  
Learning Consortium  
Better Learning From Better Learning Technology

# Financial and Member Growth

IMS Global achieved record levels of growth for the 11<sup>th</sup> year in a row.

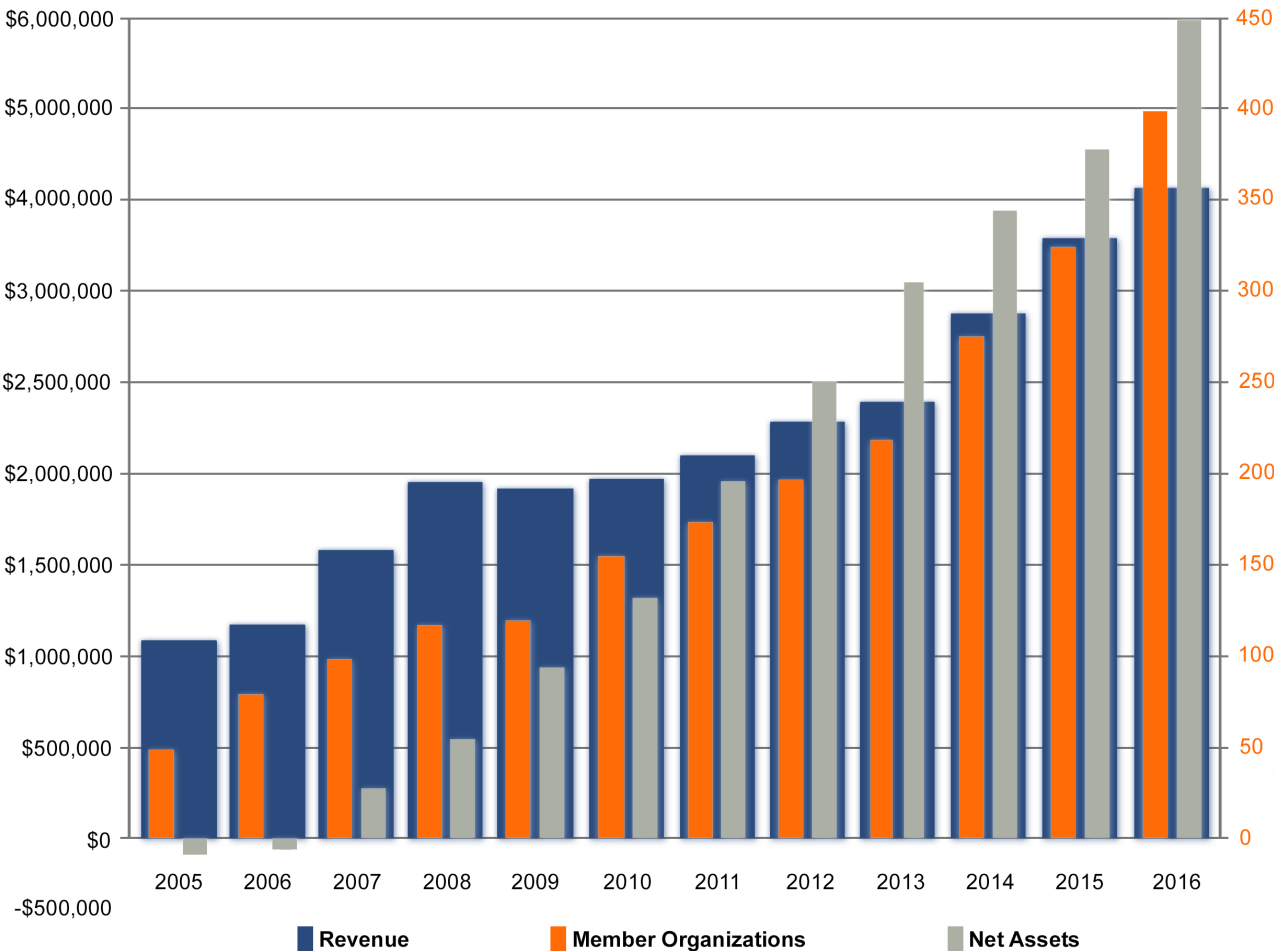
**392**

MEMBER ORGANIZATIONS

**\$4,095,741**

IN REVENUES

Revenue, Membership Totals and Net Assets 2005-2016



**53**

NET NEW

**MEMBERS**

3rd year in a row of accelerated growth.



IMS Global revenues have grown at a compound annual growth rate (CAGR) of **12.8%** over the last 11 years.

Membership has increased **20.6%** CAGR over the same period.

## Letter from the Chairman and the CEO

### To IMS Global Stakeholders Worldwide,

We are pleased to present the annual report for calendar and fiscal year 2016. The IMS Global educational technology innovation ecosystem “movement” continues to accelerate in both K-12 and higher education around the globe.

We thank the IMS member organizations ([imglobal.org/membersandaffiliates.html](http://imglobal.org/membersandaffiliates.html)) for amazing leadership. IMS member organizations around the world, universities, school districts, ministries of education, and suppliers of all sizes are enabling new models of education, not just for themselves, but for all that wish to take advantage of the resulting ecosystem of interoperable products.

“Better Learning Through Better Learning Technology,” the IMS slogan, is becoming a reality. Over 2,600 leaders, representing 392 organizations, are now collaborating via IMS Global. 53 new member organizations joined in 2016. While the annual IMS revenues surpassed \$4 million for the first time, the IMS revenues represent a small percentage, estimated at less than 10%, of the investment being made in the IMS ecosystem across our membership. Considering the nearly 20-year history of the collaborative, IMS is likely the largest collective investment in edtech market development ever.

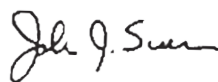
Simply put, the IMS-based educational technology ecosystem is a better way to the future than any of the known alternatives in terms of providing great user experiences, lowering the barriers to innovation, enabling actionable information and saving on integration time and cost. To support the many K-12 and higher education institutions that are demanding IMS certified products, IMS has invested in providing a much more informative certified product directory ([imscert.org](http://imscert.org)), allowing easy comparison. IMS also has invested in providing code libraries and APIs for our members wishing to accelerate development and achieve certification.

While we are making great progress we still have a long way to reach the full potential of our vision. As technology continues to evolve we have to quickly adapt and develop new standards. This requires our institutional members to drive our functional requirements and to work closely with our supplier members in an “agile” manner—a term not normally associated with “standards” organizations. But, IMS is out ahead of the general market and we expect to stay ahead with your help.

We look forward to continuing to build the educational technology ecosystem with you!



Rob Abel, Ed.D.,  
Chief Executive Officer



Jack Suess  
Chairman of the Board of Directors

## Getting to the Future of Digital Learning Faster

The work of the IMS Global member community is dramatically improving educational technology experiences for instructors and students, including enhanced usability, greater choice, and better insights that help students succeed.

Disjointed and siloed technology are barriers to learning. As options for digital support continue to grow rapidly, institutions are challenged to select and combine the right resources and to collect and view the right data to help students progress.

The solution is in the hundreds of IMS Global Conformance Certified digital learning apps and tools. Procuring IMS Global Conformance Certified products is the best way to establish a plug-and-play ecosystem to accelerate teaching and learning innovation and trust that personal data is being protected and used only for agreed upon purposes. The official directory of IMS Global Conformance Certified products is maintained at [imscert.org](https://imscert.org).

By adopting IMS Global standards, all K-20 institutions, both large and small, are able to cut through the clutter of the ever-growing myriad of learning systems and applications—proprietary technology formats that are inhibitors to personalized learning—and turn it into a learner-centered and user-friendly ecosystem. This results in:

- Seamless user experience and information integration across tools and digital resources from many sources
- Agile plug-and-play connectivity among apps and platforms reduces costs and implementation times
- Effective investment in the use of technology through the ability to understand the learning impact of diverse learning approaches

A better future for education is closer than you think, and through collaboration and leadership, IMS Global members are getting to it faster!

## 2016 Achievement Highlights

The IMS Learning Tools Interoperability® (LTI®) standard continued to expand across the education sector, with 144 products certified in 2016 alone. While the success of LTI as a simple “launcher” of apps with single sign-on has been impressive, market leaders shifted focus to leverage LTI for deep integrations to improve the user experience and as a trusted connection for data sharing, such as the reporting of gradebook information.

LTI v2.0, which enables adaptive integrations “at the speed of now,” has made its way into the product plans of most of the leading learning platform suppliers for production availability in 2017. IMS Global has developed extensive code libraries, training, and testing to enable market uptake of LTI v2.0.

Adoption of the IMS OneRoster® standard continues to exceed expectations as more and more K-12 districts are requiring conformance certification. In 2016, there were 24 OneRoster certifications—making OneRoster the fastest adopted IMS Global standard. IMS Global and Ed-Fi announced a partnership focused on taking a unified approach to rostering and close collaboration to bring the work of the two organizations together for the benefit of school districts and states.

The transfer of Open Badges work to IMS Global from Mozilla was announced, placing the IMS Global Digital Credentialing Initiative on a global stage. The Extended Transcript prototype was successfully piloted, a major leap forward to enabling a secure way to capture a wide range of learner achievements (competencies, courses, co-curricular activities, and internships) into a standardized credential records store.

IMS Global initiated the Competencies and Academic Standards Exchange (CASE) activity to support districts and states moving to digitally-published academic standards. Pilots were initiated in GA, NC, and FL to determine the efficacy of the CASE standard, with several more on the way. CASE is expected to reduce the cost and increase the effectiveness of alignment of digital resources to learning standards or competencies.

IMS Thin Common Cartridge® (Thin CC®) has become the preferred import format for digital educational resources in K-12 and is beginning to take hold in higher education. Thin CC enables the import of LTI links to publishers' cloud-based resources so that they can be manipulated and searched as "learning objects" from learning platforms. The net result is a library of resources that can be searched by teachers, students, and recommendation engines.

IMS Caliper Analytics®, the first open standard that provides clickstream data on learning activities from learning resources, tools, and platforms, continues to gain traction as early adopters began implementing—paving the way for the much anticipated v1.1 release expected in 2017. A major collaboration with the ADL Initiative was launched to look at opportunities to advance the field of learning analytics by combining the best from Caliper with ADL's Experience API™ (xAPI).

IMS Question & Test Interoperability® (QTI®) continues to revolutionize e-assessments as many U.S. state departments of education and leading suppliers around the world are seeing the benefits of QTI being adopted on a massive scale, enabling high quality interoperable digital assessment, both summative and formative. In 2016, we saw the use of millions of items and tests in QTI, Accessible Portable Item Protocol® (APIP®), and the Partnership for Assessment of Readiness of College and Careers (PARCC) profile of APIP formats delivered to students across the country, with suppliers seeing the successful delivery and machine scoring of tens of thousands of items per minute during regular school hour testing.

IMS Global officially formed two new chapters: IMS Europe and the IMS Japan Society. Each regional chapter is establishing local priorities and plans including regional workshops, workgroups, and Learning Impact events.

The annual William H. (Bill) Graves Leadership Award was created to recognize an individual who has made an extraordinary difference in realizing the mission of IMS Global Learning Consortium. This award is named after one of the founders and eventual Board chair of IMS Global. Bill Graves was also honored posthumously with an EDUCAUSE Leadership Award.



## Institutional Leadership: Making Change Happen

Collaboration among IMS Global members is the catalyst to accelerating progress.

The K-12 and Higher Education Institutional Leadership Boards (see the list of board members at end of this report) are championing the growth of the plug-and-play ecosystem to support innovation. These institutional leaders meet quarterly to share progress, identify priorities, set expectations with suppliers, and provide guidance to promote the adoption of IMS Global standards.

*“SAFARI Montage is proud to support IMS Global and to be a part of the IMS Global community’s achievements developing and perfecting standards for building integrated digital ecosystems that fulfill the promise of next generation digital teaching and learning. Having witnessed the successful implementations, amazing progress and innovative work of our K-12 district partners over the past year, I have seen the real-world impact of IMS Global standards in classrooms across the country. These standards are the key to making the digital classroom learning environment work today and unlocking the full potential of education technology in the future.”*

— Tim Beekman, President and Co-founder,  
SAFARI Montage

To accelerate progress, the boards have put in place institutional Innovation Leadership Networks (previously named Communities of Practice) to develop resources and share strategies that make it easier for institutions to adopt IMS Global standards.

In 2016, we launched four networks for K-12 member districts and five higher education (HED) networks. Participating members representing 15 districts and 37 institutions met regularly to address common challenges such as the integration of digital content from different providers, how to safely share roster information across systems, how to define next-generation analytics or automate the alignment of assessment results to learning standards and content.

### HED Innovation Leadership Networks

- Learning Tools & Content
- Learning Data & Analytics
- Digital Credentialing & CBE
- Accessibility
- Adaptive & Personalized Learning

### K-12 Innovation Leadership Networks

- Meta-tagging & Metadata
- E-Assessment & Analytics
- Rostering for Digital Apps
- Competency & Academic Standards Exchange

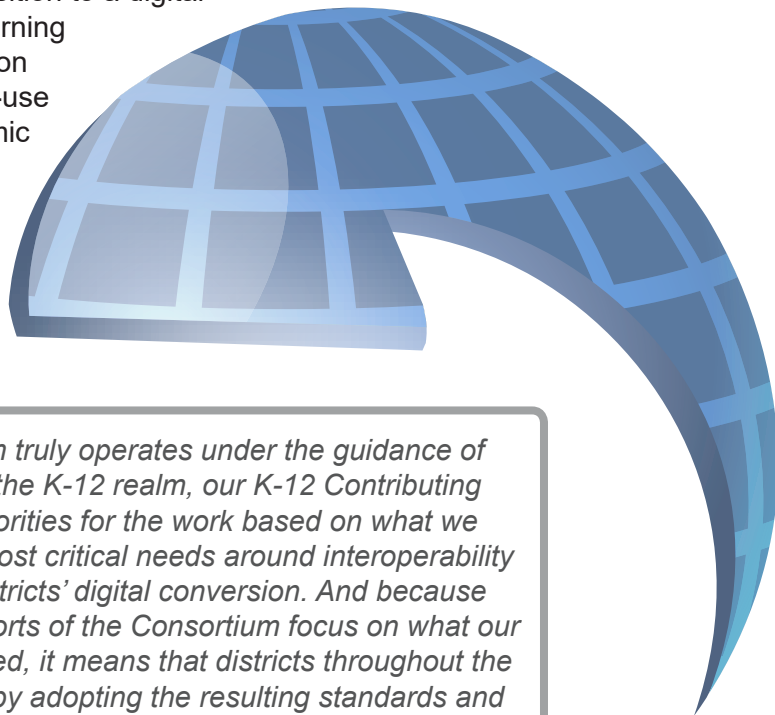
*“The Higher Education Institutional Leadership Board provides a forum for discussion, information sharing, and input into IMS priority setting. By helping to set and coordinate direction of the IMS community, including the HED Innovation Leadership Networks, we are able to more effectively pool resources and influence the market to move in favorable directions.”*

— Sean DeMonner, Information Systems Executive, University of Michigan



## Resources Developed by Institutions to Accelerate Adoption

IMS Global institutional members, via the Innovation Leadership Networks, are creating “Playbooks” to make it easier for all institutions to transition to a digital plug-and-play integrated teaching and learning ecosystem. The K-12 and Higher Education Playbooks are designed to be an easy-to-use reference and resource center for academic and IT leaders, curriculum and education technologists, and IT specialists to help shorten the learning curve around the adoption of IMS Global interoperability standards.



*“The IMS consortium truly operates under the guidance of the membership. In the K-12 realm, our K-12 Contributing Members set the priorities for the work based on what we determine are the most critical needs around interoperability to accelerate our districts’ digital conversion. And because the priorities and efforts of the Consortium focus on what our member districts need, it means that districts throughout the country can benefit by adopting the resulting standards and practices.”*

— Tricia Kennedy, Director of eCLASS Transformation,  
Gwinnett County Public Schools

Playbook resources include implementation best practices, videos, articles, and high-value use cases for adopting IMS Global standards. Suggested RFP language and checklists are also available that institutions can use to require IMS Global Conformance Certification when procuring digital platforms, apps, and tools. New resources are added monthly to the playbooks to help institutions enable better learning from better learning technology.

Visit the **K-12 Playbook** at  
[imglobal.org/COEK12Playbook.html](http://imglobal.org/COEK12Playbook.html)

Visit the **HED Playbook** at  
[imglobal.org/COEHEPlaybook.html](http://imglobal.org/COEHEPlaybook.html)

Get Involved!

If you are interested in participating in the HED or K-12 Innovation Leadership Networks, please contact  
[info@imglobal.org](mailto:info@imglobal.org).



Photo credit: Gwinnett County Public Schools

## WELCOME

IMS  
Europe



IMS  
Japan  
Society

First open standard that provides clickstream data on learning activities

## CALIPER ANALYTICS

**19** learning platforms, tools, and products that achieved Caliper v1.0 certification

**5** HED

- Learning Tools & Content
- Learning Data & Analytics
- Digital Credentialing & CBE
- Accessibility
- Adaptive & Personalized Learning

## INNOVATION LEADERSHIP NETWORKS

**4** K-12

- Meta-tagging & Metadata
- E-Assessment & Analytics
- Rostering for Digital Apps
- Competency & Academic Standards Exchange

IMS GLOBAL



Current Registrations:  
[imscert.org](http://imscert.org)

**24**

**ONEROSTER**  
certifications

**144**

**LTI**  
products certified

**MILLIONS**  
of items & tests

**QTI  
&  
APIP**

### EXTENDED TRANSCRIPT PILOT

**43%** of users in the pilot accessed the Extended Transcript

**70%** of users surveyed found the Extended Transcript content useful

**84%** recommended an Extended Transcript learner record for all students

**10,000s IPMs**  
(items per minute)

**delivered &  
machine scored**

**IMS Global, Mozilla Foundation, and LRNG**

Announce Next Steps to Accelerate the Evolution and Adoption of the  
**Open Badges Standard**

**2016**



## IMS Global Key Initiatives: Enabling Innovation

Effective teaching and learning is easier to achieve when digital technologies work seamlessly together. IMS Global facilitates member collaboration around the following five key initiatives that go right at the heart of making it easier for institutions around the world to enable better learning from better learning technology.

### Digital Credentials, Badges and Competency-Based Education

In 2016, IMS Global heralded a new phase in the continuing commitment to enabling open architectures that simplify the adoption of innovative educational models. IMS Global's leadership in

*"Acclaim is excited to participate in the IMS Global Digital Credentials Initiative. In today's fast-changing economy, open learning credentials streamline the employment landscape by ensuring verifiable recognition of learning achievements that communicate each individual's competencies, skills and knowledge. The ongoing development of the open standard enables a future where learners are empowered to easily unlock further learning and discover new employment opportunities, and where employers can find talented individuals with specific skills as never before."*

— Pete Janzow, Senior Director of Acclaim Business Development, Pearson

digital credential programs such as its Badge Extensions for Education and the Extended Transcript was recognized by the founding developers of Open Badges, the Mozilla Foundation and Collective Shift/LRNG, and IMS Global was requested to assume leadership for the future evolution and publishing of the Open Badges standard. Organizational preparations were completed as planned and the standard officially moved to IMS Global's stewardship on January 1, 2017.

IMS Global Contributing Member University of Maryland University College (UMUC) completed a pilot of the beta-level Extended Transcript standard designed to consolidate learner achievements in multiple forms (competencies, courses, co-curricular activities, and internships) into a standardized credential records store. UMUC's program for graduate level business students was very successful, with 84% of survey respondents stating that extended transcripts should be available to all students to help them in their career pursuits. The IMS Global Extended Transcript 1.0 standard will be available to members in 2017 and an employer-facing pilot is planned.

### Educational Data and Analytics

Since the release of Caliper Analytics v1.0, there have been 19 learning platforms, tools and publisher products that achieved Caliper v1.0 certification at the time of this report. To further adoption, the Caliper Workgroup began incorporating feedback from initial market implementations to substantially enhance the education analytics standard. The information model was extended to support discussion forum interactions and simple tool usage, and the technical design of data payloads was substantially reduced. Caliper v1.1 will be released in 2017.

The HED Innovation Leadership Network released the Learning Data & Analytics Key Principles ([imglobal.org/learning-data-analytics-key-principles](http://imglobal.org/learning-data-analytics-key-principles)) document articulating eight principles that institutions should consider when implementing technology for the collection and use of learning data. Going forward the evolution of Caliper will be guided by continued input from K-20 Innovation Leadership Networks and a newly formed Caliper Executive Product Steering Committee comprised of leading suppliers committed to accelerating market adoption.

*"The data and analytics work coordinated by IMS Global is a positive thing for the higher education ecosystem. It promotes a common language for analytics events and fosters collaboration between institutions and vendors. Both are vital to furthering the state of analytics."*

— Mike Sharkey, Vice President Analytics, Blackboard

IMS Global also initiated collaboration ([imglobal.org/article/experience-api-and-caliper-discovery-moving-along-nicely](http://imglobal.org/article/experience-api-and-caliper-discovery-moving-along-nicely)) with the Advanced Distributed Learning (ADL) initiative to explore areas of convergence for Caliper and the Experience API (xAPI).

### Integrated and Effective Digital Curriculum

The OneRoster standard continued to gain momentum as more and more districts require conformance certification, with 24 new products certified in 2016. To address the growing demand, IMS Global launched a series of boot camps to provide its member organizations with implementation support to fast track adoption and conformance certification in advance of the Fall 2016 term. Additionally, the Rostering of Digital Apps Innovation Leadership Network published OneRoster procurement guides and videos focused on implementation lessons learned from two school districts. These are available in the K-12 Playbook.

Work on OneRoster v1.1 is planned for release in 2017 as a major upgrade to roster formative and summative scores, resources within courses and classes, and enrollment/membership information within courses and classes.

Just as IMS Common Cartridge® was a breakthrough in efficiency for publishing, acquisition, and management of digital content, Thin Common Cartridge takes those benefits to the next level by delivering content seamlessly from a publishers' cloud-based source. Already a well-established standard with 39 products certified for Thin CC, in late 2016 IMS Global began meeting with school districts, publishers, and platform providers to provide their feedback and suggestions for the next version of the standard.

To support district and states moving to digitally-published academic standards, IMS Global began to create the Competencies and Academic Standards Exchange (CASE) standard to help reduce costs and achieve personalized learning with greater fidelity. Pilots in GA, NC, and FL were initiated to determine the efficacy of the CASE standard. CASE v1.0 will be released in 2017.

*"The further adoption of the IMS Global standards are driving industry solutions to eliminate barriers associated with the access to technology in a cost-effective, collaborative environment. These efforts are championing the evolution of personalized learning and enabling the use of technology as a mechanism to deliver the best outcomes using data from multiple applications. The common set of standards facilitates the ability for Renaissance solutions to seamlessly bridge assessment, planning, and instruction in one comprehensive platform to drive student outcomes."*

— Mark Angel, Chief Technology Officer, Renaissance Learning

### Integrated & Actionable e-Assessment

Digital assessment is made easier if there's a standard format for the exchange of test questions and structures, scoring information, the ability to analyze results, and ways to accommodate learners' personal needs or preferences. Leading states, state consortia, and suppliers around the world are using IMS Global standards on a massive scale to enable high quality interoperable digital assessment, both summative and formative. In 2016, the e-Assessment technical workgroups finalized and published a profile of Accessible Portable Item Protocol (APIP) for the Partnership for Assessment of Readiness of College and Careers (PARCC) community that allows conformance certification to its member states' unique requirements. Other activities included work on the next version of Question and

Test Interoperability (QTI) that combines the accessibility functionality of APIP and more advanced features that improve assessment delivery and alignment with the latest web technology.

The IMS Executive Board on Assessment (EBA) is helping the QTI Workgroup roll out a new conformance certification program for v2.2 that establishes three additive levels of certification to improve the meaning of assessment content and system interoperability. The EBA also sponsored several interoperability demonstrations between member organizations showing the feature improvements of v2.2.

In the K-12 Innovation Leadership Network for e-Assessment, 12 districts collaborated to create use cases describing scenarios in which the alignment of learning standards with assessment items, assessment results, and digital content is automated. This work is driving efforts to improve analytics and the automatic prescription of digital content based on students' performance.

*"Informing and supporting our customers' digital ecosystems is a priority for Pacific Metrics. The work we do with IMS Global reinforces our commitment to delivering innovative and reliable assessment solutions."*

— Bob Guerin, President,  
Pacific Metrics

### **Plug & Play Ecosystem of Learning Platforms, Apps and Tools**

In 2016, the Learning Tools Interoperability (LTI) standard continued to evolve from its initial functions to securely launch an external learning tool and to enable single sign-on. In its current state, LTI can be expanded with a library of extensions performing specific data sharing functions such as the reporting of grades and access to online content. The latest LTI standard, version 2.1, was materially completed in 2016 and includes support for privacy and student data use declarations, automated tool re-registration and updated security and authentication to the most current OAuth standard.

*"Adopting the LTI standard has empowered UCF to provide improved experiences for our faculty and students with an integrated educational technology ecosystem. Our use of LTI spans the seamless authentication between systems, identity authentication in quizzes, online course content inspection for universal design, and learning analytics. One of the most rewarding aspects to date has been the ability to share a few of our custom LTI apps with other academic institutions. Working with the IMS Global community has also allowed us to co-host the inaugural LTI hackathon and work on solutions in a collaborative environment. Our team looks forward its continued participation in IMS Global and the LTI network that results in empowering our faculty and students to excel in their teaching and learning."*

— Francisca Yonekura, Ph.D., Associate  
Department Head, Learning Systems  
& Technology, Center for Distributed  
Learning, University of Central Florida

The Gradebook Services extension provides enhanced means for assignments in a learning platform's gradebook to be graded with an assessment tool, and have grade results returned to the platform's gradebook along with any comments from the assessor. The standard supports the ability for instructor override with a history of the change, allows recording the number of attempts for a line item to be reported and tracked in the tool consumer, and also supports the transfer of groups of results.

LTI's certified conformance adoption rate, with 144 products certified in 2016 alone, speaks to the increasing importance of a plug-and-play strategy among educational technology leaders.

The LTI Innovation Leadership Network published suggested LTI language and checklists for RFPs and the LTI Fundamentals FAQ, a functional document designed to answer basic questions about LTI in a non-technical manner. Both resources can be found in the HED Playbook ([imglobal.org/higher-education-playbook](https://imglobal.org/higher-education-playbook)). The group also began planning the first LTI Hackathon that was offered at the February 2017 quarterly meeting, and work was initiated to create a collaborative app vetting environment and registry.

## 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 Learning Consortium
- Jeremy Auger, Chief Strategy Officer, D2L
- Timothy Beekman, President & Co-Founder, SAFARI Montage
- Lois Brooks, Vice Provost for Information Services & CIO, Oregon State University
- Malcolm Brown, Director, EDUCAUSE Learning Initiative, EDUCAUSE
- Michael Chai, Senior Vice President of Learning Services Technology, Pearson
- Paul Czarapata, Ed.D., Vice President & Chief Information Officer, Kentucky Community & Technical College System
- Steve Flynt, Ph.D., Ph.D., Chief Strategy & Performance Officer, Gwinnett County Public Schools
- Rick Johnson, Vice President of Product Strategy, VitalSource
- Michael King, Vice President, Global Education Industry, IBM
- Vince Kellen, Ph.D., Chief Information Officer, University of California, San Diego
- David LaBine, Director, Education Software, SMART Technologies
- Stephen Laster, Chief Digital Officer, McGraw-Hill Education
- Bruce Maas, Vice Provost for Information Technology & CIO, University of Wisconsin-Madison
- Phillip Miller, Vice President of Teaching and Learning, Blackboard
- Jodi Marshall, Ph.D., Executive Vice President of Business & School Solutions, Florida Virtual School
- James Garner Ptaszynski, Ph.D., Senior Fellow, Bill & Melinda Gates Foundation (Board Observer)
- Lou Pugliese, Senior Innovation Fellow, Arizona State University
- Lenny Schad, Chief Information Technology Officer, Houston Independent School District
- Jack Suess, Chairman of the IMS Board; Vice President of Information Technology & Chief Information Officer, University of Maryland, Baltimore County

## Technical Advisory Board Executive Committee

*Responsible for identifying and prioritizing the technical work of IMS Global. As technical leaders, their expertise impacts the future direction IMS takes to transition education to digital.*

- Gary Driscoll, Senior Strategic Advisor, ETS
- Alfred Essa, VP, R&D and Analytics, McGraw-Hill Education
- Bradley S. Fordham, Ph.D., Chief Technology Officer, Echo360
- Bracken Mosbacker, Director of Development, Lumen Learning
- Melissa Loble, VP, Platform & Partnerships, Instructure
- Tim Tomlinson, VP, Core Services Product Development, Blackboard
- Chris Vento, CEO, Intellify Learning
- Jennifer Whiting, Sr. Manager Product Development, Florida Virtual School

## Executive Board on Assessment

*Provides business guidance to the QTI standards committee, drives assessment enhancements, fosters long-term alignment between APIP and Accessibility and promotes QTI as the de-facto standard for e-assessment interoperability.*

- |                      |                       |
|----------------------|-----------------------|
| • ACT                | Education             |
| • BPS                | • Minnesota DoE       |
| • Cito               | • NWEA                |
| • CvTE               | • NYC DoE             |
| • ETS                | • O.A.T.              |
| • FLVS               | • Pacific Metrics     |
| • Gwinnett County PS | • PARCC               |
| • Houston ISD        | • Pearson             |
| • Instructure        | • Performance Matters |
| • Maryland State DoE | • Questar Assessment  |
| • Measured Progress  | • Smarter Balanced    |
| • McGraw-Hill        | • WIDA                |



## Executive Strategic Council

- Leilani Cauthen, CEO & Publisher, The Learning Counsel
- John Cavanaugh, Ph.D., President & CEO, Consortium of Universities of the Washington Metropolitan Area
- Marie Cini, Provost, University of Maryland, University College
- Toni Cleveland, Ph.D., President & CEO, HERDI
- Nynke De Boer, IMS Europe; Manager, Computer Exams, College voor Toetsen en Exams
- James DeVaney, Associate Vice Provost for Digital Education & Innovation, University of Michigan
- Dae-Joon Hwang, Ph.D., CEO of IMS Korea; Provost, Planning & Budgeting and Professor, School of Information & Communication Engineering, Sungkyunkwan University
- Kathleen Ives, D.M., Chief Executive Officer & Executive Director, Online Learning Consortium
- Bernard Luskin, Ph.D., Chancellor, Ventura County Community College District
- Mollie McGill, Director of Programs & Membership, WCET
- Katsuhiko Shirai, President of IMS Japan Society; Chairman of the Open University of Japan Foundation

## HED Institutional Leadership Board

*Comprised of institutional Contributing Members, the Institutional Leadership Board works closely with IMS staff to provide guidance in the development and adoption of IMS Global standards to enable an institution to become more agile in integrating digital applications, platforms and tools into the enterprise.*

- Thomas Cavanagh, Ph.D., Associate Vice President of Distributed Learning, University of Central Florida
- Paul Czarapata, Ed.D., Vice President & Chief Information Officer for the Kentucky Community & Technical College System
- Sean DeMonner, Executive Director, ITS Teaching & Learning, University of Michigan
- Tristan Denley, Vice Chancellor of Academic Affairs, Tennessee Board of Regents
- Jason Fish, Director of Teaching and Learning Technologies, Purdue University
- Stephen Gance, Policy Associate - eLearning & Open Education, Washington State Board for Community & Technical Colleges
- David Goodrum, Ed.D., Director of Academic Technology, Information Services, Oregon State University
- Jeff Grann, Ph.D., Academic Director of Assessment and Learning Analytics, Capella University
- Brent Harris, Vice President for Information Technology, University of Mary Hardin-Baylor
- Avi Hyman, EdD, Director of Academic & Collaborative Technologies, University of Toronto
- Linda Jorn, Associate Vice Provost of Learning Technologies & Division of IT Director of Academic Technology, University of Wisconsin
- Vince Kellen, Ph.D., Chief Information Officer, University of California, San Diego
- Mary-Ellen Kreher, Director, Course Design & Development, Innovative Learning Technology Initiative, University of California Office of the President
- Patrick Laughran, Associate Vice President for Technology & Chief Information Officer, Framingham State University
- Phil Long, Associate Vice Provost for Learning Sciences, University of Texas at Austin
- John Rome, Deputy Chief Information Officer, Arizona State University
- Marianne Schroeder, Senior Associate Director, Teaching & Learning Technologies, The University of British Columbia
- Peter Soderquist, Sr. Manager, Academic & Instructional Technology, University of Phoenix
- Jennifer Sparrow, Senior Director for Teaching and Learning Technology, Penn State University
- Jenn Stringer, Associate CIO, Academic Engagement, UC Berkeley
- Jack Suess, Chairman of the Board, Vice President of Information Technology and Chief Information Officer, University of Maryland, Baltimore County

## K-12 Institutional Leadership Board

*The K-12 Institutional Leadership Board is comprised of district or state officials who are IMS Global Contributing Members who provide leadership to shape priorities for the IMS Global community and provide outreach to the wider K-12 Community.*

- Tina Barrios, Ph.D., Assistant Superintendent of Information Systems & Technology, School Board of Polk County
- G. Anthony Benners, Ph.D., Senior Director of Assessment Design & Senior Psychometrician, New York City Department of Education
- Kyle Berger, Chief Technology Officer, Duncanville ISD
- Lloyd Brown, Executive Director of Information Technology, Baltimore County Public Schools
- Melissa Carr, Ed.D., Director of Technology & Innovation, Volusia County Schools
- Rich Contartesi, Ph.D., Assistant Superintendent, Department of Technology Services, Loudoun County Public Schools
- Maurice Dragon, Director of the Instructional Management System, Orange County Public Schools
- Mike Evans, Chief Technology and Information Officer, Forsyth County Schools
- Joe Griffin, Chief Technology Officer, Keller ISD
- Scott Gutowski, Chief Information and Technology Officer, Pittsburgh Public Schools
- D. Patches Hill, Technology Systems Manager, Indian River School District
- Tony Hunter, Chief Information Officer, Broward County Schools
- Tom Ingram, Director Information Technology, Escambia County Schools
- Tricia Kennedy, Chair K-12 Institutional Leadership Board and Director of eCLASS Transformation, Gwinnett County Public Schools
- Kurt Kiefer, Assistant State Superintendent for the Division of Libraries & Technology, Wisconsin Department of Public Instruction
- Gordon Knopp, Director of Technology, Laramie County School District
- Janelle McClure, Director of Digital & Multimedia Learning, Cobb County School District
- Barbara Nesbitt, Ph.D., Vice Chair K-12 Institutional Leadership Board & Executive Director of Technology, Pickens County School District
- Jack Polnar, IT Services Manager, Newton Public Schools
- Brenda Quintanilla, Ph.D., Senior Education Technology Specialist, Houston ISD
- Darlene Rankin, Instructional Technology Director, Katy ISD
- Serena Sacks, Chief Information Officer, Fulton County Schools
- John Simon, Director of Technology and Information Services, Pasco County Schools
- Rod Smith, Executive Director of Technology, Clayton County Public Schools
- Storie Walsh, VP of Technology, The Virtual High School
- Jennifer Whiting, Sr. Manager Product Development, Florida Virtual School

## IMS Staff

- Rob Abel, Ed.D., Chief Executive Officer
- Joaquin Alvarez, Institutional Program Manager K-12
- Samantha Birk, Institutional Program Manager HED
- Jeff Bohrer, Technical Program Manager
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