

2014 Learning Impact Report of Effective and Sustainable Technology Innovations

ANALYSIS OF THE LEARNING IMPACT AWARD WINNERS IDENTIFIES PROJECTS AND TRENDS IN THE USE OF TECHNOLOGY TO IMPROVE ACCESS, AFFORDABILITY, AND QUALITY OF EDUCATION WORLDWIDE

IMS GLOBAL LEARNING CONSORTIUM | WWW.IMSGLOBAL.ORG

What is the Learning Impact Awards Program?

The Learning Impact Awards program is an annual competition that was created in 2007 by IMS Global Learning Consortium (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 (Figure 1).

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



Figure 1 - Three Dimensions of Education

- » 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.

Using a series of rubrics (Appendix 1), each nomination is evaluated in each of the eight dimensions of potential learning impact. To win an award a nomination must describe impact within a specific educational context, as this is the essence of the evidentiary component. Winners are announced at the conclusion of the <u>Learning</u> <u>Impact Leadership Institute</u>, an annual global conference focused on developing leaders and ideas to help shape the future of educational technology.

How to Use the Learning Impact Report

Through analysis of the 2014 LIA winners, as well as the cumulative history of the LIA winners, this report is intended to help institutional leaders determine whether their institution, district or state has considered a wide range of potentially impactful technology innovation.

The report begins with an executive summary that provides a high level analysis of the LIA finalists and shares insights about ongoing trends identified through the Learning Impact program. The executive summary is followed by information about each 2014 medal winner, including a description of "why" the project was undertaken, analysis of learning impact potential, and assessment of the level of difficulty to implement the project at scale. Each project description includes links to additional project resources.

A list of medal award winners by project category since the inception of the Learning Impact Award program (2007 to present) is included towards the end of the report (Appendix 2).

The Learning Impact Awards Versus Other Award Programs

The Learning Impact Awards appear to be unique with respect to the process of evaluation and the issuing of a comprehensive report. Compared to other award programs, a greater amount of work goes into the evaluation process to select innovative technology projects that demonstrate potential to address specific institutional challenges. Lastly, the LIAs are conducted on a global scale (see Figure 2 - medal counts by country/region since program inception). In writing the report, our goal is to attempt to make sense of the knowledge gained from the cumulative winners and to provide a better understanding of projects improving impact that can help institutions and districts make more effective institutional investments in technology.

| | Bronze | Silver | Gold | Platinum | Total |
|----------------|--------|--------|------|----------|-------|
| USA | 11 | 4 | 12 | 10 | 37 |
| Australia | 6 | 5 | 3 | 2 | 16 |
| UK | 3 | 2 | 2 | 6 | 13 |
| European Union | 1 | 5 | 4 | 1 | 11 |
| Korea | 2 | 4 | 0 | 4 | 10 |
| Canada | 0 | 2 | 1 | 2 | 5 |
| Brazil | 0 | 0 | 3 | 0 | 3 |
| Singapore | 1 | 1 | 0 | 0 | 2 |
| New Zealand | 0 | 1 | 0 | 0 | 1 |
| Taiwan | 0 | 1 | 0 | 0 | 1 |
| China | 1 | 0 | 0 | 0 | 1 |

Medal Count by Country / Region 2007 - 2014

Figure 2 - Medal Count by Country / Region 2007 -2014

Executive Summary

The 2014 award winners were <u>announced</u> during the Learning Impact Leadership Institute in New Orleans, Louisiana. This year, eight winners were selected out of 23 finalists. Finalists were chosen via regional competitions and a pre-screening process to ensure competitiveness.

The following analysis of the 2014 finalists provides a summary of the key themes from this year's competition.

Growing ecosystem of educational apps are enabling rapid integration of innovative learning tools for teachers and students

The "App Store" model has provided consumers with limitless choice and flexibility in building a personal, as well as "micro-usable" user experience. Thanks to open standards, such as Learning Tools Interoperability[®] (LTI[®]), we're beginning to see that same kind of flexibility and outcome-focused approach enter the education app space as demonstrated by this year's award entries in the "Digital Resource, e-Text, Learning App Innovation, and Analytics" category. <u>SpeakApps</u> at the <u>Universitat Oberta de Catalunya</u> is 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. <u>OKMindmap</u> is the first HTML5 web collaborative mind map tool that enables users to create and share knowledge collaboratively and in many different formats. Another notable entry was <u>Hoot.Me</u>, an app developed to enable communications between Facebook and a Learning Management System. Hoot.Me allows the instructor to make announcements and information updates within the "LMS of record," while students can see and respond to the instructor directly through Facebook. This is a wonderful example of a creative implementation of the LTI standard. Even though the app was created by an indie developer, it won first place in the <u>Connected Learning Innovation App Challenge</u>, demonstrating that it does not take the resources of a large development house to make an important impact in the education app community.

Emphasis on student success and outcomes-based learning paving the way for GPS-like products

The emphasis on improving student success has been growing in both K-12 and postsecondary environments for decades. Quite simply, stakeholders are questioning the amount of investment in education and a lack of return to demonstrate that student outcomes are improving. Another megatrend is the explosion of funding, mostly venture capital, in the educational technology segment. We are now starting to see technology products that show promising results, but the success of these products all rest on communicating learner analytics and using that data to improve student performance once data is transparent to the student, faculty/teacher, or administrator. Unfortunately, not all of the tools allow for simultaneous transparency among the groups, but there is a growing movement across education to provide a framework for integrating analytics from a vast array of learning resources into an organization's current learning systems. IMS standards like Caliper Analytics TM. LTI and Learning Information Services (LIS) are helping vendors and educators make that data more useful. Tools focused on adaptive learning are taking advantage of these advancements and presenting data on a student's ability to succeed within an instructional experience. Learner paths/degree attainment tools which have similar gualities to GPS systems are helping students map the most efficient way to accomplish their educational goals. This trend is evidenced by two dynamite 2014 Learning Impact Award winners. The Tennessee Board of Regents through its implementation of Degree Compass from Desire2Learn is part of their overall strategy to use 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. Austin Community College in partnership with Civitas Learning have implemented Degree Map to provide advisors and students with an easy way to access

and compare academic degree requirements, enabling personalized learning pathways. Another notable entry was the Insights Student Success System from the <u>University of Wisconsin</u>, which moves beyond the traditional data reporting methods in education and utilizes predictive analytics and data modeling to dive deep into key achievement, engagement and completion data to deliver an unprecedented view of learner progress and success. Other entries from <u>Delgado Community College</u> and the <u>University of Glasgow</u> show good promise for the continued adoption of adaptive, GPS-like tools to assess and guide student progress towards desired learning outcomes.

Gaming and simulation entries reinforce the power of games to improve student engagement through experiential learning

Gaming is often referred to as an emerging area of experimentation that is 2-3 years away from broad adoption in education to actively engage students, but in reality gaming isn't necessarily a new technology. In fact, games have been a commonplace part of the education experience since the 80s when games such as SimCity and Snooper Troops were popular. Gaming that we know today simply has a new face on it as another resource available to educators to engage students in experiential learning. The 2014 award winners in this area are Lightmare Studios and The Gordon, Victoria's largest regional TAFE, who teamed up to deliver broadband-enabled traineeships in an interactive game design for tenth and eleventh grade students. Florida Virtual School are utilizing the fun and social construct of Grom Social to successfully achieve a higher engagement level from students while leveraging the native communication channels that are already popular with students ages 5-16. Both are good examples of how interactive games can be used effectively to turn game play into virtual learning environments to stimulate student engagement.

Evolution of robust digital learning networks that are scalable and flexible continues thanks to learning platform innovation and open infrastructures

Digital Learning Networks (DLN) continue to play a significant role in education as demonstrated by the high number of quality entries in the "Digital Learning Networks" and "Learning Platform Innovation" categories. The robust creation of DLNs is a trend that IMS has been tracking for over eight years. The trend has been partially driven by the evolution of the LMS to be more open and flexible, but also by the increased market adoption of IMS standards to provide the necessary architecture to support a connected learning environment comprised of multiple platforms. The developments in these categories dramatically increase the potential for personalized learning within the learning environments, while at the same time reducing the difficulty of both creating and maintaining these environments through the use of IMS standards. At the Florida Virtual School they have created and implemented their Content Automation Tool (CAT) to alleviate the administrative burdens of maintaining multiple internal LMSs while streamlining the maintenance of content, improving efficiency of internal processes, and introducing a new recurring revenue model. Southern New Hampshire University (SNHU) partnered with Blackboard (Bb) to further the development of the McGraw Hill Education (MHE) building block to include automated course provisioning and centralize 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. Beijing Normal University created the Learning Cell Knowledge Community using semantic ontology technology to organize learning resources that can also be attached with social cognitive network properties to support resource construction, knowledge management, organizational learning, regional network-based study, and college network teaching. Other notable entrants in this category included Eduthek, an LTI-based solution for learning content and tools that integrates seamlessly with Austria's leading learning management services to serve more than 2,000 (out of 6,600) schools in the country. mAuthor demonstrated a powerful yet easy to use e-publishing solution designed to help publishers and developers

create a wide variety of interactive digital content and immediately publish it for multiple platforms and uses. <u>The</u> includED Program at Indiana University-Purdue Fort Wayne in partnership with Follett showcased a groundbreaking initiative to deliver required course materials in any format to students on the first day of class, helping drive engagement and academic success. <u>Atomic Learning</u> showcased how their application enables users to seamlessly search the Atomic Learning library from within their LTI-compliant learning management system and embed links to videos within their courses. Together, the entrants in these categories demonstrated the power that exists in open infrastructures to provide responsive and personalized educational solutions to increase student success.

Scaling pedagogical knowledge and practice to help teachers innovate in the classroom is gaining significantly in K-12 via new digital platforms

As innovative apps, content, and platforms are widely adopted, so does the increasing need to provide both the framework and support that is needed in an organization before scalable success can be realized. One of the key decisions with technology integration, specifically around classroom innovation, is how well it maps to pedagogical knowledge. One framework can't come at the cost of the other and how well they complement each other can determine the overall success of the project. "Scaling Pedagogical Knowledge and Practice" has been a category since the inception of the Learning Impact Awards in 2007, but entries have been stagnant in recent years. That changed in 2014 with two notable finalists. At Newton County Schools they are focused on providing both the framework and support to improve teacher efficacy and student learning. In partnership with SAFARI Montage, Newton County installed the 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%. Another example for effectively scaling pedagogical knowledge is at the School District of Pickens County where they created a BYOD Professional Learning Platform to provide faculty and staff with easy access to a series of training webinars. These webinars offered professional development for supporting BYOD programs in the classroom. As new educational apps, content and resources continue to emerge, so will the increasing need to scale professional development programs to ensure educators are reimagining their pedagogical approaches.



Enter your organization's innovative high impact project or technology for the 2015 Learning Impact Awards competition. You might come out a winner and be included in the 2015 Learning Impact analysis! See details here: <u>http://lili15.imsglobal.org/awards.html</u>

2014 Learning Impact Gain vs. Implementation

The Learning Impact Award entries are grouped by project categories to help define how to think about what each entry entails. These categories have evolved over the years as new trends have emerged and once innovative technologies have become obsolete. However, the project categories continue to provide a good framework for understanding emerging trends and adoption of educational technology solutions to improve learning impact. Figure 3A illustrates our current view of the major categories. The purple shading of the categories toward the top right indicate those categories of projects that IMS would consider "mainstream" innovations with many innovative solutions (both new and established products) available for institutional consideration and implementation. The brown shaded boxes conversely indicate innovation categories that have not reached mainstream status at this point, but demonstrate good learning impact gain and level of difficulty to implement the project category solutions. A categorization of all winners since 2007 is contained in the summary table (Appendix 2).



Figure 3A – 2014 3x3 Learning Impact Project Matrix

Note: See Appendix 3 for 2013 3x3 Learning Impact Project Matrix.



Figure 3B – Interpretation of the 3x3 Learning Impact Project Matrix

Implementation Challenges

2014 Learning Impact Finalists

The following pages provide an overview of the 2014 award winners and other finalists. Each medal winner includes the *IMS Learning Impact Project Category* (see Appendix 2 for project category definitions) and lists which cell of the 3 x 3 Learning Impact Project Matrix (Figure 3A) based on the judges evaluation. Medal ratings were based on the full set of detailed criteria and rubrics (Appendix 1). The 3 x 3 Learning Impact Project Matrix (Figure 3A) is a much higher level view of the project that is useful as we accumulate data from winners over multiple years. Additionally, the project summaries align the award winners with the EDUCAUSE Learning Initiative's (ELI) "Content Anchors" in an effort to draw a correlation between the Learning Impact Award winners and the key program areas of interest as identified by the ELI's membership. ELI content anchor details can be found at http://www.educause.edu/eli/programs/seeking-evidence-impact/content-anchors.



Using Predictive Analytics to Personalize Course Selection, Guide Student Success, Improve Retention and Close the Attainment Gap

New Initiative / Established Product

Institution: Tennessee Board of Regents

Product/Company Name: Desire2Learn Degree Compass[™] - <u>www.desire2learn.com</u> Degree Compass[™] is a 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. Powered by a predictive algorithm that taps into the success of thousands of students who have taken the same degree path, Degree Compass presents a collection of courses that are necessary for the student to

graduate, core to the student's major, and in which the student is expected to be academically successful. Interoperable with enterprise information systems already in place on a campus, Degree Compass draws from this historical data to deliver course rankings that quickly guide students to make the most informed course choices for even complex programs of study. Current research demonstrates its measurable impact on critical indicators such as earned grades and earned credit hours on improving retention and closing the attainment gap.

- » Learning Impact Project Category: Education Pathways, Portfolios, and Learning Maps
- » Learning Impact Gain Potential: Clearly Superior The available set of analytics provides a key resource for the institution and its students with immediate benefits in terms of learning impact for both.
- » Implementation Difficulty: Straight-forward/Turnkey This is now a standard product available from Desire2Learn and is part of their family of learning and teaching tools.
- » Additional Resources: Video / Brochure
- » ELI Content Anchor: Learning Analytics

The Content Automation Tool (CAT)

New and Emerging Initiative

Institution: Florida Virtual School

Product/Company Name: Florida Virtual School - www.flvs.net

The Content Automation Tool (CAT) is a Learning Management System (LMS) agnostic system designed to house course and assessment assets, assemble them for delivery via LTI, and provide them to clients in both the Florida Virtual School (FVS) hosted and non-hosted models. CAT effectively removes the administrative burdens of maintaining multiple internal LMSs, dramatically improves efficiency of internal processes, streamlines FVS's client use and maintenance of content, and introduces a new recurring revenue model. In its first year of implementation, CAT reduced the cost of content delivery by over \$160,000. Beyond the immediate administrative benefits, it positively impacts students by expanding the ways in which our clients deliver curriculum as well as increasing the speed and accuracy in which it's delivered.

- » Learning Impact Project Category: Digital Learning Networks
- » Learning Impact Gain Potential: Clearly Superior Utilization of LTI to enable their content repository has provided significant benefit to both staff and users of the FVS content in terms of access, availability and analytics data.
- » Implementation Difficulty: Manageable with Resources Content providers that adopt a similar process to streamline content delivery could reap benefits similar to Florida Virtual School.
- » Additional Resources: Video / Brochure
- » ELI Content Anchor: Online and Blended Teaching and Learning



McGraw-Hill Education / Blackboard Building Block v2.2 at Southern New Hampshire University

New / Established Product

Institution: Southern New Hampshire University

Product/Company Name: McGraw-Hill Education - <u>www.mheducation.com</u> and Blackboard – <u>www.blackboard.com</u>

McGraw-Hill Education (MHE) and Southern New Hampshire University (SNHU) worked in conjunction with Blackboard to further the development of v2.2 of the MHE building block. New enhancements include automated course provisioning and centralized user pairing to remove instructor involvement from the course setup process - all but

eliminating user error in these steps. Additionally, time on task data is now shared from MHE to Bb, providing SNHU's advisors with an early warning system to intervene with at-risk students.

- » Learning Impact Project Category: Learning Platform Innovation
- » Learning Impact Gain Potential: Good, but Evolving The use of LTI has increased the ability of advisors at SNHU to enhance their personalization of the learning content for their students adapting to students needs based on feedback received from the tool.
- » Implementation Difficulty: Manageable with Resources Utilizing LTI to help automate tasks associated with provisioning course materials and grade return could help universities respond quicker to address the needs of students and advisors.
- » Additional Resources: Video / Brochure
- » ELI Content Anchor: Provisioning the Academic Technology Ecosystem

Improving Teacher Efficacy and Student Learning One Camera at a Time

New and Emerging Initiative

Institution: Newton County Schools

Product/Company Name: SAFARI Montage 552 VIEWPath - www.safarimontage.com

During the summer of 2012, Newton County Schools in Georgia installed 552 VIEWPath classroom technology systems in schools throughout the district in an effort to improve teaching, learning and safety. The systems, which consist of Audio Enhancement's voice amplification tools, silent alarms and classroom cameras coupled with the SAFARI Montage platform, were implemented following a successful pilot program conducted at Newton High School in 2013. The results of the pilot showed that the system was successful in increasing teacher effectiveness, decreasing student misbehavior by 58%, and providing students with anytime, anywhere learning environments. Since the district-wide implementation, teachers throughout the district have been effectively utilizing the system to record classroom activities and create digital resources to support blended learning and professional development.

- » Learning Impact Project Category: Learning Platform Innovation
- » Learning Impact Gain Potential: Clearly Superior Recording of the classroom activities had immediate and direct impact on the learning effectiveness within the classroom and provided an important, cost effective, in-class professional development opportunity.
- » Implementation Difficulty: Manageable with Resources This is a systems integration-based solution using off-the-shelf hardware and software components. Furthermore, the SAFARI Montage support of IMS standards enables broader integration opportunities with other learning systems.
- » Additional Resources: Video
- » ELI Content Anchor: Provisioning the Academic Technology Ecosystem



SpeakApps at the Universitat Oberta de Catalunya

New and Emerging Initiative

Institution: Universitat Oberta de Catalunya

Product/Company Name: SpeakApps - www.speakapps.eu

Speaking is one of the hardest skills to put into practice when learning a foreign language. Formal second or foreign language acquisition settings do not provide enough room for everyone in the classroom to practice the language. If the learning is done through an online course, speaking is mostly put aside in favor of writing, reading and listening. SpeakApps aims to fill this and other gaps by providing the integration of open source tools and materials specifically designed so that language learners can practice their speaking competences in a foreign language, thus offering a way for all foreign language learners

and teachers to practice and evaluate speaking skills at a distance or beyond the physical classroom. The activities and tools provided in SpeakApps can be used both as a complement for face-to-face courses and as the main speaking activities for online courses.

- » Learning Impact Project Category: Digital Resource, e-Text, Learning App Innovation, and Analytics
- » Learning Impact Gain Potential: Good but Evolving The Open University for Catalonia has successfully and extensively implemented this solution in its School of Languages. SpeakApps is still in the early days for adoption of this approach, but the potential benefits are clear.
- » Implementation Difficulty: Manageable with Resources The toolset is available now, in various forms, and several new tools are currently being developed. The toolset can already be integrated to any platform and/or system that supports the IMS LTI standard.
- » Additional Resources: Video / Brochure
- » ELI Content Anchor: Online and Blended Teaching and Learning

Broadband-Enabled Traineeships in Interactive Design

New and Emerging Initiative

Institution: The Gordon

Product/Company Name: Lightmare Studios - www.lightmare.com.au

Lightmare Studios, an Australian game development company and The Gordon, Victoria's largest regional TAFE, teamed up on a pilot educational model developed for Years 10 and 11 secondary school students. The "Interactive Design Program," in its first year of implementation, incorporates a virtual class and employment model, delivering traineeships in interactive game design. This broadband-enabled solution facilitates student interaction and collaboration in real-time, not limited by a student's geographical location. Students study online in a virtual classroom with training delivered one day per week. Participants are also paid to work part-time from home after hours as employees for Lightmare Studios, contributing their new skills to commercial projects within the video game industry. After successful completion of the program, students receive an exclusive, no cost Certificate III in Media focused on 2D and 3D digital art and animation—a first-rate pathway into Australia's interactive design and games industry.

- » Learning Impact Project Category: Gaming, Simulation, and Immersive Learning
- » Learning Impact Gain Potential: R&D Phase This approach has been successfully applied to the gaming industry in parts of Australia, but as yet its suitability in other sectors (which in principle are many) has not yet been evaluated and established.
- Implementation Difficulty: Significant/Complex The systems infrastructure is relatively simple to establish when reliable broadband connectivity is available, but a significant amount of corporate partner coordination and staff planning is required to establish the proposed training program.
- » Additional Resources: Video / Brochure
- » ELI Content Anchor: Gaming and Gamification for Supporting Learning



Degree Map at Austin Community College

New and Emerging Initiative

Institution: Austin Community College Product/Company Name: Degree Map Powered by Civitas Learning – www.civitaslearning.com

Recognizing that advising is an essential component of a successful academic career, the Austin Community College District (ACC) committed to streamline and maximize the advising experience and ensure all students were consistently given the information and guidance needed to pursue a degree plan aligned with their personal values, goals, and career interests. As a central part of its efforts to refocus advising on program completion, ACC partnered with Civitas Learning to develop and implement the Degree

Map application with advisors and students. Degree Map allows advisors and students to easily access and compare academic requirements for all degree plans, enabling personalized learning pathways. In the future, Degree Map will leverage the power of Civitas Learning's predictive analytics platform to deliver individualized course recommendations to students to improve each student's likelihood to succeed in their selected program of study.

- » Learning Impact Project Category: Education Pathways, Portfolios, and Learning Maps
- » Learning Impact Gain Potential: R&D Phase While tens of thousands of students have made use of this application, the longer terms benefits have still not been established. In the short term, this is an excellent degree planning aid.
- » **Implementation Difficulty:** Manageable with Resources The application has been developed and is ready for broad adoption. Staff training is needed to support students in its use for degree planning.
- » Additional Resources: Video / Brochure
- » ELI Content Anchor: Learning Analytics

Learning Cell Knowledge Community

New and Emerging Initiative

Institution: Beijing Normal University

Product/Company Name: Learning Cell Knowledge Community - http://lcell.bnu.edu.cn

In this project, a novel learning resource framework named Learning Cell (LC) was proposed to enable generative, evolving, intelligent and adaptive learning resources for future u-learning. LC provides a design model for future seamless learning spaces supported by pervasive computing technology. LC has basic features of semantic aggregation, self-tracing, evolution, and cognitive network connectivity. Learning Cell Knowledge Community (LCKC) was developed based on the LC concept. Compared with the general online learning systems, LCKC uses semantic ontology technology to organize learning resources that can also be attached with social cognitive network properties. LCKC realizes dynamic semantics associations between learning resources. Learners' learning process information is used to evaluate learning effectiveness. LCKC can support resource construction, knowledge management, organizational learning, regional network-based teaching study and college network teaching.

- » Learning Impact Project Category: Learning Platform Innovation
- » Learning Impact Gain Potential: R&D Phase Further work will be required to determine the benefit and impact of the product's design and delivery.
- » Implementation Difficulty: Significant/Complex The development and design of adaptive learning resources is of significant interest to the educational community, but it is still in its infancy making implementation and development difficult.
- » Additional Resources: Video/ Brochure
- » ELI Content Anchor: Digital Information Literacies

Honorable Mentions

The following projects were submitted and selected as finalists in the 2014 Learning Impact Awards competition:

Digital Resource, e-Text, Learning App Innovation, and Analytics

- » OKMindmap: First HTML5 based web collaborative mind map tool that enables users to create and share knowledge collaboratively and in many different formats. <u>Video / Brochure</u>
- » The Insights Student Success System at the University of Wisconsin: Moves beyond the traditional data reporting methods in education and utilizes predictive analytics and data modeling to deliver an unprecedented view of learner progress and success. <u>Video / Brochure</u>

Educational Application, Content, and Media Infrastructure

- » Atomic Learning LTI Tool: Enables users to seamlessly search the Atomic Learning library from within their LTI-compliant learning management system, and embed links to videos within their courses. <u>Video / Brochure</u>
- » Eduthek: An LTI-Based Market Place Solution for Learning Content and Tools that integrates seamlessly with Austria's leading learning management services to serve more than 2,000 (out of 6,600) schools in the country. <u>Video</u> / <u>Brochure</u>
- » mAuthor: A powerful yet easy to use ePublishing solution designed to help publishers and developers create a wide variety of interactive digital content and immediately publish it for multiple platforms and uses. <u>Video</u> / <u>Brochure</u>
- » The Included Program at Indiana University-Purdue Fort Wayne: Delivers required course materials of any format to students on the first day of class, helping drive engagement and academic success. <u>Video / Brochure</u>

Adaptive Learning, Online Homework, and Formative Assessment

- » Adaptive Learning at Delgado Community College: Orion learning modules provide an adaptive learning solution that evaluates and guides student progress towards proficiency by providing appropriate assessments, feedback, and evaluations of progress to the students and instructors. <u>Video</u> / <u>Brochure</u>
- » Knowillage LeaP: Enabling personalized learning in a simplified way by combining student profile, learning objectives, activity, assessment, and mastery information, and using advanced algorithms to guide the learner down a learning path. <u>Video / Brochure</u>
- » QTIWorks at the University of Glasgow: Enables student technology teachers to deliver formative and summative assessment on a Mathematics module via Moodle. <u>Video</u>

Gaming, Simulation, and Immersive Learning

» Grom Social Education Groups at Florida Virtual School: Utilizing the fun and social construct of Grom Social, teachers achieve a higher engagement level from students while leveraging the native communication channels that are already popular with student's ages 5-16. <u>Video / Brochure</u>

Learning Platform Innovation

- » Sarasota Public Schools and Blackboard: Using Blackboard xpLor to define high-level, district-wide controls that meet the needs of both administrators and instructors alike in making the creation, sharing, and maintenance of content easier than ever before. <u>Video / Brochure</u>
- » JISC-Funded ceLTIc Project: Provides a shared, hosted instance of WebPA (a peer-assessment tool) integrated with the Learning Management System of 6 partner institutions using the IMS Learning Tool Interoperability specification. <u>Video / Brochure</u>
- » Sound Infusion: Online music creation platform designed for students to create cross-cultural musical compositions using a bank of hundreds of sound samples from a huge range of culturally diverse instruments and musical styles. <u>Video / Brochure</u>

Digital Learning Networks

» The Connected, Any School, Any Student Project - State of Tasmania: An Australian first allowing schools from State Government, Catholic and Independent school sectors in the State of Tasmania to access a single "virtual data centre" hosted in the cloud, allowing schools capacity to adopt flexible, personalized and online approaches to curriculum to ensure equity of access to education. <u>Video</u> / <u>Brochure</u>

Scaling Pedagogical Knowledge and Practice

» School District of Pickens County and SAFARI Montage: The School District of Pickens County has created a BYOD Profession Learning Plan utilizing the SAFARI Montage Digital Learning Platform -Digital Curriculum Presenter (DCP). Using DCP, faculty and staff will have easy access to a series of training webinars on the tools available to support BYOD in the classroom.

The 2014 Learning Impact Award Program Evaluators

Christien Bok SURF The Netherlands

Gary Driscoll Educational Testing Services United States

Michael Feldstein eLiterate United States

D. Patches Hill Indian River School District United States

Tom Ingram Escambia County School District United States

Tricia Kennedy Gwinnett County Public Schools United States

Jason Levin Western Governors University United States

Lisa Mattson IMS Global Learning Consortium United States Robin Robinson Framingham State University United States

Christi Segal Ellucian United States

Colin Smythe IMS Global Learning Consortium England

Jeff Swain Penn State University United States

Karen Vignare University of Maryland University College United States

Stavros Xanthopoylos Fundacao Getulio Vargas Brazil

Tsuneo Yamada Open University of Japan Japan

| | Provides greater access to proven guality learning approaches |
|------------------|---|
| Access | Enables serving significantly more learners from currently served populations |
| | Enables serving new populations of learners |
| | Provides greater convenience Enables lifelong learning |
| | |
| | Has achieved mainstream instructor use Provides large-scale mission critical 24/7 support |
| Adoption | Supports institution-wide usage |
| | Supports statewide, countrywide, or global usage |
| | One of the largest deployments of its kind in terms of learners served |
| | Clarifies or helps develop the specifics of accountability |
| Accountability | Achieves significant cost savings versus prior solution |
| Accountability | Provides analytics to understand program and/or institutional performance |
| | Enables comparison across institutions/organizations |
| | Enables improved learner efficiency |
| | Enables improved instructor efficiency |
| Affordability | Achieves cost reduction that is passed on to learners |
| | Saves substantial travel time and cost |
| | Enables clarity of learning outcomes |
| | Improves results in mastery of subject as measured by assessments |
| Quality | Enhance effectiveness of pedagogy or learner engagement |
| | Enhances self-directed learning, critical thinking or metacognitive skills Enables integrated assessment or better assessment of student learning |
| | Eliables integrated assessment of beller assessment of student rearning |
| Ormanizational | Supports assessment of key competencies |
| Organizational | Enables planning or management of competency development |
| Learning | Enables more efficient sharing of best practices |
| | Provides a distinctive organizational learning advantage |
| | Utilizes open standards for data, content, or services |
| Interoperability | Combines products from multiple vendors that share data content, or services |
| | Enabled and caused feedback into the standards process to improve future standards |
| | Has been included in IMS Global test fest events |
| | Shares data, content, or services seamlessly with other applications at minimal cost |
| Innovation | Achieves a superior realization of other prior products or services of its kind |
| | Incorporates a scientific breakthrough promising enhanced learning |
| | Represents a radical improvement in access, affordability, or quality of education |
| | Provides seamless way to incorporate advanced functionality, requiring little or no faculty or learning |
| | training |

Appendix 2 – Learning Impact Medal Winners by Project Categories from 2007 – 2014

| Technology Project Categories | Established Technology Initiatives With Proven Learning Impact | Emerging Technology Initiatives with Learning Impact Potential |
|--|--|--|
| Digital Resource, e-Text, Learning App Innovation, and Analytics Innovative learning resources, tools and applications aimed at improving access, affordability and quality of education, including data gathering to measure student engagement, progress towards desired outcomes, program effectiveness and usage of digital resources. | Digital Content for Digital Textbook and Viewer 2013 Platinum - Presentation - Paper Improving Access, Affordability and Quality of Student Course Materials at Indiana University 2013 Gold - Presentation - Paper The Progressive Science Initiative and the Progressive Mathematics Initiative at the New Jersey Center for Teaching and Learning 2011 Gold - Presentation - zip SigonMedia and i-Scream Digital e- Curriculum Library for Educators in Korea 2010 Platinum - Presentation | SpeakApps at the Universitat Oberta de Catalunya 2014 Silver - <u>Video</u> / <u>Brochure</u> Using Data to Transform Teaching, Learning and Institutional Accountability 2013 Platinum - <u>Presentation</u> - Paper Cengage Learning MindLinks 2012 Gold - <u>Presentation-zip</u> APUS Online Course Guides Initiative: A University Alternative to Textbooks 2012 Gold - <u>Presentation</u> Open Learning for Science Education - The Richness of European Science Centres and Museums Connected to Users and Learners Worldwide 2011 Silver - <u>Presentation</u> |
| Educational Application, Content, and Media Infrastructure for enabling efficiencies in content development, searching, delivery and mobile devices. | Digital Media Services in Chicago Public Schools 2012 Gold - Presentation - pdf Turbocharging Florida Virtual School's Content with Octane(TM) from Ucompass.com, Inc. 2011 Platinum - Presentation Using eXact LCMS at the UKS NHS 2011 Platinum - Presentation - swf Building Cegos Management Skills Catalogue using Giunti Labs' Learn eXact LCMS 2009 Gold - Presentation TELOS Learning Design Visual Scenario Editor and Play 2009 Silver - Presentation Learn eXact at Volkswagen Group 2008 Platinum - Presentation HarvestRoad Hive and the Resource List Management System at the University of Western Australia 2007 Gold - Presentation Using Giunti Labs learn eXact LCMS at the UK NHS and Royal College of Radiologists R-ITI Project 2007 Silver - Presentation Wimba's Course Genie: An Authoring Tool for Common Cartridge at Langside College 2007 Bronze - Info | Xerte Online Toolkit for Developing eLearning Materials at the University of Nottingham 2010 Platinum - Presentation I(4) Excellence (Independence, Instructional Integrity & Interoperability) Content Authoring System - DeVry University, The Learning Edge North America (TLENA) and Pearson 2010 Gold - Presentation eLesson Mark-up Language (ELML): Understanding the eLearning Content Creation Tool of the University of Zurich 2010 Gold - Presentation |

| Technology Project Categories | Established Technology Initiatives With Proven Learning Impact | Emerging Technology Initiatives with Learning Impact Potential |
|--|--|---|
| | Articulate at Jefferson County Public Schools 2007 Bronze - <u>Demo Info</u> | |
| Adaptive Learning, Online Homework, and Formative Assessment Providing students self-paced learning, feedback, and adaption while providing the teacher with information on individualized student progress. | Math Students Find Success with Hawkes Mastery- Based Software 2013 Gold - <u>Video</u> - <u>Paper</u> Fairfax County Public Schools Electronic Curriculum, Assessment, Resource Tool (eCART) 2010 Gold - <u>Presentation</u> Mobile Assessment and Online Recognition using QTI solutions at Tasmanian Polytechnic and Skills Institute - 2010 Gold - <u>Presentation</u> MyMathLab at University of Alabama Platinum 2009 - <u>Presentation</u> <u>Article</u> ETS Criterion Online Writing Evaluation Services at Farragut High School Platinum 2007 - <u>Demo</u> - Info - <u>Article</u> Respondus 3.5 and University of Alberta - 2007 Silver - <u>Demo</u> | Adaptive eLearning Platform by Smart Sparrow and University of New South Wales 2013 Silver - <u>Video</u> - <u>Paper</u> |
| Gaming, Simulation, and Immersive Learning Applications that give students and teachers opportunities to participate in effective experiential learning that is better than traditional alternatives. | Jericho: Breaking Down the Barriers of Vocational Career Choices and Workplace Assessment 2011 Bronze - Presentation - zip | Broadband-Enabled Traineeships in Interactive Design 2014 Silver - <u>Video</u> / <u>Brochure</u> Victoria University Serious Games for Training 2013 Gold - <u>Video - Paper</u> Diving Supervisor and Chamber Supervisor Training Simulator 2011 Platinum - <u>Presentation - swf</u> Game-Based Learning for Core Academics at Florida Virtual School 2010 Gold - <u>Presentation</u> GetsmART in Ngee Ann Secondary School - Ngee Ann Secondary School 2010 Bronze - <u>Presentation</u> |
| Learning Platform Innovation Innovative architectures and software platforms for managing the creation and delivery of learning experiences, including personalization, accessibility and mobility. | FASTEL (For All Students & Teachers in the E- Learning space) 2011 Bronze - Presentation LAMS 2009 Gold - Info MyWay: Usable and Accessible Made to Measure Learning Materials 2008 Gold - Info A Tutor: Accessible, Adaptive, Online Learning - 2008 Gold - Presentation | McGraw-Hill Education / Blackboard Building Block v2.2 at Southern New Hampshire University 2014 Gold – <u>Video</u> / <u>Brochure</u> Improving Teacher Efficacy and Student Learning One Camera at a Time 2014 Gold - <u>Video</u> Learning Cell Knowledge Community |

| Technology Project Categories | Established Technology Initiatives With Proven Learning Impact | Emerging Technology Initiatives with Learning Impact Potential |
|--|--|--|
| | Open Source Virtual Learning Environment and eLearning Network 2008 Silver - Presentation Learning Environment by Network Services - 2008 Silver - Presentation | 2014 Bronze - <u>Video/ Brochure</u> GoClass Extended Classroom Teaching Platform for Connected Learners 2012 Platinum - <u>Presentation</u> Integrating AccessForAll with Common Cartridge 2012 Platinum - <u>Presentation</u> Seoul Cyber University's Learning WAVE -2011 Silver - Presentation - pdf |
| e-Collaborative Learning Providing students & faculty with applications and opportunities to participate in and improve achievement via effective collaborative learning activities that complement traditional forms of delivery. | Wimba @ Work: Improving Access for High Needs Career Education at Bloomberg University 2011 Platinum - Presentation WebPA at Loughborough Bronze 2008 - Presentation Microsoft Research ConferenceXP at Australian School of Air Silver 2007 - Info - Demo | Creating a Personal / Professional Learning Network with Fused for the Education.au Limited in Australia 2010 Bronze - <u>Presentation</u> |
| Digital Learning Networks Achieving scalable deployment of educational resources, tools and services toward specific and measurable access, affordability, and quality objectives. | Content Automation Tool at Florida Virtual Schools 2014 Platinum - Video / Brochure Desire2Learn in the Big Apple 2012 Platinum - Presentation E-learning for Children on the Border of the Brazilian Amazon 2012 Gold - Presentation e-Learning Service for Public Officials at the Central Officials Training Institute 2010 Silver - Presentation Glow – Scotland's National Intranet 2009 Platinum - Presentation SEDUC – AMAZON 2009 Gold - Presentation Agrega: Federated Access to Content in Spain Education Community 2009 Silver - Video iSHARE: Inter-cluster Sharing of Presentation 2009 Silver - Video Scootle – Schools Online Teaching and Learning Environment 2009 Bronze - Presentation Tennessee Board of Regents (TBR) Online Campus Collaborative 2008 Platinum - Info | |

| Technology Project Categories | Established Technology Initiatives With Proven Learning Impact | Emerging Technology Initiatives with Learning Impact Potential |
|---|--|--|
| | 2008 Gold - <u>Presentation</u> Cyber Home Learning System of Korea 2007 Platinum - <u>Demo</u> | |
| Student Success and Outcomes-Based Learning Support Services Applications and processes to enable teaching, learning, and placement tied to explicit outcomes and achievements. | Lone Star College Online: Student Support Services Drives Student Success 2013 Bronze - Presentation - Paper Learning & Career Outcomes Infrastructure at Capella University 2009 Platinum - Presentation Online Learning Environment at University of Wollongong supported by the Learning Edge 2008 Platinum - Presentation | |
| Education Pathways, Portfolios, and Learning Maps Applications to help students navigate their educational experience to improve success and outcomes based workforce needs. | Using Predictive Analytics to Personalize Course Selection, Guide Student Success, Improve Retention and Close the Attainment Gap 2014 Platinum - Video / Brochure On-line Career Development Center Dream-wings 2012 Platinum - Presentation Degree Compass - The Netflix Effect for Students 2012 Bronze - Presentation - mov Campus Pack and Baldwin-Wallace College: Encouraging Student Educational Goal Planning and Life- long Learning 2011 Silver - Presentation - zip | DegreeMap at Austin Community College 2014 Bronze - <u>Video</u> / <u>Brochure</u> Promoting the Concept of Competency Maps and Inter- Professional Assessments Linked to e-Portfolios to Enhance the Student Learning Experience in Preparation for Work Based Learning, Employability and Life Long Learning. 2011 Gold - <u>Presentation</u> |
| Scaling Pedagogical Knowledge and Practice Providing efficient and effective support to teachers and faculty in significantly improving facilitation and delivery of learning experiences | Online Faculty Orientation for Online Teaching at Lone Star College 2009 Bronze - Presentation DE Oracle @UMUC 2009 Bronze - Presentation eTwinning Action by European Schoolnet - 2007 Gold - Presentation | |
| Blended Learning Optimization Evolving traditional educational delivery models featuring seamless technology environment for teachers and students to support effective combinations of online, classroom and in-context learning. | Faster English Language Learning 2011 Gold - Presentation - ppt Leveraging Interoperability Specifications for the Collaborative Development of an Online Research Skills Training Program at Durham University 2010 Gold - Presentation Overcoming the Challenges of e- Learning in the Amazon 2010 Gold - Presentation | |

| Technology Project Categories | Established Technology Initiatives With Proven Learning Impact | Emerging Technology Initiatives with Learning Impact Potential |
|----------------------------------|--|--|
| | Tegrity Mini Solutions at University of Central Florida 2008 Bronze - Info Tegrity Campus 2.0 at Saint Mary's University 2007 Bronze – Info | |

Appendix 3 – 2013 3x3 Learning Impact Project Matrix



Mainstream Innovations

Emerging Innovations

Learning Impact Report Contributors

IMS Global extends a special thank you to the following individuals for sharing their insights as Learning Impact Award evaluators and volunteering their time to assist with writing the Executive Summary for this report.

- » Stacy Cohen, Framingham State University
- » D. Patches Hill, Indian River School District
- » Robin Robinson, Framingham State University
- » Karen Vignare, University of Maryland University College

About IMS Global Learning Consortium

IMS Global is a nonprofit organization that advances technology that can affordably scale and improve educational participation and attainment. IMS members are leading suppliers, institutions and government organizations that are enabling the future of education by collaborating on interoperability and adoption initiatives. IMS sponsors the Learning Impact Leadership Institute, a global program focused on recognizing the impact of innovative technology on educational access, affordability, and quality while developing the people and ideas that are going to help shape the future of educational technology.

www.imsglobal.org

801 International Parkway 5th Floor, PMB #112 Lake Mary, FL 32746 General Inquiries: 407-362-7783



May 4 - 7, 2015 – Atlanta, Georgia

http://lili15.imsglobal.org/

Views expressed in this report are solely those of IMS Global Learning Consortium and the contributors. ©2014 IMS Global Learning Consortium, Inc. All Rights Reserved. <u>Trademark Information</u>.