2013 Learning Impact Report: e-Texts and Adaptive Learning Leading the Way to an Emerging World of Educational Apps

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

Introduction

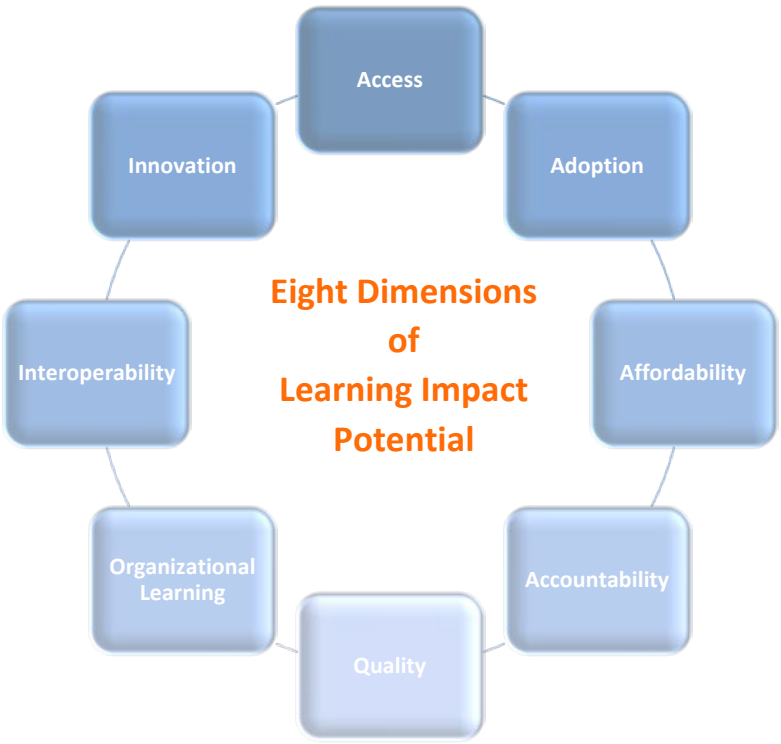
Welcome to the 2013 Learning Impact Report!

Education systems around the world face unprecedented challenges. How can institutions at all levels evolve to meet the educational needs of a modern global society? The answer to this question is uncertain, but leading institutions, departments, programs and faculty around the world are exploring new models, both evolutionary and revolutionary, to come up with the answer.

One thing is certain. For these new models of education to achieve scale and personalization there is a great need for "technology" innovation. The term "technology" here is defined rather broadly. It encompasses process redesign, as well as use of software, hardware, social networks, etc.

In 2007, the IMS Global Learning Consortium (IMS Global), the world's foremost consortium of leading educational technology providers and institutions, took a bold step by creating an annual conference and awards competition to evaluate and recognize technological innovation in education. The program, called Learning Impact, was designed with two unique aspects. First, the competition 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 (Figure 1). Using a series of rubrics (Appendix 3), expert judges evaluate each entry in each of the eight dimensions.

Figure 1 – Learning Impact Rubrics



The second unique program aspect is that the Learning Impact conference, at which the competition finalists are judged, focuses on understanding the application of technology to scale and systemically support evolving new educational models. And, as such the models to which technologies are applied are at least, if not more, important than the technologies themselves. As a result of this focus on new models and evidence of impact, the Learning Impact Awards (LIA) recognize 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. Accordingly, the LIAs identify potentially repeatable implementation of effective technology strategies and implementation practices that can help institutions and educational authorities achieve their goals, such as increasing access, creating personalized learning environments, improving student engagement, or improving student success.

By focusing on a student/institutional-centric “why” approach, as opposed to a product-centric “what” approach, institutional leaders can identify repeatable projects that have good potential to address similar challenges on their campuses. For instance, an analysis based on the “what” might proclaim that e-book readers are an important technology trend. In contrast, the “why” approach might focus on how effectively supporting bring your own device programs is an important trend that may have measurable impact on the learning experience in specific ways. Additionally, the “why” approach focuses on demonstrated application of technology versus a focus on hyped up new product categories.

Through analysis of the 2013 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.

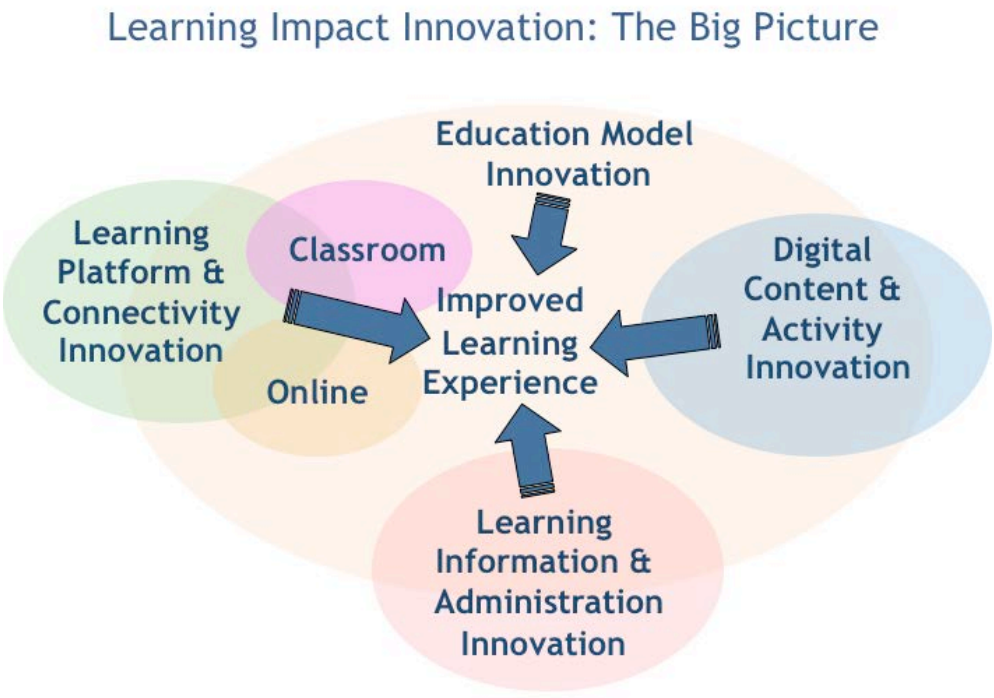
The report begins with an executive summary that provides a high level analysis of the LIA finalists and shares ongoing trends identified through the Learning Impact program. The executive summary is followed by information about each 2013 medal winner or honorable mention, including a description of “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 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 1). It is this cumulative list of LIA winners, as well as educational technology market trends, which informed the analysis contained in the executive summary.

Executive Summary

e-Texts and adaptive learning are leading the way to an emerging world of educational apps that will be utilized to implement evolving educational models

There are four top-level areas that require substantial innovation in order to improve access, affordability and quality of education experiences, as shown in the following diagram.

Figure 2 - Learning Impact Innovation – Broad categories for cooperating learning applications to support evolving educational models



Since the inaugural 2007 Learning Impact competition, the LIA nominations and medal winners have reflected progress in all four areas depicted in the preceding graphic (Figure 2). Most notably, though, has been the emergence of a potential new world of connected educational applications and digital resources. The concept of the "learning object," much touted since the mid-nineties, now appears to be taking shape in the form of the educational "learning app." While there will be numerous learning apps, the Learning Impact Awards are seeing apps aimed at supporting evolving educational models to achieve greater student success. While the evolution to these new models and the associated tools still has a long way to go, there is no doubt that we are beginning to see exciting, albeit early examples, of what this future will look like as described in the following analysis of the 2013 LIA winners, trends in LIA winners since 2007, and overall educational technology market trends.

Confirming the predicted rise of adaptive learning products

Developments in the marketplace, as well as the LIA medal winners, continue to reinforce one of our key conclusions from the 2010 Learning Impact Report that adaptive learning applications, namely online homework, adaptive tutors, and adaptive assessment systems are an investment with high impact and

straightforward implementation. Indeed, the market continues to grow rapidly and diversify. The 2013 LIA awards in this area featured Hawkes Learning Systems (implemented at Greenville Technical College) as an example of a highly effective adaptive learning product for developmental math, Smart Sparrow (implemented at University of South Wales) as an extremely innovative product for authoring adaptive content, and Educational Testing Service's (ETS) promising new product in R&D phase that pre-assesses English-language learners in order to choose the most effective learning path. Education Services Australia provided a novel entry that combined the power of a Digital Learning Network (DLN) with adaptive learning by offering a DLN featuring diverse assessment content with a DLN repository of digital learning objects.

E-texts showing signs of enabling viable strategies for institutional-level digital content adoption

Given the many potential advantages of digital alternatives to the printed textbook (see IMS blog series on this here) it's a wonder that we are not a lot closer to 100% digital. One of the reasons why, is that most digital content alternatives really aren't better than textbooks. They don't deliver on the potential. However, this is all changing as evidenced by three dynamite 2013 LIA winners. CourseSmart showed that e-text providers can and will provide useful analytics data, something that textbooks cannot provide. Courseload is partnering with Indiana University and other institutions to enable e-text/e-content alternatives with sophisticated features that are lower cost than textbooks. The Korea Education & Research Information Service (KERIS) demonstrated an interoperable advanced e-text format via a combination of ePub3 and IMS standards, which addresses the critical problem of cross-platform compatibility for e-texts.

Digital Learning Networks continue to provide excellent return and are becoming easier to set up thanks to advancements in educational applications, content and media infrastructure

Trends over the last few years have confirmed that there is large payoff to projects that IMS has been tracking now for over seven years and calls Digital Learning Networks (DLN). These DLNs are generally a scalable and flexible portal platform from which a wide variety of learning applications and digital resources can be accessed across a set of connected institutions. DLN projects are continuing to take hold in school districts/local K-12 authorities, and there is increasing interest at the state educational authority level. Implementation of these DLNs is becoming easier due to more sophisticated digital content management or learning object repositories (LORs). One such example in the U.S. is at Forsyth County Public Schools in partnership with the K-12 highly penetrated SAFARI Montage product. Learning management systems are also working hard to implement such capabilities internal to their products. Both the external LOR and the LMS-specific LOR have been made much more viable in recent years by a large variety of tools, apps and resources conformant to the IMS Global interoperability standards, most notably Common Cartridge and Learning Tools Interoperability. In addition to LOR capabilities and analytics features, learning platforms have focused in recent years on enabling mobile platform application support. While this is normally thought of as support for mobile platforms, we are now seeing more innovation in support of all the devices that might be used in the classroom and online. This trend is exemplified by 2013 entry from Visang ESL.

Blended learning optimization, outcomes-based learning and pathways for student success slowly evolve - not as sexy as MOOCs, but a lot more impactful

Largely lost in what has been a distraction of historic proportions around MOOCs are institutions and suppliers who have been working hard to enable a more student-centered educational process. Literally anyone who has paid attention to the experience of the last 15 years of educationally oriented e-learning has learned that while "the course" is indeed a very tangible thing, it is not the course that ultimately

matters to the student. What matters to the student is gaining a credential that means something in terms of their life success. The more unique and personalized (and therefore less "massive') the educational program the higher value it will be. While MOOCs may have potential to improve access and affordability, there is not significant evidence that MOOCs (in their current state of infancy) have improved student outcomes over previously deployed (smaller scale) online programs. What's more, to address the "leaks in the educational pipeline" new models for education are most likely required as opposed to massive versions of models that have not worked for underserved students. The 2013 LIA finalists included such breakthrough entries from Nisai Virtual Academy, Victoria University and Charles Darwin University. In addition, two finalist nominations from Lone Star College, the Online Student Support Services Drive Student Success project and the Education and Career Positioning System project, featured novel combinations of tools to enable institutions to help students help themselves. These combinations of tools almost certainly herald a future time of a more student success/program centered educational IT infrastructure, which will be a clear improvement over today's course centered technology model. IMS is coining the term "Blended Learning Optimization" to connote the evolution of what we had called e-learning meets e-classroom, to designate the key objective of using technology to support new program-oriented models to improve student-success.

IMS Learning Impact categories have progressed modestly in the last three years

It's been over three years since IMS Global published the inaugural 2010 Learning Impact report. Perhaps the greatest value of that report was the definition of "project categories" as a way to group the entries in terms of how to think about what they entail. In this year's report we have evolved those categories somewhat based on the last three years of LIA winners. Figure 3A illustrates our current view of the major categories. Figure 3B provides a "key" to help understand the relative positioning in terms of the two dimensions: Learning Impact gain potential and implementation challenges. Note that the placements of the categories in the matrix represent an accumulated evidence of LIA winners since 2007. The categorization of all winners since 2007 is contained in the summary table (Appendix 1). A table illustrating "learning impact potential versus implementation difficulty" is shown in Figure 3A. The "purple" shading of the categories toward the top right indicate those categories of projects that IMS would consider "mainstream" innovations at this point in time. Surprisingly though, some of these categories have "lost ground" since the 2010 report, meaning that they have proven to be either more difficult to implement or viewed as having less potential impact in the updated 2013 analysis. The "brown" shaded boxes conversely indicate innovation categories that have not reached mainstream status at this point. Some categories from the 2010 analysis have been folded into some of the 2013 categories as it now appears that these are subsets of a larger trend.

2013 Learning Impact Gain vs. Implementation

The following two charts (figure 3A and figure 3B) provide a visual summary and interpretation of the potential for Learning Impact gain and level of difficulty to implement the project category solutions. 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 potential.

Figure 3A – 3x3 Learning Impact Project Matrix

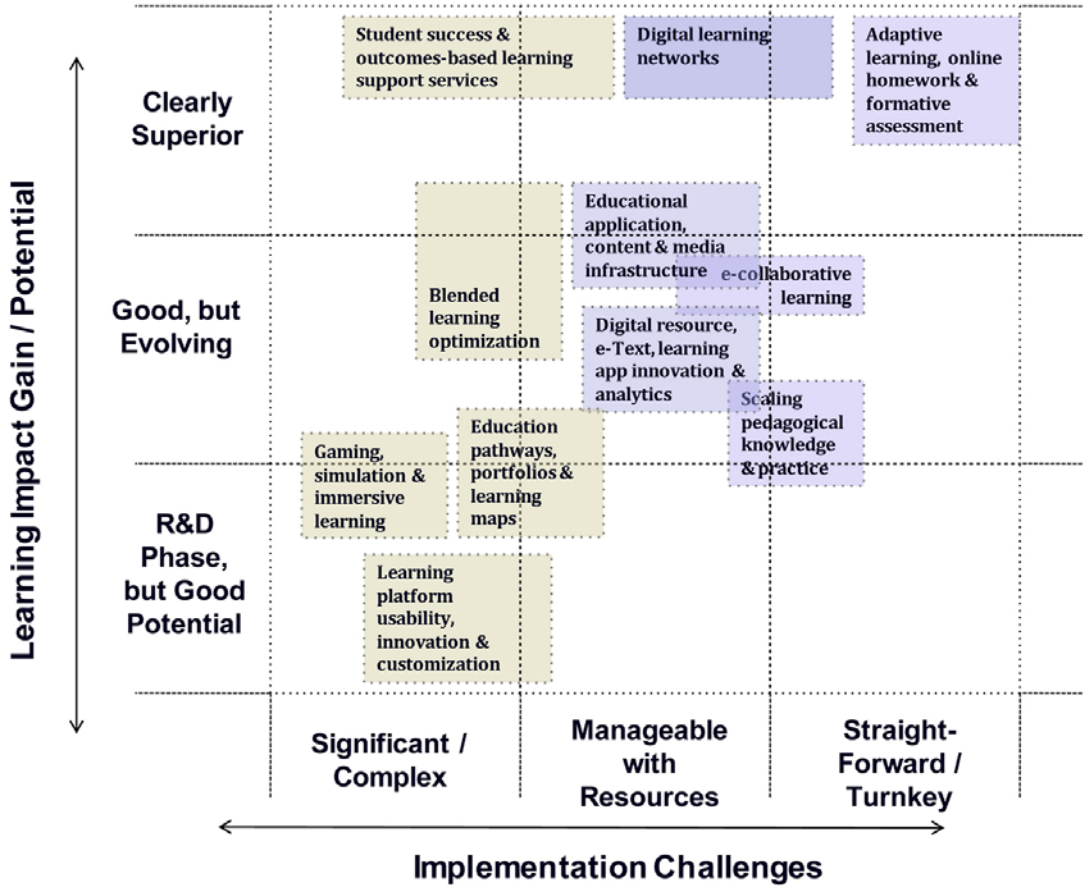
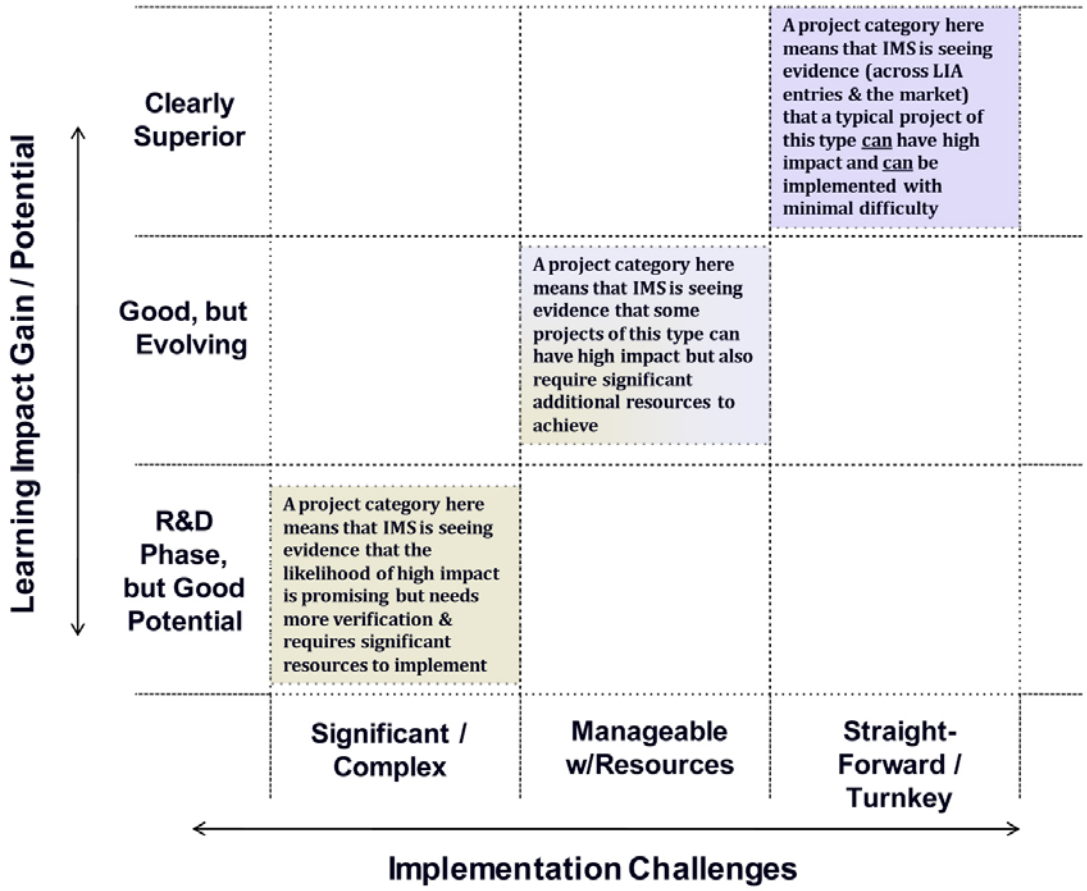


Figure 3B – Interpretation of the 3x3 Learning Impact Project Matrix



Relationship between the Learning Impact Report and Other Award Programs or Reports

The Learning Impact Awards appear to be unique with respect to process of evaluation and the issuing of a report such as this, attempting to make sense of the knowledge gained from the cumulative winners. Compared to most award programs, a greater amount of work goes into the Learning Impact Awards, including this report. Our goal is to gain a better understanding of impact leading to more effective institutional investments in technology.

In terms of comparison to other reports, there may be a temptation to compare the Learning Impact Report to the annual Horizon Report(s), of which there are K-12, HED and regional editions. However, because the Learning Impact Report takes the approach of focusing on project types rather than attempting to identify specific technologies and their adoption timeframes (as is the nature of the Horizon Report), the two reports are quite complementary. The reader of this report and any version of the Horizon Report can draw their own conclusions by comparing and contrasting the information provided. To illustrate, the following bullets are a couple of examples of how this Learning Impact Report could potentially help clarify technologies placed in the “one year or less” time to adoption horizon from the 2013 Horizon Report.

- Massively Open Online Courses: The Learning Impact analysis would see MOOCs as a type of "Blended Learning Optimization" project. As shown in Figure 3A, these types of projects have not yet achieved mainstream effectiveness in the opinion of IMS. That does not mean that there is not a particular instance of a MOOC that has been effective. What it does mean is that from IMS's perspective, based on the cumulative evidence, the widespread, high impact adoption of projects in this category is not apparent in the near term. Thus, we would potentially modify the Horizon Report's findings by pointing out that (a) there are many variations of the Blended Learning Optimization concept that institutions should be considering depending on their goals (some examples of which are given in this report), and (b) these are not easy projects to implement at this point in time.

- Tablet Computing: Tablets have definitely exploded onto the education scene. From IMS's perspective we ask if indeed they are being leveraged to improve Learning Impact. In the 2010 Learning Impact Report we identified the category of Mobile Learning Resources as being in its early stages. However, in the current report we have eliminated that category because literally all other project categories need to in some way encompass the requirements of mobile devices. IMS has also seen some very innovative and high scoring projects that have had tablets as a primary platform, some of which are now appearing in the Platform Innovation category, but may also appear in other categories depending on the project focus. However, improving Learning Impact specifically from the deployment of tablets typically requires an adjustment of teaching and learning models as well as technology being integrated in new ways. Therefore, we have primarily seen pilot projects that require substantial resources to put in place. Thus, IMS would conclude that while tablets are a given, achieving substantial impact requires further development.

Finally, it should also be noted that in the production of this report IMS takes advantage of a unique viewpoint of the educational technology landscape facilitated by a flourishing collaboration among many of the world's leading educational technology providers and institutions occurring in IMS's many face-to-face meetings worldwide.

2013 Learning Impact Finalists

The 2013 award winners were announced during the Learning Impact Conference in San Diego, California. The following pages provide an overview of the winners and honorable mention projects. Each entry includes the IMS Learning Impact Project Category and lists which cell of the *3 x 3 Learning Impact Project Matrix* (see Appendix 1 for project category definitions) based on the judges evaluation. Medal ratings were based on the full set of detailed criteria and rubrics (Figure 1 and Appendix 3). 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. Details about the ELI content anchors are online at http://www.educause.edu/eli/programs/seeking-evidence-impact/content-anchors

Platinum Medals

Using Data to Transform Teaching, Learning and Institutional Accountability

Institutions: Ashworth College, Algonquin College, Career Point College, Central Carolina Technical College, Rasmussen College, and Texas A&M – San Antonio
Product/Company Name: CourseSmart Analytics - www.coursesmart.com
2013 Platinum Medal – New and Emerging Initiative
Learning Impact Project Category: Digital Resource, e-Text, Learning App Innovation & Analytics
CourseSmart Analytics was developed to address some of the most compelling challenges in higher education: improving retention, controlling costs, and improving learning outcomes. Specifically, the tool was designed to assess a variety of e-text/digital content usage statistics, including session length, pages viewed, and activities such as highlighting or taking notes, to provide meaningful metrics of student engagement with course materials. All of the usage statistics are packaged into a user-friendly dashboard to enable faculty to view aggregate and individual student engagement data, correlate that data to overall student performance, and use it as a means to intervene with "at risk" students to help them stay on track in their studies to improve graduation rates.

- **Learning Impact Gain Potential: Good but evolving.** CourseSmart Analytics is still in the pilot phase. Until significant data from the system has been captured and analyzed showing that the analytics presented has a significant impact on outcomes, its impact on learning is still to be confirmed.
- **Implementation Difficulty - Manageable w/resources:** CourseSmart's Analytics appear straightforward, however, effectively utilizing and analysing data gathered may take practice.
- **Additional Resources:** Video - Paper
- **ELI Content Anchor:** Learning analytics

Digital Content for Digital Textbook and Viewer

Institution: K-12 schools across Korea
Product / Company Name: KERIS, DaoulnCube, Doosan Dong-A, MiraeN, Visang
http://english.keris.or.kr/
2013 Platinum Medal – Established Initiative
Learning Impact Project Category: Educational Application, Content and Media Infrastructure
Korea's Ministry of Education, Science and Technology launched a "Strategy for Smart Education" to respond to a changing environment by focusing on customized teaching and learning to enhance the capacity of learners in the 21st century. In order to meet the requirements of Smart Education, KERIS and its partners designed a nationwide open digital content platform containing a variety of learning materials to enable students to have access to high-quality educational information at a low cost and ability to explore the world beyond the classroom.

- **Learning Impact Gain Potential - Clearly superior:** Provides easy access, anywhere and anytime to digital content that a user can easily annotate while enabling easy reporting of learning outcomes to any associated learning platform.
- **Implementation Difficulty: Significant.** Once the content, including quizzes and tests, has been authored in EPUB 3, information can be accessed on an EPUB3 enabled device without requiring any further editing or reformatting. However, availability of suitable EPUB3 authoring environments is still in development.
- **Additional Resources:** Video - Paper
- **ELI Content Anchor:** e-Content / e-Textbooks

Gold Medals

Online Student Support Services Drives Student Success

Institution Name: Lone Star College-Online
Product / Company Name: SmarterMeasure, Starfish Early Alert, and Smarthinking Online Tutoring
2013 Gold Medal – New and Emerging Initiative
Learning Impact Project Category: Student Success & Outcomes-Based Learning Support Services
Lone Star College Online supports 11 fully online degrees and 23 fully online certificates. To support student success, Lone Star proactively provides comprehensive support services (e.g. SmarterMeasure, Online Advising Chat, Case Management Advising, Starfish Early Alert, and Smarthinking Online Tutoring) to online or hybrid enrolled students via the students' MyLoneStar. Their multi-prong approach to provide support services in an accessible, convenient, and high touch method that can be scaled appropriately to match rapidly growing fully online and hybrid enrollments has resulted in enhanced learning outcomes.

- **Learning Impact Gain Potential - Clearly superior:** Implementing an online student advising, tutoring and self-assessment system that is equivalent to face-to-face advising has made a significant difference in the completion and retention rates at Lone Star College Online.
- **Implementation Difficulty - Manageable w/resources:** With a mixture of software tools and a modest investment in staff, the college is able to serve a large number of students.
- **Additional Resources:** Video - Paper
- **ELI Content Anchor:** N/A

Improving Access, Affordability and Quality of Student Course Materials

Institution Name: Indiana University
Product / Company Name: Courseload – www.courseload.com
2013 Gold Medal – Established Initiative
Learning Impact Project Category: Digital Resource, e-Text, Learning App Innovation & Analytics
At Indiana University, textbooks account for an estimated 10% of a student's total cost of attendance each year. Further, more than 1/3 of all students go without one or more required textbooks each year. This delay (or absence) of course materials creates a barrier to learning that is often hard to overcome. Indiana selected Courseload's digital content delivery platform to provide students with access to various e-content more affordably than a traditional textbook model and to enhance the quality of education utilizing advanced analytics and collaborative features.

- **Learning Impact Gain Potential - Good, but Evolving:** The use of a new common content delivery platform provided the opportunity to rationalize the way digital learning was derived across the institution. Providing all students with access to the same learning materials has clearly superior potential to improve learning outcomes while reducing the financial burden on students. However, the issue of historical preferences for printed books by faculty or students mean that extra due diligence is required to achieve wider adoption.
- **Implementation Difficulty - Manageable w/Resources:** Once the initial infrastructure has been deployed, there is a considerable and immediate ROI for the institution and significant savings for the students themselves.
- **Additional Resources:** Video - Paper
- **ELI Content Anchor:** e-Content / e-Textbooks; Open Content

Silver Medals

Adaptive eLearning Platform

Institution Name: University of New South Wales
Product / Company Name: Smart Sparrow - www.smartsparrow.com
2013 Silver Medal – New and Emerging Initiative
Learning Impact Project Category: Adaptive Learning, Online Homework, and Formative Assessment
The University of New South Wales and Smart Sparrow have been collaborating to develop an adaptive learning platform that evolves online education from a "one-size fits all" approach to a more personalized, interactive approach. This adaptive learning approach encourages student learning by doing versus teaching by PowerPoint, PDFs, multiple choice quizzes and recorded lectures.

- **Learning Impact Gain Potential - Good, but Evolving:** While the use of integrated analytics is a boon for providing information about the student's progress, the solution is still in its initial phase but appears promising.
- **Implementation Difficulty - Significant:** The ability for teachers to design adaptive educational content allows students the freedom to work at their own pace and get feedback is ideal, but implementation and development may be difficult.
- **Additional Resources:** Video - Paper
- **ELI Content Anchor:** Online and Blended Teaching and Learning

SAFARI Montage as a Learning Object Repository

Institution: Forsyth County Public Schools
Product/Company Name: SAFARI Montage - www.safarimontage.com
2013 Silver Medal – Established Initiative
Learning Impact Project Category: Educational Application, Content and Media Infrastructure
In the spring of 2009, Forsyth's cloud-based learning management system (LMS) was acquired by another company and an end of life date was announced. This presented the challenge of migration and ongoing management of 12,000 digital resources. Forsyth turned to SAFARI Montage to create an in-house learning object repository (LOR) due to its adoption of the IMS Common Cartridge standard that provided the assurance that the migration of the 12,000 objects from the LMS into the new LOR would be hassle-free. With SAFARI's help, Forsythe migrated 12,000+ digital assets in less than a month and imported another 7,000 objects that had been identified and meta-tagged, but never entered into the previous LMS. With this move, all objects – regardless of type – are now accessible on any platform.

- **Learning Impact Gain Potential - Clearly Superior:** The standards-based availability of the LOR means best-in-breed learning resources can be used elsewhere in the district / institution and the BYOD availability allows learners to use devices best suited to their needs.
- **Implementation Difficulty - Straightforward:** This is a proven product that has been deployed with success in numerous school districts. Once the initial new infrastructure is deployed it is possible to provide BYOD access the common and "open" learning object repository.
- **Additional Resources:** Video - Paper
- **ELI Content Anchor:** eContent/eTextbooks

Bronze Medals

Serious Games for Training

Institution Name: Victoria University
Product / Company Name: Serious Games Group - www.seriousgamesgroup.com
2013 Gold Medal – New and Emerging Initiative
Learning Impact Project Category: Gaming, Simulation, and Immersive Learning
Victoria University partnered with the Serious Games Group to develop training programs for delivering and assessing vocational education through games-based learning. The games enable interactions among teachers, learners and industry, and most critically engages participants by making them active agents in the learning experience.

- **Learning Impact Gain Potential - Good, but Evolving:** The games have shown enhanced learning and teaching outcomes by aligning gameplay and performance criteria for the worker safety application.
- **Implementation Difficulty - Significant to Straightforward:** It takes significant time to develop a game such as this. However, once developed it has appeal to students and can be easily implemented.
- **Additional Resources:** Video - Paper
- **ELI Content Anchor:** Games and Gamification for Support of Learning

Math Students Find Success with Hawkes Mastery-Based Software

Institution Name: Greenville Technical College
Product / Company Name: Hawkes Learning Systems – www.hawkeslearning.com
2013 Bronze Medal – Established Initiative
Learning Impact Project Category: Adaptive Learning, Online Homework, and Formative Assessment
Greenville Technical College partnered with Hawkes Learning Systems to provide course materials to help them reverse a trend of student success rates declining semester after semester. Professional development sessions and teaching guidelines were put in place to ensure faculty knew how to use the software and to set a standard of consistency from course to course. Early results from the pilot in developmental math showed success rates increased from around 40% to 71.4% overall.

- **Learning Impact Gain Potential - Clearly Superior:** The use of a new common content delivery platform provided an opportunity to rationalize the way digital learning was delivered across the institution for the teaching of math curriculum. Reaching outcomes like Greenville Tech has seen from their pilot can be viewed as a significant “win” for students and faculty.
- **Implementation Difficulty - Straightforward:** This is a turnkey product.
- **Additional Resources:** Video - Paper
- **ELI Content Anchor:** Provisioning the Academic Technology EcoSystem; Assessment of Student Learning

Honorable Mentions

K12 English Learner Identification/Screener

Institution Name: N/A – Product in development at time of submission
Product / Company Name: Educational Testing Service (ETS) – www.ets.org
2013 Honorable Mention – New and Emerging
Learning Impact Project Category: Adaptive Learning, Online Homework, and Formative Assessment
The overall goal of the ETS K12 English Learner (EL) Identification Tool is to assist states, districts, schools and teachers in effectively and adequately screening and placing EL students in appropriate language instruction educational programs. The identification assessment tool developed by ETS helps institutions to easily determine if a newly enrolled student is eligible for a language instruction program and to assist in determining the student's initial English-language proficiency. It also reduces the likelihood that a student will be mistakenly classified as an EL student when they are not.

- **Learning Impact Gain Potential - R&D Phase:** This product at the time of the award evaluation was still in development, but demonstrated good potential to provide students with early interventions to help improve student language abilities at an earlier phase in students' educational development.
- **Implementation Difficulty - To be Determined:** The product is in the development and prototyping phase. Once the product is made available, it appears that implementation would be close to a turnkey solution.
- **Additional Resources:** Video - Paper
- **ELI Content Anchor:** Assessment of Student Learning

Improve – Formative Assessment Tool

Institution Name: Australian Schools
Product / Company Name: Education Services Australia - www.esa.edu.au
2013 Honorable Mention – New and Emerging Initiative
Learning Impact Project Category: Adaptive Learning, Online Homework, and Formative Assessment
Improve is a formative assessment tool that supports continuous diagnostic and formative assessment of students and allows teachers to use more than 16,000 digital curriculum resources to target specific learning outcomes in English, science and mathematics. The use of Improve has affected the speed and ease with which teachers can deliver formative and diagnostic assessment online and reduces the time for teachers to locate effective learning resources that align to curriculum standards.

- **Learning Impact Gain Potential – Good, but Evolving:** Access to test items and resources within the Improve tool enables teachers to personalize tests to better support individual learning, which clearly has potential to improve individual outcomes.
- **Implementation Difficulty – Straightforward:** Improve was launched in February 2012 and is freely available to all teachers in Australia. Education Services Australia is working closely with a number of national and international agencies to add test items to Improve to ensure that teachers and Australian students are continuously supported.
- **Additional Resources:** Video - Paper
- **ELI Content Anchor:** Assessment of Student Learning

Smart Language Learning Program

Institution Name: Visang ESL
Product / Company Name: Scholastic www.scholastic.com and the Electronics and Telecommunications Research Institute (ETRI) - www.etri.re.kr/eng
2013 Honorable Mention – New and Emerging Initiative
Learning Impact Project Category: Learning Platform Usability, Innovation & Customization
Visang created a solution that analyzes students' learning history through the LMS and provides students with tailored learning materials by connecting to an archive system in the cloud where teaching materials are identified based on an evaluation tool and are then the materials can be remade through an authoring tool. These customized materials are then operated via the teachers' tablets, electronic boards, and students' devices. Using these three devices synchronously, the teacher is able to foster an interactive, personalized learning experience.

- **Learning Impact Gain Potential - R&D Phase:** Providing an interactive and tailored learning environment has potential to improve student engagement and outcomes, but this is an evolving initiative that requires further adoption to validate potential.
- **Implementation Difficulty - Significant:** The solution shows great potential for creating smart learning environments to support personalized learning, but the solution appears to be difficult to implement without significant resources and appropriate teacher training.
- **Additional Resources:** Video - Paper
- **ELI Content Anchor:** Provisioning the Academic Technology Ecosystem

E-Backpack for Indigenous Rangers

Institution Name: Charles Darwin University
Product / Company Name: N/A
2013 Honorable Mention – New and Emerging
Learning Impact Project Category: e-Collaborative Learning
To enable trainers to reach and teach learners more effectively in remote areas, the Charles Darwin University used mobile technologies to create an e-Backpack to support and reinforce learning within and between teaching blocks and to follow-up with existing and new learners. The e-Backpack enables trainers to record students' learning, record instructions for teachers and students in their first languages, and use these materials for ongoing teaching, professional development and assessment.

- **Learning Impact - Good, but Evolving:** Appears to have good potential to improve learning impact for students in remote areas who speak very little English. Learners are able to integrate their learning into the workspace, demonstrate leadership in their learning, and find information in their first language when the trainer is not available.
- **Implementation Difficulty- Manageable w/Resources:** Implementation seems manageable with resources and enables trainers to reinforce learning in remote areas where frequent visits by trainers is not possible.
- **Additional Resources:** Video - Paper
- **ELI Content Anchor:** Mobile Learning; Accessibility

Education and Career Positioning System

Institution Name: Lone Star College – Innovations, LLC,
Product / Company Name: Personal (www.personal.com), Valpar International (www.valparint.com), and SmartHires (www.smarthires.com)
2013 Honorable Mention – New and Emerging Initiative
Learning Impact Project Category: Education Pathways, Portfolios, and Learning Maps

Recognizing the need to put career-planning tools directly in the hands of students and parents, Lone Star College in partnership with Personal, Valpar, and SmartHires created the Education and Career Positioning System (ECPS). The ECPS is a suite of tools that enable students and parents to electronically simulate, navigate, validate, and plan their education journey to align with their interests, skills and workplace opportunities. The ECPS allows the creation, storage, and access to life-long archived education documents and data, which is made possible through the U.S. Department of Education's open data policy called MyData Button.

- **Learning Impact – R&D Phase** The ECPS has potential to improve learning impact, but it is still evolving.
- **Implementation Difficulty – To Be Determined** The system is easy for students, parents and faculty to purchase and set-up. However, much work remains to integrate additional applications with the system to effectively help students navigate their education pathways.
- **Additional Resources:** Video - Paper
- **ELI Content Anchor:** Emerging Technology, Future Models, and Academic Transformation; ePortfolios

E-Learning in a Vocational Learning Setting

Institution Name: Nisai Virtual Academy, Ltd.
Product / Company Name: Nisai Education – www.nisai.com
2013 Honorable Mention – New and Emerging Initiative
Learning Impact Project Category: Blended Learning Optimization

To address the challenge of youngsters dropping out of school, ending up with dead-end jobs, or with no job because they are disengaged or have behavioral learning difficulties, Nisai Virtual Academy created a distinctive learning environment that they call the Nisai Learning Hub. The Learning Hub is where students with special needs can alternate between hands-on experiential vocational learning and online academic studies to develop the confidence in their study skills while gaining academic and vocational skills to help them obtain employment.

- **Learning Impact – Good, but Evolving:** Developing students' confidence in their study skills has good potential to improve attendance and the desire to succeed.
- **Implementation Difficulty -** Manageable, with Resources: The solution provides for a distinctive physical learning environment where students can alternate between hands-on studies and computer-based studies that appears to require significant resources to implement.
- **Additional Resources:** Video - Paper
- **ELI Content Anchor:** Online and Blended Teaching and Learning

The 2013 Learning Impact Award Program Judges

Hap Aziz
Ellucian
United States

Gary Driscoll
Educational Testing Service (ETS)
United States

Annette Grande
Norwegian Centre for ICT in Education
Norway

Dae Joon Hwang
SungKyunKwan University
Korea

Lou Pugliese
GiveCorps
United States

Rick Lumadue
Texas A&M – Commerce
United States

Lisa Mattson
IMS Global Learning Consortium
United States

Terry O'Heron
Penn State University
United States

Colin Smythe
IMS Global Learning Consortium
England

Tsuneo Yamada
Open University Japan
Japan

Stavros Xanthopoylos
Fundação Getúlio Vargas
Brazil

2014 Learning Impact Awards

Applications for the 2014 Learning Impact Awards will be accepted for consideration up until 31 December 2013. Details about the award criteria and online application can be found at:
http://www.imsglobal.org/learningimpact2014/awards.html

Appendix 1 – Learning Impact Medal Winners by Project Categories from 2007 – 2013

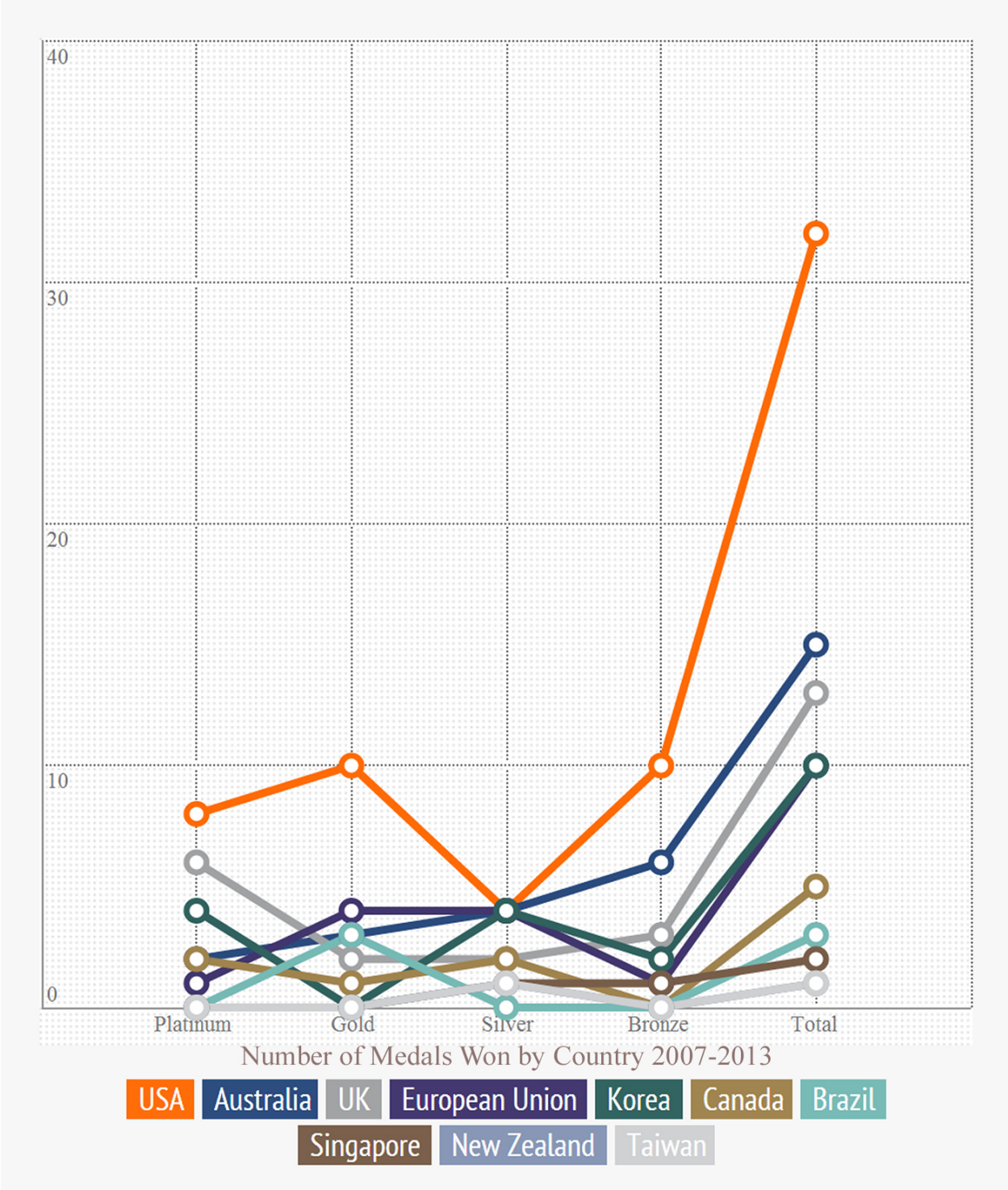
Technology Project Categories	Established Technology Initiatives With Proven Learning Impact	Emerging Technology Initiatives with Learning Impact Potential
Digital Resource, e-Text, Learning App Innovation, and Analytics Innovative learning resources, tools and applications aimed at improving access, 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	**Using Data to Transform Teaching, Learning and Institutional Accountability** 2013 Platinum - Presentation - Paper **Cengage Learning MindLinks** 2012 Gold - Presentation-zip **APUS Online Course Guides Initiative: A University Alternative to Textbooks** 2012 Gold - Presentation **Open Learning for Science Education - The Richness of European Science Centres and Museums Connected to Users and Learners Worldwide** 2011 Silver - Presentation
Educational Application, Content, and Media Infrastructure Technology 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 **Articulate at Jefferson County Public Schools** 2007 Bronze - Demo 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

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 **-** Video - Paper **Fairfax County Public Schools Electronic Curriculum, Assessment, Resource Tool (eCART)** 2010 Gold **- Presentation** **Mobile Assessment and Online Recognition using QTI solutions at Tasmanian Polytechnic and Skills Institute -** 2010 Gold **- Presentation** **MyMathLab at University of Alabama** Platinum 2009 - Presentation -- Article **ETS Criterion Online Writing Evaluation Services at Farragut High School** Platinum 2007 - Demo - Info - Article **Respondus 3.5 and University of Alberta** - 2007 Silver - Demo	**Adaptive eLearning Platform by Smart Sparrow and University of New South Wales** 2013 Silver - Video - Paper
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	**Victoria University Serious Games for Training** 2013 Gold **-** Video - Paper **Diving Supervisor and Chamber Supervisor Training Simulator** 2011 Platinum - Presentation - swf **Game-Based Learning for Core Academics at Florida Virtual School** 2010 Gold **-** Presentation **GetsmART in Ngee Ann Secondary School - Ngee Ann Secondary School** 2010 Bronze - Presentation
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 **Open Source Virtual Learning Environment and eLearning Network** 2008 Silver - Presentation **Learning Environment by Network Services -** 2008 Silver - Presentation	**GoClass Extended Classroom Teaching Platform for Connected Learners** 2012 Platinum - Presentation **Integrating AccessForAll with Common Cartridge** 2012 Platinum **-** Presentation **Seoul Cyber University's Learning WAVE** –2011 Silver - Presentation - pdf **iUOC: Enhanced Mobile Learning at Universitat Oberta de Catalunya** 2011 Bronze - Presentation **Accessibility Preferences System at the BBC -** 2010 Platinum - Presentation

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 - Presentation
Digital Learning Networks Achieving scalable deployment of educational resources, tools and services toward specific and measurable access, affordability, and quality objectives.	**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 **Schools Online Curriculum Services** 2008 Gold - Presentation **Cyber Home Learning System of Korea** 2007 Platinum - Demo **OpenLearn at the Open University** 2007 Platinum - Info - Demo	
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.	**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 **PebblePad: Personalized Learning for All at the University of Wolverhampton** 2010 Platinum - Presentation **The California State University Math and English Success Websites and the Fast Forward Program** Gold 2007 - Info	**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 -Presentation
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 **Tegrity Mini Solutions at University of Central Florida** 2008 Bronze - Info **Tegrity Campus 2.0 at Saint Mary's University** 2007 Bronze - **Info**	

Appendix 2 - Learning Impact Award Program Cumulative Medal Count by Country



Appendix 3 – Detailed Learning Impact Criteria and Rubrics

Access	• Provides greater access to proven quality learning approaches • Enables serving significantly more learners from currently served populations • Enables serving new populations of learners • Provides greater convenience • Enables lifelong learning
Adoption	• Has achieved mainstream instructor use • Provides large-scale mission critical 24/7 support • Supports institution-wide usage • Supports statewide, countrywide, or global usage • One of the largest deployments of its kind in terms of learners served
Accountability	• Clarifies or helps develop the specifics of accountability • Achieves significant cost savings versus prior solution • Achieves improvement in retention or graduation rates • Provides analytics to understand program and/or institutional performance • Enables comparison across institutions/organizations
Affordability	• Enables improved learner efficiency • Enables improved instructor efficiency • Achieves cost reduction that is passed on to learners • Provides education to significant number of disadvantaged learners • Saves substantial travel time and cost
Quality	• Enables clarity of learning outcomes • Improves results in mastery of subject as measured by assessments • 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
Organizational Learning	• Supports development of key competencies • Supports assessment of key competencies • Enables planning or management of competency development • Enables more efficient sharing of best practices • Provides a distinctive organizational learning advantage
Interoperability	• Utilizes open standards for data, content, or services • Shares data, content, or services seamlessly with other applications at minimal cost • 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
Innovation	• Shares data, content, or services seamlessly with other applications at minimal cost • Achieves a superior realization of other prior products or services of its kind • Clear potential to establish a new category of learning application • 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

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 Learning Impact: A global awards program & conference to recognize the impact of innovative technology on educational access, affordability, and quality. Learn more at www.imsglobal.org.