

## **The DECOM Declaration.**

*Towards a Digital Educational Content Economy for Europe's Knowledge Society*

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*Output Recommendations from the DECOM 2008 event*

*Sestri Levante (Italy) - October 2008*

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## Credits

*This document summarises the outcomes and guidelines discussed at the Building Digital Educational Content Marketplaces (DECOM) event held in Sestri Levante, Italy, on October 2008 by the European Learning Industry Group (ELIG, [www.elig.org](http://www.elig.org)) and jointly approved by its members as a position paper, suggesting actions and support lines for the definition of a “Digital Educational Content Economy for Europe’s Knowledge Society”.*

*The editorial group which worked to consolidate the views of those attending the DECOM event included:*

*Fabrizio Cardinali (Giunti Labs)*

*David Warlock (Outsell Inc)*

*Richard Straub (ELIG)*

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## Introduction

This paper summarizes the outcomes of an open consultation organized by ELIG (the European Learning Industry Group, [www.elig.org](http://www.elig.org)) with the support of one of its core member, Giunti Labs (a leading provider of online and mobile learning content management solutions, [www.giuntilabs.com](http://www.giuntilabs.com)) to investigate the opportunities and challenges faced by Europe's learning content publishing industry in a market that is undergoing huge and continuous changes.

The intention of the consultation is to provide a shared understanding among the ELIG member organizations – representing a significant group of major players from the European learning technology and educational publishing industry – in order to contribute with a single industry voice to the many national and international public policy debates that members of ELIG are called to join in. This includes EU expert consultation groups to help the European Commission frame development and funding lines for its next generation R&D and educational programs.

## Why a DECOM Declaration

Trustworthy quality material for Europe's learners is more important now than it has ever been; the more inconsistent information proliferates on the internet, the more the need to encourage and support the sustainable production and dissemination of high quality authoritative learning content. Generating and delivering such material has a cost, both in time and money, whether it originates from public or private resource. How that cost is covered is the subject of ongoing debate and experimentation. Throughout that discussion, the central objective for EU policymakers remains the viable delivery of effective educational content to all European citizens.

The DECOM initiative was conceived during 2008 by ELIG, to help progress its understanding of the needs and challenges raised by the production of new generation digital learning content. In doing so ELIG sought to better support its sector members with suggested action lines and to possibly inspire national and international public policies with the objective of better positioning Europe's educational publishing industry at this dawn of a new digital economy of learning materials.

This document summarizes the delegates' ideas and suggestions coming from the consultation exercise leading into the 10 discussion tables held at the DECOM 2008 event. ELIG professionals will be able to use this shared position paper, approved by its core members, in order to inform discussions, proposals and requests during the consensus building forums that ELIG is regularly called into at both national, international and EU Commission levels.

Participation in such events will support the generation of policy actions and public-private partnership programs to enable the transition towards digital content marketplaces for Europe's publishing industry and ensure its most advantageous positioning in the emerging digital marketplaces for online learning content.

## The main recommendations

The following recommendations have emerged during the discussions both within the ELIG membership and across a wider community of expertise.

### New Opportunities & Business Models

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- Ensure educational publishers are allocated a key role in the development of the learning process since these publishers have the knowledge and technical expertise to develop the basic content that is required and the services needed to ensure they work effectively in support of pedagogical activity.
- Encourage business model experimentation for free and published content so as to continue to increase usage whilst ensuring quality and sustainability. ELIG and the EU Commission should promote experimentation but avoid regulation; users and customers must remain free to choose how they wish to fund and pay for content and platforms.
- Support experimentation in new business models for accessing and downloading learning materials for mobile devices. ELIG and the EU Commission should promote experimentation in mobile business models to help meet consumers evolving needs.
- Revise teacher training programmes, on both technical and pedagogical levels, to enable teachers to make maximum use of classroom technologies such as Digital Boards, eBooks and all other e-educational tools and to take on an enhanced role as both ‘master instructor’ as well as creator of learning materials.
- Encourage partnerships between educational publishers, learning system providers and all stakeholders in the education and learning processes, in which the emphasis is placed on the learning process
- Education and workforce up-skilling are major issues to be addressed actively and within a short time horizon. The financial crisis is leading to shifting policy factors – with great challenges arising for social cohesion in Europe and the preservation of competitiveness. The European learning technology and educational publishing industry needs to be a driving force in this process and should engage with European policy makers to agree on lines for action. Close collaboration between industry and public institutions is needed for this purpose.
- ELIG expects the shifting market to have implications on all its members. Collaboration is central to enabling each member organisation to adapt to the new drivers and remain competitive in the European marketplace and beyond.

### Learning Research Priorities

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- Funding to support R&D into device-specific content delivery is needed, in particular content aimed at maximizing the different characteristics of mobile devices and classroom devices such as Digital Boards, eBooks and all other e-educational tools. That content should enable student engagement, allow teachers to act as facilitators, coaches and mentors as well as instructors as and when necessary, and be delivered at a cost level that ensures wide adoption.
- Support for research into adaptation of content to enable educational publishers to maximize the possibilities and capabilities of Web 2.0 technology and to engage in mutually sustainable relationships with the learning communities they support. Such relationships have to be based on

trust and to acknowledge user expectations of innovation, creativity, wealth creation and workplace activity.

- Support for research into pedagogical needs for new platforms. ELIG should work with the EU Commission to promote research aimed at improving our understanding of how learning through technology occurs and thus leading into the optimal pedagogical approaches for new e-education approaches and platforms.
- Support for research into the use of technology as a major enabler for new ways of skill building and personal development. Business success is increasingly seen as being reliant on innovation and workers' abilities to innovate. Although 'innovation' cannot be taught formally in schools, technology can help to encourage the development of innovation-related skills.

### **Learning Technology & Standards**

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- Facilitation and promotion of learning technologies and learning standards must become a concerted effort of the learning and publishing industry, the official de-jure European (CEN) and international (ISO) standardization bodies and global standards consortia (e.g. IMS, AICC & OASIS). The current fragmentation of standardization activities and the partial disconnection from real business and education applications needs to be overcome and the focus of activities needs to shift from a technology orientation to a learner, application and business perspective. The publishing industry needs to facilitate this transition.
- Standardization work must be better adapted to fast technological evolution and ensure inclusion of learning technologies both in current use and emerging, through use of established technology road-mapping vehicles such as the annual Horizon Reports. European regulators and public institutions from the educational sector as well as the EU are called on to support this process – e.g. by promoting open standards in public procurement and actively supporting standardization consortium activities.
- Harmonization between American and European standards leading to international consensus is critical and should not only extend to include new EU member states but should also to enable other (mostly Eastern) European countries to adopt harmonized standards. The EU can and should play a central role in this global harmonization due to the unique European multi-cultural and multi-lingual background and expertise in standardization (CEN).
- Standard contractual terms for downloads and managing institutional content acquisition is essential in order to preserve the business interests of educational publishers at a time when the development of technology is challenging and changing traditional educational publishing business models.
- Learning content should become independent from the specific channels that are used to access or deliver it. The adoption and use of XML-related standards in the creation of learning content should be more widely encouraged. Current adoption hurdles need to be researched and better understood.

### **The consultation process.**

The format of the consultation process has been based on a set of webinar calls during Q3 2008 involving key stakeholders from the Open Courseware and Publishing members of ELIG. During these calls the broad themes of educational content publishing were debated and a set of 10 'hot topics' identified. These were then addressed in a face-to-face event held on 23rd October 2008, in Sestri Levante, Italy, and named

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DECOM 2008 (Building **D**igital **E**ducational **C**ontent **M**arketplaces). Also contributing to the discussions were a number of invited external stakeholders recognized for their world renowned activities in the target area of educational publishing and open courseware initiatives and forming the DECOM Panel.

The DECOM 2008 event saw the participation by almost 150 invited stakeholders from more than 15 countries worldwide and consisted of morning plenary sessions, presenting world leading open courseware and publishing initiatives, leading into the 10 discussion tables in the afternoon to which invited stakeholders were free to enrol based on their interests and priorities. “Start up abstracts”, were provided in advance to enable informed selection.

Each table had at least one moderator whose role it was to guide discussions amongst participants. In addition there was a reporter identified for each group whose task it was to summarize and feedback key points to the general audience.

This document resulted from the DECOM open consultation exercise. It represents a positioning paper available to ELIG members and other professionals engaging with national and EU wide actions aimed at supporting Europe’s publishing industry as it seeks to ensure the most advantageous position in the emerging global marketplace for online educational resources.

Feedback and comments have informed a revision process in which DECOM Moderators, DECOM Panel Members and ELIG Open Courseware and Publishing Working Group have provided input leading to the document being finalized. A summary of the discussions at each of the DECOM Tables now follows.

## Table summaries

### Theme 1: New Opportunities and Business Models

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#### *Introducing Digital Boards and eBooks into the classroom. New educational media for new teaching formats*

**Start Up Abstract:** This table will discuss the learning impact and new business model sustainability of a new publishing channel emerging in the K12 & FE marketplaces due to the introduction of Digital Board and eBook projects to the education arena. Discussion topics will include the positioning of Digital Boards and eBooks as innovative delivery media within classrooms - and the opportunity yielded by the rise of new educational models and paradigms empowered by such delivery platforms.

#### Participants:

Name	Organisation	Role at table
Tullia Colombo	Giunti Scuola	Participant
David Dickinson	Unlike Minds	Participant
Elisabetta Gola	Università degli Studi di Cagliari	Participant
Daniela Cipollone	McGraw-Hil	Participant
Valerio Eletti	Sapienza Università di Roma	Moderator
Patrizia Zanon		Participant
Dr. Narimane Hadj Hamou	e-TQM College	Participant
Alessandro Campi	Giunti Labs Italy	Participant
Dino Baldi	Giunti Labs Italy	Moderator
Stefania Cantini	Giunti Labs	Participant
Simona Franzoni	ELI SRL - PIGINI Group S.p.a.	Reporter
Mark Taverner	Promethean	Moderator

#### Summary of the Table Discussion

These tools not only require the teachers to have enough technical knowledge to be able to operate these tools effectively but they can create a teacher-centred classroom, where the teacher interacts with the board but leaves the students as passive recipients of teaching. Of course, such a scenario does not involve the students and reduces the opportunities for them to be creative.

The ways to overcome these problems are to:

- Provide training for teachers, on both technical and pedagogical levels, to enable them to make the maximum effective use of these tools
- Provide content for the devices, within a context that enables the students to engage with the content and allows the teachers to act as facilitators, coaches and mentors as well as instructors as and when necessary.
- Allocate a key role in the process to educational publishers, since these publishers have the knowledge and technical expertise to develop the basic content that is required.

- Update the role of the teacher as not only ‘master instructor’ but also as the creator of learning materials.

In addition, it is important that these tools are perceived by both teachers and students as of value – and not just a ‘nice to have’.

**Recommendations from this table are:**

- **Revise teacher training programmes**, on both technical and pedagogical levels, to enable teachers to make maximum use of classroom technologies such as Digital Boards, eBooks and all other e-educational tools and to take on an enhanced role as both ‘master instructor’ as well as creator of learning materials.
- **Ensure educational publishers are allocated a key role** in the development of the learning process since these publishers have the knowledge and technical expertise to develop the basic content that is required and the services needed to ensure they work effectively in support of pedagogical activity.

***E-learning for European competitiveness - addressing the content gaps for IT skills and business management competencies***

**Start Up Abstract:** This table, moderated by an EU official dealing with ICT competitiveness and innovation, a European Leader in Soft Skills Training and a leading provider of web-based software for managing organisational talent, will address the potentials of new talent development models and innovative training catalogue offers to deal with the digital divide of IT literacy and business skills in Europe.

**Participants:**

<b>Name</b>	<b>Organisation</b>	<b>Role at table</b>
Fernando Pinto	Sinfic	Participant
Ilse Straub	linkSpace Management Services Ges.mbH.	Participant
Steve Curtis	Plateau	Moderator
David Dickinson	Unlike Minds	Reporter

**Summary of the Table Discussion**

The discussion covered Europe and its agenda for competitiveness, the impending global recession and e-Learning, particularly within that context

The future competitiveness of the European Union is addressed by the Lisbon Agenda. This is designed to make Europe the most competitive economy in the world, achieving full employment by 2010. There are three interrelated strategies: -a) 2010, a European Information Society for growth and employment, b) a European Research Area (ERA) and c) a European Higher Education Area (EHEA)

The EHEA process began a decade ago with the start of the Bologna Process. In an addition to it, known as the 2003 Berlin Communiqué, ministers encouraged member states to elaborate a framework of comparable and compatible qualifications for higher education, describing qualifications in terms of workload, level, learning outcomes, competences and profile. These became known as the ‘Dublin Descriptors’.

Partly in response to the Dublin Descriptors, but also as part of a broader pedagogical trend, competence-based curriculum models are emerging in K-12 and across skills-sectors in corporate markets.

There is growing evidence within each of the member states that the real challenge to competitiveness is a 'perfect storm' fed by a number of interrelated and compounding factors:

- Disengagement from the workforce and from other aspects of organised society and an ageing population and other negative demographic trends, reducing the potential workforce. Both of these factors reduce the potential workforce and increase the drain on social resources.
- Greater challenges to social cohesion.
- Greater competitive challenge from emerging nations.
- The global recession with the inevitability of increased job losses through company closures and worker redundancies.

Strategies to engage and encourage greater participation in learning and wealth creation are, therefore, going to be a major challenge for Europe and, consequently, a strong market theme for our industry.

We believe that, within K-12 education, there was a growing emphasis on using technology, content and context to support personal knowledge management - of which learning is a major strand - rather than simple e-supported instruction.

Outside the corporate markets, where engagement and participation can be mandated and learning environments are more suited to instructional models of learning delivery, we are already seeing challenges from emerging services offering interrelated e-portfolio, workflow and communications environments. These services are better able to respond to the new market conditions. They make better use of mobile and network technology advances, and include personal navigation that effectively relegates learning management systems further into the back office.

We foresee a reallocation of the market with an attendant redistribution of resources, and, therefore, major challenges to the existing business models of some of the delegates.

**Recommendations from this table are:**

- **Encourage partnerships** between educational publishers, learning system providers and all stakeholders in the education and learning processes, in which the emphasis is placed on the learning process.
- **Education and workforce up skilling are major issues to be addressed actively and within a short time horizon.** The financial crisis is leading to shifting policy factors – with great challenges arising for social cohesion in Europe and the preservation of competitiveness. The European learning technology and educational publishing industry needs to be a driving force in this process and should engage with European policy makers to agree on lines for action. Close collaboration between industry and public institutions is needed for this purpose.
- **ELIG expects the shifting market** to have implications on all its members. Collaboration is central to enabling each member organisation to adapt to the new drivers and remain competitive in the European marketplace and beyond.

***Next Generation Educational Publishing. Towards new Digital Content Marketplaces and Business Models for Education***

**Start Up Abstract:** This table will discuss the need for new generation distribution and business models for turning educational content publishing into a more effective and efficient Industry for the new millennium. New business models such as “pay per use” and “portal subscriptions” will be debated trying to forecast the way ahead trying to anticipate the next wave in textbook distribution, along the lines of the digital tunes marketplace which has revolutionized the music publishing in recent years.

**Participants:**

<b>Name</b>	<b>Organisation</b>	<b>Role at table</b>
Marc A. Boutet	De Marque inc.	Participant
Tim Hawkins	Elsevier	Moderator
Thekla Materne	Elsevier	Participant
John Peters	Emerald Group Publishing	Participant
Italo Raimondi	MC Graw Hill	Moderator
Deniz Saral	Webster University	Participant
Ewa Moberg	Scania HC	Participant
Bouwe Koopal	KvG	Participant
Jacques Dang	HEC	Participant
Adam R. S. Black	Pearson Education	Moderator
Cristina Mussinelli	Associazione Italiana Editori	Participant
Giorgio Dossi	Edizioni Erickson	Participant
Eric Baber	Cambridge University Press	Participant
Carin Martell	Giunti Labs	Moderator

**Summary of the Table Discussion**

Examining the need for new generation distribution and business models for turning education content publishing into a more effective and efficient industry, delegates considered such new business models as ‘pay per use’ and ‘portal subscriptions’. In doing so, they attempted to anticipate the next wave of textbook distribution, along the lines of the digital tunes marketplace which has revolutionised music publishing in recent years.

There was no consensus on whether or not the number of companies in the educational publishing sector was falling, while individual publishing companies were becoming larger. However, there was agreement that while this might be happening in the USA, European-based educational publishers – regardless of their corporate size - have a sufficiently large product offering to be competitive in the world market. Nonetheless, there was support for educational publishers collaborating on projects in order to have the critical mass to compete effectively.

Despite having to consider different customers – at the K-12, higher education and continuing professional development (adult) levels – all publishers agreed that they need to focus on the consumer and the consumer’s best interests.

Moreover, they encouraged ELIG to commission or undertake research into the pedagogical opportunities being made available through new digital content and new business models for education. The key issue is

to discover what the consumer of learning materials will find interesting and attractive – since consumers and not governments should drive learning content.

Key agreements reached on this table were:

- Events such as DECOM are valuable to share thinking,
- Users needs must be the focus of new products and business models to achieve sustainable success,
- Users and customers, rather than governments and EU regulators, must be free to choose how they wish to fund/ pay for content and platforms. However public Bodies should keep focussing on what is needed to facilitate the shift towards users needs especially in the educational world
- ELIG could play role promoting research into pedagogical needs for new platforms (e.g. Wikis) and EU standardisation of pedagogical approaches

**Recommendations from this table are:**

- ***Support for research into pedagogical needs for new platforms.*** ELIG should work with the EU Commission to promote research aimed at improving our understanding of how learning through technology occurs and thus leading into the optimal pedagogical approaches for new e-education approaches and platforms.

## Theme 2: Learning Research Priorities.

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### *Publishing into Mobile Learning and Virtual Worlds*

**Start Up Abstract:** This table, jointly moderated by leading experts on mobile learning and virtual worlds for learning, will address the potential of mobile devices and virtual worlds for reaching out to new users and distribution channels, discussing the sustainability and pedagogical effectiveness of these environments - both today and as an evolutionary platform looking forward to the Era of Kindle™, iPhone™ and BlackBerry™ publishing.

#### Participants:

Name	Organisation	Role at table
Eva Patricia Gil	Universitat Oberta de Catalunya (UOC)	Participant
Judy Brown	Wisconsin University	Moderator
Marta Bonell	Epise	Participant
Hans Gruber	Ericsson AB	Participant
Stefano Federici	Università degli Studi di Cagliari	Participant
Matty Smith	ELIG	Participant
Rob Gillam	Giunti Labs UK	Participant
Fabrizio Giorgini	Giunti Labs	Moderator
Andy Vallely	Cisco	Reporter

#### Summary of the Table Discussion

Many people who travel on business feel the need to use their time spent travelling usefully and profitably. This is leading to a growth in demand for learning materials delivered to mobile devices – so that their users can ‘learn on the move’.

One approach from learning providers is merely to port learning materials to mobile devices. However, it might be preferable to consider developing different learning content which is more suited to delivery via a mobile device. Moreover, since mobile devices can be used more imaginatively for learning than, say, desktop PCs, this poses a challenge to would-be developers of mobile learning materials.

Mobile devices have different sized screens from, say, desktop PCs. They have different capabilities, operating processes and memory capacity. Some can – but others cannot – cope with XML. Developers of mobile learning materials have the challenge of making those materials available to any and every mobile device, in order to meet the requirements of each learner. In addition, the learning materials must be affordable for the learner to download – or else the learners will not download the materials, however well designed and appropriate they may be. Making the costs of these learning materials as low as possible is vital in order to encourage their increased usage.

Other issues include:

- Do we want to produce huge amounts of learning for mobile delivery?
- How do we assess the learning that is delivered via mobile devices? This would seem to argue that the widespread adoption of the SCORM standard would be helpful in enabling learning assessment via mobile devices.

- How do we use mobile devices to enable their most effective use in terms of enabling learning? After all surveys of people’s learning preferences show that e-learning, in any form, does not rate highly.

One answer to this latter question could be to focus on learning via images on mobile devices, rather than via words.

**Recommendations from this table are:**

- **Funding to support R&D into device-specific content** delivery is needed, in particular content aimed at maximizing the different characteristics of mobile devices and classroom devices such as Digital Boards, eBooks and all other e-educational tools. That content should enable student engagement, allow teachers to act as facilitators, coaches and mentors as well as instructors as and when necessary, and be delivered at a cost level that ensures wide adoption.
- **Support experimentation in new business models for accessing and downloading learning materials for mobile devices.** ELIG and the EU Commission should promote experimentation in mobile business models to help meet consumers evolving needs.

**EU programs and actions supporting Innovation in Europe’s Educational Industry**

**Start Up Abstract:** This table, moderated by EU officials, will discuss how current EU funding programs and related activities aim to support innovation in Europe’s Educational Industry. The participants will be invited to suggest aspects that need further development or attention in the context of the EU programs in order to improve the competitiveness of Europe’s learning industry worldwide and foster innovation and creativity in European education and training.

**Participants:**

<b>Name</b>	<b>Organisation</b>	<b>Role at table</b>
Spyridon Pilos	European Commission	Moderator
Georgi Dimitrov	European Commission	Moderator
Panos Loullis	Allospos	Participant
Marco Bergometti	€-Fundings	Participant
Clementina Marinoni	Fondazione Politecnico di Milano	Reporter

**Summary of the Table Discussion**

Today there are many more ways of learning – thanks to technological developments. However, not enough emphasis is placed on learning processes. We need to find ways to combine these learning processes to support the learning system.

In general, learning – especially corporate learning - is not seen as being inextricably linked to ‘business success’.

Business success is increasingly seen as being reliant on innovation and workers’ abilities to innovate.

Although ‘innovation’ cannot be taught formally in schools, technology can help to encourage the development innovation-related skills, through such things as serious games, which foster individuality and independent, creative thinking.

Applying technology to the learning process means that teachers should be seen not purely as knowledge providers but also a facilitator, coach and mentor.

Developers of learning materials and learning systems not only need to anticipate the needs of education systems but also need to enlist the support of the learner’s family in developing learning materials and approaches. In other words, to be successful, learning materials and learning systems developers need to establish an increasing number of partnerships with all stakeholders in the education and learning process.

**Recommendations from this table are:**

- **Support for research into the use of technology as a major enabler for new ways of skill building and personal development.** Business success is increasingly seen as being reliant on innovation and workers’ abilities to innovate. Although ‘innovation’ cannot be taught formally in schools, technology can help to encourage the development innovation-related skills, through such things as serious games, which foster individuality and independent, creative thinking.

**Educational Publishing 2.0: Publishing to Learning communities and Social networks**

**Start Up Abstract:** Web 2.0 is the new technology infrastructure for 21st century knowledge workers, with their thrust toward self-directed learning and control over content from multiple sources (as opposed to pre-fabricated formal learning content). This table will discuss the pedagogical and teaching effectiveness of innovative web 2.0 models, and the importance of end users’ referrals to support and guide within the social networks’ dynamics as well as their acceptance of different forms of viral and social publishing.

**Participants:**

<b>Name</b>	<b>Organisation</b>	<b>Role at table</b>
Richard Straub	ELIG	Moderator
Joel Greenberg	The Open University	Participant
Georg Ranhoff	Fronter International	Participant
Paul Coyne	Emerald Group Publishing	Reporter
Jonathan Taylor	Cisco	Participant
Carla Milani	IBM	Participant
Alessandro Lorenzelli	Giunti Labs	Moderator

**Summary of the Table Discussion**

Web 2.0 is the new technology infrastructure for 21st century knowledge workers, with their thrust towards self-directed learning and control over content from multiple sources - as opposed to pre-fabricated formal learning content. For educational publishers, these trends pose a loss of ‘control’ over learning content. There are also issues of trust; quality (with different learners taking different means to

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access different parts of the learning content at different times and to different degrees); personalisation, and usability if educational publishers are to engage in a mutually sustainable partnership within the learning community.

However, web 2.0 technology provides an excellent opportunity for publishers to help validate and contextualise their content. For example, as content becomes ubiquitous, how do you find the content that is of use to you? Publishers can do this by encouraging space for 'trust' – as defined by the members of a particular learning community.

Key issues for educational publishers as they adapt to the possibilities and capabilities of web 2.0 technology are innovation; creativity; wealth creation, and workplace activity.

**Recommendations from this table are:**

- ***Support for research into adaptation of content*** to enable educational publishers to maximize the possibilities and capabilities of Web 2.0 technology and to engage in a mutually sustainable relationships within the learning communities they support. Such relationships have to be based on trust and to acknowledge user expectations of innovation, creativity, wealth creation and workplace activity.

## Theme 3: Learning Technology and Standards

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### *New e-learning Standards for New Publishing Models*

**Start Up Abstract:** The discussion, moderated by leading experts in the field of learning standards, will address new specification trends and activities within standards consortia such as IMS, AICC, and OASIS, and within European and international standards bodies such as CEN and ISO, taking into account the development of the e-learning and textbook publishing markets. The table will discuss on the use and effectiveness of new formats such as Common Cartridge and DITA, and the possible future directions of the newly forming LETSI consortia.

#### Participants:

Name	Organisation	Role at table
Rob Abel	IMS	Moderator
Avron Barr	LETSI	Moderator
Shirley Tessler	Aldo Ventures, Inc.	Participant
Jan Pawlowski	University of Jyväskylä	Moderator
Bob Godwin-Jones	SoftChalk	Participant
Andreas Åman	Scania Academy	Participant
Christian M. Stracke	ISO and CEN	Moderator & Reporter

#### Summary of the Table Discussion

The key question to answer is: what are the needs and demands for current and future standardization and for standards in e-learning?

Standardization is beneficial for business and business efficiency.

European standardization bodies should be both facilitators and promoters for learning technologies and learning standards among enterprises as well as within global markets.

The main benefit of having European standards is a strong focus on multi-cultural diversity and support.

More work is required to determine where standards maybe needed e.g.in:

- The distribution of content
- Content as a service - providing support for applications
- Assessment, including formative assessment
- Collaborative developed content
- Content management from delivery platforms
- Searching and federating
- Books online
- Mobile devices

- Online referencing and e-resources
- Competencies (and ePortfolios)
- Metadata for curricula

It is important to have customer-driven standards that meet customers' expectations - to facilitate daily and future business. However, current standards do not meet customers' expectations, mainly because of a lack of interoperability.

Key issues are that the rate of introducing new standards needs to increase and there is a need for harmonization between American and European standards. It is also important to include new EU member states in European standardization – and also to enable other (mostly Eastern) European countries to adopt these standards.

In order to help bring this about there should be no competition between standards and standardization bodies. Instead, there should be close co-operation - as already established in SC36 and its 22 liaison organisations. The current situation can be summarized as:

CEN/ISSS WS-LT for European pre-standardization as a bridge to CEN/TC 353 and to SC36

CEN/TC 353 is responsible for de-jure European standards with European impact (and this means that national standards have to be withdrawn)

IMS is focusing on interoperable technical standards as an educational trade association

LETSI brings together the individual standardization and learning experts, focusing on open standards

ISO/IEC SC36 is responsible for the international consensus building and the official de-jure and technology-independent standards at the global level

In essence:

- Standards are needed for the delivery of learning and also any other contents to mobile devices
- Conformance of standards by developers and suppliers is paramount
- Common paradigms are needed for standards across the European and global market
- These standards should work on any scale
- Ways must be found to certificate and accredit personal knowledge/skills/competency profiles (incorporating educational and workplace achievements)
- Courses should have a standard categorization
- When determining standards, the focus should always be on customers and implementations
- Those developing learning-related standards need to collaborate with the 'non-learning' world in order to make these standards understandable and accepted.
- Standards should only be developed where they are required and a consensus can be achieved, however once standards have been agreed upon by industry, further encouragement may be required to ensure they get adopted e.g. by software vendors.

**Recommendations from this table are:**

- **Facilitation and promotion of learning technologies and learning standards** must become a concerted effort of the learning and publishing industry, the official de-jure European (CEN) and international (ISO) standardization bodies and global standards consortia (e.g. IMS, AICC & OASIS). The current fragmentation of standardization activities and the partial disconnection from real business and education applications needs to be overcome and the focus of activities needs to shift from a technology orientation to a learner, application, and business perspective. The publishing industry needs to facilitate this transition.
- **Standardization work must be better adapted to the fast technological evolution** and ensure inclusion of learning technologies both in current use and emerging, through use of established technology road-mapping vehicles such as the annual Horizon Reports. European regulators and public institutions from the educational sector as well as the EU are called on to support this process – e.g. by promoting open standards in public procurement and actively supporting standardization consortium activities.
- **Harmonization between American and European standards leading to international consensus** is critical and should not only extend to include new EU member states but should also enable other (mostly Eastern) European countries to adopt harmonized standards. The EU can and should play a central role in this global harmonization due to the unique European multi-cultural and multi-lingual background and expertise in standardization (CEN).

**Digital Rights Management: preserving the value chain**

**Start Up Abstract:** This table, moderated by the representative of one of Europe’s largest R&D projects on DRM technologies, will address the need for innovative DRM practices and methodologies to support more flexible delivery and billing mechanisms (e.g. Pay Per Use, Pay Per View) for educational resources.

**Participants:**

Name	Organisation	Role at table
Paolo Nesi	University of Florence	Moderator/Reporter
Lucia Oneto	Giunti Labs	Participant
Lars Jansson	Ericsson	Participant
Pierfrancesco Bellini	Axmedis Project, AXMEDIATECH	Participant

**Summary of the Table Discussion**

Digital rights management (DRM) is essential in order to preserve the business interests of educational publishers at a time when the development of technology is challenging and changing traditional educational publishing business models.

Educational publishers have interests in both the business-to-consumer and business-to-business markets. These publishers have initially sought to protect their intellectual property rights through licensing. However, managing domains rather than licensing might now be a less complex way of operating – enabling publishers to trace who has done what with their content and so on. Present DRM solutions have to be flexible enough to support (i) different business models without regenerating the protected content, (ii) licensing for multiple devices with only one license, (iii) control on business to business.

Some of the new technologies can do that

It is important to recognise that content should not be merely delivered to the final user. The use of that content – and by whom – needs to be monitored. Thankfully, technological tools are now available to do this. The key issue is to agree how these should be applied.

**Recommendations from this table are:**

- **Standard contractual terms for downloads and managing institutional content acquisition** is essential in order to preserve the business interests of educational publishers at a time when the development of technology is challenging and changing traditional educational publishing business models

**Opening Repositories. Unleashing Content. Free and Published Content Federations**

**Start Up Abstract:** The Director of MIT’s new office for Educational Innovation and Technology will lead the discussion with thought leaders in publishing houses, universities and technology providers. The discussion will address the need to promote the adoption of Open Standards for wider access to content repositories as well as the importance of the availability of free vs. published content. An open world where better protocols to access different and distributed repositories of valuable free and published contents seamlessly - will make it easier for end users to benefit from the best of breed educational resources, in a society where no one can be left behind and open access to education is increasingly a must.

**Participants:**

<b>Name</b>	<b>Organisation</b>	<b>Role at table</b>
Derrick Sambo	Delft University of Technology	Participant
Willem van Valkenburg	Delft University of Technology	Participant
Vijay Kumar	MIT	Participant
Nick Fowler	Elsevier	Participant
Bernd Simon		Moderator
Jeffrey Earp	Istituto per le Tecnologie Didattiche - Consiglio Nazionale delle Ricerche	Participant
Bob Bolick	MC Graw Hill	Participant
Tsuneo Yamada	National Institute of Multimedia Education (NIME)	Participant
Sophie Touze	Veterinary School (TBC)	Participant
Ganesh K Raghupathy	Edutech USA Inc	Participant
Kurt Rollin	Capturator S.r.l.	Participant
Carlos A Garcia	UKS	Participant
Michela Bruzzo	Cideb-Blackcat Publishing	Participant
Eleonora Panto'	CSP - ICT Innovation	Participant
Jerry Cashman	Giunti Labs APAC	Participant
Laurent Flory	Universite de Lyon	Reporter

## Summary of the Table Discussion

The key issue for everyone concerned in the learning world is how we work together, moving from ‘federation’ to ‘confederation’. There are a number of models that can be adopted – including the ‘business/economy’ model; trust model; efficiency model, and usability model. All of these raise the issue of openness - open standards, open repositories and open education – as well as the question of whether or not to change the status quo and use these standards, repositories and so on.

Within the business/economy model there are two main versions. Editors/developers talk about ‘price’ as a means of quality assurance, while institutions prefer not to talk of price - since the content is made freely available – but of the true cost in producing this learning content, for example in terms of time taken by teachers and students.

Educational publishers are facing a changing ecosystem. Their clients’ expectations are changing, as is technology: therein lies the problem.

### Recommendations from this table are:

- **Encourage business model experimentation for free and published content** so as to continue to increase usage while ensuring quality and sustainability. ELIG and EU Commission should promote experimentation but avoid regulation; users and customers must remain free to choose how they wish to fund and pay for content and platforms.

## *The use of Single Source XML Production and Learning Content Management Systems for increasing Learning Content Publishing ROI*

**Start Up Abstract:** This table, moderated by thought-leaders in XML and SGML technologies, will explore the direction taken by the educational publishing sector towards a single source content production approach to textbook and learning objects production and management. This will include an analysis of how to achieve a higher and sustainable ROI in the publishing cycle, exploiting LCMS platforms fostering XML and structured content standards to produce once and deliver into several channels, from textbooks to web based learning, mobile devices and beyond.

### Participants:

Name	Organisation	Role at table
Allyn Radford	Learnlities	Moderator
Alistair Morrison	Echelon	Reporter
Bryan Eldrdige	Giunti Labs NA	Moderator

## Summary of the Table Discussion

It is useful to separate educational institutions from the technology delivery platforms they use. It would be horrendous in terms of workload, to say nothing of inefficiency, if every time publishers and teachers changed the delivery model for learning materials; they produced the learning materials from scratch.

XML, with its ‘produce once, publish many’ ability, offers a cost-effective way to separate content from the delivery platform. It is compatible with a number of learning delivery media including mobile technologies. Thus, it offers a number of benefits to both learning providers and learners. In particular, learning materials developed via XML can cater for learners’ preferred learning styles – through the learners’ choices of learning delivery methods.

Having agreed on the benefits of XML, the key issue is how to make XML more widely used. Three suggestions are:

Those using XML should be encouraged to 'spread the word' about its benefits – especially to other users of the technology. Encourage the adoption and use of XML-related standards.

Find – and promote – exemplars, through case studies perhaps, so that developers can see how others have used this technology to best advantage and produced a high return on investment.

**Recommendations from this table are:**

- ***Learning content should become independent from the specific channels*** that are used to access or deliver it. The adoption and use of XML-related standards in the creation of learning content should be more widely encouraged. Current adoption hurdles need to be researched and better understood.

## Conclusion

The recommendations summarised in this Declaration represent an industry perspective on some of the most pressing issues facing the learning content publishing industry today. They highlight actions that need to be taken now, across a spectrum of challenges, in order to ensure equitable access to highquality learning opportunities for the citizens of Europe. In doing so the DECOM Declaration calls on all stakeholders in the learning process; the learning industry itself, regulators and policy makers, to consider urgently those actions they might take as a response to the recommendations. ELIG will be working within its Public Policy Group, to begin this process which will include a call upon the European Commission for stronger content-related policy actions to promote high quality learning resources for Europe.