
Interviews with **Badrul Khan**



Educational Technology in Europe: Interview with Richard Straub

1. Tell us something about ELIG. What sort of organization is it?

The European Learning Industry Group (ELIG) was first launched in April 2002 in partnership with EU Commissioner Vivian Reding, the then EU Commissioner for Education and Culture. Innovation in learning, knowledge creation, and dissemination are central to ELIG's endeavors. Information and communication technologies play a pivotal role in creating innovative learning solutions. However, they have to be seen as part of a broader, holistic, and systemic approach, where pedagogical experiences, social considerations, and economic aspects have to be factored in.

ELIG members, currently numbering in excess of 60, represent the entire learning ecosystem. This includes the learning and knowledge solution industries, such as LMS and



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Society of Austria. In the course of his international business career, he has held various executive positions at IBM, including Assistant General Manager PC Marketing for IBM Europe, based in Paris, and Chief Learning Officer in the USA, with global responsibility, and Director of Learning Solutions for Europe, the Middle East, and Africa.

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LCMS providers, infrastructure companies, portal providers, content producers, content catalogues, eLearning program and service providers, professional training institutions and telecoms and media companies as well as non-industry providers, including universities, business schools, and partner organizations.

ELIG's mission is targeted towards a number of key areas. These include providing policy input at regional, national, and local levels, acting as a communication channel to the marketplace, and constituting a platform for cooperation, sharing, and concerted action for its members. In today's world of "co-opetition," there are always areas of common interest and 'win-win' opportunities for joint actions, even for companies that may be competing in the marketplace. Full details about the organization can be found at www.elig.org.

2. What countries within Europe are especially productive in areas of educational technology/eLearning?

In responding to this question, one has to realize that there are a number of different dimensions to the development of educational technology and eLearning. It can be seen from the perspectives of technology infrastructure, virtual learning environment delivery, digital content production, informal learning support, and more. However, the view shared by our members is that the UK has been, and remains, a prominent player in the areas of educational technology and eLearning. This is due to its strength in the distance learning market, to focused government policy providing resources and supporting large-scale implementation of eLearning, but also through its shared language with North America, enabling it to benefit from generic materials developed on that side of the Atlantic. This is underlined through research carried out across six European countries last year by ELIG member CEGOS, into eLearning use within the professional training context. This showed the UK as the greatest user of eLearning for professional training, with 55% of UK organizations using eLearning for this purpose, as opposed to 51% in Spain and 44% in Switzerland.

However, custom made eLearning in the local languages is developing in all European markets, with the volume strongly connected to the strength of that local language; this means that the German, French, and Spanish-speaking markets are probably the biggest after the UK, and France has a particular strength in the serious-games arena. A factor that needs to be considered here is the nature of the eLearning that is being developed. Pure eLearning is not as widely accepted within the mainland European market as it is in the UK, due to lack of a 'self study' competence; in these markets, the use of eLearning with blended learning delivery is more common.

The Scandinavian countries are recognized to be leaders in pioneering educational technology, both through their innovative approaches to design and also through their investment in high-quality technical infrastructures.

It is not a straightforward 'league table' but rather a collection of varying areas of capability and strength, which makes for a very rich mix in terms of both quality and innovation in the production of educational technology and eLearning.

3. Compliance with technical interoperability standards such as SCORM (Sharable Content Object Reference Model) and accessibility standards such as Section 508 are common in the US eLearning industry. How about Europe? Do you have any such standards? Do you

really need such standards in eLearning?

The whole question of standards is one that has recently been the focus of sustained debate within ELIG and forms a substantial component in our recently launched Declaration (<http://www.elig.org/node/17>) concerning the Digital Educational Content Marketplace (DECOM). Technical interoperability and accessibility standards are a *must*, especially for eLearning technology; eLearning works towards facilitating learning and as such is a tool that is powerless if not connected to other tools, open to a variety of content sources, and accessible to the full range of users. The learning 'sphere' has expanded to such an extent that open interoperability standards must be considered when creating an easily accessible, relevant, but at the same time secure learning environment. Our members have highlighted the fragmentary nature of the standards landscape and have called on the various parties—the learning and publishing industry, the official *de-jure* European (CEN) and international (ISO) standardization bodies and global standards consortia (e.g., IMS, AICC, and OASIS)—to make a concerted effort in resolving this situation. Equally, 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.

Having highlighted the challenges in this area, however, it is important to note that SCORM is a well-accepted standard in Europe, used for off-shelf eLearning products (especially as many of these are developed in the USA for commercial learning management systems) and is a requirement in almost all eLearning, LMS, and authoring tool procurement. There are issues with it, particularly with respect to it being driven not only by the US market but more especially by military requirements, neither of which provides the best fit with European or corporate needs. The anticipation is that these issues may be addressed through the emerging SCORM 2.0 standards, but concern remains that this and other standards have failed to follow more general Web standards evident in the Web 2.0/Enterprise 2.0/informal learning context. Other standards, such as Section 508 of the Workforce Rehabilitation Act, while well-known to globally operating European companies, are almost unknown to local enterprises.

Within the European Community, there is a history of differing standards across both countries and organizations. So the UK, for example, has a number of standards developed by government-funded bodies, such as CETIS, JISC, and BECTA. The EU has also supported work developing standards in relation to learning content, accessibility, and eLearning.

4. There are many issues critical to the development of meaningful eLearning. These issues encompass eight categories, including pedagogical, institutional, technological, interface design, evaluation, management, resource support, and ethical considerations. What are your thoughts on any of these eight categories of issues for the successful design of eLearning in general?

There is no doubt that all of these issues need addressing in the design, development, delivery, and support of effective eLearning provision. But one key aspect, not mentioned here, is ensuring an overarching strategy (or learning strategy) that shows how it relates to the overall strategic objectives of the organization/business in question and from which the

eLearning emanates. A central part of such an overarching strategy would be clarification of 'meaningful eLearning.' Does it mean 'meaningful' at a micro level, in terms of the types of engagement, technologies, student/student, and student/teacher relationships, learning outcomes, and assessments of learning, or at a macro level, in its impact on the economic development of a country and the global concept of the 'knowledge economy'; or both?

Are formal, non-formal, and informal learning situations meant—or a subset of these? Is age considered when referencing the 'diverse' learner—young learners, adults, both? Local and global are collapsed, scope is not defined, and layers of complexity have been overlaid with a very general question. Without these strategic definitions, projects can be ill-conceived and end in failure.

Overall, Europe has a strong orientation towards a learner-centric educational philosophy.* This philosophical approach puts learning at the heart of any eLearning technology and demands that the **pedagogical** capabilities or flexibilities must be focused on. Different users, institutions, teachers, and students will be using the eLearning environment—and as such will be using different pedagogical methods. A meaningful platform will be flexible and open enough to encompass any pedagogical method and its requirements. This requires personalizing learning and ensuring the active engagement of the learner—there needs to be a paradigm shift from learning aimed at **information consumption** to learning that is focused on **knowledge production**. How do we make this shift? To answer this, we need to focus on policy, teacher training, curriculum, assessment, and technology—all of which contribute to the development of digital literacies.

Institutions are becoming more and more relevant today as government organizations are able to define and 'certify' different technology providers. With the resources to implement large-scale reform, they also carry the influence to determine what kind of service and functionality an eLearning provider will be giving. Macro level/top down equals leadership and management, shared vision of the role of schools in the 21st century, the role of schools in the community, and schools working together, forming collegiate structures sharing information and expertise. Micro level/bottom-up equals role of teachers, collaborative work, teacher/pupil relationships, and pupil/pupil relationships.

The **technology** itself offers continuing challenges: funding models, cost-benefit ratios, sustainability of infrastructure and software, and the impact of open-source are just a few. Child-protection aspects have a strong technology element, and central provision of technology solutions versus institutional provision remains an issue. Of course, the constant change in technologies brings real challenges, especially in seeking to optimize the productive nature of digital technologies for every type of learning provision.

Linked to the technology, interface design and learning platform affordances have to be identified through user consultation and engagement. The focus has to be on simplicity, on targeting user requirements, and on the relevance of content: developing visual literacy in learners through content which is 'born digital' as opposed to analogue

*Towards greater quality literacy in eLearning Europe. Dr. Ulf-Daniel Ehlers, University of Duisburg-Essen; published Jan. 2007 at <http://www.elearnigeuropa.info/files/media/media11559.pdf>.

content which is digitized.

Evaluation can be interpreted in many different ways. In terms of evaluating the impact of eLearning, there has to be a change in mindset from assessment of learning to assessment *for* learning. If we recognize that eLearning affords different learning pathways and styles, then the ways in which we assess the outcomes of eLearning cannot be defined by assessment models applied to traditional learning models. Evaluating 'soft' skills, such as online collaboration and virtual teamwork, requires us to revisit what we teach, how we teach it, and how we assess.

There are a number of **ethical considerations** which the use of eLearning raises. For those using eLearning, 'online' is a medium of being—the Internet is not a tool but *a way of being*. Online engagement requires agreed rules of engagement, a moral engagement in an environment which is essentially '*An economy of ideas*' (John Perry Barlow). There are also serious questions about democracy and the Web (subsuming ethical behavior in a virtual world) and about control of curricula—who is deciding the rules of engagement and according to what rationale?

However, among European eLearning users, there are clear satisfaction drivers which also have to be taken into account. These include, in order of importance, the user-friendliness of the navigation, the content quality, the standard of design and graphics, and the level of interactivity offered by the eLearning experience. So while the categories you have laid out are each serious topics for debate and provide a degree of complexity around eLearning that we have not seen evident in any previous educational movement of the learning paradigm, we also need to take account of the expectations of the users.

5. What do you see as the future of eLearning in Europe and globally?

Learning technologies are generally spreading rapidly across Europe. As formal learning continues to embrace informal learning and social technologies, the learning process and location extends beyond an institution, and beyond the classroom. The 'learning space' or classroom is extended globally to a virtual global classroom, and also extended over a student's whole life. The online personal portfolio and collaborative working area of each individual will therefore become more and more important as tools and pools of growing resources that the user will continue to update and build on.

So there is confidence within the ELIG community that acceptance of eLearning within Europe will continue to grow, as it will on a global basis. However, a crucial factor, that has yet to be fully addressed, and which will significantly impact on not only the future development in eLearning but also the success of Europe in the global economy, is a more widespread understanding and acceptance of the value proposition of eLearning; the power of eLearning to deliver effective learning.

All anecdotal evidence suggests that European corporations are significantly slower in implementing learning technology compared with their US-centered counterparts. European Chief Learning Officers have been more cautious in moving into eLearning. However, this might turn out to be an advantage as new models emerge where Web 2.0 tools and workplace learning play an increasingly important role. □

Q & A with Ed Tech Leaders

Interview with David Dockterman

Michael F. Shaughnessy
Susan M. Fulgham

*David Dockterman is vice president and chief academic officer at Tom Snyder Productions, now a unit of Scholastic, where for more than 20 years he has developed award-winning educational software for the classroom. Among his team's programs are **Decisions, Decisions; Thinking Reader; FASTT Math; and Timeliner XE**. Dockterman authored the books **Great Teaching in the One Computer Classroom** and **Weaving Technology into Your Teaching**. He also co-created and co-wrote **Science Court**, the highly acclaimed animated TV show that ran for three years on ABC's Saturday Morning. Before joining Tom Snyder Productions, Dockterman taught high-school social studies. He has dedicated himself to supporting classroom teaching and the successful integration of technology into schools. In this interview, he reflects on the growth of educational software, discusses some current issues, and reflects on where the field is going (e-mail: ddockterman@scholastic.com).*

1. First of all, how long have you been developing and researching software?

I guess my initiation started in 1981, when I wrote a little grading program to help me manage my high school history and social studies classes in Connecticut. I got formal about it, though, the following year when I started my doctoral program at the Harvard Graduate School of Education and simultaneously began my long association

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