

Predictions for 2007 (Jan 07)

By Lisa Neal

A myriad of new technologies impacts our daily lives in 2007. This fact is clearly on the minds of our experts this year as they consider how e-learning will be affected by these widespread changes.

Personally, I suspect far too many people are blinded by innovation and fail to stay focused on the importance of quality in educational materials and teaching. Even as a long-time advocate of peer education and informal learning, I believe that expertise has an essential role in separating the wheat from the chaff, so to speak. This is important in any year, but even more important in 2007, when information overload is almost a chronic condition.

In an *eLearn Magazine* interview, Don Norman, our first expert below, spoke of how "the distractions of modern life destroy" the flow state in which optimal learning occurs. I agree with him, and further believe that today's constant connectivity and access to learning materials does not necessarily lead to richer learning experiences. But used judiciously, the new technologies do have the potential to enhance the online learner's experiences.

Here's what our experts have to say this year:

"Finally, something might happen within the educational scene. Why - because business leaders are now seriously worried. I have seen more educational startups, more new foundations, more retired-while-still-young entrepreneurs turning their attention to education than ever before. Sure, many of these efforts are naïve and overly-simplistic, but these people are smart, fast learners, so their lack of knowledge and understanding of education doesn't last long. Not only that, but they are hiring teachers and educators for their staff, management, and advisory boards. Finally, something might happen within the educational scene."

—**Don Norman**, Nielsen Norman Group, Northwestern University, and Author of *Things That Make Us Smart*, USA

"Researchers will continue to make progress in determining the instructional design features of e-learning that promote learning, including research-based principles for the use of animated pedagogical agents, intelligent tutoring systems, simulations, games, virtual reality, and multimedia environments."

—**Richard Mayer**, Department of Psychology, University of California, USA

"High Definition Learning: The rise of high definition media (from HD TV to higher resolution plasma/LCD screens) will push us to a new model of High Definition Learning. This will manifest itself in high definition video conferencing, presence, and higher expectation of virtual/simulated settings. Social and Informal Blends: Add one part informal learning, one part social networking and swirl in classrooms, e-learning, and online webinars, and you have some new recipes. Continuous Events vs. Defined Courses: Why graduate learners from a course in a field that is continuing to change? Courses don't have to end, but can continue for years. That can be applied to higher education as well as corporate learning offerings. Learning Systems (LMS/LCMS) Experiment with Web 3.0: Presence on the desktop, peer reviewed content, 'gadgets/components' and Learning API's. Open Source Content: There will be several experiments on organizational open source learning content development."

—**Elliott Masie**, The MASIE Center's Learning CONSORTIUM, USA

"The U.S. Supreme Court will weaken the test for proving 'obviousness' in a patent case, substantially impacting Blackboard's current patent litigation efforts. The Spellings report will spur new efforts in implementing institution-wide metrics for e-learning effectiveness in higher education. The IMS Common Cartridge and upcoming Enterprise V2 standards will significantly

improve content and learning system interoperability, respectively, although we won't see the full benefits of these developments until 2008. And, finally, despite a ton of buzz in the edu-blogsphere and some merit, 'e-Learning 2.0' will only see limited success in terms of widespread diffusion."

—**Michael Feldstein**, author of the e-Literate weblog and member of *eLearn Magazine's* Editorial Advisory Board, USA

"With the push toward Web 2.0 technologies, Time magazine recently named "you" as the person of the year for 2006. In the world of learning, this signifies the growing attention toward personalizing and customizing learning and placing the learner in charge of her own learning activities. In 2007, we may further recognize this by renaming "the Web" as "the Web of Learning." In effect, when it comes to training and education, no longer is the Web simply "the Web." Instructional models are beginning to reflect this trend by thinking deeply about pedagogy and the learner within e-learning, not simply technology."

—**Curt Bonk**, Professor, Indiana University, USA

"As expected, last year was the year of video. This year will continue that trend with a wide range of video-on-demand services becoming available as the leaders consolidate their hold. Also look for ubiquitous Wii-like wireless-based online applications, a limping launch for Vista, and challenges to commercial software across the board by hosted services (which will later become free applications you can host yourself). Single sign-in will finally arrive, and new services enabled by this (such as socially supported content filtering) will sweep the web. The internet is ripe for something new (and no, that something is not Second Life): something like the personal learning environment connected to free content— Creative Commons, open access, and open educational resources. If the bottom doesn't drop out of the paid software and content market in 2007, it will at least be severely compromised."

—**Stephen Downes**, Researcher, National Research Council, Canada

"The coming year will bring advances in mobile learning (m-learning) as Microsoft and Apple compete for the e-learning market with enhanced versions of Zune and the iPod. At the same time the major cell phone manufacturers will deploy many new models of the dual WiFi/3G cell phones. These phones will enable e-learners to access web materials (with no minutes charged) at WiFi access points and via advanced 3G cell where WiFi is unavailable. Learning providers, recognizing the rapidly expanding market of mobile-connected learners will ramp-up delivery of m-learning compatible courseware."

—**Ray Schroeder**, Director, Office of Technology-Enhanced Learning, University of Illinois at Springfield, USA

"Gadgets, games, and gizmos will dominate the e-learning landscape in 2007. On the one hand, organizations will seek to develop e-learning with an eye toward 3D environments using Second Life and other commercially available platforms. On the other hand, an increasing number of simple, quick games, so called casual games, will be developed to teach facts and concepts to employees who are used to being entertained as well as educated. Mobile devices will finally begin to be used for mission critical learning events such as prepping for sales calls and troubleshooting large machinery. Web-based tools used by individuals such as social bookmarks, RSS feeds, blogs, wikis and avatars will become more mainstream in academic and then corporate environments."

—**Karl Kapp**, Assistant Director, Institute for Interactive Technologies and Professor of Instructional Technology, Bloomsburg University, USA

"The role of instructional-designers-by-assignment continues to expand (SMEs who develop their own learning programs). Instructional designers work as production assistants in these situations— well below our abilities and aspirations. Experimentation in the design of e-learning programs will be more practical and usable to other designers as our experience with the medium grows. In the workplace, e-learning is increasingly seen as one key part of an organization's larger portfolio of learning options. Blogs and wikis continue to gain traction as an e-learning

device, especially in universities. Finally, e-learning tools are increasingly working their ways into the everyday university classroom, from guest speakers by webcast to the increasing rarity of paper syllabi."

—**Saul Carliner**, Assistant Professor, Graduate Program in Educational Technology, Concordia University, Canada

"Knowledge everywhere—evolution not revolution: Annual studies by ASTD and Training magazine confirm the slow, steady trend away from classroom delivery and towards more technological approaches to training and support. Information, lessons, instructors, and events are beginning to go where they are needed. While the shift from knowledge in the classroom to knowledge everywhere is radical, progress is not. Not yet. Revolution is too strong a word for where we are today. Intimations, hints, glimmers, and possibilities—those words describe it better. How will you use 2007 for pilot projects, measurement, continuous improvement, and change management? How will you bring knowledge and support closer to where it is needed and advance this worthy revolution?"

—**Allison Rossett**, Professor of Educational Technology, San Diego State University and co-author of Job Aids and Performance Support, USA

"This will be the year of PULL. People will rebel against the ever larger haystacks that have been pushed upon them in favor of finding needles for themselves. We'll see fewer and fewer courses, books, and three-day retreats, and more "small pieces, loosely joined." Conference attendees will set their own agenda; workshop participants will choose their curriculum. Systems will evolve that enable us to rate what we read—allowing the best to rise to the top. Not that we have a lot of choice. The world has become unpredictable; only a fool plans far in advance these days. As for technology, everything will get faster, better, cheaper. That's not a prediction; it's Moore's Law."

—**Jay Cross**, Internet Time Group., USA

"My predictions are that we will realize that we need to re-design the curriculum for ISD programs so that we teach critical thinking informed by interdisciplinary courses; re-design business models toward more pay-as-you-use models that take advantage of Web 2.0 technologies; re-design our markets so that they veer sharply away from predatory business practices like seeking overly broad patents; craft a new design to better integrate game-based learning while meeting instructional objectives; realize that mobile learning means something other than hardware— it means experiences and environments; and finally, that Stephen Downes will be a pretty good predictor— he picked video last year."

—**Mark Oehlert**, Learning Strategy Architect, Booz Allen Hamilton, USA

"E-learning will continue to gain ground outside traditional training organizations. It is becoming a popular delivery vehicle for certification and compliance training. Managers in line organizations such as operations, sales, and finance who simply need to deliver information/instruction and document "training" have discovered e-learning. The reach of these kinds of e-learning programs will color learner expectations regarding e-learning. Training professionals in turn will need to market their programs to overcome prejudice and negative prior experience."

—**Margaret Driscoll**, Consultant, IBM, USA

"Pressed by bandwidth limitations in many parts of the world, e-learning innovators in developing countries will find increasingly clever ways to balance online Internet connectivity needs with stored local content and pedagogical aids. Local content and learning algorithms (e.g., MyCyberTutor) can be stored on a hard drive, CD, DVD, or local server. The right combination of low-bandwidth text interactivity coupled with animations and video that can be stored locally will allow more and more learners in developing countries to experience the rich learning environments that we take for granted in the higher-bandwidth West. There are business, research and implementation opportunities here."

—Richard Larson, Director, MIT Learning Interactive Networks Consortium (LINC) and Mitsui Professor, Engineering Systems, MIT, USA

"European Union funding policies currently emphasizing digital inclusion and skills-development will continue to provide leverage for the uptake of e-learning in Europe. The content providers' markets will be increasingly divided into two segments: there will be an increased offering of free and open content, contributing to the decrease of prices for commercial e-content; meanwhile, another segment will continue development of quality, interoperable, and interactive e-content that is bundled with additional services such as accreditation. Moreover, this latter segment will move aggressively towards the institutionalization of intellectual property rights of digital educational content. Human resource professionals will increasingly demand and procure end-to-end e-learning solutions that will complement content and infrastructure offerings with consultancy services required to develop a truly value-adding technology-enabled human resource development function. Examples of such services include HRD process improvement, training needs assessment, evaluation and accreditation, and convergence of information and learning infrastructures."

—**Angeliki Poulymenakou**, Assistant Professor in Information Systems, and Spiros Borotis, Researcher, both at Athens University of Economics and Business, Greece

"As various types of e-learning have developed, we now have come to a point where there are disciplines that specify what types of e-learning should be given to what types of learners in what types of situations. One example of such a discipline is that e-learning content generally should consist of fundamental material required for learning an advanced topic. Fundamental topics may not change so radically every year. Because advanced topics have to be changed and revised as academic knowledge accumulates, they are not as well-suited to e-learning. The time and the cost of revising e-learning content is not small, hence teachers often want to use the same content for at least 3 to 5 years."

—**Masaaki Kurosu**, Professor, National Institute of Multimedia Education, Japan

"I predict that three distinct emerging trends will impact the ways in which e-learning practitioners engage in their professional activities for 2007. The first, and probably the most significant of these trends, looks at the impact of dynamic media (e.g. smart documents, interactive Web video content, mash-ups, and metaworlds) on learning and performance support, and how this new media is changing expectations of a high-quality, engaging e-learning experience. The second trend is mobility and considers the role that mobile technologies play in providing learning and performance support at the point of need, when that support is needed, and on whatever digital device makes the most sense for the learner. The third trend considers how socially negotiated media and user produced content (the so-called Web 2.0 phenomena) are expanding opportunities for all members of an enterprise to contribute ideas and information in a variety of formats and forms, regardless of their technical abilities."

—**Ellen Wagner**, Sr. Director, Worldwide eLearning Solutions, Adobe Systems, USA

"Neal Stephenson's and William Gibson's metaverse is open for business: 3D, first-person, highly sensational, real-time. Yes, there's lots of lap dancing going on in SecondLife, but also 120+ campuses and the NMC's very compelling learning space. Learners are now physical as well as discursive avatars. Explosive brew. PREDICTION: There will be a strong impulse to 're-create' the conventional university setting (walls, lecterns, screens & whiteboards)—comforting vestigial organs, like handrails in 1920s elevators. But the fluidity of physical identity and boundary-destroying commfeeds will busta move. Someone will exploit this creative tension by inventing a new and compelling mode for learning."

—**David Porush**, Executive Director, SUNY Learning Environments, USA

"We're going to start building a lot more 'intelligence' into our online information environments in some surprising new ways. Our 'seek and ye shall find' style of searching will morph into an 'I need, I find, I do' kind of solution. Yes, Google will still be there when we need it. But we're going to be adding actions and decision making capabilities. We're going to have environments that help us learn and that learn from our experiences. We're going to be embedding all kinds of informative semantics into our XML-driven metadata. We're going to be looking at semantics from a business perspective. My favorite? Take a carefully look at O'Reilly's Safari U

(<http://www.safariu.com>) and then imagine the possibilities!
—**Geoffrey Bock**, Principal, Bock & Company, USA

"We will see movement toward capturing tacit knowledge and integrating collective knowledge with corporate data and other knowledge resources. Social tagging software will emerge as an important element of the knowledge management landscape. Corporate universities will begin to question their positioning as a 'university,' and some enlightened Chief Learning Officers (CLOs) will reject the academic model and begin to reposition themselves as performance support and change management specialists. More CLOs will move up to the board. The role of knowledge in corporate competitiveness will be enhanced while the metrics of the knowledge/learning function will shift toward revenue models, abandoning 'completion' statistics for more relevant measures."
—**Jonathon Levy**, Senior Learning Strategist, Monitor Group, USA

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