

Why e-Learning is Backwards...

Putting the Learning Before the “e”

by Rich Berens and Tom Crawford

Introduction

Over the last couple years, e-Learning has promised to revolutionize the corporate training market. It came with the highly attractive potential for reduced costs, consistent and scalable delivery, unprecedented flexibility, as well as shorter times to competency. Wall Street and many industry leaders took notice. John Chambers, CEO of Cisco Systems stated, “The next big killer application for the internet is going to be education.”

So what happened? The promise is still significant, but there are major challenges that threaten to undermine the progress. A key challenge is that the e-Learning industry has spent more time on the siren call of technology than on the quality of the learning experience. We have great technology available to us, but e-Learning will not reach its promise unless we can deliver the content in an engaging and effective way in the new medium.

Today’s Market: More about the “e” than the “Learning”

Many people believe e-Learning is a new phenomenon. However, many of those in the industry know differently. Over the years, it has been called a lot of different things like Computer-Based Training (CBT) and Web-Based Training (WBT), but insiders know that not much has really changed since the early examples were created on the first mainframes. In those days though, we had an excuse. There were only about 256 characters available and graphics were a distant dream. Many of the examples were textbooks and tests placed online. Some would say that this was taking the worst parts of classroom learning, the “tell-test” methodology, and placing it online. In the meantime, some of the best parts of traditional learning, the instructors and the engaging experience, were omitted. In history, this process has been repeated over and over. When a new technology comes along, we try to take the old technology and force it into the new with little success. It is not until we begin to use the new technology in new ways, taking advantage of its strengths while avoiding or at least minimizing the impact of its weaknesses that the technology truly takes off. Just think about a few examples from this century alone, like bicycles to motorcycles, typewriters to word processors, radio to television, mail to e-mail, and plays to movies. Each technology experienced a disruptive innovation. Early attempts at each new technology focused only on how the old technology’s concepts could be adapted or retrofitted. When we began to truly focus on and apply the advantages of the disruptive technology in new ways, we were able to unleash it’s true and full potential.

Take, for example, the transition from plays to movies. When people first started making movies in the early part of the 20th century, they filmed plays, exactly as they appeared on stage. They would take a single camera, focus on the entire stage, and yell “Action.” The stories were great. The movies were awful. The filmmakers had not yet learned that simply sliding an old format onto a new medium doesn’t work. Until they realized that film required different camera angles,

different staging, and different lighting, they were unable to make good movies. They had not yet taken advantage of what a camera allowed them to do.

In the same way, traditional classroom education does not translate well to an online environment. Most people find reading words on screen to be difficult. It is certainly no more exciting than reading the paper version. For the most part, the e-Learning industry has moved the same offline methods to the online environment creating results as unappealing as the old plays that were converted to movies. At the time, many thought that movies would be the end of plays once movies came into their own. But, of course, plays didn't go out of style. There's room for both. In the same way, e-Learning will not, and should not, replace traditional learning. Used at the right time and in the right way, e-Learning tools will enhance and add value to any curriculum.

If the learning is not engaging, people will always find ways to work around the system. Take, for example, a reoccurring theme that comes out in our interviews. Employees are given a mandatory e-Learning class and must pass a certification exam as part of the session in order to receive credit. Inevitably, one employee will take the course in its entirety and create a cheat sheet for other employees by carefully recording the questions and answers during the session. Instead of reading the information and learning the concepts, the other employees will then use the cheat sheet to simply get through the session quickly. Now, we being well-intentioned e-Learning people have devised ways to prevent this from happening. We can simply select the possible answers from a pool of possibilities and then randomize the answers so the correct answer is not always in the same position. However, this is only a stopgap measure on our part. People catch on quickly and adapt. We, as an e-Learning community, need to create more engaging tools that people want to use and are so engaging that they want to finish—on their own. The tools should be so engaging that the participant is looking forward to what might be around the next corner in this application or anxiously anticipating the next application.

Near Future Market: The World is Changing With or Without Us

In spite of the lack of engaging e-Learning tools, the movement is unquestionably accelerating and has exploded onto the corporate scene in the past several years. The popularity and growth of the World Wide Web has, of course, played a significant role, but e-Learning has not yet fulfilled its promise of reduced costs, consistent delivery, and flexibility.

We need to figure this out very quickly. We are working under a deadline. Just like there are many adults who have never touched a computer, there are many children who have not experienced life without the Internet, much less a computer. In *Digital Game-Based Learning* (McGraw-Hill, 2001), author Marc Prensky refers to the distinction between “digital natives” and “digital immigrants.” Digital natives, like today's grade school students, have always spoken “computer;” it is like a second lifelong language. Digital immigrants, no matter how technology-savvy, will always have a “digital accent.” They search the Internet for information, but then print it out to read it. They read the manual *before* they attempt to use a new computer program. Don Tapscott, in his book *Growing Up Digital* (McGraw-Hill, 1997), also refers to the growing “Digital Divide” between baby boomers and the “N-Gen” or “Net-Generation.” Tapscott says, “These young people learn, work, think, shop and create differently than their

parents.” They *work* differently. They *think* differently. They *learn* differently. Yet, as an industry, we’re still trying to take the same methods and move them online. It is no wonder many e-Learning customers are not realizing the results that were promised. If we do not adapt quickly, as these new generations enter the workforce, the problem will only get worse and get worse quickly.

The real challenge for organizations comes in creating tools that are effective for both “digital natives” *and* “digital immigrants.” In a recent test of one our e-Learning products, the client had seven participants in the room which, by chance, ranged the full spectrum of computer backgrounds. The youngest participant—only with the company for several weeks—finished the session in about half the time as the participant with nearly 25 years of experience with the company. One of the executives observing the test was infuriated, believing that the experience was a failure and that the young participant “could not have possibly learned anything.” After a brief discussion on the issue, we decided to have the executive quiz the participant on the content. The executive asked a series of questions on details from the content. The teenager was able to answer all of the questions correctly, much to the surprise of the executive. For this young man, the tool was an enabler. He learned in a way that was familiar to him and the engagement aided in his recall. The “Net-Generation” works, thinks, and learns differently.

How Do We Respond?

The objective of any learning experience is to engage the audience in learning and encourage their active participation through thought, creativity, and experimentation. Learners should be encouraged to think, challenge their own assumptions, consider all of the data, and come to their own conclusions. As you start, the three keys to creating the most engaging learning are the learners, the content, and the delivery method. This is as true offline as it is online. Start with “Who is the audience and what do I want them to learn?” Only after those questions are answered thoroughly should you proceed to the determination of a delivery method. Many times the answers to the first two questions will make the answer to the third very clear. To add clarity, further information can be gathered from the answers to these questions:

Who is the audience?

- Who are your learners?
- What is their learning style?
- What do they already know?
- How comfortable are they with technology?

What do I want them to learn?

- What information do I need to present?
- What do I want them to do or do differently?
- How long will they need or use this information?
- What is the best way to communicate this message?

What is the best delivery method?

- What resources are available for this project?
- How will this tool fit into existing programs?
- How can existing programs enhance this program or be enhanced by this program?
- What are your technological capabilities?

- Where are the learners located?

e-Learning is for Engaging Learning

Once you have the answers to these questions and from that have determined that e-Learning is the best approach (or part of the best approach), there are many elements that can make an e-Learning session engaging. The effective implementation of content into the new medium requires new skills and approaches. Good content will lose its effectiveness if it's not properly and creatively adapted. In cooking, starting with poor quality ingredients will guarantee bad results. A bad story will be a bad story no matter what the medium, and bad content won't magically be made into good content just by putting it on a computer. Also like cooking, it's not necessary to use all of the ingredients at the same time. You can mix and match. Here are a few of the basics:

Visual Environment

We know that people learn visually. Through our extensive experience in business learning solutions, we have learned that visualizing issues allows individuals and organizations to think systematically, speeding up the “aha” process. It also creates focused thinking, allowing everyone to build a shared understanding of the topics at hand. In e-Learning, the picture on the screen is a key factor. If the image is compelling, interesting, and fun to look at, people are more likely to become engaged quickly in the process.

The visual is also important because it helps to tell the story. In movies, visual cues are as important to the story as the script. Just think of some of the movies that have left the most memorable impressions, such as Steven Spielberg's *Jaws* in 1977. Who doesn't remember the unique score and the shark fin coming out of the water crawling along the beach by Amity Island? The impression was so powerful that it actually impacted beach traffic for years to come. The emotional connection the audience had with the story was greatly enhanced by powerful imagery. Not only does a powerful visual environment help engage the participant, but it also aids in recall. All learning tools should take advantage of this powerful mechanism. Many offline tools have used powerful visual elements for many years. Few online tools have made effective use of this opportunity. It is important to note that visual does not necessarily imply video or high-bandwidth requirements. Many tools on the market make animations efficient and effective for use over limited-bandwidth connections.

Interactivity

Well-designed interactivity takes learners from “Don't make me read another screen” to “I can't wait to see what happens next!” Interactivity includes things like:

- Matching, Ranking, and Sorting—self-discovery exercises. These types of activities introduce key data and information into the process so people can learn based on facts, not their own opinions. Self-discovery also harnesses one of the most effective ways people learn—by making mistakes.
- Searching—“I Spy” experiences geared to a learning objective. In an electronic learning tool created for employees of a large department store chain, learners were shown a cutaway of a consumer's home and were asked to click all the products sold by any

subsidiary of the company. When many items in every room were highlighted, learners discovered the extent of the company's reach. Learners found this far more entertaining than studying a long list of items offered to customers.

- **Typing**—expressing ideas, comments, and commitments. When learners are asked to type in their thoughts, it forces them to organize their thoughts and reflect on what they have learned before they answer. Initially, we tried to avoid this method, likely due to our own dislike of typing open-ended answers. However, in test after test, we found that this approach provided value for learner engagement and retention.
- **Case Studies**—using actual business situations to provide experience. This is a great way to allow people to consider how business decisions are made. A real-world scenario is presented and learners choose an appropriate solution. When they discover how the real situation was handled, they more genuinely consider the effect of the decision. Many times situations do not have “right” answers or have a series of complex answers. These lead to difficult decisions that although frustrating, help reflect some of the complexity of issues that can occur in everyday life.
- **Role Playing**—auditioning new skills, processes, or ideas. Learners can “be” the CEO or the customer and try out decision-making in a consequence-free environment.
- **Simulations**—exploring the complex relationships between critical business drivers. Learners get an appreciation of the impact of decisions, as they discover results of actions and safely experiment with strategies.
- **Gaming**—If you have kids, you already know the allure of computer games. We will know we have arrived, as e-Learning designers, when we are able to create the same level of engagement with business issues in a corporate environment as game designers do for the home. During one rollout, we had top executives coming back on their lunch hours to see if they could improve their score. Many executives wouldn't leave the game to take the predetermined breaks. We're still a long way off from having executives staying up until 3:00am to drive the game's key metrics, but the future is very near. In most current educational games for adults, you play the game and stop to do the learning activity. You are basically interrupting the game for a moment of learning and then returning to the game. Clearly, gaming as a component of effective e-Learning is not as potent when separated from the learning. The “Holy Grail” of games for a business-learning environment is when the learning is totally integrated into the game and not just an interruption.

Virtual Facilitator

In a traditional classroom environment, the facilitator is “the sage on the stage.” Teaching by telling. In an effective e-Learning application, the facilitator becomes “the guide on the side.” The virtual facilitator gently steers the learner through the activity, introducing and summarizing concepts, challenging ideas, and tying the whole package together.

Dialogue

Learning is about asking the right questions, not just giving the right answers. Carefully crafted, discovery-based questions not only lead people through the learning process but also allow the group to create a forum for exploring critical business issues. In this way, people learn from their peers and can come to their own conclusions rather than being told what to think. In an e-

Learning environment, dialogue can occur through a variety of synchronous web meeting tools or over simple phone conference calls.

Storytelling

Facts alone don't tell the story. Reading facts on a screen will not result in a well-informed organization. But if people are led to tell a story *themselves*, given the data presented, they become deeply engaged and are more likely to understand the context in which the facts are presented. The story provides the context.

It has been said that, in all of history, only storytelling and gaming have stood the test of time. Storytelling makes learning relevant by providing a context in an intelligible and relevant framework. In an effective e-Learning tool, you can present a story that involves learner's emotions, creating realistic characters and a plot. With storytelling, the audience is brought into the story and is compelled to consider how an idea might play out.

e-Learning Will Not Solve All of the World's Learning Needs

The best solution is often not just traditional learning or just e-Learning, but a combination of both. In deciding what makes the most sense for your learners and your organization, think about a blended approach. The use of web-conferencing and online learning combined with traditional methods can draw out the best of each experience.

Again, it's important to examine the same questions that you used to determine which components of e-Learning to use:

Who is the audience?

What do I want them to learn?

What is the best delivery method?

e-Learning is a good choice if your employees work in widely dispersed locations, are computer literate, have access to a computer infrastructure that can support it, and have content to be learned that is appropriate for the tool.

Traditional learning is a good choice if the content to be learned requires live discussion and face-to-face conversations such as for a diversity initiative or those that involve emotional responses and interpersonal relationships.

To illustrate how the blended learning processes work, consider two cases. The first case is a large financial company. Over the past several years, this company had watched its once-strong brand slip down the international rankings, eventually falling off the chart. The future of the company depended on the commitment of its employees to enhance the brand's image. They needed an effective, engaging, and informative way to help educate its large employee base and its partners on the importance of brand and their part in reviving the brand. About 20% of the workers were so widely dispersed geographically that it would be cost-prohibitive to bring them together for any type of traditional group session. They needed a solution that would communicate the key concepts, but would allow some of the learners to use it at their own desks.

They wanted a product that was fun, interactive, and easily transported. The solution was a combination of e-Learning and traditional learning.

To reach the largest group of employees—those in large, centralized facilities—they used a learning process that involved facilitated small group discussion and a large-format visual metaphor that linked the ideas as well as the learners. This tool, designed for synchronous interaction, was available online, offline, and in combination. For the far-flung employees, they created an electronic application redesigned for individuals. The element of group discussion was adapted through exercises designed to challenge assumptions and present thought provoking questions. Survey-type questions were included that allowed learners to compare themselves to colleagues who had already taken the session. The application was available on both CD and through the company's Learning Management System to allow the broadest flexibility for distribution.

This blended solution, using a variety of online and offline technologies, was an effective combination for them. Pre- and post-learning surveys showed that employees better understood their role in improving the brand. The employees' satisfaction levels were very high, and each employee came away from the experience with enthusiasm and a resolve for specific actions to improve the brand. Whether online, offline, or in combination, statistically significant positive movement was shown on each of the key learning objectives. No statistically significant differences were found between the different delivery mechanisms.

Now consider a different approach to blended learning. In the second case, a large, midwestern utility wanted to provide a learning experience for its leadership team on the complexities of its financial and operational environment. Most of the leaders were very effective engineers. Though technically and operationally excellent in each of their individual areas, many lacked the expertise in how their operational decisions impacted other areas of the business and how the decisions impacted the overall financial performance of the company.

The Organizational Development and Finance departments designed a unique, two-part solution. First, it was necessary to provide each leader with a common framework and language with which to discuss the financial results of the company. They used a learning process that involved facilitated small group discussions of 8 to 10 people and a large-format visual metaphor that linked the ideas as well as the learners. While the leaders were, of course, familiar with revenues and expenses, the first part of the session provided them with the ability to compare and contrast complex topics such as free cash flow, earnings per share, net income, net operating profit, and stock price with a focus of improving shareholder value.

The second part of the session then allowed the leaders to discover a deeper understanding of the relationships between their operational decisions and actual corporate performance. The small groups were further divided into groups of 3 or 4 people. Each group gathered around a computer to experience the simulation. The groups were presented with a variety of scenarios in which they had to develop a strategic response, predict the expected outcomes, test their theories using the simulation, discuss the actual results, and determine next steps.

The blending of an online tool into a traditional classroom setting provided significant results to this company. Participant satisfaction ratings were over 95% for each of the sessions. Participants would come back during their lunch hours and skip breaks just to have more opportunities to “win the game.” Each of the five learning objectives were moved at least 1.5 points on the scale according to pre- and post-event surveys. The greatest impact, however, was revealed in interviews with participants in the months following the session. Participants revealed how the session had changed their decision-making processes and were able to point to significant bottom-line results from this session.

Summary

It is certain that e-Learning has a place in the present and future of the corporate world. There will need to be changes in the status quo for it to really succeed.

- e-Learning delivery methods need to become more engaging and more interactive for the medium to fulfill the promises it has made.
- To be effective, designers must first consider the audience and the content before determining a delivery method.
- Content will become more and more important. Providers who cannot offer relevant content will fail. The cost savings remains irrelevant if the tools are ineffective at conveying critical content.
- The focus of learning will shift to a more blended approach where the right delivery mechanism is deployed at the right time.
- Engaging content does not need to wait for more bandwidth. Great movies have been created without the use of special effects. Innovative effects are great, but flash for the sake of flash won't enhance learning.

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