

Assessing Organizational Readiness for E-Learning: 70 Questions to Ask

by Debra Haney

Who wants to jump on the corporate e-learning bandwagon? What—we all do? Great! Now, who wants to actually be in charge? Hey—where did everyone go?

E-learning has become a working life reality for instructional designers, human performance technologists, trainers, and human resource (HR) professionals, not to mention the actual end-user trainee. Increasingly, organizations are investing in it, implementing it, using it, and, frequently, regretting their involvement in it. As with any large-scale organizational initiative, e-learning will have its serious implementation hurdles. Unlike many organizational initiatives, however, it appears that these hurdles will not cause implementation failure. E-learning is here to stay (Aldrich, 2000).

Assessing the Organization's Readiness

What can we do to lessen the pain for the organization paying for e-learning, the different departments managing it, and the employees using it? A logical starting point would be to assess the readiness of the organization by identifying goals, needs, motivators, resources, and constraints (Aldrich & Ross, 2000; Bonk, 2001; Colbrunn & Van Tiem, 2000). These need to be ascertained for

all organizational stakeholders: employees, human resources, training and professional development, information technology, and last but not least, leadership and management.

Organizations undertaking an e-learning initiative often have assessments conducted, usually by e-learning vendors or consulting companies that specialize in e-learning. The potential problems with this approach are a lack of objectivity, bias toward a company's own products, and, most importantly, an agenda heavily skewed toward finding the organization ready (and willing and able) for the initiative. Having an understanding, even if incomplete, of its current state (in terms of both infrastructure and mindset) regarding e-learning, would be a great benefit to an organization *before* it calls in external assessment experts. This type of assessment can also be beneficial to organizations in different phases of e-learning implementation, even organizations that have a system in place. In that situation, the assessment can act as a formative evaluation of the system, with the goals of identifying problem areas and improving the system.

Roles in the Assessment Process

Human performance technology (HPT) professionals are a natural top choice for being involved in the assessment process.

Different types of analyses, evaluations, and assessments, especially performance and needs assessments, are familiar processes to most of us (Hale, 1998; Rossett, 1995). Assessing different aspects of organizational readiness for an initiative is also a skill many of us already possess (Haney & Hara, 2000). Orchestrating change management, examining multiple aspects of a situation, generating cost-benefit analyses for alternative solutions, and identifying political problems are all part of our skill set. All of these skills are needed to assess readiness for e-learning.

E-LEARNING ASPECTS TO CONSIDER
<ul style="list-style-type: none"> • Employee competency development needs • Career paths and records • Course tracking • Courses and content • Technology infrastructure and support • Finance • Vendor offerings

Figure 1. Important Aspects.

E-learning in an organizational setting is much more than just courses and content for individual employees. Course options are only one aspect; multiple aspects need to be considered even in a relatively simple system. Figure 1 lists important aspects to consider.

PROFESSIONALS INVOLVED IN MULTIDISCIPLINARY ASSESSMENT TEAM
<ul style="list-style-type: none"> • Human performance technology or organizational development • Human resources • Training or professional development • Information technology • Legal or risk management • Management (finance)

Figure 2. Necessary Professionals.

A potential weakness of organizational self-assessments is that they may focus on one or two aspects, rather than examining everything that will be involved. This can be a result of one organizational group being solely responsible for the assessment. For example, when HR professionals are in charge of the readi-

ness assessment, course completion and certification tracking are the natural comfort zone aspects they examine, perhaps to the detriment of technology infrastructure aspects. When the information technology (IT) group is in charge, technology will be emphasized, and appropriate curricula may be underexamined. When classroom trainers are in charge, blended approaches of technology-based courses in combination with stand-up trainers may be emphasized, but course tracking may not be adequately examined.

All of these professional orientations are necessary. None are sufficient alone. Thus, assessing readiness for an e-learning system requires collaboration between different professional groups (see Figure 2). An accurate and comprehensive readiness assessment is most likely to result

from a multidisciplinary assessment team composed of professionals from the HPT, HR, training, IT, and legal groups, supported by executives with budgetary authority.

Complexities of E-Learning and E-Learning Systems

By now some readers may be asking themselves, "Isn't she making this more complicated than it needs to be?" E-learning is complicated; underestimating that complexity will lead to underestimating needs, future problems, and costs (Rosenberg, 2001). E-learning is not just web-based courses. It is skill and competency development based in a wide set of technology-based applications and processes, including, but not limited to, web-based learning, computer-based training, virtual classrooms, and digital collaboration. Course content is available to the learner via Internet, intranet/extranet, local servers, individual computers, and CD-ROMs.

A logical starting point would be to assess the readiness of the organization by identifying goals, needs, motivators, resources, and constraints (Aldrich & Ross, 2000; Bonk, 2001; Colbrunn & Van Tiem, 2000).

An e-learning system is even more complicated: It is an integrated system supporting technology-based course content, skill assessments, secure and appropriate access, and tracking. Extremely high-functioning e-learning systems are referred to as virtual universities. An e-learning system is typically composed of courses from multiple vendors, a learning management system (LMS) for enrollment, tracking, and tuition payments, servers and server sites, web pages, firewalls, and links to other software, such as enterprise resource planning programs. All this to connect a learner to the content!

Figure 3 shows a simplified illustration of an e-learning system in which an employee accesses courses from his or her home by connecting to the company intranet site. An actual e-learning system would be much more complex. Note all the potential obstacles in the form of firewalls between the employee (learner) and the courses (content). Other obstacles may be the connection speed, or connectivity incompatibility in the software code between the organization, the LMS, and the course vendors. In a well-designed and

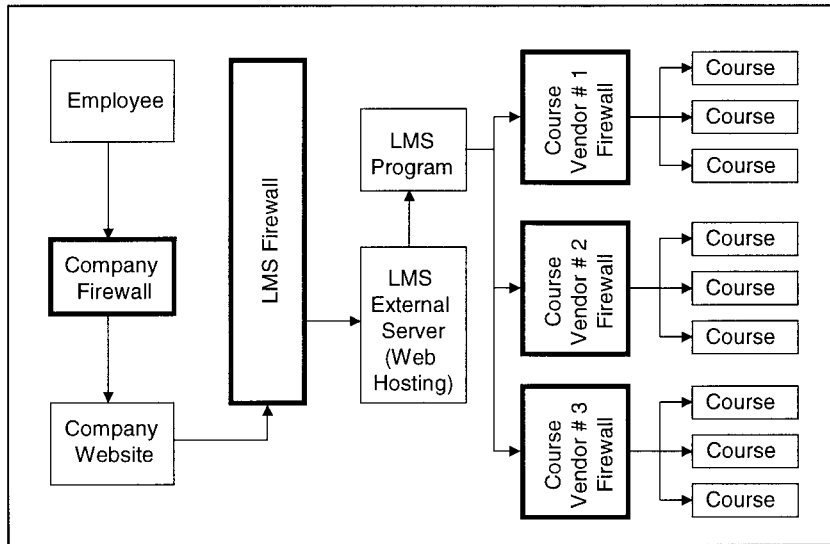


Figure 3. Simple E-Learning System.

smoothly functioning system, the learner is happily unaware of these potential obstacles and just proceeds to do his or her part: learn.

Few, if any, organizations are willing or able to create, install, launch, track, administer, and troubleshoot their own e-learning systems. Most use a variety of vendors, and perhaps develop a few of their own proprietary courses for company-specific content. Choosing the best options and vendors for each of the different aspects of e-learning (courses, tracking, skill assessment, server sites, web design, firewalls, portals, etc.) is a serious decision. It affects employee skills and competencies as well as organizational competitiveness (Khan, 1997). It also is a *critical financial decision* that can commit company resources for years. Making an informed decision in the beginning is better than informed regrets after the fact.

70 Top Questions

The following job aid gives 10 key considerations for each of the seven top aspects involved in e-learning (see Figures 4 through 10). It has been compiled both from industry leaders and commentators (Aldrich & Ross, 2000; Barron, 2000; Hall, 1997) and my own experience. The components have been field tested over the past three years.

This is not a comprehensive list—that would contain thousands of considerations—but it is a starting point for your informed assessment process. Note that a few items have been already checked as very important. These items (all the IT, finance, and vendor sections) should always be considered in the assessment and vendor-selection process. The level of importance on all other items is for each organization to decide. Although these considerations are organized into separate categories, all these aspects affect each other; none stands alone.

Human Resources

On a recent client engagement, I observed that the HR department was in the process of changing its own internal tracking system (logging which employees have completed which courses) when the company announced it was launching a virtual university. One of the challenges for HR was to decide whether the department should continue transferring records to the new system or wait until the virtual university was launched. And, of course, work associated with both the original change-over and the virtual university launch were in addition to their already full roster of responsibilities.

Learning Management System

Deciding on and providing appropriate access to employee training records is always problematic, even with the advice of a company's legal or risk management department. In some ways, the greater number of options that a LMS provides makes the problem worse because access is technologically easy. Now, HR must decide on a wide-range policy regarding access levels by the employee, the employee's manager, employee's department head, and others, in order to have the right access levels built into the system.

Learners

In a recent survey of different stakeholders in an e-learning system installation, one difference of opinion between the end users and the team in charge of the website design held back progress for over three weeks, which is a long time in a time-is-money situation. Most of the learners (more than 90%) would be accessing the courses over phone lines from their homes in different parts of the country. The company website designers were wedded to their design, which was heavy with photographs and graphics. They had, of course, checked out the access speed, but they worked in an office that was 30 feet down the hall from the server. The resolution was to eliminate some graphics, change others, and disperse them throughout the website, in order to satisfy the end-users' needs. The moral: Employees are at the heart of user-centered design for e-learning.

Content

Employees will view the courses from their own perspective, which is almost guaranteed to be different than that of other stakeholders. Employees will also access the courses for purposes other than completing one course at a time. I witnessed a situation in which certain employees were apparently starting multiple courses over and over, without finishing them. HR was concerned. Did these employees need remedial help? It turned out that they were accessing the

content for specific information to help them in their work performance at that specific time. They were using the e-learning system as an electronic performance support system. Remedial? I don't think so.

Information Technology

This may be the aspect that is most likely to get an organization into financial trouble if it is not carefully considered. Each of the 10 points touches on a major cost area for all e-learning systems. Knowing your own organization's technological profile is not enough; it must be compatible with all vendor products.

Finance

Human beings seem to have a natural tendency to focus on the immediate or short-term considerations of a situation

while undervaluing the long-term considerations. In an e-learning system situation, this translates into examining the installation costs, but not considering the maintenance costs as carefully. However, the maintenance costs of a system will be many more times the initial installation costs. Also, if top management has decreed that an e-learning system will take place so the company will have a high-tech system that is just as good as the competition's, who wants to raise the issue of what makes good financial sense?

Vendor

Vendor assessment is included here as part of assessing organizational readiness. Any product or service that the organization does not wish to provide for itself will come from a vendor. Frequently, an organization already has an existing relationship with a vendor; the compatibility of existing and potential new software and hardware needs to be assessed.

Human Resources (HR)	Importance		
	Not Very	Mod.	Very
1. Are different employee records currently in one database or linked databases?			
2. Will user passwords be automatically assigned during registration?			
3. Will different levels of permission be used?			
4. Will interfaces be customized for groups or individual users?			
5. Will multi-lingual records and operations need to be dealt with?			
6. Are current skills defined and organized (skill map)?			
7. Are employee skill profiles used? How updated? To be linked to course completion?			
8. Are employee skill development plans used? How updated? To be linked to course completion?			
9. Are employee career development plans used? How updated? To be linked to course completion?			
10. Will courses be tracked by: skill categories, learners (names and total numbers), attempts, completion, year completed?			

Figure 4. Human Resources.

Learning Management System (LMS)	Importance		
	Not Very	Mod.	Very
1. Will the system be ERP (enterprise resource planning) compatible? Which system? To what degree?			
2. How and what will be tracked: different delivery courses (instructor-led classroom, for example), registration, tuition, pre-enrollment, no-shows, grades, and cancellations? Individual learner training records?			
3. Will the LMS track different delivery of courses: CD-ROM, instructor-led classroom, self-study print, etc.?			
4. Will the LMS determine an individual's being able to register for a course, based on skill profile, previous courses, or career path?			
5. How will learners choose a course (course title, location, time, subject, delivery mechanism)?			
6. What restrictions will be placed on registration (prerequisites, career path, job level)?			
7. Will manager notification or approval be available?			
8. Will administration (HR) be able to override restrictions?			
9. How will evaluation of courses be conducted?			
10. Will financial accounting be available (cost, revenue, and profitability for class)?			

Figure 5. Learning Management System.

After the Assessment

After the assessment is completed, a formal report on the assessment findings will be made to the assessment sponsors, the executives, and top management. The report should include how, and to what extent, e-learning would support the organization's mission and strategic goals. If the company decides to take further action, then the next steps follow the typical project management route. The same multidisciplinary team that conducted the assessment should be kept intact to take those further actions. A preliminary strategy should be developed. Aspects to include in the strategy are as follows:

- Money: Budgetary commitment is needed for the further actions, such as finding out more before committing to a vendor-conducted assessment or developing requests for vendor bids.
- Internal operations: Address any internal operations related to an e-learning

initiative that need correction or improvement. An example of this would be fully staffing an understaffed technology support department.

- Additional research: Your organization will need to know much more about everything that was examined in the needs assessment.

- Change management: At this preliminary stage, start identifying potential sponsors, champions, and opponents.

The 70 questions given here are a starting point only; a real-world assessment will examine thousands of aspects. While such an assessment may seem daunting, the payoff in terms

Learners	Importance		
	Not Very	Mod.	Very
1. How and where will learners access the courses? Work? Home? Client site? Phone lines? Cable?			
2. Will learners be able to access their course completion records?			
3. What are the security procedures for user identification and privacy (view their own records and not others)?			
4. Will learners access skill lists for other positions?			
5. Will learners be able to access both required and suggested course lists?			
6. Will learners be able to take more than one course at a time?			
7. Will learners be able to complete only part of a course or course content?			
8. Will learners access list of all courses for entire company? Or only for their functional category?			
9. Will learners be able to test out of courses? Parts of courses?			
10. How will learners be able to ask questions and get quick answers?			

Figure 6. Learners.

Content	Importance		
	Not Very	Mod.	Very
1. Will courses be downloadable?			
2. Will courses be printable?			
3. Will learners be able to bookmark place or progress in course?			
4. Will trainers be able to create online tests for existing courses that have no tests?			
5. Will there be interactive scoring and feedback?			
6. Will there be the ability to limit the number of test attempts?			
7. Will students be able to review questions and answers?			
8. How will cheating be prevented?			
9. Will successful course completion count toward certification?			
10. Will virtual classrooms (synchronous sessions) be available? Able to break into smaller workgroups?			

Figure 7. Content.

Information Technology (IT)	Importance		
	Not Very	Mod.	Very
1. What are your organization's current IT capabilities? Will the same courses be stored on multiple servers to reduce access time?			✓
2. What are the server requirements?			✓
3. What are end-user requirements? (browser type and version, plug-ins, bandwidth)			✓
4. What are firewall considerations?			✓
5. What are access routes (office, home, travel, client site)?			✓
6. What are remote access connection speeds?			✓
7. Will there be one portal access to all courses and resources: vendor hosted, company server-based, etc.?			✓
8. Will course development templates be provided? Customizable?			✓
9. What authoring tools will be used for course development?			✓
10. Are software and/or files standards-compliant: AICC for authoring tools; IEEE for portals; HTTP for web?			✓

Figure 8. Information Technology.

Finance	Importance		
	Not Very	Mod.	Very
1. What will the installation costs be?			✓
2. What will the hardware costs be?			✓
3. What will the licensing costs be? Renewal costs?			✓
4. What will the maintenance costs be?			✓
5. What will the version update costs be?			✓
6. What will the fees (access, hosting, security) be?			✓
7. What factors affect implementation time?			✓
8. What will be the total costs from implementation to end-of -first license period?			✓
9. What will the costs per student be?			✓
10. What will the costs per course be?			

Figure 9. Finance.

Vendor	Importance		
	Not Very	Mod.	Very
1. What is the vendor's established record of previous installations and service? Are previous clients available to confer with?			✓
2. How long has the vendor been in business?			✓
3. What is the vendor's financial stability?			✓
4. What other major vendors has the vendor successfully cooperated with in the past? Currently?			✓
5. Will a vendor be able to host courses, LMS, applications?			✓
6. What guarantees (costs, timelines, outages, compensations) are provided for: security, versions (updates, features, controls) compatibility, compliance with industry standards, etc.?			✓
7. Will vendor cooperate at end of license or contract to transfer to another vendor? To what degree? With what costs, constraints, timelines?			✓
8. What level of service or support will the vendor provide? Costs? Guarantees?			✓
9. What customization support is available? Cost? Timelines? Guarantees?			✓
10. What constitutes functionality? What provision for bug or problem fixing is available? Does the vendor or the client decide on what constitutes a bug?			✓

Figure 10. Vendor.

of learning, performance, and cost savings (or cost avoidance) will be immense. So how do you know when to begin? The best time to conduct an assessment is after your company has decided to commit to e-learning (or at least is committed to thoroughly exploring the issue), but before it is committed to a particular strategy or vendor, and certainly before calling in an external assessment team. The best time to start thinking about what will be needed for an internal assessment is now. 🌟

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