Embedded Learning

Is it 'Learning' or is it 'Work'?

A worker in the finance division of a government agency receives an urgent email from an agency director, who asks about international travel approvals. The worker, let's call him "Scott," vaguely recalls hearing about such approvals while attending an internal training session last year, but cannot remember the details. Scott consults his online knowledge portal, which presents two e-learning courses that might have the answer to the question. However, Scott does not have the luxury to sift through course content. A search through the department's frequently-asked-questions or FAQ database fails to yield an answer. Scott sends a broadcast instant message to 24 of his fellow workers. Within minutes, Scott receives an answer to his request and sends the director a response.

However, the story does not end here. One of the people who received Scott's instant message was Lori. She is a designated subject matter expert, whose responsibilities are to ensure that the finance community has the right tools, information, and training needed to do its job. Lori is aware of an upcoming policy change that will likely increase the number of questions, such as the one Scott received. She convenes a 30-minute online virtual meeting to review the pending changes. This session will be stored for future reference by new community members and anyone not able to attend the meeting. Lori also updates the FAQ list with the answer to Scott's question. Lastly, Lori reviews the e-learning courses to ensure that the subject matter is adequately addressed.

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The scenario on page 37 illustrates how employees will "learn" in the near future. For many reasons, the age-old model of "learn-then-do" is being replaced by a newer "learn-while-doing" model. And this is not about a shift from traditional classroom-based learning to e-learning (Scott did not have the time luxury to get his answer from a course—e-learning or otherwise). This scenario is about embedding learning into the work process.

Define embedded learning

Embedded learning is defined as "learning that is based on the premise that the more contextual learning is to the job or task, the more an individual is motivated to learn." If organizations can make critical learning available at that moment of need, they create an inherent "teachable moment"—an ideal time to leverage learning without having to remove the learner from work.

Embedded learning:

- provides immediacy
- stresses collaboration
- leverages non-learning technologies, such as instant messaging, intelligent search, and content management
- integrates learning with knowledge management.

Let's look at immediacy. Today's fast-paced and ever-changing work environment no longer supports a model where workers can take courses on topics that they might use at some point in the future. Formal, structured learning events are, by definition, time consuming. While new technologies that dynamically tag and retrieve e-learning content are being developed, traditionally the most immediate answers are obtained from simply asking the person in the next cubicle. What if we could extend the ability to easily ask a question of someone across the floor, on the next floor, in the next building, or even across the country? This takes us to collaboration.

Collaboration underlies embedded learning—and that is mainly what distinguishes it from performance-based learning programs. It is impossible to capture, store, and catalog the vast repository of "institutional knowledge" existing in the minds of employees. While early knowledge management efforts focused on formalizing that knowledge, there aren't many recorded success stories. The knowledge is too vast and dynamic to formalize it. Instead, embedded learning provides the individual with access to this knowledge as opposed to embarking on an up-front capturing of what exists in the minds of dozens, and even thousands, of experts. The ability to capture and store the exchange, de facto, formalizes this knowledge.

The third characteristic of embedded learning is one that unnerves some learning technology vendors. Many of the technologies supporting embedded learning are already ubiquitous in offices today—email, instant messaging, search engines, online people directories, and portals. These technologies, and others, can often easily and cost-effectively be deployed in support of embedded learning. However, embedded learning requires tight integration into workplace tools and portals, so care should be taken not to declare it as a simple drop-in solution.

Finally, embedded learning integrates knowledge management with learning. Providing access to tacit (such as policies and procedures) and explicit knowledge is key. Knowledge is presented in numerous ways—data, FAQs, websites, papers, stored video, stored audio, and presentations. The embedded learning environment sorts and presents that knowledge based on the needs of the learner or worker. Also, by making knowledge capture at the scene (just like Lori did in the opening scenario), many of the traditional capture challenges are alleviated.

Overcome barriers

Transforming an organization's culture toward collaboration and knowledge sharing can be very challenging. In some organizations, information hoarding is viewed as the key to success. Even in environments where information hoarding is not present, it is often difficult for employees to get their arms around new roles and responsibilities required for collaborative success. For example, part of Lori's role as a subject-matter expert means spending a portion of her day advising others and ensuring that knowledge and training gets into the right hands. Yet, Lori also has a day job as one of the top finance performers.

Organizations must recognize the return-on-investment of having Lori play this new role. Lori is not a trainer or supervisor, she's very much part of the finance front lines—she could not be effective in her position otherwise. The technologies and tools supporting embedded learning are not complicated, but care must be taken not to make snap judgments. For example, a learning management system or LMS may play a key role in embedded learning, but an organization can implement elements of embedded learning without an LMS.

Embedded learning is a completely different paradigm than the learn-then-do environment. It is the learning organizations and leaders themselves who can have the most difficulty embracing this concept as their roles dramatically shift from content provider to content intermediary, thus ensuring access to a variety of sources in the best means possible. Now, more than ever, the learning professional has to possess a deep understanding of the work process.

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Implement embedded learning

Transitioning to embedded learning requires careful planning and coordination across multiple divisions—HR or learning, functional lines, and technology, to name a few. To get the process started, organizations can use the following questions to assess their readiness for embedded learning:

- **Has the amount of your formal training declined in recent years due to cost and productivity pressures?**
- **Has the pace of required learning increased due to changes in your organization and work environment?**
- **Are there frequent changes in your work processes and work rules?**
- **Are you effectively tapping the institutional knowledge of your expert workers?**
- **Are your expert workers geographically dispersed?**
- **Are you concerned with losing key expertise due to competitive pressures or retirement?**

Does that mean the continued decentralization of learning? Perhaps, but centralized direction is still required to establish standards and principles for the embedded learning model.

Shift from learning to working

The nature of work is changing. Employers require greater productivity and expend fewer hours on activities that do not provide immediate results. Employers also recognize that traditional e-learning programs may not necessarily be the solution because they often require participation outside the work context. Our clients are telling us that they can no longer afford to send employees to class, nor can they afford to have employees spend hours on e-learning activities that do not directly support the task at hand. Thus, we are working to break down traditional e-learning material into byte-sized learning objects so they can be easily embedded into the workflow.

Now comes the inevitable question: "Like so many other quick fixes in today's society, are we sacrificing learning in favor of simply developing good search and navigation skills?" No. Embedded learning does not advocate collaboration and query above everything else. Formal learning interventions, both group and individual, will still play a key role in the long-term development of employees. However, these interventions will now be geared toward supporting longer term competency development (those behavioral characteristics so important to success); while the embedded learning-focused collaborative and query interventions support skills development (the knowledge needed to complete a key task). That distinction between competency and skills is key to understanding the role that formal learning will continue to play.

Change the future of learning

As technology continues to evolve at a rapid pace, learning will be further embedded into an employee's work flow. Learning methods need to reflect this evolution. A tech-savvy generation is entering the workforce with technology embedded into their everyday lives. Smart mobile devices, contextual search capabilities, and multi-sensory input and output options will allow individuals to access learning around the world and around the clock.

By empowering your employees with different learning tools and embedding them into the work flow, your workforce will not only benefit from the many learning resources offered, they will acknowledge the value and commitment to learning. Learning organizations will increase efficiencies and productivity, while positioning themselves for continued future growth. TD

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