Today's workplace must employ knowledgeable, flexible, efficient, and adaptable workers who are lifelong learners. Adult learners need to be updated on the latest changes in the structure of the business environment. Business programs must respond to corporate and personal development needs by designing curriculum that embraces the management skills required by a changing business world. Because of workplace changes, managers need to cultivate change skills (such as flexibility, efficiency, and adaptability) in themselves and workers. People and corporations are undergoing paradigm shifts, where the accepted reality of their world is changing. Businesses are recognizing innovative ways to increase productivity by redesigning entire critical business processes and using technology to support the new designs. Business leaders must know how to attract, train, and retain "knowledge workers." E-learning offers 10 major advantages to the business world and work force: real-time learning; learner-centric training; learning-on-demand, which can help attract, train, and retain key workers; personalized individual training; ownership and empowerment; simulation; collaboration; training anytime and anywhere; cost effectiveness; and quantifiable return-on-investment. Employee education methods must be flexible and cost-efficient. The need for organizations to promote and capture learning at the individual, team, and organizational levels has fueled considerable interest in the concept of the learning organization. Online learning is effective and efficient. (Contains 15 references.) (YLB)
Relevance of Education & Training in a Business Environment

Jo Ann M. Whiteman
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Information technologies are changing the way we think, the way we teach and the way we learn. Gone are the days of attending school, graduating and sometimes returning. As we enter the new millennium rapid and revolutionary changes continue to occur in the structure of global business. It is therefore apparent that today’s workplace will have to employ knowledgeable, flexible, efficient and adaptable workers that are lifelong learners (Devarics, 2000).

We have entered the century of reality-based learning as higher education continues to redefine itself in preparation for the next century and beyond. The challenge includes a diverse student body that may include students that are older than the professor. Diversity also exists in experience, more particularly both business and technical experience. The mature student considers himself as a customer shopping for the best training value that can be found.

Changing Business World

Business models and processes have transformed due to digital technologies. Ebusiness, eCommerce, Trading Partners, the Web, eEnterprise, eMarkets are changing the way we work within and outside of the business organization. The delivery of business products and services continue to change. Business management systems, workflow automation, bar coding, Internet commerce, CD-Rom, EDI are a few frequently used terms in this environment.

In most cases, the adult learner needs to be updated on the latest changes occurring in the structure of the modern day business environment. Moving into the 21st century presents special challenges for graduate business education. Business programs must respond to corporate and personal development needs by designing a curriculum
that embraces the management skills required by a changing business world (Strugatch, 2000).

Dealing with Changes

Changes in the workplace require managers to be prepared to manage challenges. Managers need to cultivate, in themselves and other workers change skills such as flexibility, efficiency and adaptability (Odgers & Keeling, 2000). Creative managers seize new changes in the environment surrounding the organization to create new products, services, and processes (Basadur & Robinson, 1993). Further improvements to current routine processes, products and services can also occur during this time.

Human nature sometimes causes us to feel afraid. It is what one does with the fear that counts. The flexible employee views change as opening up new opportunities for gain. The positive attitude of resilient people is the most potent survival skill needed when facing change (Sandroff, 1993).

Paradigm Shifts

People will go for years believing one thing despite mounting evidence to the contrary. All of a sudden they notice the conflicting evidence, change their minds, and wonder why they continued to believe otherwise, a paradigm shift occurs in this instance.

In this high-tech and networked business world many people and corporations are going through paradigm shifts, where the accepted reality of their world is changing. For example, some companies are losing their share of customers, while others are finding ways to entice customers by doing everything faster, smarter and cheaper.

Businesses are recognizing innovative ways to increase productivity by redesigning entire critical business processes and using technology to support these new
designs. When management and workers alike recognize that these changes should be embraced, organizations can keep abreast of these changes and hopefully ahead of competition.

**A New look at Workforce Training**

Small business owners, entrepreneurs, executives and managers face the challenge of not only recognizing when change is coming, but where it's coming from, and how it will affect their business operations. As they recognize these trends, they must also know how to proactively manage change and its resulting effects. Some visionary leaders are quick to see emerging markets and industries. But quite often, a paradoxical change occurs that will alter the way the business world operates - pushing executives out with their golden parachutes.

In addition to facing the challenge of recognizing change, business leaders must also know how to attract, train and retain "Knowledge workers". In the past, this has been viewed as a very high expense to companies, a "liability" rather than a necessity. How can business leaders "attract, train and retain" their employees and show a substantial return-on-investment (ROI)?

**E-Learning**

It's a difficult task to train and retain the "Knowledge workers" of the world - the workforces of the new millennium are now "free agents" and job hoppers at a whim. What they offer is portable knowledge. There is a possible solution to these three business concerns and weaknesses - e-Learning.

What is e-learning? Here is a definition by Greg Priest, CEO of SmartForce:
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"e-Learning is to traditional training as e-business is to the five-and-dime. E-Learning puts the learner in the center of the equations instead of the trainer (Priest, 1999).

In 1999, corporate America alone spent $63 billion on educating and training its workforce. Of that spending, e-Learning, at $3 billion, accounted for the fastest-growing fragment of the market. What began simply as IT training has made its way into management, sales, marketing, customer service, and professional development. This multimedia approach to training is quickly migrating to the Web. International Data Corporation projects that Web-based corporate training revenues will grow to $11.4 billion by 2003. Other analyst reports estimate a much higher dollar figure. Either way, the pie is growing rapidly.

In the final analysis, e-Learning offers ten major advantages to the business world and its workforce.

- **Real-time learning.**
  
e-Learning offers real-time learning and application of critical knowledge.
  
Knowledge will no longer need to be taken from the shelf of the training department, brushed off and reviewed. e-Learning is immediate and provides up to date information. Just as the Internet has revolutionized information accessibility, so e-Learning begins to revolutionize training.

- **Learner-centric training.**
  
e-Learning changes the focus of training from traditional instructor-centric to learner-centric training. This is how training and learning should be done. e-
Learning is tailored to the learners’ professional responsibilities and capabilities, creating relevant application to their needs.

- **Attract, train and retain.**

  The most important assets in a company are its “Knowledge workers”. The shortage of skilled workers is global. Research shows that the number one reason for loss of key employees is that they feel their company hasn't invested sufficient resources for their professional development. e-Learning not only addresses the workers' need to develop new knowledge and skills, but provides learning-on-demand (LOD).

- **Personalized individual training.**

  An effective e-Learning system learns about its users and tailors its offerings to their learning style, job requirements, career goals, current knowledge, and personal preferences. This is all accomplished through “portions” of learning granules and objects labeled so systems can automatically create and deliver individualized learning experiences.

- **Ownership & Empowerment.**

  e-Learners are responsible for their own learning. e-Learning empowers them to manage and implement their own learning and development plans. Ownership of learning is crucial for individual growth and retention of employees. Empowerment creates learner ownership and direction – leading to powerful learning and growth potential.

- **Simulation.**

  We learn by seeing and doing. e-Learning introduces a truly innovative way of
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simulating each learning experience with content and ideas provided by some of
the leading professionals in the world.

- **Collaboration.**
  This is accomplished through either joint problem solving or discussion among
  study groups through forums, discussion groups and chat rooms. Collaboration is
  the way to effective learning - opening the path to broader thought and innovative
  processes through the sharing of ideas and experience.

- **Anytime and anywhere.**
  One difficult and costly process of traditional training is coordinating travel,
  resources, materials, classroom settings, or seminar training for a global
  workforce. The reality of training in a virtual information classroom, across
  continents, is now possible - anytime, anywhere.

- **Cost effective.**
  Costs can be applied to each learner and results can be measured against them.
  More importantly, e-Learning is less intrusive to the daily work duties of the
  company and learner, saving time and money through less interruption of
  employees regularly scheduled duties.

- **Quantifiable ROI.**
  e-Learning can be effectively measured in terms of knowledge gain and
  retention. Companies will be able to establish systems that can track progress,
  report results, and specify additional subject matter for continued success. Both
  employer and employee will recognize this as real ROI.
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e-Learning offers companies the ability to address and manage the monumental task of hiring, training, and retaining the new “Knowledge worker”. It also will show which corporations are serious about attracting, training, and retaining their global workforce.

Last year, 70 million people received training and education on the Internet. Soon, training for nearly every job in the world will be available over the Internet. The real change in business practice will be the acceptance that the knowledge of employees represents a competitive edge (Barron, 2001). In fact, it is the competitive advantage companies’ neglect most often. Speed, connectivity, and intangible value have made e-Learning the prime choice for creating and maintaining a competitive advantage in an ever-changing information world. Knowledge is not only Internet mobile, but mobile with each employee.

John T. Chambers, President and CEO, Cisco Systems stated, "The next big killer application for the Internet is going to be education. Education over the Internet is going to be so big it is going to make e-mail look like a rounding error."

Investment in Education

Companies must invest in their greatest asset, their employees. There is a need to keep all employees updated on the skills necessary to work in today’s global environment. This includes frontline staff as well as management. “No person, team, process, or company ever knows enough” (Kalakota & Robinson, 2001).

Updated information is needed now. The education methods must be flexible and cost-efficient. Depending on the course, the employee, also called a nontraditional adult learner, should be able to attend traditional classrooms or virtual classrooms on the
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Internet or on cable TV. Many of these learners are confronted with the reality of extremely limited time for self-learning the minimum technological skills.

As more organizations become knowledge-based, they are realizing how important continuous or lifelong learning can be to their overall success. It is essential that organizations promote and capture learning at the individual, team, and organizational levels. That need has fueled considerable interest in the concept of the learning organization. The characteristics of which are:

- A climate that encourages, rewards, and enhances individual and collective learning.
- A view that mistakes and failures are learning opportunities.
- A widely available and unlimited access to information and resources.
- A desire for continuous improvement and renewal
- Learning which is integrated with and a part of everyday work.
- Opportunities for open dialogue and inquiry (Clemmer, 1998).

Learning on the Web

So, what type of learning media for the lifelong, nontraditional, frontline worker and executive will work? It is important to increase access to higher education for those adults who work fulltime, have heavy family obligations, and/or are unable, for whatever reason, to attend traditional face-to-face instruction. Using computer-mediated instruction, the focus is on home or workplace study that is both interactive with faculty and collaborative with other students. Courses are delivered "on-line" to remote off-campus locations -- either in a student’s home, workplace or possibly at the local
community college. Students are able to access coursework without the potentially exclusionary constraints of having to be present at a specific location during a scheduled time; they can enter the "classroom" and engage the material anytime and anyplace (Whiteman, 2000a). How effective are online courses? A study, conducted by a group of 16 professors at the University of Illinois, concludes that online learning can be applied effectively--without compromising academic quality--provided it's augmented with classroom learning. Limiting class size for online learning is key to ensuring that it's sufficiently engaging for students, the authors also found.

The study, conducted as a yearlong seminar by the Illinois group, casts the technology in an optimistic light. Skeptics and enthusiasts on the panel were evenly split, and together they examined several recent examples of online learning. They also reviewed the impact of online learning among faculty and students and pedagogical issues surrounding the medium.

"Online teaching and learning can be done with high quality if new approaches are employed which compensate for the limitations of technology, and if professors make the effort to create and maintain the human touch of attentiveness to their students," the panel concluded in their report (University of Illinois, 1999).

The Web not only allows people to learn in context; it also allows them to learn in communities. There's a whole taxonomy of places on the Net -- portal exchanges, community sites, support sites -- that serve all kinds of professionals and that mix business with learning.
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Learning at the Workplace

In a study conducted at three Colorado communities: a large city, a small city and a rural town an examination of change was looked at from the perspective of two groups of people: the participants and their supervisors. The analysis of the data provided insight into three very interesting questions:

1. "In what setting do participants apply learning?
2. What kinds of application do learners make?
3. What difference does workplace learning make to organizations that sponsor the training?" (Gershwin, 1998)

The data collected from the learners provided support for the supervisor on behavioral change to improve relationships. Skills learned were used to build relationships both at home and in the workplace. They took on responsibility, taking greater initiative and involvement. For example they were willing to help each other in the training process and some participants even thought about going back to school part-time to earn a degree.

Further, according to the supervisors, workplace participants demonstrated improvement in three key areas:

- They communicate more effectively,
- They take on more responsibility, and
- They demonstrated improved skills on the job (Gershwin, 1998).

The supervisors also reported employees increased skills on the job and they brought the new skills to real situations. They also showed another major change, attitude. According to the supervisors, employees exhibited greater openness to new information,
new ideas, awareness of needs of others, willingness to accept change, and increased interest in tasks (Gershwin, 1998).

Other changes reported were the ability to reflect upon how they were experiencing the process of using new skills as they discussed and shared this process with others. Most importantly they had a new awareness of communication patterns. For instance they took a conscious effort not to interrupt others and took time to listen to others.

Supervisors reported that workplace learning produced a climate of teamwork and flexibility. A spirit of cooperation, camaraderie and interdepartmental communication improved. They reported that the workplace environment was positive, which made it a more pleasant. As this attitude spread, customer service improved. For many organizations, this meant a significant bottom-line increase.

“To recruit and retain smart people, you need to make it easy for them to collaborate with other smart people. That makes for a stimulating, energized workplace. A collaborative culture, reinforced by information flow, makes it possible for smart people all over the company to be in touch with each other” (Gates, 1999).

Conclusion

We all understand that work skills are becoming more sophisticated because of technology and today’s information may be obsolete next week (Whiteman, 2000b). Then who is responsible for training and upgrading the skills of employees? Does an organization continue to hire from the outside? Skilled employees are sometimes tough to find and expensive to recruit. Should an organization develop their present employees? Having your own home grown employees that have been nurtured by their
own organization is truly a possibility. Perhaps training in-house? Perhaps training on the web? In today's workplace, many agree that the cost of keeping people — even if you have to spend money to train them and make them feel better about what they are doing — is minor compared to the cost of replacing them (Barrier, 1998).

Education and training has relevance in a business environment since it effects working conditions. It is one of the reasons why employees stay on board. Managers must learn to coach, mentor and empower employees. Employees should be made to feel part of the organization and be involved in the growing process. Lifelong learning is an intricate ingredient in fulfilling this requirement. Think of the salesman that is on the road most of the time. He needs to know about changes in his company's product line and about what his competitors are doing. He wants to go to a Web site where someone has posted the information that he needs on an intranet bulletin board or online course that may have been designed by a district or home office trainer. The communication continuously occurs and input is received from all concerned before the change actually occurs.

The need for e-learning systems that are substantive, as well as integrated into business processes, points to the big breakthrough in learning today: knowledge management -- the delivery of exactly the right information to exactly the people who need it, when they need it. That's knowledge management. With that model, the Web begins to look more like a library rather than a classroom. You can use assistance from courses, articles, and collaboration tools like email. Information that's organized and accessible can be accessed. That way, the Web becomes a place where you're learning all the time.
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Will this be the end of the brick and mortar post secondary schools? I don’t think so. However, the effectiveness and efficiency of online learning will lead higher education to incorporate large elements of e-learning into their program that is convenient for the employees in the business environment.
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