

EFFECTIVENESS OF BLENDED LEARNING

By

A.V. NAGESWARA RAO

Faculty Member,

Srinivasa Institute Of Management Studies (SIMS),

Visakhapatnam.

ABSTRACT

The introduction of blended learning added new dimension to training, and the possibilities for delivering knowledge and information to learners at an accelerated pace and opened new vistas for knowledge management. Industry pioneers and academicians agree that blended learning will continue to become a driving force in business and in education. Few years ago the term blended learning was not well known among the people. Technology-enabled learning and online Web-based training, which morphed into blended learning is an important tool in Education Scenario.

The phrase "blended learning" is being used increasingly to describe learning and teaching approaches which contain a mixture of online activities and face to face activities. Blended learning provides the necessary communication, collaboration, and learning technology to quickly and efficiently keep employees up-to-date on new procedures and offerings without taking them out of the field.

Key Words: Blended learning, knowledge management, technology, strategic solution, Content management, e-learning, effectiveness

INTRODUCTION

Organizations see blended learning as a strategic solution that must be deployed to all employees. Enterprise-wide roll-outs are used to increase sales effectiveness, improve organizational competency, and build rich customer relationships. Companies find that without spending time to properly train employees and customers, the investment in major Advanced Planning Systems, ERP, and CRM purchases will fail. Consequently, blended learning will continue to be a part of organizational infrastructure, similar to other product suites used to increase staff productivity.

Similar to traditional classroom training, blended learning can provide technical and non-technical training to employees, such as application-based training, on how to operate software or skills-based training on how to deal with customers over the Internet. The types of blended learning offerings are large and diverse, consisting of three

major categories.

Content, Technology, and Services.

Content, Technology, and Services are the three major categories of BL. When considering content, companies should look at vertical areas, such as business skills, technical skills, soft skills, and organization-specific customized packages. The format through which one can deliver information must be considered as, whether it's simulations, operations, games, mentoring, or so forth. With regards to technology, current and future needs for learning management, content management, knowledge management, content distribution, competency management, collaboration, assessments, reporting, workflow, and localization have to be take into account. In the area of services, think about change management, customization, strategic deployment, project management, operations management and other areas related to the successful implementation and

deployment of technology within the organization.

In many cases, a comprehensive blended learning solution requires components from each category, which are integrated into blended learning suites aimed at solving a particular business issue, such as within the sales department or product-specific training. The trend is to look for a supplier who can help to decide what you need and how best to configure and integrate the parts and pieces for the total solution. To preserve the best blended learning suite possible for an organization, incorporating open interfaces with the capability to integrate with existing corporate computing infrastructure, and checking for compliance with industry specific standards are essential.

A current buzz phrase and trend involves blended learning programs, designed to integrate with traditional training methods to increase overall effectiveness. A single delivery mechanism is no longer sufficient to handle enterprise-wide training needs.

The construction of true blended learning programs moves learning into a new age. Blended learning preserves the necessary consideration of how people learn but offers options for learning and can still produce measurable savings in learning offerings promised by blended learning

Hand-in-hand with blended learning, there's an increased desire for a seamless transition from one learning activity to another. Rather than stand-alone learning activities, the trend is towards the integration of these activities or delivery mechanisms. Look for seamless transitions from live group activities to individual exercises, from self-paced learning activities to synchronous instruction, from activities in smaller groups to activities in a larger learning community.

Blended learning, online collaboration, and knowledge management are margining into each other. Suppliers

who understand this trend and can offer options for knowledge management and digital collaboration are to be sought. The trend towards standardization of digital collaboration platforms means that an IT organization will likely be a part of one's decision to buy, so they can be involved in the selection process.

Prior to the recent economic downturn, businesses had capital to invest in new technology. At this time, organizations are extremely cautious about how they invest, or whether they invest at all. They look for business solutions that support key business initiatives, relieve immediate pains, and offer a quick return on investment.

As blended learning developed, most offerings consisted of basic libraries of self-paced courses that were accessible over the Internet. Learning management focused on activity tracking, and live synchronous blended learning modeled content delivery and interaction on the traditional classroom methodologies.

With the trend toward hybrid experiences in which self-paced learning, content management, and live blended learning come together under one platform, the ability to repurpose content for various delivery formats will become critical, not only from a content development standpoint, but as a way to meet the learning needs of a diverse set of learners. As part of this trend, venues for subject matter experts, within and outside formal training departments is needed, to create content easily through the use of simple wizards and content authoring tools.

Early adopters of blended learning consisted mainly of corporations, which were trying to augment face-to-face meetings, conferences, demonstrations, training classes, and lectures. Government agencies, colleges, universities, and non-profit organizations are now following suit. These organizations are using blended learning to address their learning and communication needs, as well as expand their business opportunities.

A few years ago, organizations expected learning management systems to increase learning and solve business problems. The Learning Management Systems strategy was reasonable, but it involved a corporate commitment of time, cost, resources, and energy that only a few organizations could afford. Learning Management Systems were touted as end-to-end solutions, that could do anything and everything. The fact is that no single product can do it all. Effective knowledge delivery solutions need to work externally as well as internally to connect business units, suppliers, and customers. The current trend is to look at the big picture of knowledge delivery and combine HR management, learning management, and content management to address enterprise-wide learning needs from the inside out.

These tools are intended to provide a framework for considering the organization's learning needs. Therefore, when purchasing learning solutions, one must be thinking about the deployment options. To work with suppliers who can offer learning tools in a variety of configurations, including universal software licensing for on-premise installation, outsourced hosting services, and full-service collaboration for Advanced Planning Systems will give better results. Additionally, the supplier should offer products to meet the needs of both internal and external audiences and support industry standards to ensure interoperability with other enterprise learning systems and content types. It is important to work with suppliers who speak about the changes, than an organization may experience with blended learning, and how it can be managed. With these in mind, it's a reasonable prediction that blended learning will become a part of the daily life of organizations.

As teachers move from the form to the substance, the core tool for the e-learning platform creator is Learning

Content Management (LCM) software, like Jupiter Suite 4.5 from Englewood, Colo.-based Avaltus. This allows instructors to create content tailored to each user at the precise moment he needs it. More advanced technologies offer the promise of streamlined programs, live or pre-recorded, that integrate voice, video and data through audio, video, and Web conferencing and online course management. They result in true interaction across borders. Satellite technology is also being used in unique e-learning environments. There's something very special that happens when you enable students to reach out beyond the walls of their classrooms and interact with other people who are interested in the topic they are studying. It helps to give importance to the subject."The advantage of more advanced distance-learning technology is that, unlike the simple equipment described above, which lets people to transfer data and generic documents, the more complex tools allow users to share presentations, documents, applications and video immediately with anyone, anywhere and at any time. They are generally compatible with Windows, Macintosh, or Solaris systems and use a standard Web browser Blended learning content helps teachers incorporate the Internet into their classrooms.

Blended learning can be used as an alternative to Traditional learning with more specific with the following:

Design the customised Course:

If the expectation is of a change in attitude, beliefs or thinking, design the course to be a customised course. For such courses, limited human interaction, such as which normally occurs with self-paced digital designs, is acceptable, as is perhaps the use of the ubiquitous multiple-choice exam.

If the course is a competency course, it should be custom developed. Here the expectation is that the learner will change behavior in some way that benefits the

organization and the learner (new skills, new capability, enhanced performance, etc.).

Competency is measured by observation, not just by exam. Hence, organization subject matter experts or trained instructors must be involved in the design, development, delivery and assessment processes. Competency might be partially achieved through a digital library or a commercial catalog. It might be enhanced by independent research through the Internet. In the end, competency courses require human intervention and a program specifically designed to confirm that the student can perform to the required level of competency.

Rather than attempting to measure the competency of a person, the organization might want to consider measuring the competency of an entire group of people. If a group has achieved a satisfactory level of competency after having taken a course or program, some change in business performance should be observable by the leadership, even if that change is measured by subjective means.

Blended Learning- a Requirement:

If the organizational expectation is genuinely to effect change, whether through a survey or competency course, a requirement for continued employment can be formulated. Motivation is a factor, perhaps even a significant one, in determining the completion of a course. Making a course as a requirement of employment is one of the ways to increase that motivation.

Although survey courses is less important than competency courses, interaction with instructors/mentors and peers can be important to learner satisfaction and confidence. Instructor or mentor interaction can provide the reinforcement and support the learner needs to feel competent and the person must be kept involved in the learning process. Interaction might be achieved using

electronic facilities such as synchronous, interactive software, chat rooms or even bulletin board facilities. E-mail is another alternative.

Provide Opportunities for Practice

Competency is not achieved by just reading material and viewing pages on a computer screen. Opportunities must be provided for human interaction through peer-to-peer exercises, discussion groups, practice sessions and similar activities. In many cases the human interaction is possible by electronic means, whether in real-time or asynchronously. In any case, design is important, and the activities must be relevant to the course objectives. In some cases, the practice must be physical.

Make the Content Relevant

It was recently asserted that the best way to teach is to make the needed material as an obstacle to get one's work done. When the material is necessary, relevant and/or important, it can be placed in front of the learner rather than inviting them to take a course. In short, it is necessary to consider the need for the learning opportunity and push the content to the learner in appropriate time. For example, if there is a need to implement a supervisory user log-on to an internal system and post the following message: "Click here to learn how."

Three important points to be emphasized

Digital learning is as effective as any other learning method when:

- ? The organization's expectations are clearly identified.
- ? The learner's needs and readiness are properly considered.
- ? Business objectives merge with reason and sound pedagogical thought to guide the course design and decision-making processes.

In short, any learning opportunity would be effective, regardless of delivery means and methods, if it considered

the above instructions.

Benefits and challenges

Convenience is key in distance learning. After all, it allows self-paced, on-demand education. It also permits teachers to draw on a global array of resources.

In addition to convenience, the new technology promotes extraordinary cultural exchange. The people belonging to one culture can communicate openly with the people of another culture at any time as, you are building the foundation for understanding and tolerance.

Adoption of distance learning in public education is slow because the system is unreceptive to change and lacks the funds to properly implement the technological enhancements. Students also tend to have limited access to the high-speed Internet connections often required for the more sophisticated online learning programs.

In addition, self-paced learning requires self-discipline, a characteristic that not all students share. The challenge is fostering the change in work habits necessary for the full benefits of this technology to be realized. Online educational information also lacks the security of a live classroom. Teachers have no way of confirming that a particular student has completed a specific assignment. Many programs do, however, ensure the privacy and integrity of their data with standard SSL (secure-socket-layer) encryption protection.

The costs of collaborating are surprisingly low compared to the benefits and estimated returns on investment. E-mail, instant messaging, chat rooms, and other programs can be found at no cost on the Web. Video and audio conferencing, real-time or otherwise, can be purchased on a per-minute or per-session basis. Software might be purchased on a per-license basis or as a subscription.

Businesses benefit from streamlined expenses and faster dissemination of information. The high-speed transfer of

data results in increased competition and better-trained employees, partners, and customers. Companies with better-trained employees will find themselves at a competitive advantage, and "collaborative technologies by themselves are not the solutions for business problems. They must be applied to be effective."

Blended learning in the Work Place

An Internet search for "digital learning" or "e-learning" produces an abundance of opinions, statistics, forecasts and experiences, most of which suggest that digital learning offers considerable advantage to corporations from a return-on-investment (ROI) perspective.

How effective is digital learning when compared against an equivalent classroom event? How about retention of what was learned? What was the effect on productivity once the students were back on the job? Was there a difference in post-course supervision/mentoring that was required for those who had classroom training versus digital training? Was the learning experience even relevant to the real tasks on the job?

The answers are not easily found, in part, because such questions are not usually asked. Academic research generally suggests that digital learning produces outcomes that are similar to traditional classroom settings, (Beare, 1989; McCleary & Egan, 1989; Sonner, 1999); however, these studies focus on grades and ignore questions such as what factors account for success and to which degree is competency actually demonstrated. In short, there is a paucity of credible research by which to support a claim that digital learning is at least as effective as traditional classroom training in areas such as retention, relevance, satisfaction and performance. There is also a shortage of consistently positive reports from corporations that were early adopters of digital learning. Some have decried the initiative as a failed experiment while others are only able to report on ROI as the basis for their

approval.

The growing number of accounts of high drop-out rates (failure to complete), lack of user satisfaction and no differences in performance suggest that digital learning might not be the panacea often implied by proponents of digital learning products and services. While we cannot yet establish all reasons for the complaints, there are obvious contributing consequences of a rush to "go-digital": (a) poor quality content regardless of format, (b) poor instructional design, (c) technology and infrastructure problems, (d) inappropriate software decisions, and (e) inappropriate content for the business and learning objectives.

Another part of the challenge in determining what is either right or wrong with digital learning is that we have few instances where we can make reliable comparisons. Received assumptions, such as the viability of traditional classroom instruction, are obscure both in reasoning and research. It is probably safe to claim that all readers are most experienced in classroom education and training. It is likely that readers will also acknowledge that not all classroom experiences are satisfactory, conducive to learning or promote increased performance. So, how shall we draw conclusions about the effectiveness of one approach versus the other? In the first step we have to refine the question into perhaps a more appropriate question, as, When and where is digital learning as or more effective than traditional classroom training using equivalent learning content? While we must still define the terms "effective" and "digital learning," it is more likely that a comparison can be made when the content is controlled. Of the required definitions, "digital learning" is probably easiest to articulate. Most often the term is considered to mean a formal course along with measurement, both being delivered by electronic means. However, such a definition is far too limiting in the sense that it is assumed to

be a course. It is also limited in prescribing measurement. It should become apparent later, as digital learning is defined here in somewhat broader terms. It is the electronic delivery of material and/or interaction with the expectation of changing attitude, belief, thinking, and/or the behavior of the learner. This leaves the term "effectiveness."

Conclusion

Blended Learning offers unique opportunities to bring together resources from different sources. Access to external resources and to those created locally by the tutor can be integrated, course co-ordinators can work as teams and share resources more rapidly using learning technologies. The range and variety of learning resources available for students in carrying out study tasks is a mixture of digital, physical and human resources, accessed by face to face or online methods or a mixture of learning resources. Blended learning is changing in its implementation mechanism and covers a number of interesting and imaginative ways in which course design, learning activity styles and the information environment are changing.

References

- [1]. **Campbell, K. (2000, March).** E-Learning: Fact or Fiction? Dynamic Business Magazine..
- [2]. **Beare, P.L. (1989).** The comparative effectiveness of videotape, audiotape and telecture. The American Journal of Distance Education 3, 57-66.
- [3]. **Fallah, M & Ubell, R. (2000, December).** Blind scores in a graduate test: Conventional compared with web-based outcomes. ALN Magazine, 4(2), 1-5.
- [4]. **Feuerstein, R. (1980).** Instrumental Enrichment: An Intervention Program for Cognitive Modifiability. Baltimore: University Park Press.
- [5]. **Fitzpatrick, R. (2001).** "Is distance education better

than the traditional classroom?"

[6]. **Howe, J. (1987)**. Using cognitive psychology to help students learn how to learn. In J. Richardson, M. Eysenck and D. Piper (Eds), *Student learning: Research in Education and Cognitive Psychology* (pp. 135-146). Philadelphia: The Society for Research into Higher Education. Open University Press.

[7]. **Kerka, S. (1996)**. Distance learning, the Internet, and the World Wide Web. Washington, D.C.: Office of Educational Research and Improvement. (ERIC Document reproduction Service No. ED 395 214)

[8]. **Johnson, S., Aragon, N. & Palma-Rivas, N. (2000)**. Comparative analysis of learner satisfaction and learning outcomes in online and face-to-face learning environments. *Journal of Interactive Learning Research*, 11, 29-49.

[9]. **Knight, J., Ridley, D.R., & Davies, E.S. (1998, May)**. "Assessment of student academic achievement in an on-line program." Paper presented at the Association for Institutional Research Annual Forum, Minneapolis, MN.

[10]. **Lawson, T. (2000)**. Teaching a social psychology course on the web. *Teaching Psychology*, 27, 285-288.

[11]. **McCleary, I. & Egan, M. (1989)**. Program design and evaluation: Two-way interactive television. *The American Journal of Distance Education*, 3, 50-60.

[12]. **Ridley, D.R. (1998, June)**. "The 1998 assessment

report on CNU on-line." Paper presented to the State Council of Higher Education for Virginia, Newport News, VA.

[13]. **Ruttenberg, A. & Ruttenberg, R. (2000)**. "Railway Workers Hazardous Materials Training Program: Evaluation of On-line Eight-Hour Awareness Training Pilot." Unpublished Paper: George Meany Center for Labor Studies-National Labor College. Bethesda, MD.

[14]. **Saljo, R. (1987)**. The educational construction of learning. In J. Richardson, M. Eysenck and D. Piper (Eds), *Student learning: Research in Education and Cognitive Psychology* (pp. 101-108). Philadelphia: The Society for Research into Higher Education. Open University Press.

[15]. **Sonner, B. (1999)**. Success in the capstone business course - assessing the effectiveness of distance learning. *Journal of Education for Business*, 7, 243-248.

[16]. **Tucker, S. (2001)**. Distance education: Better, worse, or as good as traditional education. *Online Journal of Distance Learning Administration*, 4(4).

[17]. **Waschull, S.B. (1997, September)**. "Teaching and learning over the WWW." Paper presented at the meeting of the National Alliance of Community and technical Colleges, Biloxi, MS.

[18]. **Waschull, S.B. (2001)**. The online delivery of psychology courses: Attrition, performance, and evaluation. *Teaching of Psychology*, 28, 143-147.

ABOUT THE AUTHOR

Prof. A. V. Nageswara Rao is Faculty Member MBA Program, Srinivasa Institute of Management Studies, Vishakapatnam. He received his MBA from Andhra University and M.Phil from Madurai Kamaraj University. He has 6 years of teaching experience and specialized in International Business and Supply Chain Management His research interest lies in Effectiveness of Internet based teaching (IBT) and "Emerging trends in Supply chain Management".

