Publisher indicates that this work is on a Creative Commons license but doesn't specify which one. Access to this work was provided by the University of Maryland, Baltimore County (UMBC) ScholarWorks@UMBC digital repository on the Maryland Shared Open Access (MD-SOAR) platform.

Please provide feedback

Please support the ScholarWorks@UMBC repository by emailing scholarworks-group@umbc.edu and telling us what having access to this work means to you and why it’s important to you. Thank you.
PUBLISHER’S DECLARATION

The International Journal of Instructional Technology and Distance Learning is refereed, global in scope, and focused on research and innovation in teaching and learning.

The Journal was established to facilitate collaboration and communication among researchers, innovators, practitioners, and administrators of education and training programs involving instructional technologies and distance learning. The editors and peer reviewers are committed to publish significant writings of high academic stature.

The initial year of publication was funded by the TEIR Center, Duquesne University. The Executive Director of the Center, Lawrence Tomei, served as Publisher. Additional support was provided by DonEl Learning Inc. and freely donated time of the editors, and peer reviewers.

This Journal is provided without cost under the Creative Commons Copyright License.

Donald G. Perrin
Executive Editor
# Table of Contents – February 2005

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Editorial: The Golden Age of Television</td>
<td>1</td>
</tr>
<tr>
<td>Donald G. Perrin</td>
<td></td>
</tr>
<tr>
<td><strong>Refereed Papers</strong></td>
<td></td>
</tr>
<tr>
<td>New Teacher and Student Roles in the Technology-Supported, Language Classroom</td>
<td>3</td>
</tr>
<tr>
<td>Daithí Ó Murchú</td>
<td></td>
</tr>
<tr>
<td>Transformation in an Urban School:</td>
<td>11</td>
</tr>
<tr>
<td>Using Systemic Analysis to Understand an Innovative Urban Teacher’s Implementation of an Online Problem-Based Unit</td>
<td></td>
</tr>
<tr>
<td>Donna L. Russell</td>
<td></td>
</tr>
<tr>
<td>The Right Horse and Harness to Pull the Carriage:</td>
<td>29</td>
</tr>
<tr>
<td>Teaching Online Doctorate Students about Literature Reviews, Qualitative, and Quantitative Methods that <em>Drive</em> the Problem</td>
<td></td>
</tr>
<tr>
<td>Kim Blum and Brent Muirhead</td>
<td></td>
</tr>
<tr>
<td>What Makes an Online Group Project Work?</td>
<td>47</td>
</tr>
<tr>
<td>Students’ Perceptions before and after an Online Collaborative Problem/Project-Based Learning (PBL) Experience</td>
<td></td>
</tr>
<tr>
<td>Brenda I. Lopez-Ortiz and Lin Lin</td>
<td></td>
</tr>
<tr>
<td>Can Interest in Distance Training be Sustained in Corporate Organizations?</td>
<td>55</td>
</tr>
<tr>
<td>Zane L. Berge and Adrian A. Kendrick</td>
<td></td>
</tr>
</tbody>
</table>
Editorial

The Golden Age of Television

Donald G. Perrin

Since World War II, television has made its debut in education on broadcast channels, airborne television (MPATI), closed circuit television, Instructional Television Fixed Service (ITFS), cable television, satellite on C and Ku bands, Interactive Video via telephone lines and later using Internet Protocol (IP), and most recently on a host of handheld devices such as Personal Digital Assistants (PDAs) and cell phones. Analog radio and analog television are being replaced by digital radio and digital television from satellite and terrestrial sources.

All telecommunications are going digital.

We have seen the rise of special programming for preschool, K-12, higher education, and home consumption. We have seen educational programming of exceptional quality from the Public Broadcasting System and the Adult Learning Services. These programs that once upon a time were supplied as expensive 16mm films are now available at low cost on videocassette and DVD.

We have seen new technologies replace old, and production companies come and go. The success of new technologies such as cable television, World Wide Web, and Digital Video Disk have adversely affected the market for commercial television and television networks. The Public Broadcasting Service and Adult Learning Service (ALS) are increasingly dependent on Foundations, sponsors and fund raising. It is projected that ALS will close in September 2005.

As distance learning in colleges, universities, and school systems went online, funding for educational television production diminished. With cuts in federal and state funding, the future of educational television is uncertain at best. And the move to make television fully digital hastens the demise of existing television production and broadcast equipment.

The internet has been widely adopted for distance learning. It can be accessed anywhere, anytime, by almost anybody. It is highly interactive, ubiquitous and inexpensive. The inventory of educational resources is enormous and many resources come free of charge. Does the internet replace television? Not exactly. But it does so much more…

Is it possible that we are coming into the golden age of the Internet? Or is it already in decline as an agent of learning?

The possibilities are enormous, but so are the threats. Commercialization, spam, and spyware occupy an increasing percentage of bandwidth. The Digital Millennium Copyright Act and privatization of knowledge are propelling valuable free resources into “for sale” products and services. Government regulation and taxes loom like a dark cloud on the horizon. It would be easy to conclude that the Internet also has seen its Golden Age.

But wait!

Innovation and creativity - a powerful force for growth and change – are flourishing. Educators have adopted the Internet as important to facilitate learning at a level unprecedented for earlier technologies. Distance learning on the web is exploding as a world wide force for education and training. It is serving the underserved and provides access to education where it was previously inaccessible – in hospitals, prisons, home schools, and geographically remote areas. The Internet crosses local, state, geographic, international and cultural boundaries to form new kinds of learning communities; It supports mobile learners and flexible schedules. It supports many learning styles, languages, and levels of education and training.

The Internet is still at the beginning of its golden age. The best is yet to come!
Editor’s Note: Business and industry has adopted distance learning in its many forms for flexibility in scheduling, uniformity of training, and economic advantages. There is little reason to question its viability except for one fact. When budgets are tight, training is an easy target if it does not promote competitive advantage or the bottom line. With alternatives to training such as outsourcing, the question is again raised whether training programs, even distance training programs, can be sustained.

Can Interest in Distance Training be Sustained in Corporate Organizations?

Zane L. Berge and Adrian A. Kendrick

Establishment of distance training solutions in corporate organizations has increased on a large scale all around the world. This is especially true among organizations that have employees and clients scattered in various locations around the globe. The implementation of distance training is an effective tool for reducing training cost, saving time, and creating a more knowledgeable and productive workforce. Even so, implementation of distance training in corporate organizations is moving at a relatively slow pace (Lane, n.d.; Portway & Lane, n.d.). One theory is that many organizations just do not have the internal expertise to properly plan for the change in learning paradigms. Other organizations find it difficult to foster wide scale interest and now struggle to maintain their distance training program.

The purpose of this article is to analyze various obstacles that stifle interest in sustaining distance training in corporate organizations. The secondary purpose is to develop some possible solutions that can be used by organizations to implement and maintain distance training programs.

In this article, a distance training program is defined as an organizational process, consisting of policies and procedures specific to departments’ or divisions, functions and responsibilities (Schreiber and Berge, 1998). The following questions are explored:

1. How does the philosophy of education/learning in an organization affect the sustaining of distance training?
2. How can corporate organizations develop an infrastructure to support Distance Learning?
3. What is the role of leadership in maintaining interest in Distance Education Training?
4. How can corporate culture influence the sustaining of distance training?

Philosophy of Education and Learning

The ability to sustain distance training is deeply rooted in the successful adoption of technology, workplace learning, and the sharing of information. The development of an organizational philosophy that supports technology, life long learning and change can lay the foundation for supporting distance training. Organizations must not only establish a philosophy that uses technology but one that also supports equal access to course materials, updated information, maximizing resources, and promotion of learning that will support organizational objectives.

During the initial planning stages the organizational philosophy can produce answers concerning the rationale for implementing distance learning. The philosophy of an organization will have an impact on the success of distance training in planning, funding, equipment, staffing, and development. Simply put, the organizational philosophy establishes the level of commitment the organization has for distance training and the professional growth and development of the organization and employees.
Using Technology

Many organizations already have access to new technological advances. However, the organization is responsible for determining if current technology infrastructure can support and sustain distance learning. Development of a strong technology infrastructure must be part of the organization philosophy. This requires the organization to support technology, technical expertise and the use of new and innovative technologies. It is difficult to keep up with the fast pace of technological change (Cho and Berge, 2002).

Many instructors lack the knowledge and skills to design and teach distance learning courses, yet their organizations do not provide education opportunities or a support staff to assist them to develop distance learning course materials or provide distance learning training.

Technology will change and require constant updating. If the organization’s philosophy does not support technological change it is unlikely that the organization will continue to fund the distance training program over other organizational interest. This will make it very difficult for the organization to stay competitive. The organization’s support of the use of technology in the learning process will be instrumental in removing employee fears about using advance technology. Instructors fear that increased use of distance learning technologies may decrease the need for teachers. Thus, feeling intimidated by technology may threaten an instructor’s sense of competence or authority (Berge, et al. 2002). Either or both of these psychological factors may lead faculty to feel that their job security is threatened.

Providing Access

The use of technology can provide quick access to course materials and allow the free exchange of information to enhance learning. To be effective, an organization’s philosophy must support easy access to technology, course materials, and updated information throughout the entire organization. This in turn will sustain interest in distance training. Many organizations that provide distance training do not provide equal access to training sites; others make access difficult. To sustain interest, employees need access to training solutions on demand.

Maximizing Resources

Organizational philosophy must include the desire to maximize the use of resources to implement and sustain distance training. These include human resources, funds, equipment, partnerships and collaborations. It is important that organizations use these resources properly to gain the maximum benefit in meeting organizational objectives and boost their Return on Investment.

Communicating the Philosophy

Often the organization’s philosophy concerning training is not communicated beyond senior leadership. This can create a barrier between leaders and other staff members down cultural lines. Communicating the organizations philosophy on education and learning requires competent personnel that have a solid understanding of the numerous cultures operating within the organization, the organization’s mission and philosophy, and the organizations desire to offer distance training at all levels of the organization. Knowledge and understanding of the organization philosophy is directly related to work, production, organizational representation, information distribution, receptiveness of personnel, and impact realized on employees and the organization. Distance training signals what the organization and instructors do, while distance learning indicates what the learner does. (Berge, 2001 pg.16)

The development and implementation of a strategic plan will generally bring together representatives from various areas of expertise to make decisions related to the organizational mission, and to establish training needs for stakeholders. Members are generally made up of senior management, communication staff, technology, member services, and financial
management areas. Building blocks of a strategic plan consists of goals, policies, programs, actions, decisions, and allocation of resources that define the organization. (Knox, 1993 pg. 33)

The resulting objectives put the strategies into measurable and qualitative terms; they are the basis for the development of action plans. This is extremely important for organizations entering into stage three and four of technological maturity. It is at this point that the organizational philosophy, policies, and procedures can have the greatest impact on organizational change.

In a survey of distance trainers, Berge and Kearsley’s (2003) asked what are the biggest obstacles or issues associated with sustaining e-learning in your organization. Of those listed, the most important areas of concern were: 1) finding and retaining e-learning staff, 2) identifying what training needs can best be met by e-learning, 3) creating and maintaining interest in e-learning, 4) lack of consistent direction, support, or involvement from management or senior management, and 5) keeping up with rapid changes in technology.

After analyzing the results of their study, the primary focus from an organizational perspective should be how to sustain leadership interest in distance training. Leaders should be responsible for sustaining the interest of the line employee in their respective departments. The organization’s objective should be to ensure that all leaders buy into the value of distance training. Organizations must develop leaders that can champion the cause of distance training by:

1. Develop partnership and collaborations with other organizations.
2. Provide training programs that support the professional development of the leaders at all levels.
3. Provide training and access a wide array of resources where management and their employees can learn according to their own cognitive styles.
4. Provide management with sense of structure, and provide access to as much instructional and technical support as possible.
5. Seek new and innovative technology, stay informed on the newest developments in Internet or Intranet applications, and determine which ones might be suitable to sustain the distance training program at various levels of the organization.
6. Provide funding to allow management to continuously seek a highly qualified staff to maintain a high level of internal expertise and seek outsourcing help when practical.
7. Create policies that support professional development and organizational growth.

The development of a strong culture that supports distance education and training will allow organizations to develop policies and procedures that will enhance distance training efforts and assist in developing and sustaining infrastructure needed to support the constant changes of technology.
Developing and Sustaining the Infrastructure

Developing and sustaining an infrastructure that can foster interest in distance training requires effective supporting structures that can make the delivery of learning solutions possible. Sustaining distance training requires interest from personnel at every level within the organization and in some cases those external to the organization. Distance training relies upon the dynamic expertise of a committed and talented staff in roles that can sustain long-term interest in distance training. As businesses continue to grow and meet the challenges of a global market and meeting the demands of their customers, the need to increase the skills and knowledge of employees becomes more important to maintain a competitive edge. Corporations have found that independent, self-directed learners are extremely cost effective and allow the organization to benefit from the immediate impact of new employee skills and knowledge.

While this seems easy, many organizations have found that getting everyone on board requires the application of human resources and systems technology, while gaining a broad understanding of organizational culture and how value is placed internally and externally to the organization. Shepherd (2002) found that “many organizations do not have the skilled personnel, or infrastructure to successfully overcome cultural resistance to enthusiastically support new training solutions. However, today’s corporate training climate finds the cost savings, streamlined training, and instant return on investment too attractive to pass up.”

Corporate organizations of all types and sizes have found distance training to be a viable solution for their organization. The American Society of Training and Development (ASTD) pointed out that the investment in learning on the job has contributed to more than half of the nations increase in production over the last thirty years. Through investment of human capital and strategic development, companies are able to use technology more efficiently and development more effective employees who are able to solve problems using creative solutions.

IBM restructured their education and training program in 1984 with the goal of creating a highly trained competitive work force. However, the primary question they wanted answered was, did IBM possess a training department that is adequate for preparing a competitive workforce for the future. Management training is a critical business issue at IBM, and is part of its strategy for adapting to a changing economy. IBM asked researchers from Harvard University to conduct a study of its training program. When the managers were asked which method of delivery they wanted, most of them selected in-person, classroom learning. After participating in the e-learning based training, however, most of the managers selected the e-learning model as their favorite.

The support of senior leadership is key to sustaining distance training. Leadership must understand how distance training can assist them in meeting the organization’s objectives. This is necessary to build and support an infrastructure that will bring about organization maturity to support wide spread change toward distance training.

The first strategy many institutions adopt is to put in place the technology infrastructure (Waller, 2003). The technology infrastructure however, has several elements that are equally important and must be linked to the organizations overall strategy in sustaining a distance training in the corporate culture. These elements are 1) physical, 2) human support, 3) funding the technology, 4) assessing the adequacy of technology, and 5) the relationship between technology infrastructure and academic planning (Bates, 2000 pg.76-80).

In the case of IBM, the physical element, which includes desktops or laptop machines and mainframes or servers, were already in place. Therefore, additional attention was placed on the human support element of building a technology infrastructure, which is far more important in building organization maturity and key to maintain interest in distance training.
During the first stage of technology maturity it is suggested that organizations conduct separate or sporadic distance learning events (Berge, 2001, pg.15). IBM first focused on the leadership of the organization by developing a four-tiered e-learning program. The training content was offered online, was accessible at any time and was delivered via the company Intranet. A primary purpose of the program was the transfer of information and the communication of basic concepts regarding what it takes to be an IBM manager. Additional tools accessed in these tiers include: performance support; access to a massive database of questions; sample scenarios to address common concerns such as evaluation, retention and conflict resolution; access to interactive learning models with more than a dozen simulations; and collaborations using Lotus Learning Space, allowing students to interact and solve problems as a team. IBM’s initial training methods represent an example of separate and sporadic training, allowing the organization to foster champions among management during the early stages of organization maturity and get more productivity from the physical and human elements of the technology infrastructure. These efforts can be used as building blocks for stage two and three of organization maturity.

To develop and sustain interest in distance training, organizations must demonstrate the willingness to hire the appropriate staff and increase existing staff competencies to increase the technical expertise that can support the infrastructure needed to sustain a distance training program. Organizations that are willing to provide consistent funding for computing and communications technologies can ensure updates and changes are made that target the specific training and technology needs of the organization. This also can assist in the easy integration of training into the work process. This may require the use of outsourcing and the use of materials created by vendors or materials created through other partnerships and collaborations.

**The Funding Element of the Technology Infrastructure**

Evaluation plays a key role in sustaining distance training by providing required statistical data and reports to verify budgets, desired outcomes, and financial accountability. Finance professionals ensure that decision-makers have reliable, timely information to make critical training decisions. They should provide accurate reports to internal and external supporters relating training and productivity. This critical role enhances the quality, reliability, and responsiveness of the distance training program to keep up with rapid changes in the marketplace and in technology. Many organizations interest in distance training is limited to potential cost savings for training personnel. Finance personnel can provide information that will allow the organization to analyze the effectiveness of the program, implement additional spending, or determine spending priorities. Data produced by finance personnel can foster increased interest and support for distance training among management and other supporters in the organization.

**The Role of Leadership**

The role of the organization in sustaining distance training is extremely broad and encompasses an extensive list of issues and concerns that can act as obstacles to sustaining distance training. Just as important, if not more important, is the role of leaders at every level of the organization. Leadership must be willing to respond to the massive changes that the organization will undergo when implementing and sustaining distance training. It is imperative that leaders manage change and be prepared to lead future change efforts as well. This requires leaders to develop learners within their departments who have a motivation for learning for themselves, their department, and the organization, and are willing to champion the cause of distance learning. The leaders that are developed from a sound strategic plan will be characterized by a shared vision, systems thinking, and team learning. It is incumbent upon those leaders to stimulate active participation from their employees by reinforcing the use of new learning theories, new and innovative technologies, and organizational change. This is where the true cultural battle takes place, in the trenches of the organization. For distance training to be successful, the culture must recognize learning as a valued part of what people do and a productive activity, not a waste of time (Rosenberg, 2000).
Training managers must design and develop effective instructional materials based on a systems model of design and evaluation, and integrate adult learning principles throughout their course and program designs. They must also facilitate individual, group, and organizational learning and change, which may require providing flexibility among various corporate cultural issues that affect the design, delivery and evaluation of instruction. The goal of management is to create an environment that encourages learning as a valuable activity of the business supported by senior managers who are truly engaged in the process (Rosenberg, 2000).

Obstacles that could be directly linked to failures in the leadership of the organization include: 1) identifying what training needs can best be met by e-learning; 2) misconceptions about e-learning that result in under use or overuse; 3) need for instructor acceptance of e-learning; 4) getting employees to make time for e-learning; and 5) lack of consistent direction, support, or involvement from management or senior management (Berge and Kearsley, 2003).

Additional requirements by leaders to foster and maintain interest in distance training include:

1. Being accountable for their employees’ training.
2. Promoting a unified department.
3. Including time for training during work activities.
4. Continued involvement in distance training initiatives.

**The Influence of Corporate Culture**

The corporate culture can have a tremendous impact on the sustaining of distance training. These influences can be negative or positive when seeking wide spread acceptance of distance training solutions. In cases where distance training has already made a positive impact, the negative cultural influences may be minimal. The culture that has already seen the positive impact of distance training is more apt to be open to future changes and champion future initiatives. Organizations that find an excepting culture for distance training must seek to capitalize on this culture during the implementation process and find the right staff to champion the cause. This is especially true with organizations that operate over large geographical areas. In organizations where distance training is new to the organizational culture it requires a much broader approach. The negative impact of a culture that doesn’t embrace distance training can be devastating to any training initiative regardless of how great the technology infrastructure is or how much funding support has been placed into the training initiative.

Cho and Berge (2002), found that factors of organizational change include technical expertise, support, and infrastructure are the most frequent and influential barriers encountered. Their analysis determined the most effective way to change the organizational culture is to educate and find champions among the corporate executives. Organization’s policy makers must know what the ideal outcome of distance training should be. Organizations want to do the same training for less money while improving quality. This means, increasing effectiveness and making training more accessible to everyone. E-learning can contribute a great deal to this but only if it is part of an overall learning strategy. Learning at a distance is not easy for many students. The isolation from both the teacher and other students, the unfamiliar format and the need to self-pace their learning can be discouraging. To tap into the various organizational cultures the student must ultimately feel a part of the community of learners and share ownership into the over all success of the organization. What will drive change and growth in distance learning? It will be the policies and support from leaders. Success will have to include many of the techniques used to build a successful business to include effective marketing, highly reliable distribution, quality assurance, and the ability to quickly adopt to what works and quickly drop what does not (Strehle, 2000).
Evaluation

Another important area for maintaining is assessment and evaluation. The best plan for implementing distance training may not be the best plan to sustain the program. To properly assess and evaluate the distance training program the organization must maintain clear and consistent goals. While saving money is important to the organization this should not play an important role in measuring effectiveness, roles and learning. A program evaluation should include specific components that relate to technology-mediated delivery, separate and apart from the more traditional methods that rate the instructor’ performance and perceived worth of the content delivered (Berge, 2001 pg. 21).

To sustain interest in distance training the organization must use evaluation methods that measure quality and effectiveness as determined by the organization during the strategic planning process. Included in the evaluation process should be the most important asset, the instructors and students who are the nucleus of the distance training program. Their input concerning the effectiveness of the program can provide the organization with information to enhance the training process and foster cultural acceptance that can help sustain distance training.

Conclusion

Can interest in distance training be sustained in corporate organizations? Previous research suggests that interest in distance education can be sustained, however, the ability to sustain distance training is deeply rooted in the success during the early stages of implementing distance training and the integration of the work and learning environments.

Organizations must be proactive and identify those issues that act as barriers to their distance training efforts. Organizations can sustain distance training by understanding were they are in the stages of technological maturity, developing a comprehensive strategic plan, developing a sound technology infrastructure to include the various infrastructure elements, and building strong leaders to champion their initiatives and philosophy of education and learning.
References


About the Authors

Zane Berge, Ph.D. is Associate Professor of Education at UMBC in the Training Systems graduate programs. His teaching and research is in the area of distance training and education. Email: berge@umbc.edu.

Adrain Kendrick is currently a Graduate student at the University of Maryland, University College and is the lead Instructor of Explosives Safety Training at the Business Logistics and Support Division in Jacksonville, NC. Email: akendrick@cox.net.