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.

Balancing Top-Down,
Bottom-Up, and Peer-to-Peer Approaches
to Sustaining Distance Training

Gertrude DUDINK
Zane BERGE
UMBC-CANADA
1000 Hilltop Circle
Baltimore MD 21250

ABSTRACT

Many distance training case studies identify distance training leadership as bottom-up, whereas much of the literature suggests a need for strategic, top-down approaches. With change management as an overarching framework, approaches to sustaining distance training that originate at different levels of the organization are explored. Special attention is paid to the content of the change messages involved, guided by Rogers' five attributes of innovations. Research of change management and distance training literature suggests a combination of approaches that should fit the organizational culture as well as correctly address genuine concerns at the various organizational levels. A properly balanced approach could lead to new levels of communication and understanding in a learning organization and to distance training being sustained as a business process.

Keywords: Distance training; Bottom-Up, and Peer-to-Peer Approaches.

INTRODUCTION

Some distance training and education (DT&E) literature (Rosenberg, 2001; Berge, 2001) promotes strategic, top-down leadership in order to sustain elearning in the organization. On the other hand, elearning initiatives are unlikely to succeed without grassroots commitment to their adoption, both from training staff and from employees who will take the training. In other words, some training managers identify the elearning leadership in their organization as bottom-up (e.g., Berge and Kearsley, 2003). This paper explores the balance between top-down, bottom-up and peer-to-peer approaches to sustaining distance training, and the implications for the creation of a learning culture in the organization. It will focus on managing the human side of technological innovation.

BACKGROUND

Schreiber (1998) identifies four stages of an organization's technological maturity from the introduction to the institutionalization of distance training in the organization. At stage 1, distance training events are separate and introduced using project management approaches. At stage 2, a move towards program management is made and the technology infrastructure is able to support the program. Stage 3 starts to combine bottom-up and top-down approaches by addressing issues of organizational policy, procedures and planning; and at stage 4, distance training has become part of the strategy development procedures of the organization.

In the journey from the first to the fourth stage, organizational perspectives on the distance training initiative change, and the responsibility for sustaining it should shift with these perspectives. As can be seen from the description of stage 4, higher levels in the organization assume more responsibility and take over from separate departments—that is, if they can be made to see the value of distance training at the preceding stages. Assuming

the organization does not have a Chief Learning Officer or equivalent to start with, stages 1 and 2 have most likely been initiated from the bottom up—possibly by the training department, conceivably also by the ICT department. The introduction of distance training may have led to some isolated changes in the organization, but not necessarily to organizational change.

CHANGE AND CHANGE MANAGEMENT

According to Rosenberg (2001);

> Preparing your business for a shift to elearning requires that you build your learning culture, find and leverage your champions, and create sound, value-based communications. . . . The best way to approach these important issues is through a systematic change strategy, often referred to as "change management" (p. 199)

Change management aims to "effect managed change in both the people and business dimensions of an enterprise simultaneously" (Mackenzie-Robb, 2004, section "Change Management", p. 1). Ellsworth and Iorizzo (2001) additionally emphasize that change is a process, not an event. As can be seen from these definitions, organizational change affects all levels and individuals of the organization in question. Although a change effort can originate in any part of the organization, it will eventually require strategic effort from the top and buy-in from the bottom in order to be sustained.

There is no tried-and-true division of tasks and responsibilities in a change process. Nickols (2004) describes change as a "how," "what," and "why" problem. Which of these questions is asked usually depends on the place of the individual or department in the organization. However, Nickols emphasizes that, when organizational change proves necessary, all people at all levels of the organization should address all three questions in order for the change to be sustained over time.

It is therefore important to include various perspectives in approaching the change related to introducing and sustaining distance training in an organization: bottom-up, top-down and peer-to-peer approaches will intersect and interact to create profound change – or the change will not be sustained.

BOTTOM-UP APPROACHES

Like elearning, change management research shows the absolute imperative of having top level sponsorship for any project. . . . In reality, elearning projects seek and get no more than a top level sanction (mainly because of the budgets involved), and are not seen by senior management as tools for enterprise change (Mackenzie-Robb, 2004, section "Change Management", p. 6).

Starting from the Berge and Kearsley (2003) survey finding that bottom-up approaches are relatively common in the field of distance training, it is useful to explore these first. These approaches should address the problem identified by Mackenzie-Robb above: the distance training initiative should gain true commitment from the top, not just be sanctioned.

 "Building a business case" is often cited as the way to get top management on board (Rosenberg, 2001; Werner, n.d.). Clark and Kwinn (2005) fill this in from several angles by proposing seven routes a training manager can explore with his/her CEO. Each one of these routes requires the training manager to think from CEO's perspective.

Demonstrating the expected return on investment (ROI) of the initiative is a common approach, although it is not always easy to use measurements appropriate for training and performance adequately in ROI (Tobin, 1998b).

Attributes of Innovations

Another starting point for bottom-up approaches to making the case for distance training can be found in theories in the area of the diffusion of innovations. In a case study of an IBM management development program, Orton and Lewis (2000) apply the model of the "perceived attributes of innovations," described by Everett M. Rogers (2003). According to Rogers (2003), the characteristics of innovations, as perceived by individuals, help to explain their different rates of adoption. These characteristics are defined in terms of:

> - *relative advantage:* the degree to which an innovation is perceived as better than the idea it supersedes
> - *compatibility:* the degree to which an innovation is perceived as being consistent with the existing values, past experiences and needs of potential adopters
> - *complexity:* the degree to which an innovation is perceived as difficult to understand and use
> - *trialability:* the degree to which an innovation may be experimented with on a limited basis
> - *observability:* the degree to which the results of an innovation are visible to others (pp. 15-16)

While Orton and Lewis (2000) describe an example of an innovation introduced by a training unit (IBM Management Development) to a group of users (the managers to be trained), it appears these five characteristics can be more universally applied in the communication about proposed changes, top-down as well as bottom-up. Rosenberg (2001, pp. 193-196) sums up a list of ways to enrol the support of executives, which can each be classified under one or more of the five innovation characteristics:

> - Build a sound business case: a business case can illustrate the *relative advantages* of distance training *to management* in terms of costs, speed, access and performance improvement
> - Use success stories: this refers to the *observability* of the innovation
> - Educate executives: this could be linked to both the *observability* (in separate departments or pilot projects, or in similar companies) and *trialability* of distance training
> - Coach executives: helping the leader to develop policy or strategy around elearning. This strategy can help address issues of *complexity* and *compatibility* from the organizational, rather than the individual, perspective
> - Overcome prior perceptions: again, addresses *relative advantage* and *observability*, and also *compatibility* (in cases where distance training has been previously discarded as unsuitable for a particular organization)

Rosenberg's last two suggestions ("work the politics" and "ignore the disbelievers") have more to do with the persons to address with the messages described above rather than with the content of those messages. By applying the concept of the attributes of innovations to the content of the message to top management, expected advantages and gains can be formulated not only in financial terms.

TOP-DOWN APPROACHES

Top-down approaches to managing change are perhaps most often described and most easily identified. Yet, according to Senge (1996, p. 1), the evidence of top-management lacking the ability to lead successful corporate transformations is abundant. He warns against confusing positional authority with leadership. Senge (1996, section "Executive Leaders") argues that in order to gain true commitment to change, top management should look to local line leaders and "community builders" to initiate, manage and spread the change.

Executive leaders should take on a more modest role by articulating *guiding ideas*, paying attention to *learning infrastructure*, and promoting change within the *executive team* itself.

It follows that driving change through the organization is never exclusively a top-down responsibility. However, some initiatives usually originate at the higher levels of the organization and need to be communicated to other levels.

Vision

For the entire organization to back a large initiative that involves a culture change, a vision (cf. Senge's *guiding idea*) should be crafted (Bates, 2000). A vision – what the organization would really like to do in a few years' time – is not formulated by top management for top management. A vision needs to be shared throughout the organization. Therefore, senior management should involve stakeholders from all parts of the organization and make sure that all key stakeholders and constituencies are involved at an early stage in the conception and formulation of this vision. (Miller, 1992; Bates, 2000)

Message

Kramlinger (1998) suggests that the training department should be involved in the formulation of the change message – to make it a "learnable message" (p. 44), while the department is usually involved only later, when training about the change is being rolled out. This change message should focus on relevant learning objectives with the message aimed at a particular target group, not repeated for different constituencies. It should address employees' real concerns, and make a connection to employees' shared values.

This approach again comes close to communicating the necessity and possible advantages of the change along the lines of Rogers' (2003) five attributes of successful innovation. The relative advantage, compatibility, complexity, trialability and observability of the change should be reformulated for every separate target group, ranging from shareholders to front-line personnel. At the same time, these different messages should all be consistent with the overall vision to reduce resistance.

Resistance

According to Maurer (2001), nearly two-thirds of all major changes in organizations fail. Resistance is identified as the primary reason. Although ultimately, the success of the entire corporation will benefit all or most of its members, individuals and groups at different levels of the organization may define their own interests, and the value they attach to the proposed change, rather differently from top management.

Particularly if the initiative to integrate distance training into the training function did not originate in their own department, training staff may fear being replaced. Front-line personnel may see the initiative to have access to training "anytime, anywhere" as encroaching on their personal lives (Berge et al., 2005; Tait, 2002; Takiya, Archbold, & Berge, 2005).

Where top management may see the value proposition of distance training in terms of cost efficiency, quality, service and speed (Rosenberg, 2001, p. 227), this may not be the message content that will convince other levels in the organization of the necessity and advantages of the change.

Maurer (2001) warns against addressing resistance merely by providing more information. Resistance may have its roots at the physiological or emotional level and be linked to an individual's struggle for survival. Information addresses only the rational level. Peer-to-peer approaches (see below) may provide a more credible alternative by identifying and attempting to solve the "soft" issues.

Executive roles

As an alternative to directing change from the top, Meister (2000) identifies various roles executive leaders can play in change processes, particularly related to corporate universities: the CEO can act as visionary, sponsor, governor, subject matter expert, teacher, learner, and chief marketing agent for learning (pp. 54-56). John Coné (2000)

convincingly illustrates some of these roles by describing the role played by CEO Michael Dell at Dell Computer Corporation.

Taking on these roles, the executive leader seems to better fit Senge's ideal of the internal networker or "seed carrier" (1996). These roles allow the CEO to "walk the talk" or "lead by example": to show rather than tell the employees what the distance training initiative is all about and thus get the message across in more than one way.

PEER-TO-PEER APPROACHES

Rogers (2003) describes human communication as either *homophilous* (between individuals who are similar) or *heterophilous* (between individuals who are different). Homophilous communication is more likely to take place and to succeed, as the individuals involved share many of the same views, social background etc. However, the communication involved in a change process is more likely to be heterophilous – coming from levels higher-up in the organization, from outside consultants etc. Part of this discrepancy can be counteracted by focusing on the relevance of the message for a particular target group (see above).

However, it is also important to exploit the advantages of homophilous communication by identifying motivated individuals or groups that are perceived as trustworthy and credible by their peers. The search for distance training "champions" should therefore not be limited to any one level.

Tiger Teams
One instance of using distance training champions at different levels of the organization is described by Ellsworth and Iorizzo (2001): the deployment of "Tiger Teams". Such teams represent "the key stakeholder groups and [are] composed of individuals who already understood the technology and believed in its potential" (p. 37). These teams were successfully deployed to gain the buy-in of their (former) colleagues.

Although this is a useful means to get the message across, the authors do cite a number of pitfalls for this approach, such as the fact that overburdened departments may not be willing to delegate suitable candidates, or instead delegate staff about to retire or change position, which may diminish their being perceived as a "real" colleague. Also, Tiger Teams are no longer effective after a certain period of time, when the team comes to be seen as an independent entity (p. 39).

The team's message can again be framed into the five attributes of innovations cited above:

> ➢ relative advantage: being able to use an Electronic Performance Support System rather than retrieving the training handbook to look up a certain procedure
> ➢ compatibility: showing how distance training is compatible with the employee's needs and values
> ➢ complexity: helping overcome fear of technology
> ➢ trialability: offering a safe opportunity to practice and possibly fail in an informal situation between colleagues, rather than in a formal training setting
> ➢ observability: stories and demonstrations from early adopters, illustrating advantages over disadvantages, *from the perspective of the target group*

Other Peer Level Stakeholders
If the initiative to implement distance training originates in the training department, the first place to look for allies may be the ICT-department (the reverse also makes sense). IT people are among the most seasoned and enthusiastic elearners, with the majority of elearning offerings still centered on IT skills (Barron, 2000, p. 33).

Rogers' five attributes can again direct the ways in which the distance training initiative is supported by arguments directed at this target group:

- ➢ **relative advantage:** e.g. integration of new IT/software roll-outs with training by joining forces; consistency in IT-use in the workplace and in training situations
- ➢ **compatibility:** as IT-staff are already aware of the use of elearning for IT skills, it may be easier to demonstrate additional applications in other fields. There is also the issue of literal compatibility: integration with current (administration) systems
- ➢ **complexity:** IT concerns often focus on bandwidth and firewall issues. The training department would do well to take these concerns seriously and help IT to come up with creative solutions
- ➢ **trialability:** pilot projects can not only serve to show future learners what distance training is about, they can also be used to investigate how IT can integrate new systems with existing systems (see *compatibility*)
- ➢ **observability:** the training department should be able to show successful examples from similar companies, and present a clear picture of what they want to achieve themselves in terms of the exploitation of the IT-infrastructure for distance training

Tailored Approach

Although it is appealing to assume that there is one optimum approach to sustaining change, and the institutionalization of distance training in particular, there is still the corporate culture to consider.

Schneider (1998) distinguishes four types of organizational cultures:

- ➢ **Control:** military system; power motive
- ➢ **Collaboration:** family and/or athletic team system; affiliation motive
- ➢ **Competence:** university system; achievement motive
- ➢ **Cultivation:** religious system(s); growth, or self actualization, motive (section "Reason # 2", ¶ 5)

These cultures have different strategies and leadership styles to match, and Schneider poses that the chance of any one management idea to succeed in an organization, depends on its natural fit with the organizational culture.

Distance training as such can function in any organizational culture, albeit with different accents such as the self-directed learner would not naturally fit in a control culture. Still, the question remains what change management strategy is best suited for a particular organization.

Nickols (2004) describes four basic change management strategies, which may be applied in combination:

- ➢ **Empirical-Rational** (based on self-interest, communication of information, and incentives)
- ➢ **Normative-Reeducative** (based on the desire to adhere to cultural norms and values)
- ➢ **Power-Coercive** (based on authority and sanctions)
- ➢ **Environmental-Adaptive** (based on the readiness to adapt to new circumstances) (Section IV)

The combination of organizational culture and change management strategy flowing more or less logically from the culture in question, will significantly influence the balance between top-down, bottom-up and peer-to-peer approaches, and the content of the communication flowing between the organizational levels, in sustaining distance training. For example, Mackenzie-Robb (2004) describes a case from Lloyds TSB, where a normative re-educative approach was taken to implement Windows.

This approach consisted of setting up spaces with a computer throughout the company where employees could informally experiment with the new system. In other words, bottom-up and peer-to-peer approaches to start using the new system were facilitated in an

attempt to make new users feel comfortable, and no use of "force" was implied in the message.

In a more control or competence oriented culture, one might have expected the use of power-coercive and/or empirical-rational approaches by rolling out compulsory training from the top down. Schneider (1998) warns that approaches that do not have a natural fit with an organization's core culture may yield some positive results at the beginning, only for the organization to start "healing" itself and return to its traditional ways of functioning.

Further research and investigation of case studies would be necessary to identify how different corporate cultures and change management strategies facilitate or hinder the acceptance and adoption of distance training.

THE LEARNING ORGANIZATION

Although the introduction of distance training into an organization is a fairly concrete step in the process, it may be a step in moving the organization towards adopting and integrating a learning culture in the organization. According to Peter Senge (1994), learning organizations are "organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together" (p. 3).

The top-down, bottom-up and peer-to-peer approaches to sustaining distance training may help the organization create not only a physical, but an abstract learning infrastructure as well, as different levels of the organization learn to approach distance training from other perspectives than their own in order to achieve successful institutionalization.

This will create pathways for internal networkers to reach out through the entire organization, capturing initiatives at their source, and diminish the tendency to look to senior management to initiate and drive change. When that happens, distance learning becomes an embedded business process, rather than just a corporate activity (Mackenzie-Robb, 2004), thus standing a better chance of being sustained in the long run.

CONCLUSIONS

Both change management literature and case studies in the field of implementing and sustaining distance training make it quite clear that a major change cannot be sustained from any one part or level of an organization. Instead, sustaining such a change requires a carefully built network, a "change agency" that reaches over the various hierarchical levels and permeates the various stovepipes of the organization (Tobin, 1998a).

Different levels and functional departments require tailored input from other levels and functions and provide different input into the change process.

Working from a shared vision, including key stakeholders at all levels and stages, and communicating frankly and empathically will allow an organization to gain buy-in and support at all levels. The perceived attributes of innovation provide a guiding framework to shape the messages involved.

The issue is complicated by organizational culture and differences in change strategies: the optimum balance of top-down, bottom-up and peer-to-peer approaches will therefore vary considerably. Ideally, the change process involved in the institutionalization of distance training will open up new channels of communication and new levels of understanding in the organization–an important step towards the creation of an organizational learning culture that reaches beyond training.

BIODATA and CONTACT ADDRESSES of AUTHORS

Gertrude DUDINK is involved in the implementation of "quality management" procedures for distance education. At this point in time she is writing manuals on product development and marketing practices. Gertrude works as Co-ordinator of Product Development in Charkow Beheer B.V. (in the Netherlands). In its international capacity, this enterprise is called the European School for Correspondence Courses (ESCC,) that operates in Central and Eastern Europe, and in China. The international brand name changes since it is translated into the official language of the country served.

Zane L. BERGE is Associate Professor of Education. Ph.D., 1988, Michigan State University, Educational Systems Development (Dissertation: Effects of group size, gender, and ability grouping on learning science process kills using microcomputers). B.S., 1977, Rochester Institute of Technology,Finishing and Production Management Certification in istance Education, 1995, Pennsylvania State University. Honors Received: 1999- Charles A. Wedemeyer Award for distinguished scholarship and publication (Distance Training) 1987 Finalist- Spencer Dissertation Fellowship Competition 1985-present. Phi Kappa Phi National Honor Society, Life Member 1983-1986. Fellowship, Institute for Research on Teaching, Michigan State University

Zane Berge
UMBC-CANADA
1000 Hilltop Circle
Baltimore MD 21250 USA
Email: berge@umbc.edu

REFERENCES

BARRON, T. (2000, December). Getting IT support for elearning. *Training & Development,* 32-37.

BATES, A. W. (2000). *Managing technological change: Strategies for college and university leaders*. San Francisco: Jossey-Bass.

BERGE, Z. L. (Ed.). (2001). *Sustaining distance training: Integrating learning technologies into the fabric of the enterprise.* San Francisco: Jossey-Bass.

BERGE, Z.L., Bichy, C., Grayson, C., Johnson, A., Macadoff, S., & Nee, K. (2005). Where does work end and home life begin? In P. Rogers, C. Howard, J. Boettcher, L. Justice, K. Schenk, & G. Berg (Eds.). *Encyclopedia of Distance Learning*. Hershey, PA USA: Idea Group, Inc. pp: 2038-2043.

BERGE, Z. L., & Kearsley, G. (2003, November-December). The sustainability of distance training: Follow-up to case studies. *The Technology Source.* Last accessed July 23, 2005, at http://www.wisc.edu/depd/html/TSarticles/Sustainability.htm.

Clark, R., & Kwinn, A. (2005, June). Aligning training to business results. *T+D,* 34-39.

CONÉ, J. (2000, June). How Dell does it. *Training & Development,* 58-70.

ELLSWORTH, J. B., & Iorizzo, L. J. Jr. (2001). Distance training at the U.S. Army Intelligence Center. In Z. L. Berge (Ed.), *Sustaining distance training: Integrating learning technologies into the fabric of the enterprise.*. San Francisco, CA: Jossey-Bass. (pp. 31-47).

KRAMLINGER, T. (1998, April). How to deliver a change message. *Training & Development,* **44-47.**

LEWIS, N. J., & Orton, P. (2000, June). The five attributes of innovative elearning. *Training & Development,* **47-51.**

MACKENZIE-ROBB, L. (2004). *E-learning and change management–the challenge.* **Retrieved June 28, 2005,** http://www.vantaggio-learn.com/Vantaggio_CM.htm**.**

MAURER, R. (2001). *Why resistance matters.* **Retrieved July 1, 2005, from** http://www.refresher.com/!resistancematters.html**.**

MEISTER, J. C. (2000, June). The CEO-driven learning culture. *Training & Development,* **52-58.**

MILLER, N. A. S. (1992, November). Toward a common vision: The change process in practice. *Educational Technology,* **58-62.**

NICKOLS, F. (2004). *Change management 101: A primer.* **Retrieved June 19, 2005, from** http://home.att.net/%7Enickols/change.htm**.**

ROGERS, E. M. (2003). *Diffusion of innovations* **[5ᵗʰ ed.]. New York: Free Press.**

ROSENBERG, M. J. (2001). *E-Learning: Strategies for delivering knowledge in the digital age.* **New-York: McGraw-Hill.**

SCHNEIDER, W. E. (2002). *Why good management ideas fail – the neglected power of organizational culture* http://www.refresher.com/!neglected **. Retrieved July 1, 2005.**

SCHREIBER, D. A. (1998). Organizational technology and its impact on distance training. In D.A. Schreiber and Z.L. Berge (Eds.) *Distance Training: How Innovative Organizations are Using Technology to Maximize Learning and Meet Business Objectives.* **San Francisco, CA: Jossey-Bass Inc., Publishers. pp: 3-18.**

SENGE, P. M. (1994). *The fifth discipline: The art and practice of the learning organization.* **New York: Currency Doubleday.**

SENGE, P. M. (1996). *Leading learning organizations: the bold, the powerful, and the invisible* **[electronic version]. Retrieved June 23, 2005 from** http://www.solonline.org/repository/download/1-LdngLrngOrgs-Druckr.doc?item_id=363266

TAIT, A. (2002). The convergence of distance and conventional education: some implications for policy. In A. Tait & R. Mills (Eds.), *The convergence of distance and conventional education: Patterns of flexibility for the individual learner.* **London: Routledge. (pp. 141-149).**

TAKIYA, S., Archbold, J., & Berge, Z. L. (2005, April). Flexible training's intrusion on work/life balance. *The Turkish Online Journal of Distance Education,* **6(2). Retrieved April 1, 2005 from** http://tojde.anadolu.edu.tr/tojde18/articles/article5.htm**.**

TOBIN, D. R. (1998a). *Correcting functional myopia.* **Retrieved July 8, 2005, from** http://www.tobincls.com/myopia.htm**.**

TOBIN, D. R. (1998b). *The fallacy of ROI calculations.* **Retrieved July 1, 2005, from** http://www.tobincls.com/fallacy.htm**.**

WERNER, T. (n.d.). *Change management and elearning.* **Retrieved June 21, 2005, from http://www.brandon-hall.com/whitpaponcha.html.**