

DOCUMENT RESUME

ED 427 741

IR 019 292

AUTHOR Ullrich, Martha  
 TITLE Making the Move to On-Line Learning.  
 PUB DATE 1998-11-00  
 NOTE 7p.; In: WebNet 98 World Conference of the WWW, Internet and Intranet Proceedings (3rd, Orlando, FL, November 7-12, 1998); see IR 019 231.  
 PUB TYPE Opinion Papers (120) -- Reports - Evaluative (142) -- Speeches/Meeting Papers (150)  
 EDRS PRICE MF01/PC01 Plus Postage.  
 DESCRIPTORS Computer Assisted Instruction; \*Distance Education; Educational Change; Educational Environment; Educational Technology; Learner Controlled Instruction; Nontraditional Education; \*Online Systems; \*Student Role; \*Teacher Role; Training; \*World Wide Web  
 IDENTIFIERS Technology Integration; \*Technology Role

ABSTRACT

Change is a reality in today's workforce. With every new invention and growth in technology, businesses are forced to change. One of the changes businesses are making is the adoption of Web-based technology. This has greatly impacted the business of training. One of the biggest challenges the training industry is facing today is making the transition to Web-based and on-line learning. With this change in direction for training and education, the roles of the instructor and the student are also changing. Roles and responsibilities are becoming more ambiguous. This can lead to resistance. It is well documented that individuals and organizations resist change. In search of stability, it is natural for people to attempt to establish and maintain control over their environment. In this paper, the impact of role ambiguity, specifically that of instructor and student, on the change from instructor-led classroom training to on-line learning is explored. Contains 12 references. (Author)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*

# Making the Move to On-Line Learning

Martha Ullrich

Hewlett-Packard Company

Tel: 650/691-7062 Fax: 925/484-3341 email: martha\_ullrich@hp.com

**Abstract:** Change is a reality in today's workforce. With every new invention and growth in technology, businesses are forced to change. One of the changes businesses are making is the adoption of web-based technology. This has greatly impacted the business of training. One of the biggest challenges the training industry is facing today is making the transition to web-based and on-line learning. With this change in direction for training and education, the role of the instructor and the student also are changing. Roles and responsibilities are becoming more ambiguous. This can lead to resistance. It is well documented that individuals and organizations resist change. In search of stability, it is natural for people to attempt to establish and maintain control over their environment. In this paper, the impact of role ambiguity, specifically that of instructor and student, on the change from instructor-led classroom training to on-line learning is explored.

## 1. Introduction

The topic of organizational change is not new. Organizations have been plodding through change, and the various business fads resulting in change, for decades. The training industry is currently in the midst of a major change in terms of technology and in terms of mindset.

Possibly the most important pitfall to any change process is not understanding resistance. This lack of understanding can result in frustration on the side of the change agent, the management and the employees. It can also lead to dysfunctional behavior, such as acting out against the change, the initiators of the change and the organization itself [Galpin, 1996]. Resistance can sabotage the best intentions for change. Sometimes, there is no trace or knowledge of a change effort because, due to internal resistance, the project was stalled before it really took off [Goldstein, 1988]. Therefore, it is critical that this resistance be effectively addressed, or avoided, in the first place.

## 2. Causes of Resistance

Many factors contribute to the success or failure of organizational change. A number of variables can result in resistance to the change efforts. Among them are: a lack of information about the change; unclear messages regarding the need for the change; unclear expectations regarding new roles and responsibilities; and inadequate reassurances of the individual's ability to be successful in the change. Gone unchecked, these variables can result in resistance to, and ultimately end in failure of, the change effort [Robbins, 1997, Armenakis, Harris, & Mossholder, 1993].

Another factor is readiness of the individuals and the organization. Readiness to change refers to the employees' beliefs and attitudes about the organizations need to change and its ability to make the changes successfully [Armenakis, Harris, & Mossholder, 1993]. People will choose tasks and goals they believe they can be successful in and tend to avoid those in which they feel they will fail [Bandura, 1997]. If the employees do not believe in the need for change or feel it will be unsuccessful, either for them or the organization, resistance will occur. Instructors and students are no different. The instructors want to be successful in their job; i.e. they want to be effective teachers. Most instructors don't truly see the need to change the way they currently do their job. They see their students walk out of their classroom having learned what they needed to. Why fix what isn't broken?

The students want to be successful in their job or role as well; i.e. they want to learn in an effective way. Classroom training has been a tried and true model for centuries. And most of the new technological fads have not proven to be as effective or as practical as classroom training.

Neither group sees the need for the transition, nor do they understand how their role will actually change. This is a great source of concern and stress for these individuals.

The instructor and student response to this change can often appear as a lack of effort, a lack of motivation, or a willful opposition to the new learner-centered model of instruction. Through this resistance to change, the employee is attempting to maintain explicit goals, roles and behaviors that have become the norm for them. Resistance, either conscious or unconscious, is their response to a real or perceived threat to their traditional norms, power relationships, and ways of conducting themselves in their job roles [Senge, 1990]. In many cases, the perceived threat is almost more potent than a real threat. People are more influenced by their perceptions and interpretations of their environment than they are by objective reality [Bandura, 1997; Thomas & Velthouse, 1990]. In a sense, resistance may function as a survival mechanism when change is perceived as a threat.

There are many variables that can cause this response of resistance to proposed change. Among them is the student and instructor belief in their ability to be successful and ambiguity regarding their new roles.

### **3. Role Ambiguity**

Role ambiguity occurs when there is a lack of clarity between an individual and others regarding what is expected of them [Spreitzer, 1996]. Ambiguity around the expectations and responsibilities of the new job role can adversely affect the student's and the instructor's belief in their capability to perform these new work activities with skill.

#### **3.1 The Changing Roles of Students and Instructors**

In this new environment of on-line learning, the role of the student is changing from being passive recipients of information to being active agents in their own learning. The role of the instructor is changing from being the "sage on the stage" to the "guide on the side". They are becoming facilitators of the learning experience rather than the controller of the experience. For both groups, these changes are enormous. Most adults have twenty plus years of experience with the traditional classroom model of instruction. From their elementary and high school education through college and their careers, the stand-up instructor is probably all they've known. Both groups are now being asked to give up that model and adopt a new one, often times with little or no guidance as to what the new model, and their roles within it, are.

##### ***3.1.1 Employee Expectations***

In order for management to provide appropriate guidance and direction to the instructors and the students, each role should have clearly articulated expectations and responsibilities. This enables them to take responsibility for their performance and for management to hold them accountable for their performance [Rizzo, House, & Lirtzman, 1970].

Ambiguity around these new roles and responsibilities prevents them from performing at their highest potential because the expectations are unclear or unspoken. If they don't know what it is they are expected to do, and how to go about doing it, they cannot become high performers. Without clear expectations, the student's and the instructor's beliefs about their ability to be successful suffers. To offset this problem, employees will often resist the change that created the ambiguity in their roles, hoping to return to the roles in which they were confident and they understood.

For the instructors, that often translates into becoming virtual lecturers. Without clear guidance and expectations in their new role, instructors will often revert to lecturing on-line, ignoring the functionality the on-line learning environment provides. Collaboration and interaction is not fully utilized. The instructors begin to feel inadequate in this new role because they have lost touch with their students. They don't feel this new environment is conducive to the type of training they are conducting. They begin to consciously or unconsciously resist the new role and the new direction of their job.

For the students, this often translates into lack of persistence in this new method of learning. They drop out of classes, don't fully engage in the activities, or simply go through the motions of the class, not

learning everything they need to be successful. Evaluations for the classes are poor. The result of this is often misinterpreted as inadequate training and the program is dropped. Unfortunately, this scenario happens far too often. Had the student been taught how to learn in this new environment, and had the expectation been set that they need to take an active role in their learning, this might have been avoided.

### ***3.1.2 Management Expectations***

Additionally, if the roles, responsibilities and expectations are not clear, management cannot provide the appropriate guidance and support to the employee to help them achieve high performance. This exacerbates the problem for the organization as a whole. Many times, management is not fully aware of the new role training is taking for their employees. Many organizational cultures and environments aren't designed to support a student in this type of training. In the old method, the student went away to training - out of sight, out of mind. In the new method, the student may be taking training at their desk. This often leads to the students being interrupted during their training simply because they are there. With constant interruptions, the student cannot succeed. If the students are not successful, the program will not be successful in the long term.

### ***3.1.3 Summary***

There are many variables that can cause this ambiguity in new roles within a changing organization. A lack of goal definition may result in goal conflict and role ambiguity across the organization [Spreitzer, 1996]. Unclear hierarchies and lines of authority create uncertainty as the employees attempt to fulfill the expectations of the many different stakeholders in the organization. In the old model, the student went to class. Their priority was the training and the hierarchy stopped with the instructor. In the new model, the student is torn between the hierarchy of their management structure and the instructor. Priorities become blurred if not explicitly outlined. Unclear expectations of the new role responsibilities and how they map to the new organization also lead to role ambiguity and conflict. And lack of communication regarding the stages of the changes and the impact to the individual's role within the organization often result in ambiguity around roles.

## **4. How Role Ambiguity Contributes to Resistance to Change**

### **4.1 Factors Contributing to Resistance**

There are many organizational factors that contribute to creating ambiguity around roles and responsibilities. How does this ambiguity contribute to employee resistance to change?

#### ***4.1.1 Power Shifts***

Changes often involve the shifting of power from groups within organizations. This shift, real or imagined, threatens the employee's individual status and power and can make the power relationships and hierarchies unclear. As we have seen, the student now faces dual hierarchies. The instructor perceives a loss of personal power over the students in the new model because they no longer have proximal control. Too many factors are quickly becoming out of their control. These instructors must make significant adjustments to their new span of control. Those adjustments can be positive or negative. Positive adjustments often manifest themselves in personal growth initiatives, with the instructor proactively seeking ways to gain different forms of power and control, such as influence and expertise. Unfortunately, the negative adjustments often result in putting effort into activities designed to circumvent or resist the change. These activities manifest themselves as criticizing the new model, willfully failing to implement the new technology in the appropriate manner, or simply quitting their job in search of one that better aligns with their mental model.

#### **4.1.2 Personal Control**

Role ambiguity threatens personal control and creates stress. Role ambiguity creates feelings of threat and resentment toward the change and fear of the unknown. This threat to personal control directly impacts the employees' belief that they are capable of being successful in a given task. We know individuals will avoid activities they believe exceed their abilities and will undertake activities they judge themselves capable of [Bandura, 1997]. If there is ambiguity around their role, it is understandable that the students and instructors will not be as confident in their ability to be successful, especially in the initial phases of the transition. The change threatens to make them look bad. They have inadequate feelings of competence in this new, ambiguous role. This lack of confidence leads to resisting the change that they feel created the role ambiguity to begin with.

#### **4.1.3 Summary**

What does this mean for the change process and employee resistance to change? As we have seen, high self-confidence regarding new roles the students and the instructors must take on and clear expectations regarding those roles are key to them choosing to take on the role and persist in that choice. Continued high self-confidence, clear, concise and timely communication, and continued monitoring of effort by both the employee and the manager are instrumental in persistence in the new role. Without both, resistance can and will occur.

### **5. What can be done to intervene?**

Given the potential for resistance to change due to role ambiguity, what can be done to develop motivation for the change and a shared understanding of the expectations and responsibilities of the new roles of student and instructor? The first and most important thing to do is to understand the reasons for the resistance, in this case, ambiguous roles. But we must go beyond that to the root of the resistance, which is understanding what is causing the role ambiguity. There are several strategies for dealing with resistance, including communication and participation.

#### **5.1 Communication**

Communication and goal setting are key to overcoming any resistance to change. This is done with careful, well thought out, clear communication that clearly articulates what is changing, why it is changing, how the process will proceed, when the stages of change will occur, and who is affected.

Another key mechanism for avoiding resistance to change and role ambiguity is a clear message articulating expectations for the individual's role within the organization, and the individual's ability to be successful in the change. Clear goals regarding the change and the new roles are instrumental in avoiding role ambiguity and role conflict. The message should clearly articulate how their roles will be migrated and what the effected individuals and groups can expect.

Managers and change agents must provide adequate information about the change and the new vision and strategy. Information about organizational vision and strategy is important because it helps to create a sense of meaning and purpose. By understanding where an organization is headed, individuals can begin to understand how their work roles and behavior affect its success [Frey, 1993]. Access to organizational information also allows individuals to see the big picture and develop a frame of reference for understanding their new roles within the organization [Bowen & Lawler, 1992].

#### **5.2 Participation and sponsorship**

A study by Coch and French (1948) demonstrates the value of allowing employees to participate in the change efforts. Much of the change literature recommends employee involvement in the form of change process teams, including integration teams, improvement teams, and steering committees. Not only

does a team tend to create a better result than a single individual, but employee buy-in to the change is more likely if they have respected representatives involved in the process [Galpin, 1996; Armenakis, Harris, & Mossholder, 1993; Manz, Keating, & Donnellon 1990].

From a motivational perspective, high involvement interventions facilitate the employee's trust in an organization and increase the individual's sense of control and identification with the new organization, their new roles and how they fit in the organization.

Clearly, the change agent's role and the management sponsor's role in communicating the change process and actively involving the employees in the change is critical to achieving successful change.

The following are specific interventions management can implement to help the effected instructors and students during the transition to an on-line learning environment.

### **5.3 Instructor Interventions**

Below are a few suggestions for enabling successful instructor change:

- If possible, involve the instructors in the choice of on-line tool.
- Give them the opportunity to experience the new environment from the perspective of the student, preferably in the same type of training they conduct.
- Ensure the instructors have adequate tools available to them to gauge student involvement and engagement, and ensure they know when and how to use them.
- Engage them in the development of the instruction so they and the instructional designer fully understand the implications of the methods of training they are choosing. For example, the choice of collaboration verses single-student activities must be weighed carefully and designed appropriately into the instruction.

### **5.4 Student Interventions**

Below are a few suggestions for enabling successful student change:

- Ensure there is an adequate adjustment period to this new method of learning. Some students do not know how to learn on their own. They may need additional guidance in acquiring these skills.
- Create a culture and environment that is supportive of learning on the desktop. Managers may need to run interference for their employees to ensure they are not interrupted while attending on-line training sessions at their desk. Some companies installed local training kiosks where students can go to take training in a quiet, undisturbed environment. Others have initiated the use of symbols that identify when an individual is actively involved in training at their desk and that they are not to be disturbed. Some such symbols range from little flags posted in the cubes to signs outside their work area.
- In the initial phases, monitor the student's progress and provide external motivation support as appropriate.
- Build into the training some mechanism, even a manual one, to allow the student to self-monitor their progress and engagement levels, as well as allowing the instructor to monitor their progress and engagement.
- Conflicting priorities may make persistence in learning at their desks difficult. Managers may have to help their employees with priority management.
- Give them adequate equipment to fully utilize the features and functionality of the on-line environment.

## **6. Conclusions**

A major change such as the transition to on-line learning involves new roles and responsibilities for the instructors and the students. If the change and resulting impact to student and instructor roles is not clear, overt or covert resistance can and will occur. Management is responsible for ensuring their people are fully prepared, both from a skill perspective as well as a confidence perspective, to successfully make this transition. Through interventions of communication, participation in the change process, and skill development, the resistance fades as employees begin to understand, and become confident in, their new role within the organization [Manz, Keating, & Donnellon, 1990].

The implications of overlooking employee confidence, role ambiguity and their respective impacts to the change process and the organization as a whole are enormous. The change to an on-line learning environment itself is at risk if the individuals involved in it are resistant and do not buy-in. It is clear that communication and clear articulation of the change and what the change means for them and their role is key to successful change efforts.

## 7. References

- [Armenakis, Harris, & Mossholder, 1993] Armenakis, A., Harris, S., & Mossholder, K. (1993). Creating readiness for organizational change. *Human Relations*, 46, 681-703.
- [Bandura, 1997] Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman & Company.
- [Bowen & Lawler, 1992] Bowen, D., & Lawler, E. (1992). The empowerment of service workers: What, why, how, and when. *Sloan Management Review*, 31-39.
- [Frey, 1993] Frey, R. (1993). Empowerment or else. *Harvard Business Review*, Sept-Oct, 80-94.
- [Galpin, 1996] Galpin, T. (1996). *The human side of change: A practical guide to organization redesign*. San Francisco: Jossey-Bass.
- [Goldstein, 1988] Goldstein, J. (1988). A far-from-equilibrium systems approach to resistance to change. *Organizational dynamics*, 17(2), 16-26.
- [Manz, Keating, & Donnellon, 1990] Manz, C., Keating, D., & Donnellon, A. (1990). Preparing for an organizational change to employee self-management: The managerial transition. *Organizational Dynamics*, 19(2), 15-26.
- [Rizzo & Lirtman, 1970] Rizzo, J., House, R., & Lirtzman, S. (1970). Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly*, 15, 150-163.
- [Robbins, 1997] Robbins, S. (1997). *Essentials of organizational behavior* (5th ed.). New Jersey: Prentice-Hall.
- [Senge, 1990] Senge, P. (1990). *The fifth discipline: The art and practice of the learning organization*. New York: Currency-Doubleday
- [Spreitzer, 1996] Spreitzer, G. (1996). Social structural characteristics of psychological empowerment. *Academy of Management Review*, 39, 483-504.
- [Thomas & Velthouse, 1990] Thomas, K., & Velthouse, B. (1990). Cognitive elements of empowerment: An "interpretive" model of intrinsic task motivation.



**U.S. Department of Education**  
Office of Educational Research and Improvement (OERI)  
National Library of Education (NLE)  
Educational Resources Information Center (ERIC)



## NOTICE

### REPRODUCTION BASIS



This document is covered by a signed "Reproduction Release (Blanket) form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.



This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").