

ILT Internship: Leadership Report

IT 6930: ILT Internship/Field Experience

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Overview

As the manager of the instructional design team in my organization my goals include ensuring that the instructional designers are proficient using a variety of development tools including Flash and video and ensuring that the Training Department is delivering instruction as efficiently and effectively as possible. I created and delivered a training program that helped me to fulfill these goals. Its intent was to increase the participants' proficiency with online development tools and techniques including Flash, video, and assessment and to evaluate the effectiveness of a hybrid classroom/online delivery model. To accomplish both of these goals simultaneously, I developed seven units of instruction and activities for Flash and video that were delivered online and in the classroom. I also inserted various methods of formative and summative assessment into the instruction. The program included the following learning objectives:

- Participants will create and edit a CBT (computer based training) using Flash.
- Participants will produce a one minute video to be incorporated into a Flash CBT.
- Participants will evaluate the effectiveness of a hybrid classroom/online delivery model versus a pure classroom or pure online model.
- Participants will experience and evaluate various assessment techniques.

Rationale

This is the first time that a training program has been delivered in my company using methods other than classroom training or CBT. I chose to implement this course within the Training Department as a pilot program because I believe that the methods employed would be too radical of a shift for learners elsewhere in the organization and likely would lead to failure. For the adult learner, change takes time and requires a plan (Fogarty, & Pete, 2004). As a member of the Training Department, and with my manager's support, I was able to deliver this program in a controlled environment for evaluative purposes. This program would help the instructional design team to develop an implementation plan (for future online implementations) and identify hybrid delivery and assessment techniques that could slowly be incorporated into training programs for learners outside of the Training Department. Delivering a similar program outside of the department would likely require an exhaustive amount of participant supervision to overcome a lack of familiarity and acceptance of a non-traditional instructional model. Essentially, risk of failure increases if the Training Department and its business partners do not share the same vision for how learning is to be accomplished (Sagor, 2000).

Methods

The program provided multiple units of Flash instruction for the instructional design team. It included four units about Flash basics applicable to the creation of online instruction, two units about basic video production, and one unit about how to incorporate video into Flash.

Units:

1. Flash Basics
2. Flash Symbols
3. Creating Movement in Flash
4. Video Production Basics 1 – Shooting
5. Video Production Basics 2 – Editing
6. Importing Flash Video into a CBT
7. Flash Components

The project incorporated assessment before, during, and after the units listed previously, measuring the learners' knowledge and the program's effectiveness at regular intervals. The course was also used as a method of introducing the participants to the delivery of instruction outside of the traditional delivery models of lecture and the linear CBT. This was accomplished with a blend of classroom instruction, one-on-one tutoring, and online instruction and support. Online instruction consisted of Web 2.0 tools available in SharePoint, Microsoft's collection of online tools that mimics Web 2.0 functionality. I developed a website in SharePoint that served as our instructional home base for the program.

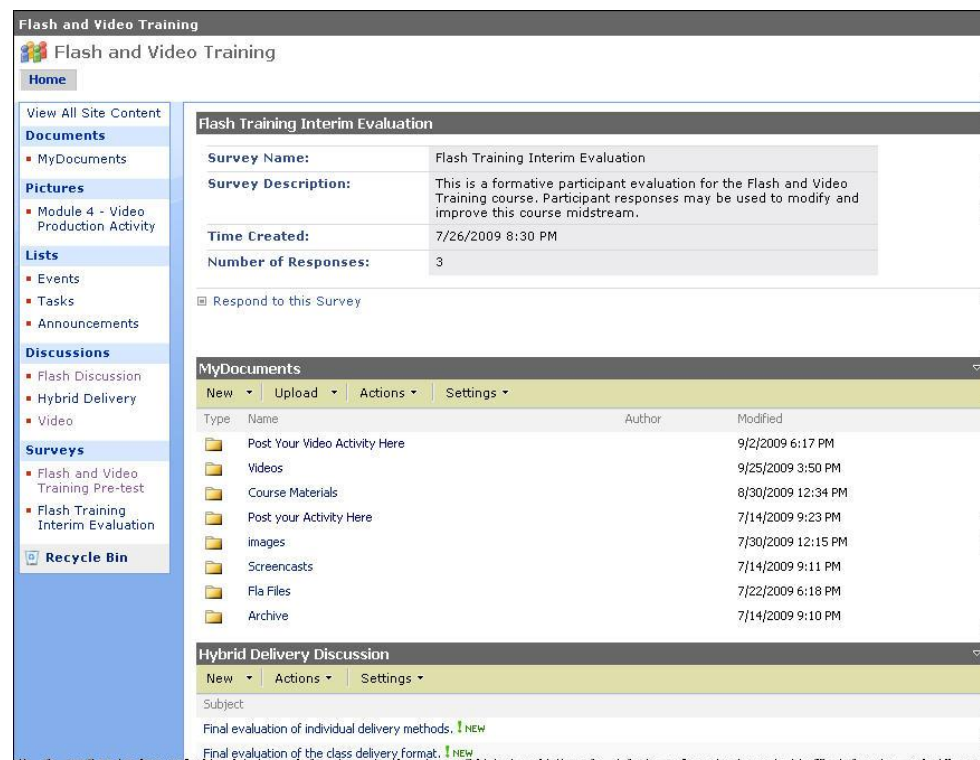


Image 1: Flash and Video Training SharePoint Site

The participants received additional online support and instruction via screencasts, blogs, three discussion forums, and self-paced activities, all administered via the website. This mix of delivery methods and technologies was important to keep learners engaged (Lorain, 2008; Depue & Little, 2006) and to appeal to multiple learning styles. Instruction should include activities interspersed throughout a lesson that require students to think, participate, collaborate, cooperate, and solve contextually relevant

problems (Prince, 2004). Technology enhances a teacher's ability to actively engage learners, increasing the possibility that their students remain interested and, ultimately, that their students learn. With the video production units excepted, the units generally adhered to the following process:

1. Needs assessment administered via SharePoint survey and discussion forum
2. 1-2 hour classroom session with lecture, discussion, activities, and assessment
3. Reading assignments administered via Flash help menus, external websites, or content posted to SharePoint
4. Screencast tutorials posted to SharePoint
5. Self-paced activities in which participants applied a unit's instruction
6. Follow-up discussion in the SharePoint discussion forum

Assessment

I incorporated selected assessment techniques into the classroom sessions as a method of exposing the participants to new concepts and practices in assessment. Participants were able to experience the application of pre-tests, classroom assessment techniques (CATs), clickers, and surveys instead of simply studying theory.

Evaluation

As users, the participants were asked to evaluate the effectiveness of hybrid delivery and online support. This was accomplished through electronic surveys, face-to-face interviews, and a discussion forum administered within SharePoint.

Video Production

The video production units were administered differently. An initiative requested by executive management presented a great opportunity to apply the video production units to a real-world video production project in which a 12 minute video was produced by the instructional design team and incorporated into an existing Flash-based CBT. Because all instructional design resources had to be allocated to the video project, the focus of the program shifted away from the hybrid delivery model to real-world, hands-on learning for approximately one month.

Participant Support

The hybrid delivery model was chosen because it offered flexibility when delivering a varied and complex curriculum. While the training program was intended to be a pilot program for the implementation of online instructional delivery, it was also a critical means of providing professional development for the instructional design team. Thus, it was important that the participants not be put into a situation in which they were hindered—real or not—by the delivery method. With the hybrid model, if a participant was unable to solve a problem or grasp a concept using an online tool, he or she

could seek assistance through traditional means such as one-on-one instruction or classroom discussion. This also helped to alleviate initial reluctance admitted to by the participants at the beginning of the program. The classroom sessions allowed me to introduce the online structure and its rationale slowly and in a more familiar setting. Initiating stakeholders ahead of implementation is important for a successful change process to allow time for evaluation, reflection, and acknowledgement of any apprehensions (Fogarty, & Pete, 2004).

Accountability/Roles

The participants report to me, thus it is my responsibility to provide them with opportunities for professional development. One of my goals is to ensure that each instructional designer is proficient with new concepts and technologies, such as alternative methods of online delivery, Flash, video, and alternatives for assessment. I led the entire initiative and was fully responsible for the course's design, content, delivery, assessments, and evaluation. This includes the creation of all training materials, activities, Web 2.0 tools, and assessments. I also facilitated all of the classroom sessions and the online discussion forums. I am accountable to the head of the Training Department for the outcome of this program as well as for the instructional design team's growth and output.

ILT Competencies

This project satisfies the following ILT competencies:

- 2. Conduct a needs assessment for learning or performance interventions
- 6. Implement and evaluate effectiveness of programs, products, or practices
- 10. Participate in a change process and provide leadership in helping people adopt new technologies or practices

Competency 2: Prior to the course implementation I identified each participant's level of ability for Flash and video production. The participant's level of knowledge was assessed via a SharePoint survey and a discussion thread. Following is one excerpt from the discussion thread and one question from the online survey.

Body: I don't know what Motion Tween is, so I would also like to learn about this.

Like Bill and you, using Flash for assessments interests me as well. For example, it would be great if we could build the FPS1 new hire assessment in a program that would auto score for the facilitator. That would be great.

From: xxxxx, Tracey x
Posted: Friday, July 31, 2009 2:46 PM
Subject: Module 2 - What I'd like to learn

Although I have some experience with Motion tween, I could definitely use a refresher on this feature in Flash. I was attempting to make my brief animation in this Module's assignment more fluid, and it would have been with a Motion tween. However, I encountered some problems with symbols disappearing as I moved along the timeline after adding the tween. I would also like to learn more about how to create assessment questions, specifically drag-and-drop type questions.

Image 2: Discussion Forum – Needs Assessment

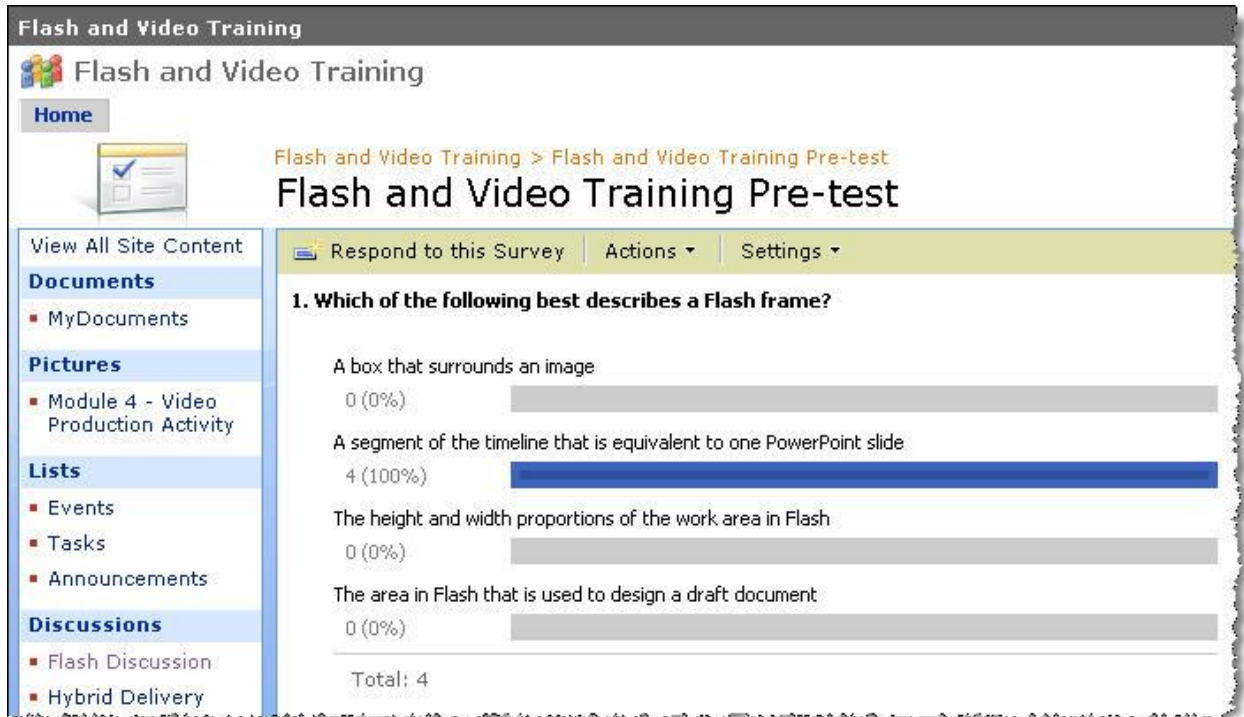


Image 3: SharePoint Survey – Needs Assessment

Competency 6: I evaluated the effectiveness of this program by soliciting participant reactions via the discussion forum (image 4) and with two assessments (images 5 and 6). The first assessment was administered mid-way through the program. The second was administered at the conclusion of the program. For the mid-term assessment I supplied each participant with three images and asked them to construct a Flash CBT that demonstrated what they had learned up to that point. As you will see in the image below, I made this light-hearted and fun. The final assessment built upon the mid-term assessment. Participants were asked to enhance their mid-term CBT with video and learning interactions. They were asked to insert a video three times using three methods that were studied in Unit 6 and to insert six learning interactions using the six templates that are available in Flash.

Body: I will be looking for opportunities to use what I experienced in future training. I think the use of a SharePoint site for surveys and for discussion outside of class can be very effective, especially in a series of related training classes. I would like to be able to use the internet polling as well. It can be an engaging way to check the understanding of the group after a key concept has been presented.

From: Lea, Gregory
Posted: Thursday, October 22, 2009 3:18 PM
Subject: Final evaluation of individual delivery methods.

Would you use any or all of what you experienced in this class in a class that you designed here or elsewhere?

Image 4: Discussion Forum – Final Evaluation

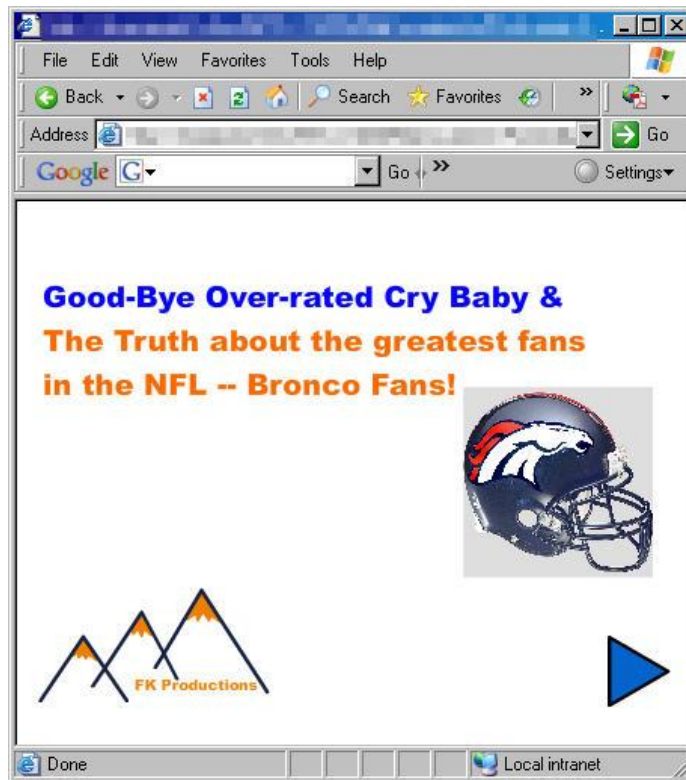


Image 5: Mid-term Assessment

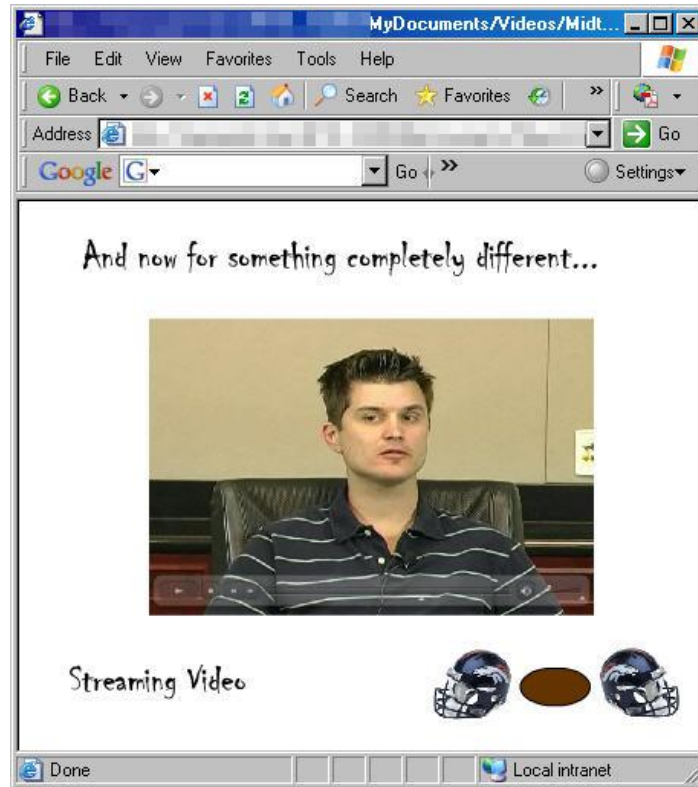


Image 6: Final Assessment

Competency 10: I led this program, introducing multiple concepts and technologies to the instructional design team. As described throughout this paper these include:

- Hybrid course delivery
- Flash
- Video production
- SharePoint/Web 2.0
- Alternative assessment techniques

Outcome

The training program was a success as both an instructional tool and a method of evaluating the hybrid delivery model. For the final assessment, each participant successfully created a CBT using Flash and incorporated a brief video into the CBT. The videos were self-produced.

The CBT was built in phases, with new components added for each unit of instruction. The CBT was constructed using the following progression:

Unit	Self-guided Activity
1. Flash Basics	<ul style="list-style-type: none"> • Create a 1 frame CBT about 1 topic from the Unit 1 readings
2. Flash Symbols	<ul style="list-style-type: none"> • Import the other participant's frames into your CBT, creating a 3 frame tutorial. • Add a title and summary page that both include a graphic symbol. • Add navigation buttons • Add action script for the buttons
3. Creating Movement in Flash	<ul style="list-style-type: none"> • Fade text in, then out • Add movement to a graphic • Add a spinning company logo
4. Video Production Basics 1 – Shooting	<ul style="list-style-type: none"> • Create 1 minute of video that includes wide, medium, and tight shots
5. Video Production Basics 2 – Editing	<ul style="list-style-type: none"> • Capture the video using Adobe Premiere Pro • Edit the video using Windows Movie Maker
6. Importing Flash Video into a CBT	<ul style="list-style-type: none"> • Add your video to your CBT using 3 methods: <ul style="list-style-type: none"> ○ Embedded ○ Streaming ○ Linked • Choose the best method for our real CBT production project
7. Flash Components	<ul style="list-style-type: none"> • Add 6 learning interactions to your CBT

Table 1: Units

Additionally, participants assisted me with the production of a 12 minute video which was inserted into a Flash CBT that was deployed company wide. They were able to participate in a real video production, helping with lighting, audio, camera work, editing, and the insertion of the video into the CBT. This portion of the project was invaluable.

In addition to the instruction described above, each participant was asked to evaluate the online delivery methods that I used for portions of the instruction. One sample response to the use of the hybrid delivery model from each participant is included below:

- **Bill:** “I think in some respects the hybrid delivery is helpful. When everything is presented in an instructor led setting, you don't have the opportunity to choose your own pace. Using the ILT portion to set up a new topic, and then letting us move at our own pace is a refreshing change compared to the Flash class I attended, where everyone had to stay with the instructor at every turn. I thought the screencast was a good addition because it allowed us to refer to it later as we were building our first activity. Of course the hands-on opportunity is invaluable, because if you never try to do it yourself, you're never sure you can. “

- **Tracey:** “I enjoy the hybrid version of learning, as I have experience with both developing and taking these types of courses. It does take some getting used to, especially if the course topic is brand new to you. Since I have some experience with Flash as well, I was comfortable with the initial activity. My first reaction to guiding my own learning was, where am I going to start? ...It was definitely useful to have the screencast to use as an example on how to navigate. It's easy to get caught up in working within Flash, so the hands-on activity was a good break in the work day. It was fun having the creative freedom to create what we want, then expand on it by viewing others' activities.”
- **Fred:** “My initial reaction to the hybrid delivery model was that I probably prefer the standard instructor led classroom training model. I enjoyed the initial classroom training and the screencast was great as it felt like a classroom tutorial. Initially the hands-on activity left me feeling on my own. I struggled through various points of the assignment; however, after completion I now feel empowered. This is causing my initial reaction to the delivery method to slowly change from negative to neutral or slightly positive. The hands-on activity was invaluable--the application of the concepts presented in the reading were immediately put to use.”

Reflections

This program had two main goals:

- Build participant’s proficiency with new concepts and technologies in online learning.
- Evaluate the potential uses of the hybrid delivery model for classes company-wide.

Building Proficiency

Building participant proficiency with online learning tools was very successful as demonstrated by the participants’ performance on their mid-term and final assessments. Each created a professional quality CBT that included three types of video and all of the functionality presented during the program. Each was able to upload and run their CBT on our learning management system. Most of the background information was delivered electronically through SharePoint or through required readings that I prepared and posted online or were already available online. Classroom sessions contained minimal lecture and were dedicated mostly to learning through hands-on activities and discussion. Classroom sessions were also used to demonstrate assessment techniques such as CATs, clickers, and Assessment AS learning.

Having participated in a lecture style Flash class myself, I believe the program exceeded expectations due to the way it was designed. Instruction did not end when the classroom sessions ended. Instead it was stretched over three months and occurred mostly under the direction of the learners who had to filter the required readings to determine what was relevant and then learn mostly through activities. This was evident in the evaluations provided by the participants. Bill wrote:

I thought we were able to move more quickly through the material by leaving the reading for outside of class and spending more class time on activities.

Fred added:

The small in-class activities immediately allowed me to apply the lesson and begin building my confidence. The out-of-class reading allowed me to decide what portions of the lesson I needed to cover in more granular detail. The assignments forced me to apply the lesson and it became immediately evident if I grasped the lesson or if I needed additional assistance from the reading, classmates, or the facilitator.

Overall, participants responded positively to the mix of classroom and self-guided activities. The classroom sessions functioned mostly as a starting point where key concepts were demonstrated. The online tools provided mostly supporting content and a way to communicate asynchronously. Tracey described her experience this way:

Some individuals may be very adverse [sic] to learning outside of the classroom, and elearning takes a certain amount of self-motivation. With the introductions to the modules and some hands-on interactions being delivered in-classroom, it provided a good platform from which to jump off into the elearning portion.

While unplanned, the ancillary video production project was invaluable, allowing participants to learn about video production through a real-world experience rather than a simulated one.

Evaluating Potential

Initially, I intended to create a fully online class for an internal business unit outside of the Training Department. After reflecting on that idea I decided to test a hybrid format in an environment where I had more control. The hybrid format allowed flexibility for me and the participants. Bill wrote:

I think there is a significant benefit to being able to use a variety of delivery methods in a corporate setting. Naturally that does not mean that from now on all training should be a mix of elearning and classroom training, but it can be effective to mix delivery methods when the material lends itself to that.

The hybrid format also presented some difficulties. One difficulty was scheduling. In the Training Department we have the flexibility to set our own schedules. That is not true, though, for all business units. Fred contributed the following observation:

Since my experience with this type of training had a successful outcome, I think this method should be considered when it suits the line of business' needs and L&D resources can accommodate it. I think it would be hard to apply this type of delivery to new hire training courses where the training must occur prior to the employee starting their job. This type of delivery method could be challenging in relation to trainer schedules.

In some instances participants were hesitant to use the provided online tools such as the discussion forum. They would typically post a single reply to the forum and only if required to. If not required to use the tools in SharePoint, the participants most often resorted to the tools with which they were most familiar such as face-to-face communication, instant messaging, email, and telephone. Interestingly, I was sick for about one month and it was necessary to work from home. When face-to-face communication was no longer an option, the participants still chose the familiar tools and typically communicated through SharePoint only when required.

Participants were more receptive to the use of SharePoint as a home base for the course. I posted supporting materials such as surveys and screencasts to the project site and used it to host activities. During the first video production unit, I created a blog and posted entries with examples of different types of camera shots and movements. The participants responded to the blog posts with examples of their own and explanations of when these shots or movements would be most useful. The participants indicated that they enjoyed this activity more than the discussion forum, which was typically limited to text narratives.

Conclusions

The most important lesson learned from this project is when it is appropriate to utilize online instruction in a corporate environment. Given the hesitancy of the instructional designers to utilize all of the Web 2.0 tools that I provided, I will not attempt to implement a fully online, Web 2.0-based class in the near-term. I believe it would be difficult to gain immediate acceptance for such a program from learners and their managers. My instructional interests are not necessarily the same as those of the managers in the business units we support. Others are more likely to accept change if we find a middle ground that bridges the difference between the two parties and implement the change with both party's interests in mind (Christensen, Horn, and Johnson, 2008).

I also would not attempt to implement a hybrid class to the extent that I did for this program. Instead, I would start small and implement specific Web 2.0 tools in the classroom as activities within more traditionally structured classes. In this environment the facilitator could explain the activities to participants, help those that are struggling with the technology, and ensure that the participants are provided adequate time to complete the activities. This would be necessary because of the limitations many of our employees face with regard to scheduling. Most work in a call center and would probably not be provided adequate time to complete activities in a fully online, asynchronous environment.

One example of an activity that could be used in the classroom is the blog activity described previously. This could easily be incorporated as an activity in place of traditional lecture. Surveys could also be administered via SharePoint in the classroom. The survey tool allows you to display a graphical analysis of survey results which could be displayed and used as a starting point for classroom discussions.

We experimented with clickers as an assessment tool during this class. Since the company does not own any clickers, we used www.polleverywhere.com which uses cell phones and text messaging in place of clickers. This was received very positively by the participants who all indicated that they would like implement it in various classes. I do not think that the cell phone solution, given the cost of text

messaging and the difficulty that each of the users had sending the text message correctly, is practical in the corporate environment. Therefore, I am recommending that the Training Department purchase an actual clicker system instead.

While I would not implement a hybrid class similar to the one just completed, I still consider this experiment to be a success. We identified elements of Web 2.0 that can be used to enrich traditional instructor-led training and better engage learners. Implementing the technology slowly and in a classroom environment in which learners are able to become more familiar with it, may set the stage for more robust implementations later.

Resources

- Christensen, C. M., Horn, M. B., & Johnson, C. W. (2008). *Disrupting class: How disruptive innovation will change the way the world learns*. New York, NY: McGraw-Hill.
- Depue, K., & Little, C. (2006). Engaging the reluctant learner through podcasting. *etech Ohio Technology for Learning*, Retrieved November 23, 2008, from <http://www.etech.ohio.gov/jcore/doclib/DocView.jsp?step=view&file=DE519367-9B27-48DB-BBB9-F8247B80D7B2>.
- Fogarty, R. J., & Pete, B. M. (2004). *The adult learner: Some things we know*. Thousand Oaks, Ca: Corwin Press.
- Lorain, P. (2008). Teaching that emphasizes active engagement: Improving learning for middle school students. Retrieved November 22, 2008, from NEA Web site: <http://www.nea.org/teachexperience/msk030905.html>
- Prince, M. (2004, July). Does active learning work? A review of the research. *Journal of Engineering Education*, 93, Retrieved November 23, 2008, from http://www4.ncsu.edu/unity/lockers/users/f/felder/public/Papers/Prince_AL.pdf
- Sagor, R. (2000). *Guiding school improvement with action research*. Alexandria, VA: Association for Supervision and Curriculum Development.