Capturing the Magic of Classroom Training in Blended Learning

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Abstract

Organizations today are faced with the challenges of expanding their traditional classroom-based approaches into blended learning experiences which integrate regular classrooms, virtual classrooms, social learning, independent reading, on the job learning and other methodologies. Our team converted a two-day classroom-based program, taught from 2010–2013 through the Canadian Organization Development Institute (CODI), into an on-line offering. We used several leading edge technologies, without sacrificing the power of face-to-face training. In this article we will highlight the lessons learned and the best practices that ensured the program's success.

Keywords: adult learning; blended learning; interactive; virtual classroom

Introduction

Due to financial and time constraints as well as the emergence of powerful online learning technologies, organizations are being challenged to incorporate learning opportunities into the actual work environment, while not compromising the effectiveness of face-to-face training.

With this challenge in mind, our team designed and implemented an on-line offering of a successful face-to-face professional development program entitled "The Essentials of Organization Development and Change," originally designed by Marilyn Laiken.

Our team consisted of three very experienced educators—Jon Wagner and Russ Milland in on-line learning, and Marilyn Laiken in classroom education. We all felt that our past experience with remote/virtual learning was not inspiring, with e-learning designers tending to reproduce traditional lecture-style education, replete with "talking heads" and "death by PowerPoint" (Federman & Laiken, 2010).

Could we really recreate the dynamic environment of an experientially-designed training program? By "experientially-designed" we mean that the learning environment incorporates as many basic adult learning principles as possible that are grounded in years of well-supported research.

Current Research Underlying our Design

Kurt Lewin's classic *Theory of Experiential Learning* (Lewin, 1951), defines four discrete operations needed to actually learn a skill that can be "applied in action," the only kind of learning truly useful in a work situation. These are:

1. Concrete Experience (participating in an activity)
2. Reflective Observation (sharing reactions and discussing observations)
3. Abstract Conceptualization (making generalizations and developing principles)
4. Active Experimentation (applying the learning to new situations).

Active Learning ("learning by doing") is an essential element. Learners may receive a demonstration or instructions prior to applying the learning themselves. At other times they might be asked to

experiment first, and then reflect on the experience and draw conclusions from it. Either way, the learner must be *actively involved* in the learning process.

To complicate this notion even further, people have different learning styles (Kolb, 1984) that need to be accommodated. For example, some learn more effectively by experimenting first, and then being exposed to the theory. Others are just the opposite.

In a review of the literature, there was absolutely no data supporting the notion that e-learning with verbal presentation only is sufficient for effective integrated learning (Zelinka, 2011). However, many articles support the use of hybrid methods (face-to-face classroom or on-site learning, combined with an e-learning approach) and the use of multiple methods of presentation.

Halpern and Hakel note that "Substantial practice during training under varied conditions promotes long term retention and knowledge" (Halpern & Hakel, 2003, in Zelinka, 2011, p. 1–2). This is supported by Burke *et al*. (in Zelinka, 2001), who say:

> In fact, when the relative effectiveness of training methods as presented in the literature was re-analyzed and categorized according to learner participation in the learning process, the results, based on 95 studies and in excess of 20,000 participants, indicated that that the most engaging methods (hands-on training)…were approximately twice as effective as the moderately engaging methods (programmed instruction, feedback intervention), and approximately three times more effective than the least engaging methods (lectures, pamphlets, films, videos). Learners were also able to recall and reproduce more of the material (after the same period of time) as training became more engaging (p. 1–2).

Basic Principles of Adult Learning Underlying Our Design

Finally, the basic principles of adult teaching and learning, as shown in Table 1: *Basic Principles of Adult Learning*, are the foundation of a successfully designed classroom learning environment (Laiken, under review). It is these principles that we believe create the "magic" in experiential classroom education.

Based on these principles, the question we posed to each other was: "How can the many years of research on how adults learn be applied with the use of technology, so that the cyber learning milieu is as dynamic, personal and collaborative as the classroom context can be in the hands of a skilled adult educator?"

In order to respond to that question, we present here a case study—the transformation of the "Essentials" program to a dynamic blended learning experience, using an Adobe Connect Pro platform for the virtual classroom, as a core component.

Table 1: Basic Principles of Adult Learning

ADULT LEARNING PRINCIPLES	APPLICATION TO PROGRAM PLANNING
* Learning needs to be meaningful and relevant to the learner. The learner needs to see "what's in it for me" to feel committed and involved.	* Encourage expression of needs, interests; provide opportunity to relate content to personal experience; establish learning goals relevant to the learner's needs.
* Learning can only occur with the agreement of the learner.	* Encourage learners to trust themselves, and assume responsibility for their own learning.
* Learning is aided by cooperation, collaboration and support.	* Develop activities that encourage interaction with others and build trust among group members. Encourage learners to recognize and use mutual resources.

Table 1: *Continued*

ADULT LEARNING PRINCIPLES	APPLICATION TO PROGRAM PLANNING
∗ Learning that involves behavioural change tends to result from experience.	∗ Develop activities that encourage learners to be active rather than passive.
∗ Learning occurs most readily in a state of "optimal anxiety."	∗ Create a learning environment that challenges learners while reducing unnecessary anxiety.
∗ Learning occurs most effectively within a structured framework, with room for personal creativity.	∗ Clarify expectations; allow learners to find their own ways of accomplishing agreed-upon goals.
∗ Learning is unique to each individual.	∗ Celebrate the differences; provide for a variety of approaches to match individual learning needs/styles.
∗ Learning is aided by feeling comfortable in the work setting.	∗ Provide a comfortable, informal environment; be attentive to physical needs.
∗ The process of learning is emotional as well as intellectual.	∗ Develop an atmosphere that legitimizes expression of feelings, as well as ideas.
∗ Learning is sometimes a difficult and slow process.	∗ Develop an environment that permits making mistakes; that is supportive versus judgmental; and that provides for differences in learning rates.
∗ Learning needs to be reinforced.	∗ Provide opportunities to practice skills and use knowledge. Provide on-going feedback to help assess progress.
∗ Learning is enhanced by positive self-regard— "nothing succeeds like success."	∗ Help learners feel respected and accepted, and successful in their learning tasks.

The Essentials of Organization Development and Change—A Case Example

The two-day, face-to-face version of this program was designed as a highly interactive introduction to the essentials of Organization Development (OD).

The specific objectives of the program were to answer the following questions:

1. What is OD? (roots)
2. Who am I as an "instrument of change"? (roles)
3. How is it done? (research in practice; action research)

These "3 R's" of O.D.—*Roots, Roles,* and *Research in Practice* were taught in the classroom through a combination of small and large-group discussion, short presentations, personal reflection using a self-scored inventory, and experiential activities, including a case study which provided a step by step experience with an "action research" model (O'Brien, 1998). The activities were supplemented by a reading list and handouts for further reference.

Approach to Converting from Face-to-face to Online

We used Wagner and Milland's (2014a) six-step approach to convert the program and design the revised on-line offering:

1. *Review Learning Objectives*: We reviewed and revised the learning objectives, determining which of these would be best accomplished and tested in a virtual classroom, and which would lend themselves to other blended learning components.
2. *Reorganize content*: We then redistributed the content to various media, and allocated appropriate virtual classroom content to interactive sessions of 2 hours each.
3. *Make it visual:* We inventoried and repurposed existing visuals, adjusting and expanding them to virtual classroom functionality (video format, size, and so forth)
4. *Add interaction:* We inventoried and repurposed existing interactive components, incorporating ad hoc interactions, converting long open-ended assignments into short interactions, and adding frequent relevant interactive activities.
5. *Introduce the Virtual Learning Environment:* We started with existing introductory exercises, adding a new virtual approach to ensure both social presence and mastery of the virtual learning environment.
6. *Inventory and convert supporting materials:* Finally, we reviewed materials to ensure "fit" with the new structure, simplified handouts into one resource guide, reviewed and revised leader's guides and participant materials, and made undocumented interactions explicit.

The New Program Architecture and Specifications

The 2-day program was reconfigured into a 7-part blended learning experience with the components shown in Figure 1: *Architecting the OD Essentials into a Blended Learning Environment*.
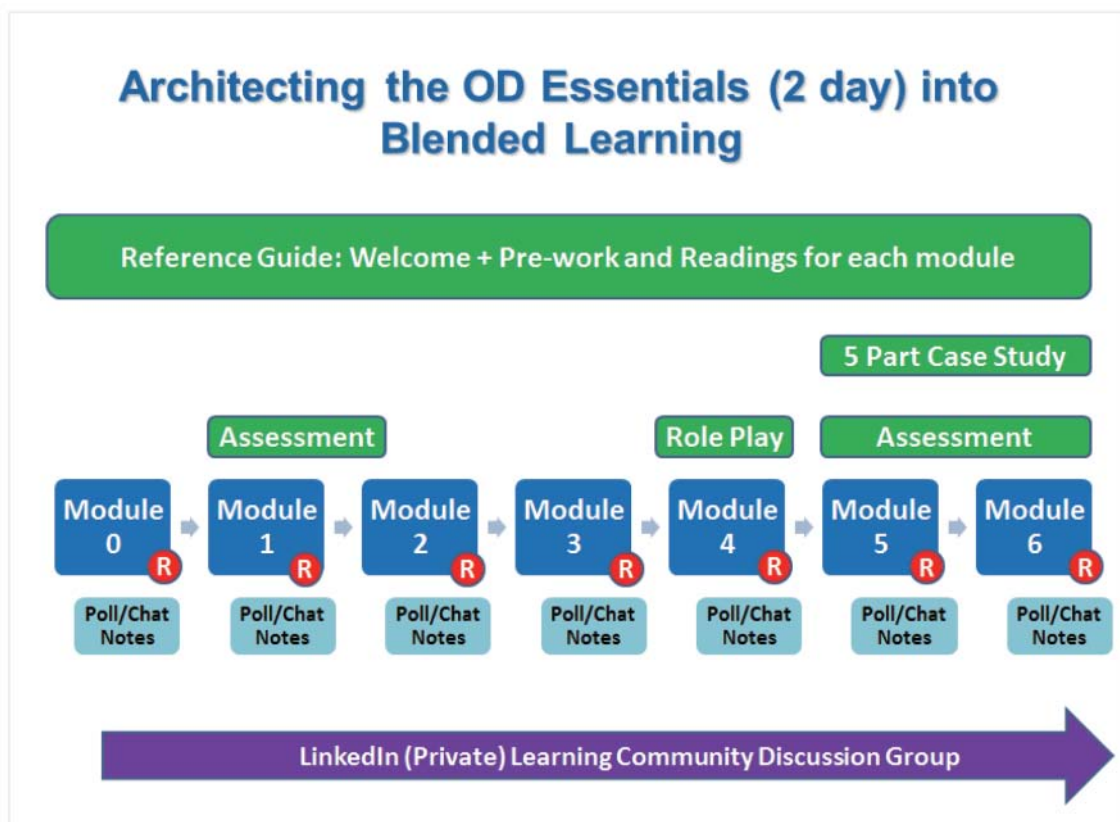
Figure 1: Architecting the OD Essentials into Blended Learning

1. *Reference Guide:* A reference guide was developed, which brought together all materials including a welcome letter, pre-work and pre-readings for each module.
2. *Module 0:* We added a front-end Module "0" which introduced participants to the technology and interactive features so that the first class was productive, and technical issues were resolved for individuals prior to the official start.
3. *Modules 1–6 (Virtual Classroom Sessions):* Six 2-hour virtual classroom sessions were developed to be highly interactive, to help participants internalize the content that was delivered in the readings and activities assigned between sessions. Adobe Connect Pro was used as the technology platform for the classes.
4. *Assessment:* Paper-based assessments from the original program were converted to automated spreadsheets for quick analysis. Assessments were completed between sessions. Results were shared in small group discussions online.
5. *Role-Play:* We used specially designed screen layouts, which allowed the role-play participants to see each other and work with visual as well as aural cues.
6. *5-Part case study:* New information was revealed to participants online for each segment of the case study, at the appropriate time, to enable them to work in virtual break-out groups and report results. The facilitator then shared what happened in reality.
7. *Slides, polls and poll results, slide decks and chat session logs* were sent to participants immediately following each session.
8. *Recordings:* Sessions were recorded for subsequent participant review. This allowed those who missed a session to catch up.
9. *LinkedIn (private) learning community discussion group:* Work between the sessions was made more interactive by having participants discuss certain issues and topics in an online discussion group, and then continue discussions later in the virtual classroom.

Challenges

- For the facilitator, a key challenge was an inability to see non-verbal participant responses.

We realized how much we depended on these cues for feedback. We needed to find other ways to solicit that information. Ways we did this included "water cooler" session introductions and "check-outs" at the end, as shown in Figure 2: *Water Cooler Checkout*, providing open-ended opportunities to express reactions and questions. Polls and ongoing evaluations also solicited participant feedback. This often resulted in changes that improved our original design.

- Another challenge was how to reproduce in a virtual environment the active exercises that enlivened face-to-face sessions.

The Adobe Connect platform was selected for its powerful collaboration tools. One of the best practices for virtual classrooms (see that and 144 other best practices: Wagner & Milland, 2014a) is the 5–10 minute rule. The virtual classroom is most effective when the degree of interaction is very high. The best practice is to ensure that an activity is created that requires participants to engage actively with other participants or the instructor every 5–10 minutes.

Likewise, in his book *Brain Rules*, Dr. John Medina (2009) also recommends what he calls the 10-minute rule. His research shows that attention drops off dramatically after 10 minutes, and that it is briefly recovered near the end of the session (perhaps because people know it is about to end and a Q&A or summary has started).
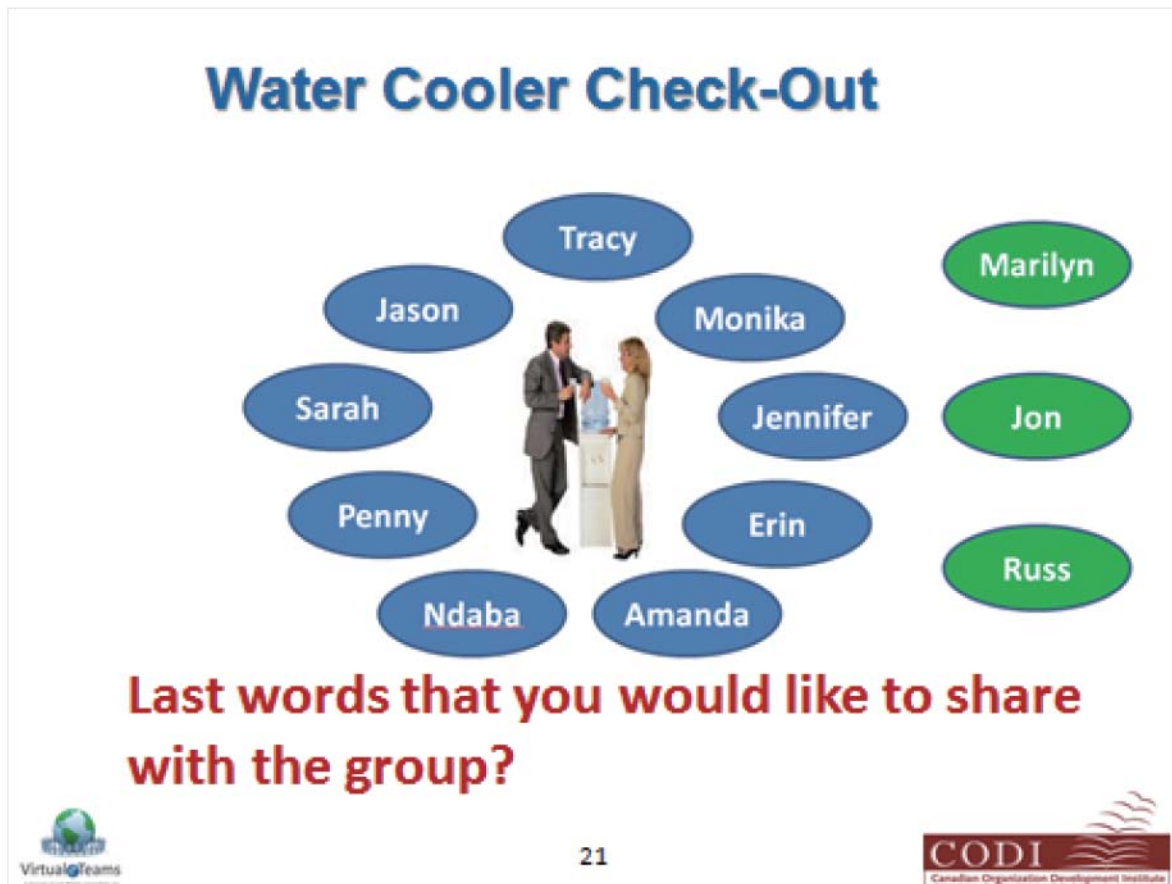
Figure 2: Water Cooler Checkout

In her book, *Better Beginnings*, Dr. Carmen Taran (2009) proposes that if something can be done to "create anticipation" in the first 30 seconds, it buys you 10 more minutes of attention, after which anticipation needs to be created all over again.

The implication of both Dr. Medina and Dr. Taran's research is that to keep participants engaged, the facilitator must introduce activities that require everyone to interact at least every 5 to 10 minutes.

In that vein, Table 2: *Interactive Adobe Connect Tools*, summarizes the interactive Adobe tools used for the on-line Essentials course.

Table 2: Interactive Adobe Connect Tools

Tool	Uses in the on-line course context
Chat	• Solicit participant input, brainstorm, collaborate • Encourage participants to continuously contribute ideas and questions

Polling in
  – Adobe
  – Survey Monkey
	• Quick visual polls or voting using the annotation tools
	• Use an instant Adobe Connect poll
	• Solicit input prior to workshop sessions

Emoticons/ Status Options	• Quickly get input—Polling through "Raise Hand," "Agree/Disagree" emoticons • Identify who wants to speak

Table 2: *Continued*

Tool	Uses in the on-line course context
Webcam	• Stream video of instructor/participants selectively throughout the program. Use during discussion and debate or role plays
Whiteboard	• Brainstorm and capture ideas • Use annotations to vote on pre-built forms
Application Sharing	• Share websites, videos, images, desktops, documents, notes • Co-edit key documents
Breakout Rooms	• Small group work or role plays
Round Robin/"Water Cooler"	• Prepare a slide with everyone's name on it • Call on individuals for input or to share thoughts

- Envisioning how to successfully replicate activities in the classroom, such as role-plays and small-group discussions, was a special challenge.

*Values Clarification Activity Example***:** In the classroom version, participants were asked to choose between two polarities for 4 different scenarios. Participants moved over to the side of the room where the statement was that best represented their values; these sub-groups discussed why they chose that polarity on each side of the room, and then reported out their respective perspectives to the whole group.

In the virtual classroom, participants were asked to put their initials beside the polarity with which they best identified on a virtual whiteboard. Participants then discussed their perspective, followed by general comments. The interaction and discussion were equally rich in both contexts.

Role Play Activity Example: In the classroom version of a Role Negotiation activity, a participant described their own current troublesome case scenario using two chairs—one representing what they had said, and the other representing what was said by the person they were addressing. The participant then moved to the chair of the other person. A volunteer would then fill the empty chair and role play what they would say. After several such interventions, the scenario was debriefed, and the participant who provided the case told the group what they might now actually try in this situation.

In the virtual classroom, virtual breakout rooms were used with a special screen layout where the "Consultant" and "Client" turned on their webcams and did the role play, using index cards to indicate who was speaking at any point in time. The observers gave feedback and the program leader participated to help provide further insights. The larger group then reconvened and debriefed their learnings.

- A key question we held was, how do you ensure the participation of every learner remotely?

It is easier to just "lurk' in an on-line setting, yet active participation is a key to integrated learning. So, how to deal with the silences online?

We needed to learn to accept silences not as a lack of interest, but simply part of the on-line milieu. "Round Robin" responses to questions periodically insured that everyone had a "voice" and that participants were still "with" us.

- Another important question was, how does one evaluate the impact of the learning experience?

Each session concluded with a different brief "formative" evaluation. The first session had the participants raise their hands and respond to specific questions. For the second session, we used an anonymous poll. The results and subsequent program adjustments were shared and discussed briefly at the next session. At the end of the third session a "virtual round robin" checkout was used. At the end of the sixth session, a more detailed evaluation of the whole program was completed on-line.

- Finally—how did we manage to stay aligned as a three-person team—a challenge in any team-training environment?

This challenge was exacerbated by the fact that our three team members were also working remotely, hours away from each other by road.

Jon Wagner and Russ Milland brought a wealth of research, experience and best practices in Virtual Teaming to this project. Their approach is described in detail in their book: *Building Effective Virtual and Remote Teams* (Wagner & Milland, 2011). Marilyn Laiken also contributed many years' experience in working with face-to-face teams as described in her book: *The Anatomy of High Performing Teams: A Leader's Handbook* (Laiken, 1998).

We launched the project with a kick-off face-to-face meeting ("travel for trust"), and subsequently co-developed the vision, objectives and approach virtually, using *BEST Practices for Virtual Meetings* (Wagner & Milland, 2014b) as our guide.

We then scheduled regular 1 to 2 hour virtual meetings before each online session, reviewing course materials as well as pre and post-session scripts and checklists. We debriefed each class, providing honest feedback on each others' roles, and reflection on our own performance, making changes where needed.

Summary: Lessons Learned

There are a few key learnings from this experience that could improve future practice, such as:

1. *A blended learning environment can be just as, or even more effective and interactive than a 2-day face-to-face workshop*. With ongoing reinforcement, participants are more likely to complete all readings and extra work to enrich their learning. Participating in on-line discussion groups with clear guiding questions continually reinforces the learning.
2. *It takes much longer to develop blended learning than a classroom experience.* The virtual classroom environment is less forgiving than the classroom, and it is more difficult to "go off script" once you are "live" in the virtual classroom. Material needs to be thoroughly tested to ensure the concepts are clear, and the technology works as planned.

Upon reflection, we recommend the following steps for the best results:

(a) *Plan a separate Technical Orientation session*. We learned from this program that planning a separate technology orientation session may have helped to ensure that the first class would be productive and engaging from the start. We managed to take this opportunity to teach the students how to function in the blended learning environment, and we were able to deal with any technical issues at the same time.
(b) *Always include at least two facilitators/hosts/presenters*. We found that in the virtual classroom, it is difficult for one person to play multiple roles (as facilitator, host, presenter,

technical support, for example). Having at least two people involved may free the facilitator to focus more on the teaching role.

(c) *Move content to pre-work and intersession work.* Detailed content is best delivered with readings, videos and audio recordings, requiring reinforcing communication from the facilitators to ensure that people do the work. Once participants experience a session where the content is built upon, they may realize that they need to complete pre-work to enable their full participation.

(d) *Design virtual classroom sessions to be highly interactive.* Applying the 5 to 10 minute rule (as discussed previously) improves engagement. We found that twenty to twenty-five PowerPoint slides is the optimal number for a highly interactive 2 hour session. A maximum time of 5 to 10 minutes between activities is very realistic.

What would we do differently?

Overall, we were very pleased with the end product and results, and found that the changes we would make were fairly minor.

We did realize that we did not set clear expectations about the number of sessions that participants could miss, while still being awarded a certificate of completion. In a 6 week program, as opposed to a 2 day face-to-face workshop, it is more likely that participants may miss sessions due to scheduling changes. Available session recordings and individual "meetings" with us helped bring missing participants up-to-date. It became evident that absences could be disruptive to the group dynamics, especially in a fairly small group of participants.

Finally, especially the first time a program is converted, the amount of development time should not be underestimated. A useful research study by Chapman Alliance (2010) suggests that to develop blended learning with highly interactive on-line components, it will likely take four times as long as it may take to develop classroom-based instructor-led training.

However, despite these challenges, all three of us were convinced that, in this case at least, we were able to retain the "magic" of face-to-face classroom learning in our blended learning context—and even improve on it in some important ways. We will certainly do it again!

We'd like to let our learners have the last word. When asked in a post-session on-line survey what they were most pleased about regarding the program, they said:

- *"Team discussions through breakout rooms were fantastic"*
- *"I appreciated the opportunity to participate and contribute, but at the same time have time to absorb the information and concepts"*
- *"I really appreciated the wealth of knowledge and experience that the facilitators provided to the course. Theory is one thing, but when combined with experience, the product that is delivered is that much better."*

(Final program evaluations, November, 2013)

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