Author: **Abrahamson, Tracy J.**

Title: ***Moving Company ABC Training from a Traditional Classroom to a Virtual Classroom***

The accompanying research report is submitted to the **University of Wisconsin-Stout**, **Graduate School** in partial completion of the requirements for the

Graduate Degree/ Major: MS Training and Development

Research Advisor: Sally Dresdow, DBA

Submission Term/Year: Spring 2015

Number of Pages: 64

Style Manual Used: American Psychological Association, 6th edition

☒ **I have adhered to the Graduate School Research Guide and have proofread my work.**

☒ **I understand that this research report must be officially approved by the Graduate School.**

☒ **I attest that the research report is my original work (that any copyrightable materials have been used with the permission of the original authors), and as such, it is automatically protected by the laws, rules, and regulations of the U.S. Copyright Office.**

☒ **My research advisor has approved the content and quality of this paper.**

STUDENT:

NAME: Tracy Abrahamson **DATE: 5/8/2015**

ADVISOR: (Committee Chair if MS Plan A or EdS Thesis or Field Project/Problem):

NAME: Sally Dresdow **DATE: 5/8/2015**

This section for MS Plan A Thesis or EdS Thesis/Field Project papers only

Committee members (other than your advisor who is listed in the section above)

1. **CMTE MEMBER'S NAME:** **DATE:**
2. **CMTE MEMBER'S NAME:** **DATE:**
3. **CMTE MEMBER'S NAME:** **DATE:**

This section to be completed by the Graduate School

This final research report has been approved by the Graduate School.

Director, Office of Graduate Studies: **DATE:**

Abrahamson, Tracy J. ***Moving Company ABC Training from a Traditional Classroom to a Virtual Classroom***

Abstract

Research was conducted to identify the training needs and current level of instructor competency, to develop a program to build trainers' still in virtual instructor-led training. The company reorganization and long-term strategic planning was to develop an effective interactive virtual classroom as an alternative to the on-site training option.

The application trainers participated in an interview process which consisted of 11 questions. The goal of the interview was to collect data to on training needs and create a virtual instructor-led training program. The analysis of the interviews reveal the following common themes: 1) all respondents preferred training in the traditional classroom; 2) application trainers believe learners are distracted during VILT training sessions; 3) learner participation is important to applications trainers; and 4) overall applications trainers experience with designing VILT, using WebEx tools, and facilitating VILT is limited. Conclusions and recommendations for an overall project plan with targeted training for application trainers and VILT development were proposed.

Acknowledgements

Thank you so much to all the family, friends, and teachers that supported me during this journey. I appreciate all the cheerleading you did for me along the way.

I would like to thank my research advisor, Dr. Sally Dresdow, for her patience and faith in my ability to complete this project during the most difficult times.

Finally, and most importantly, I want to express my heart-felt gratitude to my immediate family for supporting me throughout all my studies. Their unending encouragement to complete this project helped me overcome setbacks, and none of this would be possible without them as my source of love and energy.

Table of Contents

List of Tables

List of Figures

Chapter I: Introduction

Company ABC is a healthcare benefits and healthcare financial solutions Software as a Service (SaaS) company. It is a hosted cloud computing solution made available to over 500 partners, 90,000 employers, and 10,000,000 consumers. The SaaS platform solution allows for configuration of the software to meet specific partner service model needs without the partner incurring IT costs.

Company ABC was founded in the early 2000's, merged with another healthcare financial solutions industry leader in 2011, and in 2014 was acquired by a leading provider of cooperate payment solutions. Following a scalable business model, Company ABC increased profitability by adding new partners quickly while keeping internal costs low. As a result, sales volume significantly grew over five years. In 2008, the number of new partners was seven, but in 2012, the number of new partners increased to 25, and in 2013 it was 52.

While Company ABC's partner base grew rapidly, the implementation and training departments did not grow sufficiently to meet the demands. Once a new partner comes onboard, there was a 12 week software implementation phase. During the implementation, two key team players were the implementation program manager and the application trainer. The assigned implementation program manager coordinated the group and the application trainer facilitated and customized the partner training.

The application trainer assigned to the implementation attended the kick-off introduction call with the partner and subsequent implementation meetings as needed. New partner training consisted of three or four days at Company ABC's site or at the partner location. This included a pre-requisite online session, and post training online sessions. New partners were encouraged to send a minimum of two and maximum of eight people to the training. If partners wanted groups larger than eight, additional resources were required for the training.

Company ABC's application trainers typically included lecture and lab interactions when instructing end users on the configuration of the software and the features and functionality of the software. Company ABC had a lab-style classroom equipped with computers, a projector, and the amenities needed for the creation of a dependable learning environment away from the distractions of the daily work routine.

If a partner requested training at their site, Company ABC used formal documentation, called a statement of work in order to define the needs for effective training at their location. Partner responsibilities included providing a training facility which included a projector, a computer for each trainee, internet access, and the resources necessary for setup.

As part of the 2014 acquisition and reorganization, Company ABC began to implement a new strategic plan meant to support new partners and shape future implementation and training efforts. The desired outcomes for the strategic plan were to determine new strategies that would reduce training time and travel costs while enabling new partners to quickly acquire the SaaS platform knowledge and skills. A specific area of interest was moving from onsite physical classrooms to the alternative virtual instructor-led training (VILT). It was believed it would be an inexpensive solution to new partner training.

Application trainers began offering VILT for new partners by simply taking the existing classroom content and reusing it in the virtual classroom. Trainers were not convinced that VILT was the right solution for new partner software training after several months of failed attempts. In the end VILT resulted in continued retraining, a higher volume of technical service issues, and longer implementation times.

Statement of the Problem

Faced with reorganization and long-term strategic planning, Company ABC must develop an effective interactive virtual classroom as an alternative to the on-site training option during the implementation phase to achieve day-to-day utilization and maintenance of the SaaS platform.

Purpose of the Study

The purpose of this study was to understand the training needs of application trainers at Company ABC as the organization transitions to virtual instructor-led training. To identify the training needs, interviews of current trainers were conducted to provide the current level of instructor competency, and develop a program to build the trainers' skills in VILT.

Assumptions and Limitations

Assumptions of scope:

1) Application trainers at Company ABC are not motivated to make the transition to VILT.
2) Data collected from the interviews will be used to create instructor VILT training program.

Definition of Terms

Asynchronous training. It is a self-paced training delivery method that does not require learners and trainers to meet at the same time (Hugget, 2010).

Blended Learning. Merges several training delivery methods (face-to-face, virtual training, e-learning, etc.) to create combination of learning activities.

Synchronous training. Training delivery method that requires learners and trainers to meet real-time for a training event and interact simultaneously (Hugget, 2010).

Technical training. Instruction based on how to operate computer program product to build knowledge and skills to complete a task.

Virtual instructor-led training (VILT). Use of a software program to allow trainer and trainees to meet and participate on-line for a synchronous learning event.

Methodology

Application trainers were interviewed to determine current level of VILT competencies. Interviews were the chosen data collection method, and were the best approach to help the interviewees recall and evaluate their experiences with VILT. The interview responses collected were analyzed to identify the current level of application instructor competency, and the level of competency needed to make the transition to VILT.

Chapter II: Literature Review

The executive leadership of Company ABC set a strategic plan to modernize training by developing delivery via a virtual classroom. There is often a gap in expectations when executives in an organization provide the goal but they lack practical training experience to realize the goal. It is the responsibility of the workplace training and development professionals to define, design, and deliver training solutions which support the strategic plan and company goals.

This chapter includes a literature review on the subject of transitioning from the primary use of a traditional classroom to a virtual classroom. Traditional face-to-face and instructor-led virtual classroom elements are compared to answer the question of what areas of expertise do trainees need in order to achieve Company ABC's learning goals. Evaluation of the contrasts between instructional system design models, analyze, design, develop, implement, and evaluate (ADDIE), successive approximation (SAM), and simple online learning instructional design (SOLID), provides a basis to determine what goes into VILT to assure successful and effective learning events.

State of the Industry

Implementing a learning solution assumes the end result will be learners acquiring skills which will improve performance in order to meet business goals. After training if learners are not able to return to the job with new or improved skills, learning did not take place. In 2013, organizations in the United States invested on average, $1,208 per employee for training and development (Miller, 2014). This investment means it is critical to have a consistent and effective training design development. Training must be scalable, leverage technology, and deliver in the outcome of enhance skills with better performance.

According to the Association of Talent Development's (ATD) (2014) *2014 State of the Industry Report*, the traditional face-to-face classroom continues to be the most common learning delivery method. As shown in Figure 1, the average percentage of formal learning hours spent in the traditional classroom is 54.62%, while only 9.33% is spent in the virtual instructor-led classroom (Miller, 2014, p. 27). However, these numbers do not mean one is better than the other. The effectiveness of a learning experience is not realized through the delivery medium, but in how effectively the features of the delivery medium are designed, developed and implemented (Clark, 2014).

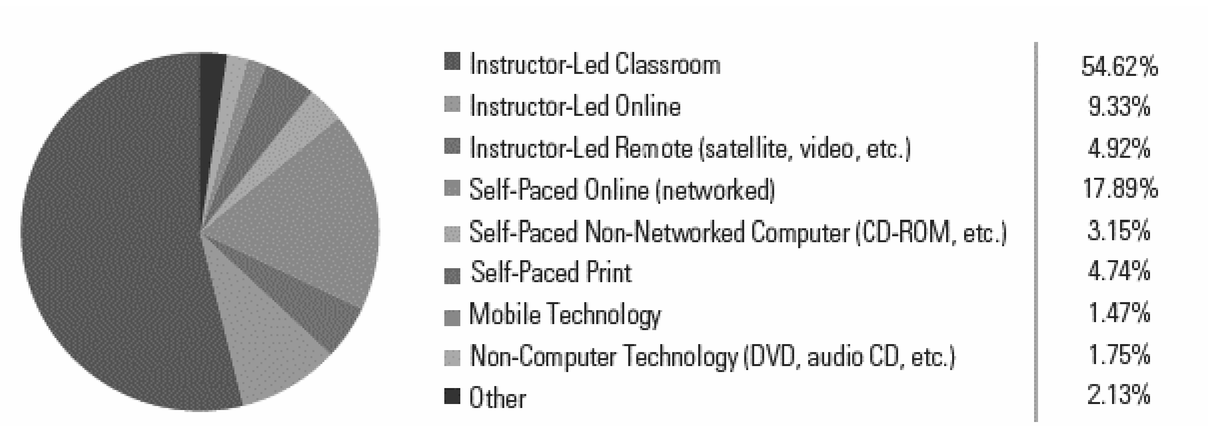


Figure 1. ATD average percentage of formal learning hours via all delivery methods. Miller, Laurie. (2014, p. 27). 2014 state of the industry. ASTD DBA Association for Talent Development (ATD).

When tasked with creating training events many workplace training and development professionals look for a way to quickly development training and often design a solution similar to what they currently provide (Duhigg, 2012; Rosen, 2009). In addition, most trainers are social people and enjoy being in front of the room, sharing stories, and interacting with others (Hofmann, 2004). Both are possible contributors to the 54.62% average learning hours spent in the classroom as noted in the ATD (2014) report.

Asking a trainer who has only taught in a face-to-face format to suddenly deliver learning in a virtual classroom is asking trainers to lead an environment they have not mastered (Hofmann, 2004). According to research by Turmel (2012), 80% of trainers are asked to convert and deliver VILT with no training, no positive examples, and no management guidance. Therefore, many trainers will simply take existing traditional classroom lessons and reuse it for a virtual classroom word for word. However, a virtual classroom is not always a one-to-one translation from the traditional classroom delivery (Hugget, 2010). Taking this approach often results in less than favorable learning outcomes which may lead to training professionals assuming failure. This scenario and others like it could be the reason only 9.33% average learning hours are spent in virtual instructor-led classrooms as reported in the ATD (2014) report.

Often what holds back training professionals from considering VILT is the same as what prevents learners from learning, it is the fear of change. Specifically, these are the fear of learning new concepts and skills, and then adapting that knowledge along with what works in the traditional classroom to create something new for the virtual classroom (Rosen, 2009). Trainers are asked to take on a new way of teaching and to move away from what they are comfortable with and enjoy (Turmel, 2011). To show value to their organizations however, training professionals must acquire new skills in order to be successful. The recent ASTD Competency Study (2013) clearly describes online learning and technology as the key areas of competency that trainers cannot ignore.

Implementing a virtual classroom for effective technical training takes more than a delivery platform and an instructor. It requires planning, designing engaging learning activities, incorporating interactivity, and the collaboration between instructor and learner – the same requirements necessary for the traditional classroom (Clark, 2014). Companies looking to implement VILT can expect high upfront costs but the return on investment will be effective learning solutions (Ready, 2011).

Traditional Classroom vs. Virtual Classroom

There are differences between traditional and virtual classroom delivery methods. The first apparent difference is the direct face-to-face contact of the traditional classroom. The virtual separation between trainer and learner can be a challenge for a trainer. The lack of connection is unsettling to many trainers because they are accustomed to using eye contact and body language for gauging cues related to learner engagement (Hofmann, 2004). Also, part of job enjoyment for trainers is the excitement and performance of being in the classroom, interacting with learners (Turmel, 2012).

Virtual classrooms can also be challenging for the learner. According to Rosen (2009) many learners are not as engaged in the virtual classroom and tend to multitask or become distracted by the work environment. Disengagement in the traditional classroom is easily discouraged between trainer and learners because of a face-to-face interaction while in the same physical location. However in a virtual environment, the trainer may not know of the disengagement.

Hugget (2010) suggests trainers should not be discouraged by the lack of physical proximity. According to Hugget (2010) "if you are a classroom trainer, then you do already know a lot about facilitating in the online classroom" (p.21). The skills of a trainer in the traditional classroom, interacting with learners, asking questions, giving instruction, leading engagement actives are all also required in the virtual classroom. Hugget (2010) goes on to say, "Because virtual trainers do not see participants, they have to rely on other methods of observing participants" (p. 23).

This leads to a second difference between the traditional and virtual classrooms which is the tools used to communicate (Hofmann, 2004). Rather than meeting at a physical location, trainers and learners use a learning management system (LMS) software program, such as WebEx, Adobe Connect, or GoToMeeting. Trainers have the ability to reach geographically dispersed learners through a virtual classroom.

Using technology a LMS can heighten the anxiety of both the trainer and the learner. Nevertheless, trainers already have traditional classroom facilitation skills (Hugget, 2010). They simply need to become skilled at the software program they will when applying those skills and design for delivering in a virtual classroom. Likewise, most learners are familiar with conference calls and social networks and quickly learn the software of the virtual classroom.

Regardless if the training is in the physical classroom or a virtual classroom the expectation of the outcome is the same: to improve or learn new skills and increase job performance. Hoffman (2004) states trainers will find they can design learning events using a virtual classroom that they originally never thought would be effective in that delivery method. Hugget (2010) agrees that by using virtual classroom tools trainers can successfully teach almost anything.

The virtual classroom makes use of many of the traditional classroom tools. WebEx is a commonly used technology. The following will compare WebEx specific features with that of a traditional classroom.

Audio. Audio conferencing allows one-way or two-way communication via the phone or voice over internet protocol networks (VoIP). This allows the trainer and learner to interact as they would in a traditional classroom. Trainers can ask questions to provide discussion and draw learners into participation by providing learners the opportunity to also ask questions. Pluth (2010) states that building a learning community in the virtual classroom is essential. Just as greeting learners as they enter the physical classroom is important so is engaging learners as they enter the virtual classroom. As in the traditional classroom, the trainer must show enthusiasm and create the camaraderie before the session starts.

The trainer's voice in VILT is the most essential tool (Clark, 2008; Hofmann, 2004). Just as in the traditional classroom, changing pace and emphasizing a point is important, but it is even more important in a virtual setting. Many trainers think they can get away with reading a script in the virtual classroom. But learners will immediately recognize this and they quickly will lose interest. Hofmann (2004) also suggests that learners "hear" smiles and use of hand gestures, and encourages trainers to continue using natural gestures even in the virtual classroom despite the fact that learners cannot see them.

One certain distraction with audio in the virtual classroom is caused by too many people talking at once (Hofmann, 2004; Turmel, 2012). In the traditional classroom when the trainer asks if there are any questions the visual of looking around the room provides learners with the ability to simply state their question. However, in the virtual classroom asking if there are any questions can either produce distracting microphone feedback as multiple users talk at once, or the deadly silence of muted phones or disengaged learners. Hoffman (2004) suggests that trainers simply need to practice new ways of asking questions. For example, a trainer may say at this point if there are any questions, please click the raise hand button or enter your question in the Q&A section. Figure 2 illustrates question and answer (Q&A) feature of WebEx Training Center. Learner XYZ has entered a question and the trainer can now address the question. In addition, if the trainer has the learner muted they can it turn on or off when talking back and forth.

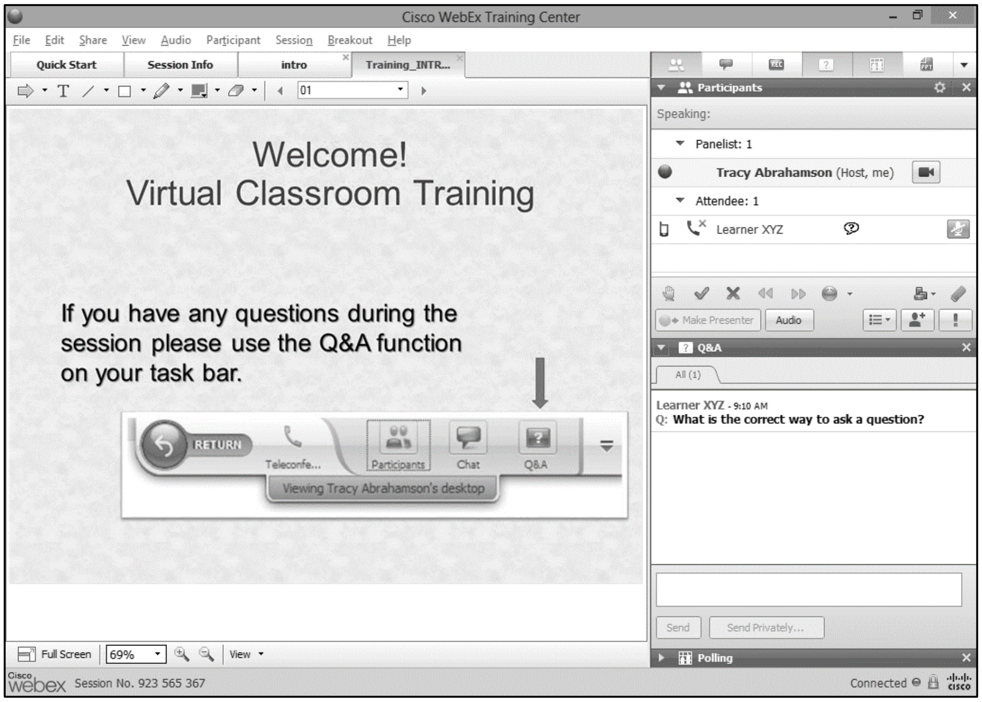


Figure 2. Example screen shot of the Q&A functionality of WebEx Training Center. WebEx (n.d.)

Whiteboard. The whiteboard in the virtual classroom setting is similar to flip charts or dry erase boards of a traditional classroom. Trainers can use the whiteboard for the same purposes as they would a flipchart. Examples of this could be parking lots or brainstorming. This tool is powerful as it allows trainers to create engaging actives, games, and capture learner ideas as shown in Figure 3. Pluth (2010) shares her experience with whiteboards in virtual classrooms:

> The average length of time a learner stays engaged before getting distracted and begins a new task is 4 minutes. This means, unless I want to lose my learners to email, and online bill paying, I need to engage participants every 4 minutes. (p. 10.).

Whiteboards are a perfect way to engage learners, as it can be interactive by allowing learners to use the annotation tools to contribute directly.

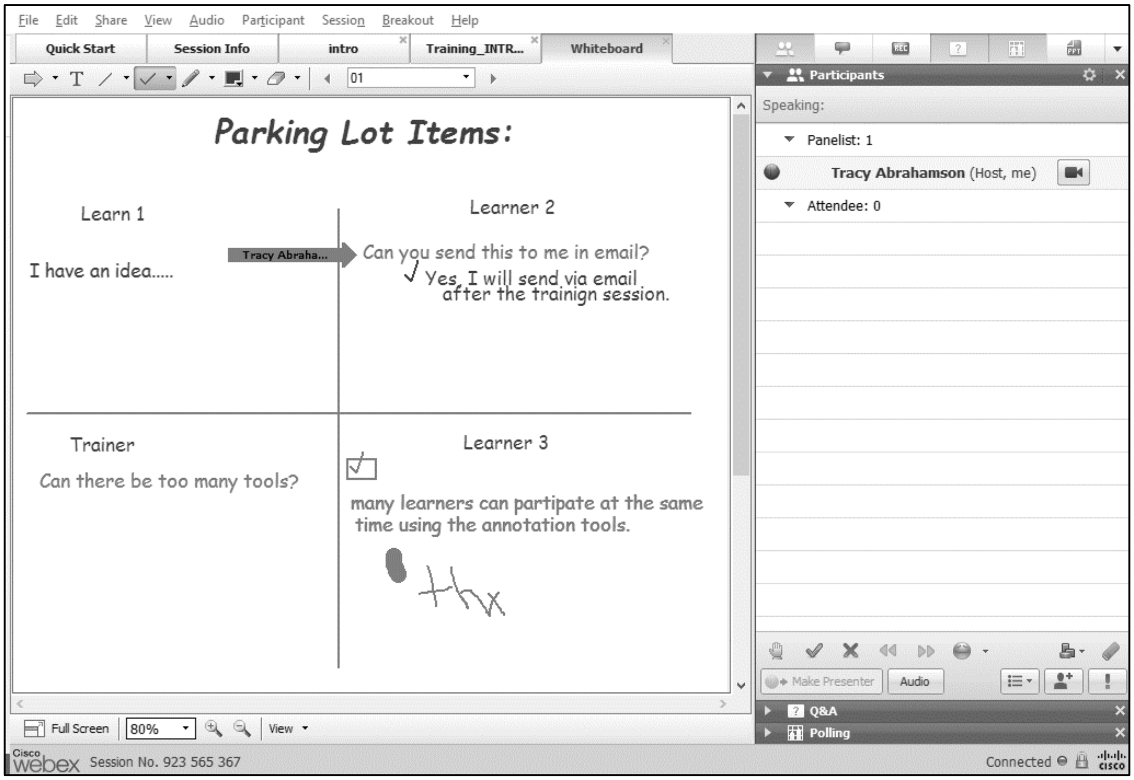


Figure 3. Example screen shot of the whiteboard functionality of WebEx Training Center. (WebEx, n.d.)

The experts suggest asking learners to type on the whiteboard rather than answering a question verbally (Hofmann, 2004) or summarizing what they have learned during the session (Hugget, 2010). This provides advantages in engaging learners. First, it builds on the sense of community and reduces the possible isolation felt by some learners. Second, it allows the trainer to engage in activities that appeal to visual learners and kinesthetic learners (Hofmann, 2004).

Just like with flip charts, whiteboards can be planned and prepared ahead of time as well as revisited during the session. An added bonus is that whiteboards can be shared after the learning event via email or other delivery methods (WebEx, n.d.).

Application sharing. The application share feature allows trainers to share a variety of views from Power Point slides, web browsers, software, and video. Figure 4 illustrates an example of sharing Power Point slides within a WebEx training session.

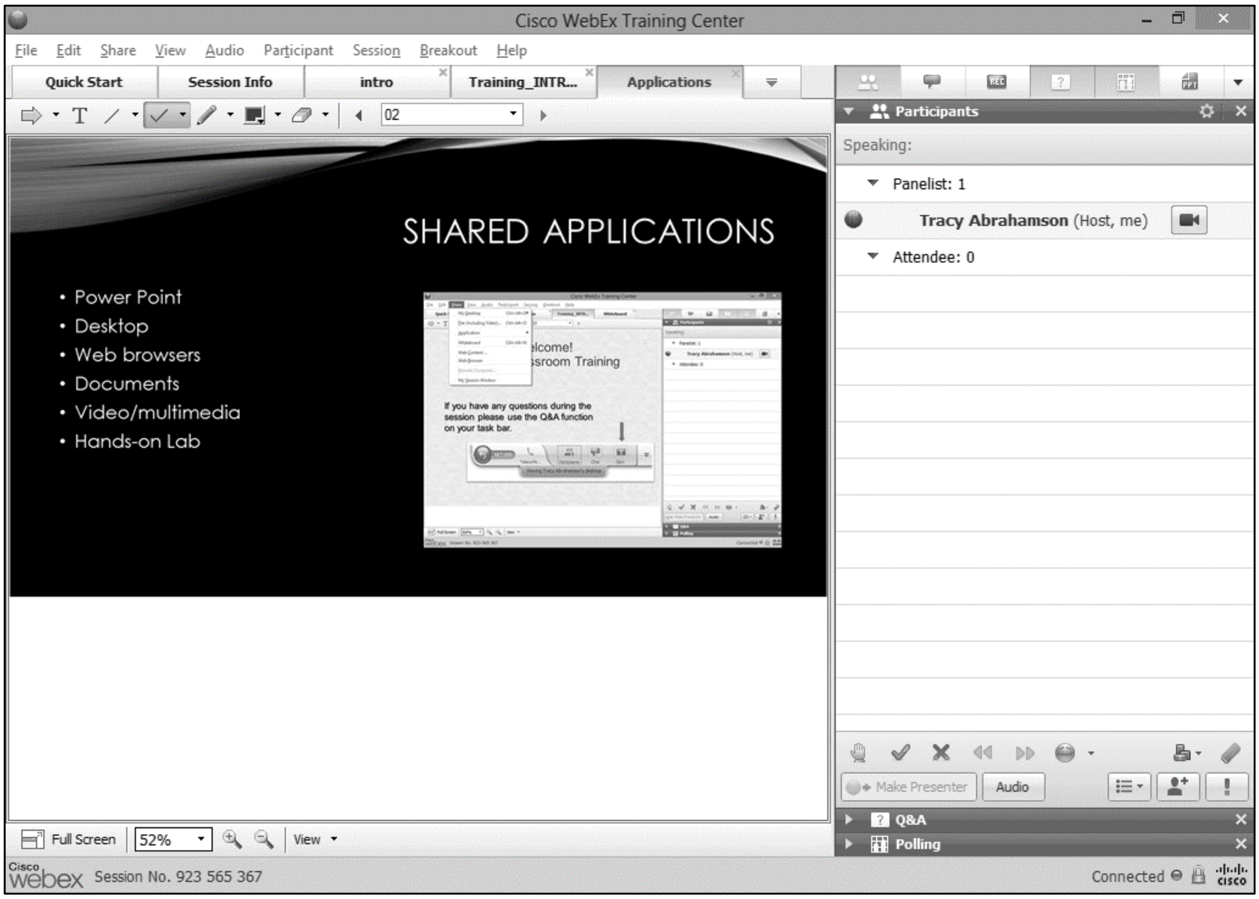


Figure 4. Example screen shot of the shared applications functionality of WebEx Training Center. (WebEx, n.d.)

Application sharing allows learners to follow along with the trainer, and collaborate using annotation tools to edit documents and provide ideas (Webex.com, n.d.). In addition, trainers can grant remote control to a learner to provide hands-on interaction and engagement (Hugget, 2010). Software training lends itself very well to this option since it allows trainers to demonstrate, navigate, and show the completion of tasks.

Hands-on Lab. WebEx provides a hands-on lab feature that allows trainers to grant learners access to remote computers that have access to applicable software (WebEx, n.d.). Trainers prepare activities for the lab environment just as they would a traditional classroom thus allowing learners to practice with a software program (Clark, 2014). During the hands-on lab sessions, learners are assigned to a remote computer where they gain experience interacting with a specific software program. Trainers can interact and manage learners in the hands-on lab by using audio, transferring files, broadcasting messages, and responding to requests for help by connecting with the learner and the remote computer. The actions of each remote computer can also be recorded for observing and evaluating later.

The hands-on lab also provides the interaction needed to keep learners engaged. Similar to Pluth (2010), Hofmann (2004) agrees that learners need a change of pace and activity roughly every three to five minutes to remain connected to the session and learning. Muller and Murdoch (2014) suggest an even smaller window of two to three minutes.

Preparing Trainers for the Virtual Classroom

Muller and Murdoch (2014) state trainers should be more cautious of old techniques of training and instead embrace new approaches. The use of technology shows no sign of diminishing and the tools used today in the traditional classroom, as well as in the virtual classroom, will only be replaced with better tools in the future.

If they wish to succeed in engaging learnings, trainers must practice the use of these methodologies - just as they would in the traditional classroom - if they wish to succeed in engaging learners.

Trainers must know and identify the objectives of the VILT training session (Turmel, 2011). Objectives provide direction on what learners will be able to do upon completion of the

VILT. But they will also assist the trainer designing content and determining what success will look like.

It is also critical for trainers to know the virtual classroom platform and practice. Trainers should practice working with the virtual classroom features and master each of them. Learners will lose interest quickly if the trainer appears uncoordinated with the technology (Hoffman, 2004). In addition, Hofmann (2004) advises to avoid apologizing for technical obstacles and announcing the use of technology, such as clearing the whiteboard, because it is artificial and distracting. Talking out loud, or trainer self-talk, and calling attention to mistakes, such as stating the connection is slow or having clicked on a wrong link, should be avoided as it distracts and the trainer may lose credibility.

Another suggestion is to use learners' names when possible. Making it personal encourages learner engagement. As in the traditional classroom, learners pay closer attention when they know they may be called upon. Using learner names also builds the learner community as suggested by Pluth (2010).

The trainer's voice is an essential delivery tool in the virtual classroom (Hofmann, 2004). Trainers should add interest to their voice, they do not need to become broadcasters but it does help to utilize the same energy, enthusiasm, and delivery (Hofmann, 2004; Hugget, 2010; Pluth, 2010). It is important to speak as if in a conversation and not over project, and to avoid monotone speaking and script reading. Hugget (2010) suggests trainers record portions of their virtual classroom sessions to hear how they sound and then make adjustments.

Trainers may also consider enlisting a producer (Turmel, 2012). Co-facilitating with another person provides additional assistance when the number of learners is high, the learners' experience with technology is low, or to improve the quality of the learning event. The role of the producer is broad. First, the producer supports technical troubleshooting. If a learner is runs into a problem during the event the producer will work with that individual via chat or email, so the trainer can continue the session. Second, the producer adds another voice and provides a more conversational or broadcasting format. Hofmann (2004) states that a change in voice helps participants to remain engaged. Third, the producer assists with managing chat and messages, launching whiteboards, and supervising hands-on labs. A producer can also assist with monitoring time, not only to keep the session moving, but to assure activities to engage leaners are occurring frequently.

Experienced trainers prepare and plan for any learning event and this applies equally to the virtual classroom. However, there are a few preparation differences. Trainers should have a backup computer (Hugget, 2010). A backup computer allows several options for the trainer. First, trainers can log into one computer as the host of the session and log into the other computer as a learner. This allows the trainer to see what the learners see which is beneficial support the learners perspective. Second, it provides a backup computer it something goes wrong with the first computer. Hofmann (2004) advises trainers to anticipate problems and prepare for them just like in a traditional classroom. Once in the virtual classroom, trainers should only have open the files and applications needed for the session. Running unnecessary programs could impact computer performance (Hofmann, 2004).

Trainers should also prepare a detailed facilitator guide. Piskurich (2006) suggests a facilitator guide for the virtual classroom is even more important the than one for the traditional classroom. The reason for this is that it serves as a reminder to incorporate feedback stops, allows for specific technical direction to launch activities and learner tools, including screenshots and notes. In the case of co-facilitation with a producer, including the production tasks is beneficial as well (Hofmann, 2004). This helps to keep the trainer and producer in sync.

Trainers need to set expectations on participation and provide the learner with the opportunity to learn and navigate the virtual classroom functionality (Turmel, 2011). For some learners the virtual classroom will be a new experience and they will be unfamiliar with the technology. For others it may be seen as a block of time to send instant messages to friends and check Facebook. Experts suggest creating a checklist to understand the audience (Hofmann, 2004; Hugget, 2010; Lee & Nelson 2006; Piskurich, 2006; and Turmel, 2011). One suggested question would be have learners attended VILT sessions before, will they be comfortable participating (Turmel, 2011). Another question might be if learners will be gathered in a conference room or at their own desks, to determine if there will be limitations on certain types of interactivity (Hugget, 2013).

Preparing Learners for the Virtual Classroom

Like trainers, learners are more likely to gravitate toward a traditional classroom learning environment because of biases regarding what can be taught and learned in a virtual setting (American Society for Training and Development, 2008). Most learners are familiar with the traditional classroom setting from their experience with education in school (Horton, 2006). There may be assumptions that as new generations enter the workplace that familiarity with online or virtual learning will increase. However, this cannot be a universal assumption. Many still require exposure to the virtual delivery of training.

Learning has typically been a social event, away from day to day distractions of the office, and sometimes allows learners to travel to a new and interesting locations. In a virtual classroom learners often remain at their work desk, surrounded by co-workers, email, and other demands requiring their immediate attention (Pluth, 2010). They may quickly lose interest watching a computer screen and listening to the distant voice of a person whom they cannot see and who cannot see them. There are steps a trainer can take to prepare learners for the virtual classroom and thus reduce such distractions.

The first step is to ask the question learners will ask. What's in it for me (WIIFM)? Just as in the traditional classroom training, this question must be answered for learners in the virtual classroom. Learners know how to learn in a traditional classroom from school experience and other face to face learning events (Hofmann, 2004). But they may need to be motivated to embrace a new learning environment. A better understanding of why this delivery method was chosen may assist them in their ability to engage (Turmel, 2012).

Next it is important to set expectations prior to the learning event (Turmel, 2012). Because of their bias toward the virtual classroom some learners will assume they can multitask during the learning event. It is imperative to set the expectation that the session will be interactive and require participation. Turmel (2011) suggests email as initial contact with learners to make sure they understand the benefits of the VILT and objectives. Hugget (2013) advocates the importance of communicating the shift of responsibility for learners. The success of the VILT depends greatly on the learner. The learner is responsibly to creating a learning environment workspace that is uninterrupted, testing computers, and audio connections, and completing pre-work. Trainers can assist with this by providing a checklist and suggestions to assist with managing their learning environment (Hugget, 2013).

It is also important to create virtual classroom ground rules. Both Hugget (2010) and Hofmann (2004) encourage establishing ground rules to help learners be successful. Some examples of ground rules are: diminish distractions by using a private room that is away from the source of interruptions; turn on the out of office email alert or completely shut email; inform co-workers not to disturb the learners; turn off phones, Facebook, and other distractions. Also, include an overview of virtual classroom tools such as the raise hand button for asking questions or making a comment; and remind learners there will be activities that require participation. If there is are pre-requisite assignments or required reading, make sure learners understand the importance of completing these tasks before joining the virtual session.

Another step is to make sure there is a virtual classroom orientation for the learners. Hofmann (2004) suggests providing a prerequisite session that shows learners how to participate in a virtual classroom. Other experts encourage engaging learners at the beginning of the session with an activity that introduces the virtual classroom tools and allows for fun practice.

As the training is developed it is important to assure that the activities in the training are relevant activities for the learners. As stated before, keeping the learner engaged requires an interaction every two to five minutes. This not only enhances the learners' involvement in order to maintain interest, but also to provide an opportunity to immediately apply what they have learned. It is critical to use technology in ways that promote learning and do not overload the learner (Clark & Mayer, 2008).

Developing strategies to create learning partners is also important for a successful learning experience. A sense of community can be created by adding a social element (Hofmann, 2004). It is important to encourage learning partners to share ideas in chat and practice assignments in breakout rooms. This keeps learners engaged because they are working with a partner. This also reinforces the new learning and it gives learners a chance to network with peers as they would in a traditional classroom environment.

Use pictures and limit text. Find and use pictures, they speak a thousand words and tell a story (Turmel, 2012). Pluth (2010) states that the use of a relevant graphic or picture can move a learners comprehension of content to the next level by promoting discussion or chat, and through a visual connection to the learning. Rather than filling a Power Point slide with text, use an image which represents the learning content or objective (Clark & Mayer, 2008). Pluth (2010) also advocates the assistance of learning by reducing eye tension and accompanying headaches caused by time in front of a computer screen. Slide backgrounds should be dark with light words to eliminate the amount of bright light during the session (Pluth, 2010).

Create a learner guide. It is not advised to simply send the learner a copy of the Power Point slides. Include information such as the ground rules, learning objectives, instructions for activities, and troubleshooting suggestions. Becky Pluth (2010) suggests making the learner guide interactive. For example, a trainer could send a presentation slide deck to learners which has blank spaces for the learner to complete. This may force learners to pay closer attention if they want to take accurate session notes (Pluth, 2010).

ISD for the Virtual Classroom

Instructional systems design models provide a framework to create a learning event and assist with the collation of time-sensitive tasks necessary to meet learning objectives. Following such a model also ensures that the learning event will provide the knowledge, skills, and abilities the learners need. Lee & Nelson (2006) advise workplace training and development professionals to never simply adopt ISD models but rather adapt those models to the workplace setting. Muller and Murdoch (2014) also encourage adapting ISD models by considering organizational needs and workplace philosophy. Similarly, Allen (2007), stresses using the ISD process that will lead to a quality learning event that meets organizational needs.

Outlined below are three ISD models, ADDIE, SAM, and SOLID. These models are utilized by various organizations to create the desired learning experience. All three are applicable to both tradition classroom and virtual classroom design.

ADDIE. The ADDIE model (see Figure 5) remains the more common of ISD models used by workplace training and development professionals. This model was utilized by the U.S. Army, Navy, and Armed Forces before becoming widely used in business settings (Allen, 2012; American Society for Training and Development, 2008; Lee & Nelson, 2006).

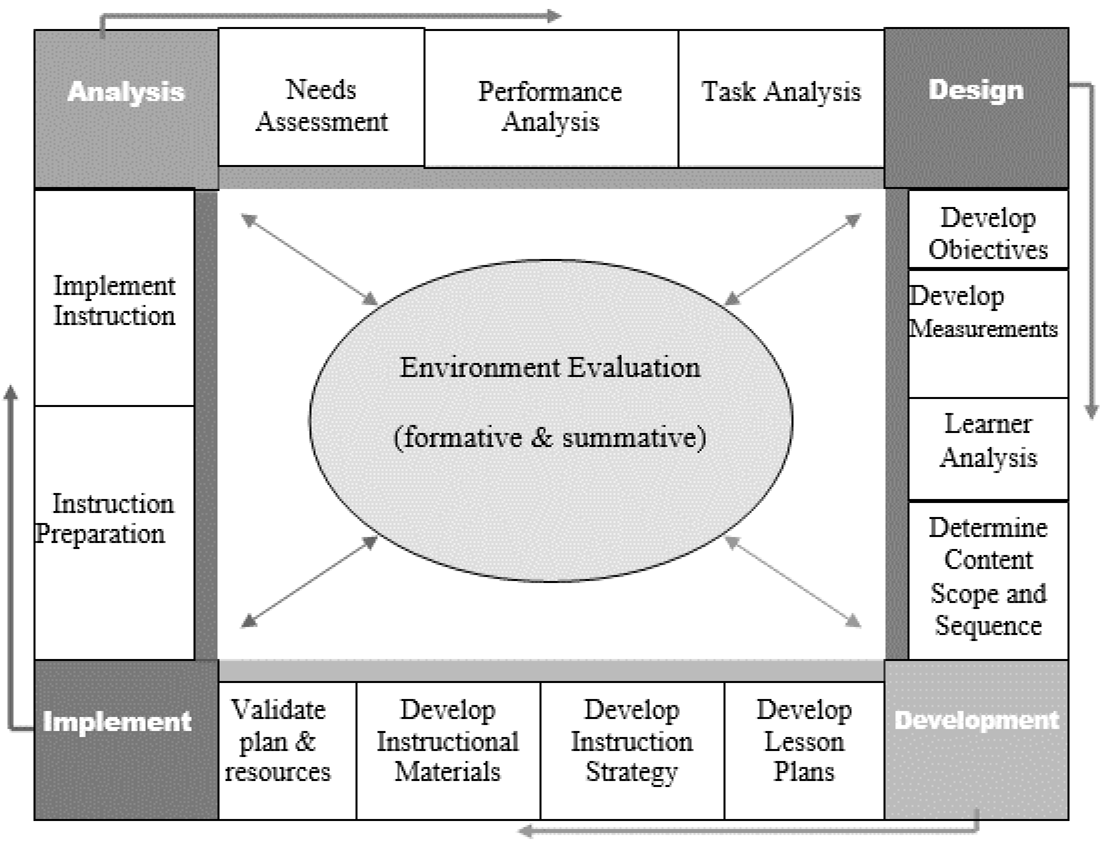


Figure 5. Depiction of the ADDIE model phases.

The ADDIE model is a long standing design tool and although linear it is not always followed rigidly. The analysis phase includes needs assessment, performance, and task analysis. The design phase includes developing objectives and measurements, learner analysis, and determining content scope and sequence. The development phase includes developing lesson plans, instruction strategy and materials, and validating plans and resources. The implement phases include instruction preparation and implement instruction. Table 1 is a synthesis of material from Lee and Nelson (2006) and it provides a detailed overview of each phase of ADDIE.

Table 1

Phases of ADDIE Model

ADDIE Phases	**Description**
Analysis	• Needs assessment. Defines the problem, what is the difference between what should be and what is. This is a data collection phase. Refrain from trying to solve the problem during this phase. • Performance analysis. Defines how the problem can be solved. This phase explores the underlying motives, methods, and reasons for a problem. It breaks down the problem into separate parts and then reviews each in context to its relationship to the system. • Task analysis. Establishes the required steps to perform a job.
Design	• Develop objectives. Includes cognitive (recall), affective (attitudes) and psychomotor (doing) objectives based on task analysis. • Develop Measurements. Written measurements based on central objectives. Include both written (do they know it) and performance (can they do it). • Learner Analysis. Incorporate needs of the audience. Use Andragogy Theory to match needs of the adult learner. • Determine Content Scope and Sequence. Based on needs assessment. Review the content to be covered in terms of time,

ADDIE Phases	Description
	management preferences, learner analysis, and environment to determine the general scope of a training content.
Development	• Develop lesson plans which include a detailed description of training course. The lesson plan includes objectives, sequence of events, a list of required materials and supplies, and may include a guide for trainers on what to do and say. • Develop Instruction Strategy. Determines who will deliver training. This step establishes if training remains in house or is outsourced, delivery method, and if conducted during business hours or not. • Develop Instructional Materials. Determine resources required. This selects instruction sources to support objectives and may include handouts, audio, or visual aids, activities, and labs. • Validate plan and resources. Review lesson plan and resources with management. This is also part of the formative environment evaluation.
Implement	• Instruction preparation. In this phase the instructor organizes delivery by assembling lesson plans, materials, scheduling and practicing delivery. • Implement instruction. Present training.
Evaluate	• Environment evaluation. • Evaluating circumstances or conditions during the formation of each phase.

The environment evaluation is the hub or center of the model. Environment evaluation is purposefully at the center since each of the quadrants is dependent upon the factors of the contributing systems within an organization. These factors may include people (employees, management, customers) materials (computers, equipment, documentation) and methods (procedures, culture). The arrow pointing in and out to the quadrants represents both the formative and summative evaluations. Evaluating circumstances or conditions during the formation of each phase contributes to the effectiveness of each during development. The summative evaluation integrates the overall data and feedback from participants and measurements of the objectives.

SAM. SAM stands for successive approximation model. It is an iterative process that includes three phases: evaluate, design, and develop. Allen (2012) states this model is easy to use for designing small learning events, and adapted easily by individual workplace training and development professionals or a team. Table 2 is synthesized from Allen (2012) who lists the description of events in each phase of SAM (Allen, 2012).

Table 2

Iterative Phases of SAM

Iterative SAM Phase	Description
Phase 1	• Evaluate: initial definition the problem, gathers background on the current state of performance and training, and starts to identify training goals. • Design: lists high-level objectives, brainstorm ideas, and sketches a prototype of how the completed learning session might look. • Develop: builds on prototype from design phase, outlines selected resources, engagement activities, and materials.
Phase 2	• Evaluate: Review phase 1 and determine if any additional background analysis is applicable. Request learner feedback and scrutinize alternative approaches. • Design: In this phase Allen (2012) suggests creating a different design from that in phase one. Modifying the original design identifies the effectiveness of the instructional design and generates new ideas. • Develop: In this phase the design focus is the development of specific learning activities, lesson plans, and performance. Test the delivery method selected to review the tools and features involved.
Phase 3	• Replicates Phase Two. • It continues to involve revision of the design to ensure that the training will be effective. If the data collected in the prior phases determines the inclusion of invalid changes, improvements can be made.

Allen (2012) proposes repeating each phase three times to maximize the effectiveness of the model. As each phase progresses, the preliminary assumptions and ideas from prior iterations are evaluated which may lead to design improvement through the encouragement of creativity. Allen (2012) goes on to caution that although repetition is important it can also pose a challenge as the design ideas improve. It is better to stop than endanger completion of the project.

Figure 6 illustrates how the phases of SAM are similar to those in ADDIE. Each circle highlights the main action of each iteration phase.

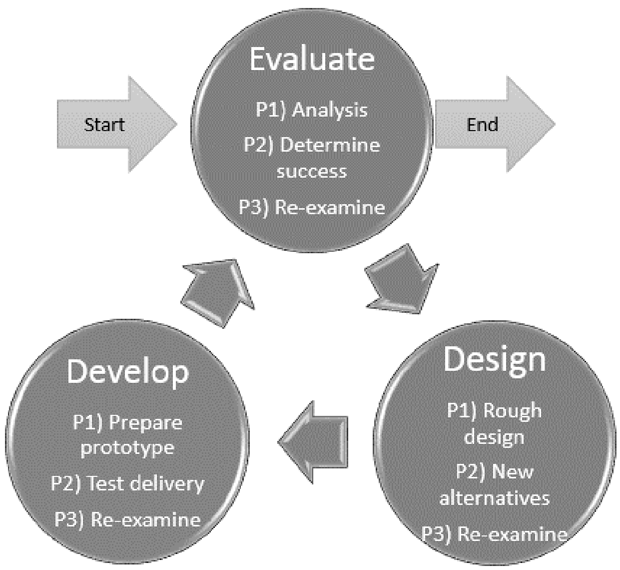


Figure 6. Illustration of the SAM model phases. Adapted from Allen, Michael W. (p. 61). *Leaving ADDIE for SAM: An agile model for developing the best learning experiences.* Alexandria, VA. American Society of Training and Development Press.

SOLID. The Simple Online-Learning Instructional Design model was created by Murdoch and Muller (2014) and is based on their trial and error approach to virtual classroom IDS. Their model includes ten steps and assumes there is already a strong and well-designed traditional learning event. There are 10 SOLID Process Steps.

1) Identify the ILT you wish to transfer to a virtual classroom.
2) Pinpoint what current ILT course materials you already have. (Example: outlines, PowerPoint slide deck, participant guide, facilitator guide, course videos, etc.)
3) Select the content approach you plan on using: summarizing or chunking.

4) List the virtual classroom tools you have on your chosen platform. (Example: chat, poll, whiteboard, breakout functionality, assessments, emoticons, screen sharing, etc.)
5) Keep in mind your platform tools, your content approach and instructional-design best practices when developing a virtual classroom outline.
6) Adapt the current ILT course materials to the needs of your virtual classroom.
7) Review your prototype with a content subject-matter expert (SME) and make appropriate changes.
8) Test with end users.
9) Receive and apply feedback.
10) Repeat testing and feedback steps until you feel it is ready for launch. (p. 375).

Summary

An effective virtual classroom has advantages in reaching learners geographically dispersed, reducing travel costs, and potentially training time. However, it is a mistake to embrace the misconception of an easy switch from traditional classroom to a virtual classroom. Adapting an ISD model to support and manage the process is essential. An effective model provides the workplace training and development professional with the path to a highly effective learning event.

Another essential piece of the design is preparing both trainers and learners for the transition. Extra attention to the needs of both along with the ISD is critical. Without effective preparation traditional classroom trainers may not naturally succeed in the virtual classroom. Training the trainer may be necessary. Learners may also need guidance in how to learn and interact in the virtual classroom setting.

Chapter III: Methodology

The purpose of this study was to understand the training needs of applications trainers at Company ABC since the organization planned to transition to VILT. To identify the training needs, interviews of current trainers were conducted to provide the current level of instructor competency, and the level of competency needed to make the transition to VILT.

Subject Selection and Description

The existing applications trainers and manager at Company ABC were the target population and the best sources of information on the current level of VILT competency. Since the application trainers have conducted both classroom and VILT, they, along with their managers, are able to provide insight on experiences, skills, and knowledge.

Five applications trainers and one manager volunteered to participate in this research. Employment with Company ABC ranged from eight years to four months. In addition, five respondents had bachelor degrees and one had a master's degree.

Instrumentation

Qualitative data was collected through semi-structured interviews (Appendix A). The interviews provided the best approach to solicit detailed information from the application trainers as it allowed them to recall and evaluate their experiences with VILT. Each interview had nine open-ended specific questions focused on VILT facilitation. The first questions targeted VILT experiences and engagement with new partners. The remaining questions focused on knowledge of the delivery software features and virtual classroom design.

Data Collection

Interviews were conducted in two one-hour segments as needed, and at a convenient time and location for the application trainer. Participation was voluntary and responses kept confidential. Responses were documented by the interviewer, reviewed, compared, and coded.

Data Analysis

A thematic analysis was conducted of all the interview responses. The interview responses were transcribed and reviewed several times in an iterative process. This comparative approach increased the validity to the finds and interpretations.

Based on the information gathered themes were developed and coded to determine key ideas, meaningful quotes, and recurrent topics. The outcomes of the nine interview questions and themes were mapped and theme tables organized. The information gathered provided insight to determine specific training needs and as provided a guide for recommended training solutions.

Limitations

Without access to other key stakeholder populations the results of needs assessment findings will be limited to the application trainers, which is a small sample size. In addition, the assumptions was made that responses to the interviews were honest and unbiased.

Chapter IV: Results

This research was conducted to understand the training needs of application trainers with Company ABC as they make the transition to virtual instructor-led training. Five applications trainers and one manager volunteered to participate in the interview process which involved nine questions. The analysis of the interviews reveal the following common themes: 1) all respondents preferred training in the traditional classroom; 2) application trainers believe learners are distracted during VILT training sessions; 3) learner participation is important to applications trainers; and 4) overall applications trainers experience with designing VILT, using WebEx tools, and facilitating VILT is limited.

Interview Analysis

A thematic analysis was conducted of all the interview responses. The interview responses were transcribed and reviewed several times in an iterative process.

Preferred delivery method. Table 3 supports that application trainers and the manager prefer traditional classroom delivery over the virtual classroom. In addition, all respondents commented that the importance of face-to-face interaction and that, in their opinion, it helps to build relationships with the learners.

Table 3

Can You Tell Me Your Preferred Delivery Method for Training, Traditional Classroom or Virtual Classroom, and Why?

Theme	Comments	Frequency
Traditional Classroom	• … it is easier to make a connection with the learner. • … because I like to be able to read body language and personal interaction. • … people are more accountable if you are in the same room. • …I feel more comfortable. • …being there with the people gives you the feedback that you don't get on the phone. • …we are social creatures and can interact more naturally in person.	6
Face to face	• …face to face time with learners, being able to see them gives visual feedback, do I need to speed up, slow down, do I need to have a break because they are wiggling around and getting tired. • …face to face because less things get lost in translation in the information when you are able to hear clearly and see the delivery of information. • …face to face is easier for instructor to track if they are paying attention, getting facial expressions when they don't get it. • …I can look at quizzical faces, read if they get it or not. • …the big point is being able to see the people, see the expression on peoples face. • …that's the big thing, in person I can observe facial expressions on if they are lost, you can't gauge that well over VILT.	6
Relationship building	• Face to Face it is easier to build a relationship. • I like in person training because it is about relationship building, need to make it creditable and a sense of trust.	2

Skills necessary to be effective VILT trainer. Table 4 reveals four respondents considered it an important skill to understand the tools and technology, and how to effectively use them to deliver VILT. Respondents also described that it was important to use inflections in their voice and to avoid having a monotone delivery. Two respondents indicated for VILT to be successful the students needed to be prepared to use the tools to learn.

Table 4

What Skills Do You Think Are Necessary To Be An Effective Virtual Instructor Led Training Trainer?

Theme	Comments	Frequency
Understand technology	• …understand the tool, what can WebEx do, capabilities, how to use it differently, how can we make it more interactive. • …can I use that technology to the fullest, and teaching the learner how to use the technology? • Ease with the technology… practice skills with the technology, it impacts the way that you deliver the content. • Mastery of the tools.	4
Voice	• …you have to use inflection in your voice…it is different than standing in traditional classroom. • I have tons of times been on session where they are talking monotone and that turns people off and you have lost people in the first five minutes. • …try not to be monotone, incorporate excitement and tone, keep everyone awake and paying attention. • …project yourself more with energy more than in the classroom.	4
Prepare the learner	• …prepare the learner differently for VILT, before they come to the VILT, so they know what to expect, what is going to make the successful in different format from traditional classroom. • …let them know the responsibility is on them the learner, they need to be active, learner contact ahead of time to say here are the things we expect and how to make the learning experience effective.	2

What has worked well in VILT. Table 5 indicates that respondents believe that VILT sessions with the best results are ones where learners were engaged in the learning and participated in the learning process. It also reveals that without engagement respondents feel the learners are bored and disengaged. Three respondents suggest setting specific goals and objectives as a key component to what worked well for VILT.

Table 5

Describe What Has Worked Well In A Virtual Instructor-Led Training Session You Facilitated Or Attended?

Theme	Comments	Frequency
Learner participation	• …works well when the training session includes engagement activities, like polls, chat, Q&A, throughout the session. • …verbal contract that is established on how the interaction is going to be, collaborate. • …use learner names… if I know people by name, they are put on notice that I know who you are and forcing them to pay attention, and they aren't just passive. • I like when there is audience participation, sometimes it is not possible but it is important for the people learning to take part in the training. • You have to have the ability to verbally interact with those attending, you have to be able to talk, if you can't talk and interact you might as well not have it happen, talking together is important.	5
Boring	• …learners aren't paying attention, don't blame them it has to be boring. When I'm the learning, I find other things to do when I should be paying attention, I know that is what others do too. • …it is so easy for a person to disengage, watching WebEx is boring. • …as a learner I find myself drifting immediately.	3
Stated goals	• …stated goals and objectives to the section, review it at the end, this is our goal and this is how we are got there. • …set goals, why is this important. • …the main focus, this is why is this information important, make them think twice about why they are there.	3

Handling VILT challenges. Table 6 summarizes the application trainer's knowledge gaps in in their skills to handle challenges during VILT. The responses indicated all respondents experienced challenges with learner engagement and focus but none were able to articulate how to handle the challenges.

Table 6

How Do You Handle Challenges With Virtual Instructor-Led Training Sessions?

Theme	Comments	Frequency
Distractions	• …as soon as there is a sound issue, participants put their phone on mute, engagement is lost quickly and it is challenging to bring the learner back into the session, once they disengage they are done. • …the challenge is when deadly dull topic, you just have to stay on it and really check in and ask questions for clarity. • It is all the distractions, its way to easy to do other things when sitting at your own desk, it sometimes doesn't seem as pressing and it is easy to brush aside and do something else, if you are face to face you aren't as obvious that you are multi-tasking. • …someone asked me to go back to the beginning and describe the steps for several processes. • …seems there are repeat questions, cover the topic and then learners ask questions like we never talked about it. • …learners can get inconsiderate, heavy breathers, selective mute and unmute, people can't stay focused, it is torture.	6

VILT challenges with new partners. Table 7 reinforced the issue that they experience learner distractions when new partners are in VILT. Application trainers concluded that with the volume of follow up sessions and repeated questions were evidence that leaners were distracted during the training sessions. Two respondents also mentioned learners were not prepared to use technology during VILT.

Table 7

Describe The Virtual Instructor-Led Training Challenges You Have Experienced With New Partners?

Theme	**Comments**	**Frequency N=7**
Distractions	• …tons of follow up sessions, more than with traditional classroom training. Can tell they did not retain the information we just covered when I ask a direct questions, or it is hands-on and when I check if they did, there is nothing there, so clearly they don't. • …they zone out when they get lost, if they get to lost they just check out… you end up backtracking, and then loose the people that were paying attention cause it is redundant. • Today in business the need to multitask is evident in how the learner manages their day, the need to multitask will not diminish, so it is important in the development that the business need is taken into account. • …distractions they face.	5
Technology	• Using the correct browser. • Sometimes partners can't even get logged into the WebEx.	2

Virtual classroom features of WebEx. Table 8 explains that there are gaps in the application trainer familiarity with the virtual classroom features of WebEx. Comments were split evenly between the respondents having basic knowledge of WebEx and knowing there are options but lack of experience no how to use the features. It is difficult to expertly run a VILT when the application trainers are not proficient with all the features of the learning management system.

Table 8

How Familiar Are You With The Virtual Classroom Features Of WebEx?

Theme	Comments	Frequency
Basic knowledge	• I think we should use the raise hand feature more, selective unmute, we don't use much. • I use the basic stuff, file transfer, screen share, chat, Q&A, the other things slow me down. • …giving them control during the session…doing things on the whiteboard it still has anxiety about it.	3
Don't know how to use	• …my personal experience with them is minimal and have utilized them as a learner. • I know the features are there but not how to use, not time to develop or explore. • …we don't use them much… we never flushed them out.	3

Working with co-facilitator/producer during VILT. Table 9 indicated that the application trainers valued the co-facilitator/producer role during VILT when the learner attendance is high.

Table 9

Describe Your Experience Working With Co-Facilitator/Producer During Virtual Instructor-Led Training Sessions? Someone to Manage Learner Technical Problems or Monitor Chat For Questions.

Theme	**Comments**	**Frequency**
Role of co-facilitator/producer	• …being the producer it went well to be able to answer things for the trainer so they didn't have to worry about it. • …it was fine but unnecessary cause there weren't very many people. • My experience as a producer has highlighted the need to have this role be part of a successful VILT especially when the number of attendees is larger.	3
Trainer role with co-facilitator/producer	• … it is really helpful to have someone doing that, the producer role helps you keep focused. • I like working with a producer, especially if the group is large, we use the Q&A feature and the producer manages, I don't have to watch.	2
Neither	• I have observed it occur but have not been involved.	1

Experience designing VILT. Table 10 documents that the application trainers had no experience or minimal experience in designing training for VILT.

Table 10

How Much Experience Do You Have With Designing Virtual Instructor-Led Training?

Theme	Comments	Frequency
None	• None. No formal background. I would like to learn, then I could help, but where is the time. • I don't think I have designed any of the ones I have done.	2
Some	• Sort of yes, designing for a classroom and VILT, with some courses in person we were able to customize. • …one of the challenges I had was pre-designed training, out of the box, and I always found it limiting, you have to delivery someone else's thought process, so I had to embellish it. • Experience with VILT is minimal. • I would say minimal as far as from scratch.	4

Attending training on VILT facilitation. Table 11 indicates that the application trainers have very little experience in being a participant in a VILT session. Without being a learner in a VILT session it may be difficult for application trainers to be aware of the issues learners in partner organizations have with learning in a VILT environment.

Table 11

How Many Training Session Have You Attended On How To Facilitate Virtual Instructor-Led Training Sessions?

Theme	Comments	Frequency
None	• None. No formal background. I would like to learn, then I could help, but where is the time. • I don't think I have designed nay of the ones I have done.	2
Some	• Sort of yes, designing for a classroom and VILT, some course in person we were able to customize. • …one of the challenges I had was pre-designed training, out of the box, and I always found it limiting, you have to delivery someone else's thought process, so I had to embellish it. • Experience with VILT is minimal. • 1 or 2 at most, that in and of itself is the problem because the expectation is if you can operate a mouse then you can do the VILT, you have to approach it differently.	4

Summary

The results of the interviews reveled applications trainers were asked to deliver learning in a virtual classroom with minimal training on design and facilitation, and without positive examples to effectively make the transition from the traditional classroom. It was clear that the desired effective interactive virtual classroom was not practical given the gaps in application trainers' preparedness. Utilizing the recommendations from the literature and the themes identified from the interviews, a project plan was developed to initiate a strategic approach to developing effective interactive virtual classroom training while focusing on the training needs and involvement of the application trainers (Appendix B).

Chapter V: Discussion

The focus of this study was to understand the training needs of application trainers with Company ABC as they make the transition to virtual instructor-led training. To do this, literature was reviewed and interviews conducted with the current trainers to establish the level of instructor competency needed to make the transition to VILT.

The review of the literature explored the prerequisites of transitioning from the primary use of a traditional classroom to a virtual classroom. Traditional face-to-face and instructor-led virtual classroom elements were compared to answer the question of what areas of expertise do trainees need in order to achieve Company ABC's learning goals. Evaluation of the contrasts between ADDIE, SAM, and SOLID, instructional system design models provided a basis to determine what goes into VILT to assure successful and effective learning events.

In addition, an interview was conducted to provide detailed information from the application trainers regarding VILT experience and knowledge. The results of the interviews revealed a significant gap in preparedness and knowledge with the application trainers. The following common themes were revealed: 1) all respondents preferred training in the traditional classroom; 2) application trainers believe learners are distracted during VILT training sessions; 3) learner participation is important to applications trainers; and 4) overall applications trainers experience with designing VILT, using WebEx tools, and facilitating VILT is limited.

The outcome of the interviews with application trainers showed the expected lack of motivation of trainers to transition to VILT. This is likely the result of the trainers not being adequately prepared or trained to make the necessary modifications in instructional design and facilitation of virtual instructor-led training.

To help Company ABC reach its goal of interactive virtual instructor-led training and to prepare applications trainers, a strategic project plan was developed (Appendix B). This project plan is critical to the successful development and implementation of VILT as it provides a clear structure to the process rather than simply taking the existing classroom content and reusing it as has been done in the past.

Several items in the plan support the findings of the literature review and interviews. First, the project charter includes the overall business objective of developing VILT sessions. There is also a communication strategy to assure that all parties within Company ABC have communication and input for on-going VILT development and training. Second, the project plan determines the tasks that need to be completed, which include kick-off meetings, development of training for the applications trainers, and overall VILT development and estimated duration.

The steps to implement of the project plan would begin with a kickoff planning meeting with the project sponsor to review a draft of the overall project plan and solicit feedback. Upon consensus of the overall project plan, training for application trainers would begin. Specific training would include instructional design, virtual classroom technology, and VILT facilitation skills.

An example training agenda for a two-day session focused on SAM, the iterative process of evaluation, design, and development, is included in Appendix C. SAM was chosen as the instructional design method because it allows application trainers to collaborate, be creative, and to practice and evaluate the VILT design solution with each iterative phase. In the case of unexpected shifts in priority SAM provides an end product after one iteration, and the remaining iteration are easily resumed at a later date.

Once the training for the applications trainers is completed, a formal virtual classroom project team kickoff meeting would take place to introduce the next phase to develop the actual virtual instructor-led training sessions for new partners (Appendix D). This phase of the project would allow applications trainers the time and motivation to put into practice new skills to develop VILT sessions they will be successful delivering.

The interviews with the application trainers identified gaps in skills necessary to develop and deliver VILT. It is recommended that the project plan presented in Appendix B should be implemented. The specific training on instructional design, virtual classroom technology, and VILT facilitation skills would best be created and delivered by the trainers themselves but could also be outsourced if necessary. Once trained in these areas applications trainers would be equipped to develop and implement new VILT sessions for a successful transition from the physical classroom.

Another recommendation for Company ABC to consider would be the addition of an instructional designer position. With the rapid This would allow an individual with a specific skill set to design VILT sessions, develop instructor and learner resources, and support application trainers, and learners, in the virtual classroom setting.

Future study may involve additional interviews with the application trainers upon completion of their training to assess the effectiveness and the any need for ongoing training opportunities.

If these recommendations are followed, it is believed that Company ABC will be successful in offering interactive virtual instructor-led training as an alternative to on-site traditional classroom training.

References

Allen, M. W. (2007). *Designing successful e-learning: Forget what you know about instructional design and do something interesting (essential tools resource).* San Francisco, CA: Pfeifer.

Allen, M. W. (2012). *Leaving ADDIE for SAM: An agile model for developing the best learning experiences*. Alexandria, VA: American Society of Training and Development Press.

American Society for Training and Development. (2008). *ASTD hand book for workplace learning professionals.* Alexandria, VA: American Society of Training and Development Press.

Arneson, J., Rothwell, William, J., & Naughton, J. (2013). *ASTD competency study. The training & development profession redefined.* Alexandria, VA: American Society of Training and Development Press.

Clark, R. (2014, November 26). *Developing technical training: A structured approach for developing classroom and computer-based instructional materials.* [Kindle edition]. Retrieved from http://www.amazon.com/Developing-Technical-Training-Computer-based-Instructional-ebook/dp/B004J4VVWO/ref=sr_1_1?s=digital-text&ie=UTF8&qid=1427229311&sr=1-1&keywords=developing+technical+training

Clark, R., & Mayer, R. (2008). *E-learning and the science of instruction: Proven guidelines for consumers and designers of multimedia learning*. [Kindle edition]. Retrieved from http://www.amazon.com/e-Learning-Science-Instruction-Guidelines-Multimedia-ebook/dp/B0062OBJEO/ref=sr_1_1?s=digital-text&ie=UTF8&qid=1427229404&sr=1-1&keywords=elearning+and+the+science+of+instruction+proven+guidelines+for+consumers+and+designers+of+multimedia+learning

Duhigg, C. (2012). *The power of habit: Why we do what we do in life and business.* New York, NY: Random House, Inc. [Kindle edition]. Retrieved from http://www.amazon.com/Power-Habit-What-Life-Business-ebook/dp/B0055PGUYU/ref=sr_1_1_ha?s=digital-text&ie=UTF8&qid=1427229363&sr=1-1&keywords=the+power+of+habit

Hofmann, J. (2004). *Synchronous trainer's survival guide. Facilitating successful live and online courses, meetings, and events.* San Francisco, CA: Pfeiffer.

Horton, W. (2006). *e-Learning by design*. [Kindle edition]. Retrieved from http://amazon.com

Hugget, C. (2010). *Virtual training basics.* Alexandria, VA: American Society of Training and Development Press.

Hugget, C. (2013). *The virtual training guidebook. How to design, deliver, and implement live online learning.* Alexandria, VA. American Society of Training and Development Press.

Lee, H., & Nelson, O. (2006). *Instructional analysis and course development.* Homewood, IL: American Technical Publishers, Inc.

Miller, L. (2014). *2014 state of the industry.* Alexandria, VA: ASTD DBA Association for Talent Development (ATD).

Muller, T., & Murdoch, M. (2014, November 16). *The learning explosion.* [Kindle edition]. Retrieved from http://www.amazon.com/Learning-Explosion-Ignite-Virtual-Classrooms-ebook/dp/B00MIEU7Z4/ref=sr_1_1?s=digital-text&ie=UTF8&qid=1427229567&sr=1-1&keywords=the+learning+explosion

Pike Pluth, B. (2010). *Webinars with wow factor. Tips, tricks and interactive activities for virtual training.* Edina, MN: Becky Pike Pluth.

Piskurich, G. (2006). *Rapid instructional design: Learning ID fast and right.* San Francisco, CA: Pfeiffer.

Ready, K., Johnson, B., & Astani, M. (2011). Design and implementation issues in integrating e-learning: Lessons learned from a fortune 1000 firm. *The Business Review, Cambridge, 18*(1), 1-7.

Rosen, A. (2009). *e-Learning 2.0.* New York, NY: American Management Association.

Turmel, W. (2011). *10 steps to successful virtual presentations.* Alexandria, VA: American Society of Training and Development Press.

Turmel, W. (2012, November). Virtual presentations: Techniques for moving training online. *T&D*, *66*(11), 32-34.

WebEx. (n.d.). *Training center.* Retrieved from http://www.webex.com

Appendix A: Interview Questions

Interview Notes Form

Interview Details

Company Name: ______________________ Date: ____________ Time: __________

Interviewer Title: ____________________

Questions to Ask Interviewee

Question: Can you tell me your preferred delivery method for training, traditional classroom or virtual classroom, and why?

Notes:

Question: What skills do you think are necessary to be an effective virtual instructor-led training trainer?

Notes:

Question: Describe what has worked well in a virtual instructor-led training session you facilitated or attended.

Questions to Ask Interviewee

Note:	
Question:	How do you handle challenges with virtual instructor-led training sessions?
Notes:	
Question:	Describe the virtual instructor-led training challenges you have experienced with new partners?
Notes:	
Question:	How familiar are you with the virtual classroom features of WebEx?
Notes:	
Question:	Describe your experience working with a co-facilitator/producer during virtual instructor-led training sessions? Someone to manage learner technical problems or monitor chat for questions.
Notes:	

Questions to Ask Interviewee

Question: How much experience do you have with designing virtual instructor-led training?

Notes:

Question: How many trainings sessions have you attended on how to facilitate virtual instructor-led training sessions?

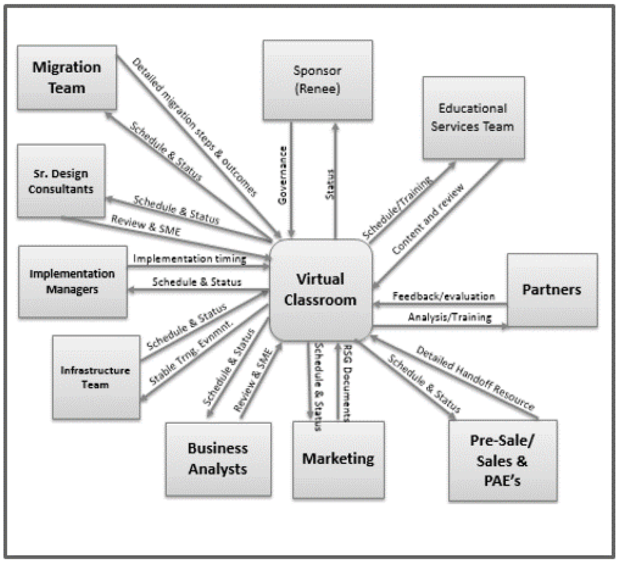
Notes:

Additional Notes

Appendix B: Project Plan

Virtual Classroom Transition

Project Charter: Virtual Classroom Transition



Business Objectives (Increase Revenue, Avoid Cost)
Primary By developing an effective virtual classroom, Company ABC will avoid the costs of on-site training to achieve effective new partner learning.

Project Objectives
1) Partners will be able to use Company ABC software given resources and manuals following training in a virtual classroom
2) Trainers will be able to facilitate training on Company ABC software given resources and manuals using WebEx virtual classroom tools.
3)Trainers will design effective virtual classroom training for new partners following the SAM model.

Quick N' Dirty Risk:

Size (1-10 big)	**___10 ____**
Structure (1-10 no reqmnts)	**___7_____**
Technology (1-10 new)	**___6_____**
Average	**___7.5______**

Constraints:	Can't move	Moves little	Negotiate
Time		X	
Cost			X
Quality/Scope	X		

RISK FACTOR	LIKELIHOOD (L, M, H)	IMPACT (L, M, H)	PREVENT BY	REACT BY
Software changes during project	High	High	Can't prevent.	Create Maintenance plan early.
There is not enough time to develop/design	High	High	Have clear schedule and people with knowledge of software.	Review scope, break down into phases.
Staff turnover	Medium	High	Difficult to prevent.	Review scope and schedule.

Project Charter: Virtual Classroom Transition

Communications Strategy

Stakeholder	Goal	Frequency	Medium	Comment
Executive Leadership	Increate Revenue, Avoid Cost, Improve Service (IRACIS)	Every 2 weeks	Conference call	Status report, with Renee and Deb
Sponsor	Avoid Costs, Improve Service	Weekly	In person 1-on-1 meeting	
Educational Services Team	Improve Service (Avoid Cost)	Every 2 weeks	In person and WebEx	Could be more frequent if assistance is needed.
Partners	Improve Service	As needed	To be determined	
Pre-Sales/Sales and PAE's AND Marketing	IRACIS	Monthly	Email	Timing will vary and dependent on information needed.
Business Analysts	Improve Service	As needed	In person, email, WebEx	Timing will vary and dependent on information needed.
Infrastructure Team	Improve Service	As needed	In person or email	Timing will vary and dependent on information needed.
Implementation Managers	IRACIS	Monthly	In person or email	
Sr. Design Consultants	Improve Service	As needed	In person, email, WebEx	SME's content feedback is important
Migration Team	Improve Service	Weekly	In person and WebEx	Will need to meet frequently at start analyze migration process

Project Plan: Virtual Classroom

Task	Task Owner	Helpers	Due	Comments	Complete
Kickoff planning meeting	Tracy A.		06/01/2015	Meet with sponsor, discuss project, goals and objectives, format, communication plan, SAM Model, and project charter	
Virtual Classroom Kickoff Meeting	Tracy A.	R	08/01/2015	1 day meeting – Tracy will create specific agenda and coordinate date with stakeholders	
Kickoff meeting with ES team	Tracy A.	ES Team	07/23/2015	Via WebEx and Video Chat	
ES training on SAM	Tracy A.	ES Team	07/08/2015	Will hold training during annual on-site all team summit. Elapsed Time Estimate: 60 hours	
ES training on WebEx Virtual Classroom and Learners	Tracy A.	ES Team	07/07/2015	Will hold training during annual on-site all team summit. Elapsed Time Estimate: 60 hours	
ES Training – VILT Facilitating for Success	Tracy A.	All	09/30/2015	Via WebEx and Video Chat Elapsed Time Estimate: 60 hours	
Pilot Session – Admin Setup Tab	Tracy A.	ES Team	10/31/2015	Task Duration Elapsed Time Estimate: 93 hours (3 weeks)	
Create pre-session – welcome letter	TBD	R&T	10/01/2015	Needs to include expectations, ground rules	
Checklist – before, during, after virtual training	TBD	R&T	10/01/2015		
Migration Analysis				Who else needs to be involved in this? how do we use this information to build into training	
Pre-Sales & Sales Analysis				How do they complete hand-off doc? Maybe we could observe a pre-sale meeting?	
Create recorded session for learners in virtual classroom				Required prerequisite to attending training needs to include how to use WebEx learner tools	
Revamp recorded session for Resources link	MJ	T		Required prerequisite to attending training	

Project Plan: Virtual Classroom

Task	Task Owner	Helpers	Due	Comments	Complete
Create New Employer training				Elapsed Time Estimate: 93 hours (3 weeks)	
Create Employer Setup				Elapsed Time Estimate: 86.4 hours	
Create Debit Card Settings				Elapsed Time Estimate: 86.4 hours	
Create Debit Card Follow Up Letters Training				Elapsed Time Estimate: 86.4 hours	
Create Plan Year and Plan Design Setup				Elapsed Time Estimate: 259.2 hours	
Create Manage Plan Documents				Elapsed Time Estimate: 64.8 hours	
Create CDEX, Employer Portal Imports				Elapsed Time Estimate: 108 hours	
Create Add and Enroll Consumers – all portals				Elapsed Time Estimate: 86.4 hours	
Create Claims training				Elapsed Time Estimate: 129.6 hours	
Create Manage Plan Activities				Elapsed Time Estimate: 86.4 hours	
Create Void/Reissue and Repayment				Elapsed Time Estimate: 108 hours	
Create Consumer Management				Elapsed Time Estimate: 86.4 hours	
Create Consumer Portal				Elapsed Time Estimate: 259.2 hours	
Create Employer Portal				Elapsed Time Estimate: 259.2 hours	

Project Plan: Virtual Classroom

Task	Task Owner	Helpers	Due	Comments	Complete
Create Nondiscrim				Elapsed Time Estimate: 60 hours	
Create MSP				Elapsed Time Estimate: 108 hours	
Create Print Fulfillment				Elapsed Time Estimate: 86.4 hours	
Create Business Party				Elapsed Time Estimate: 86.4 hours	
Create Reports				Elapsed Time Estimate: 129.6 hours	
Create Claims Exchange				Elapsed Time Estimate: 129.6 hours	
Create 1Plan				Elapsed Time Estimate: 216 hours	
Create Claim Sync				Elapsed Time Estimate: 86.4 hours	
Create Hold Scheduled Reimbursements				Elapsed Time Estimate: 216 hours	
Create Banking Setup				Elapsed Time Estimate: 86.4 hours	
Create Consumer Setup training				Elapsed Time Estimate: 86.4 hours	
				Total Elapsed time duration: 3303.6	

Appendix C: SAM Training Agenda

SAM Training Agenda

Tuesday, July 8, 2015	
8:00 am to 9:00 am	1 - Kickoff • Discuss process and review agenda. • Introductions. • Discuss examples of effective and ineffective virtual classroom training.
9:00 am to 10:30 am	2 - Discuss Goals and Contrarians • What are the company and partner desired performance goals? • What is the training readiness for learning for new partners? • What is known about the timeline constraints? • Review criteria for success. How will new partners' (and trainers') success be measured? • Review previous virtual classroom trainings. • Create map of what the virtual classroom should accomplish. • Discuss delivery platform capabilities and restrictions.
10:30 am to 12:00 pm	3 - Brainstorm • Discuss how to determine what needs to be taught. • Review the goals and select the learning topics to prototype. What do new partners really need to do? • Discuss the necessity of new partner motivation to learn. What design elements can be used to heighten motivation? • Brainstorm the virtual classroom session, what needs to happen before, during, and after.
Lunch Break	Lunch Break
12:00 pm to 1:30 pm	4 - Build Prototype • Trainers - Write objectives and prototype. • Everyone else – free time, check emails, go back to work etc. • Regroup.
Remainder of day	5 - Review Prototype and Repeat • Discuss strengths and weaknesses. What worked? What didn't? • Repeat 3, 4, and 5 (at least 2 more times), then: Plan next steps.

Wednesday, July 09, 2015	
8:00 am to 9:00 am	6 - User Feedback • Review prototypes produced overnight, if any. • Discuss importance of feedback. • Strategize approaches for user testing.
9:00 am to 9:45 am	7 – Organize Objectives • Review goals, restate if necessary.

	• Draft first objectives x treatments matrix. 8 - Determine Appropriate Assessment and Tracking
9:45am to 10:30 am	• Review goals for assessment. • Stipulate the kinds of assessment to be used. • Discuss performance tracking if needed. 9 – Right Solution
10:30 am to 11:30 am	• Describe the most desired solution, given the conversations throughout the previous 2 days regarding need, analysis, gap, potential solutions, tracking, assessments, etc. Then ask: • How would you know partners gained knowledge and experience? • What kind of reporting data would it generate? • How would it be accessed? • Discuss who will work in the final solution. Who, for example, can contribute not only content expertise, but also learning and performance inspiration?

Appendix D: Project Kickoff Agenda

Virtual Classroom Project – Kickoff Agenda

Thursday, July 23, 2015	
8:00 am to 9:00 am	Kickoff • Discuss process and review agenda, introductions. • Discuss examples of effective and ineffective virtual classroom training.
9:00 am to 10:30 am	Discuss Goals and Contrarians • Review Project Charter. • What are the company and partner desired performance goals? • What is the training readiness for learning for new partners? • What is known about the timeline constraints? • Review criteria for success. How will new partners' (and trainers') success be measured? • Review previous virtual classroom trainings. • Create map of what the virtual classroom should accomplish. • Discuss delivery platform capabilities and restrictions.
10:30 am to 12:00 pm	Brainstorm • Discuss how to determine what needs to be taught (trainers and partners). • Review 'low hanging fruit'. What can we do today? • Discuss the necessity of new partner motivation to learn. What design elements can be used to heighten motivation? • Brainstorm the virtual classroom sessions, what needs to happen before, during, and after.
12:00 pm to 12:30 pm	Lunch Break
12:30 pm to 2:00 pm	Virtual Classroom Learning Agenda • Create prototype agenda, discuss strengths and weaknesses. • Discuss which session is best to pilot.

Remainder of day	Right Solution Next Steps
	• Discuss pilot session design:
	    o Create session objectives.
	• Determine next steps for pilot session:
	    o Discuss who will work in the pilot session.
	    o Timeline.
	    o Who will lead the pilot design project?
	    o Who are the SME's needed?
	• Partner Testing
	    o Who would make a good pilot partner?
	    o How will we evaluate? Did partner gain knowledge and experience?