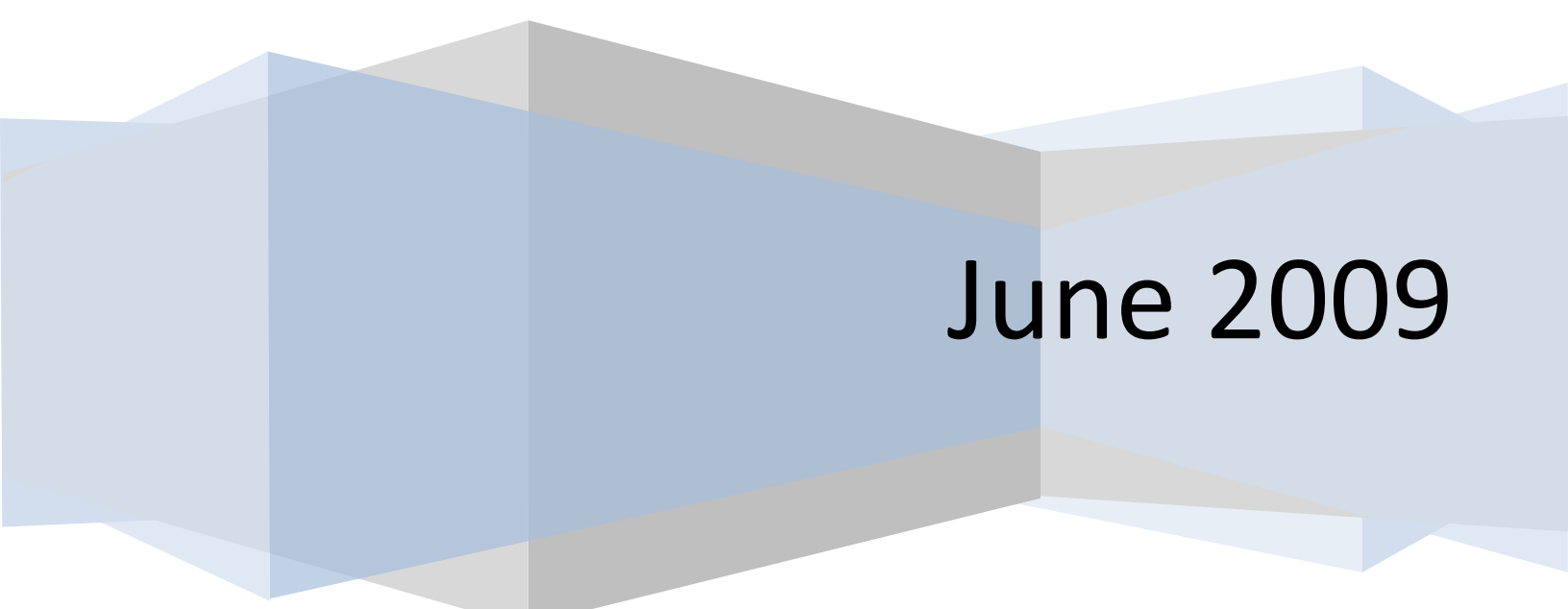


Ohio Child Welfare Training Program

# Comprehensive Design:

Integrating Distance Learning into the OCWTP

Deliverable 7E



June 2009

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# 1 Introduction

Distance learning offers many benefits and great potential. While some options allow learners immediate access to information when they need it, at their own desks and computers, all options allow learners to participate without having to travel. However, while seemingly simple in concept, distance learning is quite complex in practice. There are dozens of different technologies designed for various purposes, with different advantages, disadvantages, and costs.

The Ohio Child Welfare Training Program (OCWTP) has been exploring distance learning since 1999 when the program began embedding self-directed learning assignments into curriculum. Beginning in 2006, the OCWTP purchased or developed and launched several online, self-administered, and blended training modules for both staff and caregivers. In 2009, faced with shrinking budgets, staffing reductions, and increased workloads, county PCSAs began voicing difficulty in releasing staff to travel for in-classroom trainings. As a result, the OCWTP approached the Ohio Department of Job and Family Services with a proposal to add a deliverable to allow the OCWTP to research and develop a comprehensive design for integrating distance learning into the OCWTP. The resulting Deliverable 7E directed staff to

- Conduct a literature review of distance learning
- Talk with key informants about their experience with distance learning
- Review evaluation data from OCWTP distance learning pilots
- Research various distance learning technologies
- Explore existing distance learning modules available from other programs and determine their potential for use by the OCWTP

## 2 Methods

To inform the development of a comprehensive design for distance learning delivery within the OCWTP, staff engaged in several activities to seek the best available information from a variety of sources. These activities included:

- Completion of a scoping review to determine what empirical evidence is available and to draw conclusions from the empirical and conceptual literature
- Consultation with key informants from other state child welfare training organizations, nonprofit organizations, and public universities
- Identification and review of technologies available to facilitate distance learning delivery
- Review of evaluation data of 8 OCWTP online training pilot programs
- Exploration of existing distance learning modules available from other programs.

Methods for completing each of these activities are outlined in the following sections.

### 2.1 Scoping Review

A review of empirical and conceptual work on distance learning sought to answer the following questions:

- What is the efficacy of distance learning as a delivery method for training?
- What students is distance learning best-suited for?
- What content is most appropriate for distance learning?
- Which type of distance learning is the most effective?
- What is the efficacy of each distance learning delivery method?

Researchers defined a search strategy that included identifying keywords that were used to search 10 data bases. The search resulted in a total of 41 empirical studies that were reviewed. Each study was ranked according to the Maryland Scale of Scientific Methods (MSSM), a five-point scale for classifying the strength of methodologies used in “what works?” studies, developed by Sherman and colleagues (Sherman, Gottfredson, MacKenzie, Eck, Reuter & Bushway, 1998). Of the total studies reviewed, 4 were excluded because they did not report on outcomes related to distance learning.

Results of the scoping review are discussed in the next section. See [Scoping Review](#) for a complete listing of the empirical and conceptual literature including keywords used for search, databases searched, and a complete listing of literature reviewed.

## 2.2 Key informants

Staff identified 14 professionals, national programs and organizations, and other state child welfare training organizations as key informants for this project and approached them for the following information:

- Technologies used to facilitate or enhance training
- Rationale for technologies selected
- Barriers encountered
- Unintended outcomes
- Courses developed and whether they are in public domain
- Infrastructure used to launch training
- Available evaluative data

Summaries of these discussions are maintained on the e-Learning Locus wiki developed for this project. Use of the wiki enables the OCWTP to easily update, revise, and add new key informant data on a continuous basis. See [Key Informants](#).

## 2.3 Technology Review

Staff researched available technology used to enhance training and reviewed each technology, asking the following:

- How long has it been in use?
- What are the hardware, software, infrastructure and staffing requirements?
- What is the cost?
- What is the development time?
- For which delivery method (synchronous, asynchronous, blended) is it best suited?

- For which learning styles or content is it best suited?
- What are potential OCWTP usages?

### Technologies Researched

Authoring Tools	Online Resource	Twitter
Blog	Podcast	Videoconference
Chat	Multi-User Virtual Environment	Webinar
Message Board	Simulation	Wiki
Online Meeting	Teleconference	

Data on each technology is also maintained on the OCWTP’s Elearning Locus wiki to facilitate continuous revisions and additions. See [Technology Reviews](#)

### 2.4 Review of Pilot Findings

Since 2006, the OCWTP has completed eight distance learning pilots. Evaluative findings for each pilot were reviewed for insight regarding;

- The level at which distance learning courses met learners’ needs
- The aspects of the distance learning courses learners most and least appreciated
- The kinds of barriers learners encountered in the distance learning course
- Whether learners would opt to take another distance learning course

Evaluation findings from eight OCWTP pilots of online trainings were reviewed:

Date	Pilots	Title	Participants
2006	1	National Indian Child Welfare Act	26
2007	1	Foster Parent College	77
2007	1	National Children’s Advocacy Center	15
2009	4	Understanding Borderline Personality Disorder	60
2009	1	Skill-Building Learning Lab for Trainers	5

To review pilot final reports see [Understanding Borderline Personality Disorder](#); [Skill-Building Learning Lab for Trainers](#); [Foster Parent College](#); [National Child Advocacy Center](#).

## 2.5 Review of Existing Distance Learning Courses

Staff reviewed a significant number of existing courses to:

- a. Determine their appropriateness for use by OCWTP constituents, and
- b. Learn more about distance learning course design, features most useful to learners, technologies used, etc.

Distance learning events reviewed for this project include:

- Several online software training courses on Adobe Flash through <http://www.lynda.com/> that used video screen capture with voice-over instruction.
- Free online (non-credit) courses through Child Trauma Academy (<http://www.childtraumaacademy.com/>) – a series of readings with quizzes and some reflection assignments:
  - *The Amazing Human Brain And Human Development*
  - *Surviving Childhood: An Introduction to the Impact of Trauma*
  - *The Cost of Caring: Secondary Traumatic Stress and the Impact of Working with High-Risk Children and Families*
  - *Bonding and Attachment in Maltreated Children*
- *Knowing Who You Are: Helping Youth in Care Develop Their Racial and Ethnic Identity* an elearning course offered through Casey Family Programs at: <http://www.casey.org/Resources/Projects/REI/KnowingWhoYouAreElearning.htm>
- *Understanding Substance Use Disorders, Treatment and Family Recovery: A Guide for Child Welfare Professionals*, a five-module non-instructor-facilitated asynchronous course offered through the National Center on Substance Abuse and Child Welfare at <http://www.ncsacw.samhsa.gov/tutorials/tutorialMenu.asp>
- A series of online tutorials from Results-Oriented Management in Child Welfare (ROM) designed for managers and supervisors serving on the front lines of public child welfare operations. Topics range from policy context for child welfare practice to managing for results and evidence-based practice for achieving outcomes. Accessed at: <http://www.rom.ku.edu/>

- Series of free online courses (CEUs available for some) from Center for Substance Abuse Prevention's (CSAP). Topics range from suicide prevention to addressing school aggression and substance abuse and violence against women. Accessed at: <http://pathwayscourses.samhsa.gov/>
- Just-in-time online offerings from the National Children's Advocacy Center that feature some of the most respected names in the field as its faculty. There are 22 online training courses to choose from that range in length from 1 hour to 3 ½ hours. Accessed at: [http://www.nationalcac.org/professionals/index.php?option=com\\_content&task=view&id=39&Itemid=59](http://www.nationalcac.org/professionals/index.php?option=com_content&task=view&id=39&Itemid=59)
- Courses available through eBased Academy coordinated by the Ohio Resource Network (ORN) and funded by the Ohio Department of Alcohol and Drug Addiction Services (ODADAS) – the site offers over 50 non-instructor-facilitated asynchronous courses that can be awarded credit to students achieving a 70% passing score on post-test. Accessed at: <http://www.ebasedacademy.org/>.
- *Trauma-Focused Cognitive Behavioral Therapy*, a highly interactive, non-instructor-facilitated asynchronous web-based course offered by the National Child Traumatic Stress Network. This is a very sophisticated online course that includes video clips; pop-up case studies and exercises; and printable handouts. Accessed at: <http://tfcbt.musc.edu/>.
- Online, non-instructor-facilitated asynchronous training modules for child welfare supervisors developed by the University of Michigan School of Social Work and accessed at <http://www.ssw.umich.edu/public/currentProjects/tpcws/>, Modules include:
  - *Permanency Planning, ASFA, & Their Implication for Family-Centered Practice*
  - *Cultural Issues*
  - *Outcome-Oriented Services*
  - *Supervisory Skills*
- Four independent living non-instructor facilitated asynchronous online modules developed by the University of Kentucky's Kent School of Social Work (<http://cwte.louisville.edu/IL/home/ilmodules.htm>) and designed to enhance supervisors' and caseworkers' knowledge and skills in their work with youth aging out of the child welfare system:
  - *Dating Violence*
  - *Motivational interviewing*
  - *Mentoring*



- *Reconnecting with Birth Parents*
- A non-instructor-facilitated asynchronous 6-module course entitled, *Evidence-Based Practice in Child Welfare in the Context of Cultural Competence* developed by the University of Minnesota and accessed at: [http://cehd.umn.edu/ssw/G-S/EBP-CC\\_Modules/index.html](http://cehd.umn.edu/ssw/G-S/EBP-CC_Modules/index.html)
- An online, just-in-time resource entitled, *Child Abuse and Children with Developmental Disabilities* developed by the New York State Office of Children and Families that includes reading material, handouts, and resource links accessed at: <http://childabuse.tc.columbia.edu/>
- Family Violence Online Tutorials developed by Florida State University School of Social Work Institute for Family Violence Studies( <http://familyvio.csw.fsu.edu/rural.php>):
  - *DV 101: An Introduction to Domestic Violence*
  - *The Intersection of Domestic Abuse and Child Victimization*
- Foster Parent Club (<http://64.78.32.155/training/index.cfm>) online training for foster caregivers that includes over 15 modules of a collection of research papers, reports, and book excerpts from leading child welfare resources (with completion of a post-test, foster caregivers can receive training hours)
- The following online courses developed and currently used by the Illinois Department of Children and families for training child welfare professionals:
  - *Early Childhood Interventions*
  - *Child and Family Team Meetings for Caseworkers*
  - *Child and Family Team Meetings for Supervisors*
  - *Ecomaps and Genograms*
  - *Working with Deaf and Hard of Hearing*
  - *New Employee Orientation*
- Pre-Service online modules for new caseworkers developed by the Wisconsin Child Welfare Training System (<http://www.wcwt.wisc.edu/caseworker-training/pre-service/>) and a HIPPA training organized into relatively small, focused sections of lecture-style information interspersed with brief interactive activities.

- Webinars
  - *More Harm than Good? JSO Registration* sponsored by Human Rights Watch and CWLA
  - *Using Learning Composer to Develop Online Courses* presented by TEDS
  - *Confidentiality and Child Welfare Practice* presented by North Carolina Child Welfare Training Program
  - *How to Make Live Online Training as Interactive and Effective as In-Person Training* presented by GoToMeeting, a commercial online meeting and training platform.
  - *Cultural and Contextual Considerations in the Treatment of Childhood Traumatic Grief* presented by the National Child Traumatic Stress Network
  - *Treatment of Childhood Traumatic Grief with Infants, Toddlers, and Preschoolers* presented by the National Child Traumatic Stress Network

## 3 Findings

Findings from the scoping review, key informant discussions, review of current technologies used to facilitate distance learning, review of evaluative findings of OCWTP distance learning pilots, and reviews of existing distance learning courses were triangulated to explore the following questions:

- What is the efficacy of distance learning as a delivery method for training?
- What students are best suited for distance learning?
- What content is most appropriate for distance learning?
- Which type of distance learning delivery method is most effective?
- What technologies best enhance distance learning?
- What implications exist for development and delivery of distance learning training?

### 3.1 What is the efficacy of distance learning as a delivery method for training?

- A review of the empirical literature revealed several findings related to the efficacy of distance learning, however only one was specifically related to the delivery of child welfare training:
  - When comparing a web-based training to in-person training, participants in the web-based course scored higher on the knowledge of child abuse and neglect instrument and there was no significant difference on empathic concern and being able to consider the perspective of others (Delaney, 2009).
  - When comparing face-to-face to distance learning methods, there is no difference on testing, but skill performance is better following in-person sessions (Reed, 2008).
  - There was no difference in test scores of college students when comparing in-person learning versus videoconferencing (Hsu & Shiue, 2005).
  - In their examination of exemplary distance learning courses, Hopper and Harmon (2000) found that instructors felt their distance learning courses were as effective as their face-to-face courses.

- In the OCWTP distance learning pilots, the majority of learners indicated they gained knowledge as a result of participation in a distance learning course and were able to articulate what they learned and how they would apply the content. When asked if they learned as much as they would have in a traditional classroom setting, overall respondents said “yes” and several indicated they learned more due to concentration and focus (two-hour sessions rather than typical three to six-hour classroom session) and not being distracted by other participants in the class.
- Feedback from learners participating in a pilot of online video recording with nationally known content experts indicated that, although the format was poor and difficult to navigate, all but one participant reported learning new concepts (OCWTP Distance Learning Pilot – National Child Advocacy Center, June 2007).
- A further review of the conceptual literature offers the following implications for effective distance learning delivery:
  - Giguere & Minotti (2003) suggest that the efficacy of a distance learning format must be evaluated by considering the extent to which the learning objectives and learning processes are effectively implemented, and the extent to which the selected technology serves to facilitate or enhance the desired learning processes and outcomes.
  - Effective learning outcomes and processes for adult learning events, whether delivered via a distance learning or in-person classroom format, will correspond with the basic principles of adult learning theory (Ahmag & Jakobsen, 2008; Giguere & Minotti, 2003; Guilbrand & Jerome-D’Emilia, 2008; Harlow, 2007; Martinez, 2002; Tynjala & Hakkinen, 2005) including:
    - Clear communication of positive and high expectations of both learners and the learning event
    - Promotion of active learning
    - Content that addresses a timely and practical learner need
    - Promotion of a learning community among learners and instructor
    - Problem-solving components
    - Emphasis on ‘time on task’ (i.e., quality learning requires learners to invest time in the learning event)
    - Promotion of timely and relevant feedback
    - Recognition of and provision for diverse learners
- Conversations with key informants suggest that distance learning can be an effective delivery method for training if the following issues are taken into consideration:

- Participant access to and ease of use of technology
- Type of content to be delivered is suited for distance learning (i.e., not requiring in-person monitoring by a facilitator) and suited for the intended workshop outcomes and levels of learning (i.e., awareness or acquiring knowledge versus skill practice.)
- Amount and quality of interaction required between participants and between participants and instructors
- Instructor time constraints (distance learning course delivery requires more preparation and requires instructors to be more planful in their delivery)
- Participant drop-out rates (Note: participant dropout was noted by two child welfare training programs.)
- Learner readiness and learning preference regarding distance learning and use of various technologies

### 3.2 What students are best suited for distance learning?

- Most empirical studies did not specifically identify a particular population for whom distance learning is best suited. However, some did have implications regarding learners and orientations.
  - Martinez (1999, 2001) found that the learning orientation of users must be considered when implementing web-based learnings. In particular, students with a high degree of self-direction and self-motivation seem to do better in a distance learning format (where the “teacher presence” is more remote) than students with a low degree of the same (Martinez, 2002).
  - Hopper and Harmon (2000) found that students who were successful in online courses tended to be older, have time management skills and solid technical skills at the start of the course.
- The conceptual literature suggests that learners who have a positive attitude toward technology-enhanced instruction are likely to perform better in a distance learning setting than students with a less positive attitude toward a distance learning modality (Martinez, 2003). Also, participant attitude toward the usage of technology impacts their willingness to utilize the technology (Sanchez-Franco, Martinez-Lopez & Martin-Velicia, 2009). Alley and Jansak (2002) also suggest that distance learning is better suited for those learners who are self-directed.

- Key informant experiences varied in regard to learner type. One state child welfare training program indicated that it was challenging to deliver training via distance learning to social workers because they tend to prefer highly interactive learning. Other key informants indicated that participants who were highly motivated to learn the material would learn from the course regardless of the design or delivery. Illinois informants voiced surprise by the number of caseworkers who voluntarily logged on to asynchronous courses through their LMS after work hours.
- Although OCWTP pilot evaluations did not specifically answer this question, an overwhelming majority of diverse learners stated they would register for another online course and would recommend the online course to others. Although some indicated a preference for face-to-face interaction, the convenience of not leaving their office or home made distance learning worthwhile.
- Several learners in the Foster Parent College pilot commented that the ability to take the course when most needed and most convenient made distance learning very appealing to foster caregivers.

### 3.3 What content is most appropriate for distance learning?

- In their evaluation of distance learning as a delivery method to train health professionals to use an assessment tool, Reed, et. al (2008) found that in-person training had better skill development outcomes.
- Several authors suggest that content (across topic areas) that lends itself to problem-solving, examination of values, the exchange of ideas or creation of new ones can contribute to the co-construction of knowledge among learners and the critical 'creation of community' in a distance learning setting (Amhag & Jakobsen, 2008; Hull & Saxon, 2008).
- Although written comments most frequently noted convenience as what learners most liked about distance learning, evaluative data from OCWTP's distance learning pilots indicated that content that addresses a specific learning need made distance learning more viable. Only 6% took a particular course due to convenience while 69% took the course because the content pertained to a current issue they faced in their practice or to an issue related to a foster child in their home.
- Several foster caregivers in the OCWTP pilot of Foster Parent College distance learning courses, stated that course content was too basic and even more indicated they wanted more in-depth information on the topic. Feedback clearly indicated appreciation for the

“just-in-time” content but implied that many of these courses would need to be followed with additional learning opportunities.

- Ellis and Hafner (2003) (as cited by Henry and Meadows, 2008) suggest that content and material that works well in a traditional classroom will need to be redesigned for use in an online environment. Content should not just be placed on the internet for review, rather instructors must engage learners in activities to help facilitate learning (Henry & Meadows, 2008).
- To better accommodate learners who are less self-directed, Martinez (2000) writes that delivery and content needs to be more structured, less ambitious, and have more prescriptive paths to learning.
- In their exploration of exemplary online courses Hopper and Harmon (2000) as cited in Henry & Meadows (2008), found that subject content tended to be mastered by doing more than by reading or listening. In other words, content was not simply deposited for review. Rather, students were actively involved in it and thereby mastered it.

### 3.4 Which type of distance learning delivery method is most effective?

- Findings regarding the various types of distance learning include those that address synchronous and asynchronous learning, as well as those that address blended learning and communication; however none offered specific information regarding which type was most effective.
- One qualitative study reported that a blended course that included both a face-to-face component and online access to resources via some type of LMS afforded them both greater access to resources and the more capacity to self-direct their own learning (Parker, Robinson and Hannafin, 2007).
- Another study suggested that due to significant generational differences in learning preferences and orientations, a blended course (containing both an online and face-to-face component) will do better to meet the diverse learning needs of all generations (Hartman, Moskal and Dziuban, 2005).

### 3.5 What technologies best enhance distance learning?

- Most key informants and articles iterate the importance of distance learning courses ensuring that technology components serve to facilitate and not hinder the learning event or the learner (Giguere & Minotti, 2003) by:

- Ensuring easy access to the program and materials
- Providing adequate preparation of both the instructor and learners regarding the use of the technology
- Providing ongoing and timely technical assistance as needed
- Evaluation of technologies such as podcasts, discussion boards, simulation, teleconferences and chatrooms all suggest that these could be useful tools when delivering training or education online (Bedi, 2008; Buerck, Malstrom & Peppers, 2002; Curran, Kirby, Parsons & Lockyer, 2003; Hull & Saxon, 2008; Jung, Choi, Lim & Leem, 2002; Kian-Sam & Lee, 2008; McKinney, Dyck & Luber, 2009; Osman & Herring, 2007; Satterwhite & Schoech, 1995; Wang, Sierra & Folger, 2003; Wisher & Priest, 1998).
- Many stress the importance of not adding technology tools just because they're available (Koszalka & Ganesan, 2004; Levin et al., 1999; Mandernach, 2006; Sieber, 2005 as cited in Henry & Meadows, 2008). Henry and Meadows (2008) conclude that resources must be applied judiciously. "In the online world, technology is a vehicle, not a destination" (retrieved 4/15/09 at X:\IHS Data (F Drive)\Distance Learning 2009\P9 principles of web.mht.)
- Many distance learning courses are delivered using a combination of technologies through a content management system or a learning management system. These tools are useful for organization of resources, easy access to course materials, and inclusion of asynchronous discussion (Ausburn, 2004; Bailey & Morais, 2004; Benuban-Fich & Arbaugh, 2006).
- OCWTP distance learning pilots confirmed the need for easily accessed technical assistance. Findings also noted the following constraints:
  - Local firewalls and agency restrictions hampered some participants from receiving email invitations with links to distance learning events
  - Firewall and agency restrictions prevented some learners from converting downloaded course materials that were developed in newer versions of existing applications
  - Most pilot participants did not have head phones which made holding a phone for two hours difficult and cumbersome
- The OCWTP pilot of online course offered by the National Child Advocacy Center indicated that streaming videos of talking heads were not well tolerated regardless of the quality of the information being conveyed.



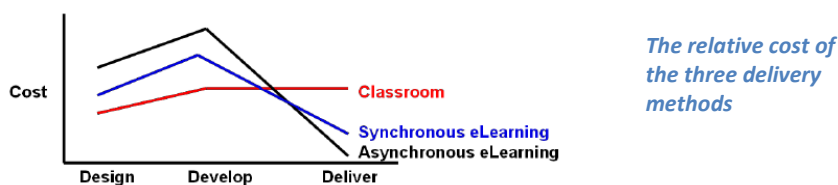
### 3.6 What implications exist for development and delivery of distance learning training?

- Several empirical studies concur about the importance of developing distance learning offerings to engage learners in a community of practice that maximize learners' interactions with other learners as well as with the trainer or instructor.
  - Hull and Saxon (2008) found that increasing instructional prompts and inserting open-ended questions in message board discussions yielded a significantly enhanced learning outcome.
  - Another study found that social interaction between learners and instructor was related to increased learning achievement (Jung, Choi, Lim & Leem, 2002).
  - In their study, Benbunan-Fich and Arbaugh (2006) found that success of web-based courses depends on use of collaborative learning activities and a challenging environment where learners are responsible for creating their own knowledge.
  - Bailey and Morais (2004) found that interaction with other students or instructor, whether online or in-person, is related to learner satisfaction.
  - In further support of collaboration, Hlanpanis and Dimtrakopoulo (2006) found that trainee collaboration is positively related to success in online learnings.
  - In one qualitative study, participants agreed that interaction on discussion boards were helpful in developing their knowledge and understanding of the topic (Curran, Kirby, Parsons & Lockyer, 2003).
  - In their qualitative study, Osman and Herring (2007) found that interaction amongst learners and instructor is even more important in a discussion board or chatroom setting than in an in-person setting.
  - Bedi (2008) found that a moderate amount of instructor interaction with students serves to stimulate productive discussion among students and increase levels of student satisfaction in asynchronous courses.
  - Koszalka and Ganesan (2004), and Sadik (2004) as cited by Henry and Meadows (2008) suggest that learners must be purposefully and strategically engaged in activities and interaction.
- Key informants also stressed the importance of engagement of learners via playful posts on message boards, collaborative assignments for learners and timely response to learner posts.
- Participants in the OCWTP pilot, *Skill-Building Learning Lab for Trainers*, made positive comments about the interaction they had with lab facilitators and fellow participants via

the online wiki that enabled them to upload their work and receive and give feedback to each other.

- Related to the above research is the direct correlation between retention, student satisfaction and engagement in an online environment. Student satisfaction (tied to interaction and engagement) is a predictor of retention. (SLOAN-C online course, *The First Step Toward Online Teaching*, March 2009.) As a result, time and effort must be made when designing distance learning courses to facilitate interaction between participants and between participants and instructor.
- Several studies indicated that distance learning course development, design, and implementation require more time.
  - Instructors are likely to spend more time planning and managing distance learning courses to insure the course accommodates a structure that promotes adult learning that includes (Harlow, 2007):
    - A way for students to become responsible for their own learning,
    - Instructors assuming the active role of a “coach” instead of merely a traditional teaching role,
    - Instructors remaining sensitive and responsive to individual learning preferences and styles present in the group, and
    - Instructors providing continuous and timely feedback to both individuals and groups as appropriate and needed.
  - In their qualitative study, Hopper and Harmon (2000) also found that development time was the greatest challenge for instructors creating online learnings.
  - Benfield (2000) also suggests that time for planning is critical. He points out that online communication requires a “conscious effort, planning, forethought and time.”
- Henry and Meadows (2008) discuss elements in the planning process. They identify the need for adequate planning time and additional technology expertise. They suggest use of a three person team to develop online learnings in order to adequately address all the issues involved with delivery of a distance learning course – an instructor, instructional designer, and an internet/technical specialist.
- Authors cited in Henry & Meadows (2008) identify the following components of distance learning instruction that are reported to contribute to enhanced learning and student satisfaction:

- Quick turnaround time by instructor on email and assignments (Hopper and Harmon; 2000)
- Frequent and engaged contact and individual feedback (Anderson, 2006)
- Having goals and objectives that are clearly stated (Carr-Chellman & Duchastel, 2000; King, 1998; Orde, et al., 2001; Sieber, 2005)
- Good communication skills (Hopper and Harmon, 2000; White, 2000)
- Regular use of student names (Aragon, 2003)
- Capacity to be real and genuine (Aragon, 2003; Beaudin & Henry, 2007)
- Key informants also supported the role of the instructor in the delivery of distance learning content highlighting the fact that instructors must be more planful in their course development and more purposeful in their responses. They also suggest that course activities be designed to increase collaboration, create “community,” and engage learners in a variety of manners.
- Wisher and Priest (1998) evaluated the cost effectiveness of teleconferencing versus traditional residency-based training in the U.S. Army National Guard. Although they found that the teleconferencing was substantially less costly, there were costs related to the acquisition of resources and implementation of the teleconferencing.
- Even though the delivery of distance learning is cheaper and faster for dispersed audiences than traditional classrooms, distance learning is typically more expensive to produce (Clark & Kwinn, 2007.)



- Findings from the OCWTP distance learning pilots provided a number of recommendations regarding the development and delivery of distance learning training:
  - Participants want the ability to easily navigate non-instructor lead asynchronous courses in order to stop, pause, fast forward, and easily return to where they stopped.
  - Many pilot participants indicated a desire to print resources ahead of time as well as the option to print resources and handouts that appear in the course.

- Learners want to know the length of the learning activity before they begin the course.
- Foster caregivers indicated they wanted to see more case studies in the Foster Parent College courses they took.
- In the instructor-led, synchronous pilot, *Understanding Borderline Personality Disorder*, morning classes were first filled. Caseworkers indicated that afternoon sessions were difficult because they felt they had less control over their time as the day progressed.
- Trainers and educators from across the country caution distance learning trainers to carefully evaluate which web resources to integrate into courses. What is available today may not be available tomorrow as URL content persistently changes (SLOAN-C online course, *The First Step toward Online Teaching*, March 2009.)

## 4 Conclusions

### 4.1 Guiding Principles

- As with in-person or “real classroom” modality for learning, distance learning should be viewed primarily as the vehicle by which a learning event is delivered, and not as the learning event itself (Harlow, 2007). Distance learning as a modality for delivering instruction, therefore, cannot in and of itself be evaluated as “effective” or “ineffective”, “good” or “not good.” The efficacy of any distance learning format must be viewed in terms of the extent to which:
  - A. The learning objectives and learning processes of the *training design itself* are effectively carried out by the selected distance learning format; and
  - B. The extent to which the selected technology serves to facilitate and/or enhance the desired learning processes and outcomes (Giguere & Minotti, 2003).
- All distance learning events should include components that are in keeping with adult learning theory including:
  - Clear communication of positive and high expectations of both learners and the learning event
  - Promotion of active learning
  - Content that addresses a timely and practical learner need
  - Promotion of a learning community among learners and instructor
  - Problem-solving components
  - Emphasis on ‘time on task’ (i.e., quality of learning is influenced by time invested by learner to the learning task)
  - Promotion of timely and relevant feedback
  - Recognition of and provision for the diverse learner

### 4.2 Delivery Strategies

- Learning objectives should determine delivery methodology in distance learning as equally as it does in in-person classroom learning. As distance learning options expand and as those options become more accessible to more learners, it can be difficult and cumbersome to decide whether distance learning is appropriate or not—and if so, whether it should be facilitator-led or not, synchronous or asynchronous, or a blending

of options. Therefore, the OCWTP will make use of the decision matrix developed during this project (See [Decision Matrix](#)). The matrix instructs trainers to first identify skill sets, competencies, and learning objectives as they develop their content outlines. Then based on the learning objective and level of discussion required, guides them toward a decision regarding delivery strategy.

- The decision matrix for determining appropriateness for distance learning delivery should be incorporated into the OCWTP Training of Trainers series where applicable.
- Non-instructor-led, asynchronous delivery strategies should be considered for learning objectives that center on increased awareness or acquisition of knowledge. Skill-development objectives are best achieved through in-person learning activities.
- OCWTP trainings can benefit from technology enhanced or “blended” delivery strategies. Various delivery combinations should be considered to enhance knowledge construction and to respond to shrinking budgets, staffing reductions, and increased workloads. Judicious implementation of various delivery strategies can insure that trainees receive quality training through methods that are appropriate for use with the desired learning objectives.
- Non-instructor-led, asynchronous courses, designed as “just-in-time” resources, can be valuable to OCWTP constituents. The program, however, will need to be strategic in making sure that training opportunities exist to facilitate levels of learning that go beyond simple knowledge acquisition.

### 4.3 Technologies

- The OCWTP should set standards to ensure that technology components serve to facilitate and not hinder the learning event or the learner by ensuring the following:
  - Easy access to the program and materials;
  - Adequate preparation of both the instructor and learners concerning the use of the technology; and
  - Ongoing and timely technical assistance, to be available as needed
- Although the variety of technologies to support training will continue to expand, the OCWTP should insure that the selection of technology is based on content and learning objectives. Trainers should be cautioned to not be driven or ‘seduced’ by the capacities or “bells and whistles” of technology (Giguere & Minotti, 2003; Henry & Meadows, 2008; Tynjala & Hakkinen, 2005; Trentin, 2003).

- Technologies to enhance training are plentiful, diverse, and ever expanding. Therefore, the OCWTP should maintain an online resource of technologies available that can be easily referenced by trainers, curriculum developers, and OCWTP constituents and one that can be added to as new technologies emerge in the years to come.
- The judicious use of technology has the potential to enhance OCWTP learning activities by meeting the needs of learners with diverse learning styles as well as helping to engage learners to take active responsibility for their own learning.

#### 4.4 Trainers

- The OCWTP needs to provide training to trainers on how to determine whether distance learning is appropriate and whether the distance learning modality should be synchronous or asynchronous; facilitator-lead or not; or a blending of options.
- OCWTP trainers need to be informed of the variety of technologies that could be used to facilitate distance learning or to enhance training along with specific information for each technology regarding strengths, weaknesses, requirements, etc.
- Trainers will need time and opportunity to practice using new technology.
- The OCWTP will need to allow for potential performance dips as trainers learn new skills and practice using new technologies.
- Trainers need to be informed that the literature and key informants all indicated that distance learning requires increased development time
- Trainers need to be informed of literature regarding distance learning components that increase learner satisfaction, retention of registrants, and most importantly, knowledge acquisition.

#### 4.5 Learners

- The OCWTP should use an assessment to help determine a learner's readiness to participate in distance learning. Although most studies do not specifically identify a particular population for whom distance learning is best suited, several indicate that assessing for the following could increase a learners success in a distance learning setting:
  - High degree of self-direction and self-motivation (Guilbrand & Jerome-D'Emilia, 2008; Martinez, 2003)

- Prior experience with distance learning (Beagham, 2006)
- Positive attitude toward technology-enhanced instruction (Martinez, 2003)
- Positive attitude toward the use of technology (Sanchez-Franco, Martinez-Lopez & Martin-Velicia, 2009)
- Orientation to learning that is either transforming (self-motivated in all coursework and assumes learning responsibility) or performing (self-motivated in subjects of interest) (Jones & Martinez, 2001).

**Note:** Based on the Learning Orientations Model that identifies distinct learning patterns for four learning orientations: transforming, performing, conforming, and resistant.

- The OCWTP needs to fully orient learners to the use of any technologies used to implement distance learning or to enhance training. Learners need easy access to technical assistance. This impacts accessibility, satisfaction, as well as likelihood of completing the learning task (Ausburn, 2004; Motteram, 2006).
- The need to assess training needs is no less important in distance learning methodologies as it is in traditional classroom settings. As the OCWTP ventures toward offering more distance learning opportunities, assessments of training needs and matching the right training to the right learner should be a component of any course offering.

#### 4.6 Administrative Issues

- Accessibility to various online features will vary between all of Ohio's 88 counties. This should impact distance learning decisions regarding standardized and or required trainings. Trainings that require attendance of staff from all counties will need to make use of technology that is accessible to all.
- The OCWTP will need to determine if the training program will allow for differential trainer pay based on the increased preparation time needed for distance learning.
- As trainers begin to develop and approach the OCWTP to offer their own distance learning courses, the OCWTP will need to determine a means of vetting the courses and monitoring for quality assurance.
- The OCWTP needs to develop a means to make recommendations regarding budget allocations related to online learning, such as purchasing headphones; online



subscriptions for existing distance learning programs; or more licenses for online meeting and training platforms.

- The OCWTP will need to determine responsibility for administration of centralized distance learning courses, such as registration, technical assistance, continuing education, etc.
- The OCWTP will need to communicate accessibility requirements to all of Ohio's 88 counties along with the need for learners to receive OC WTP emails.
- When scheduling synchronous distance learning offerings, the OCWTP should consider scheduling these course at the beginning of first, second, and third shifts.
- The OCWTP will need to strategically plan for the increased fiscal requirements of developing distance learning courses.

## 5 Bibliography

- Alley, L.R. & Jansak, K.E. (2001). The ten keys to quality assurance and assessment in online learning. *Journal of interactive student development*. 13(3).
- Amhag, L. & Jakobsen, A. (2008). Collaborative learning as a collective competence when students use the potential of meaning in asynchronous dialogue. *Computers and Education*. 52 (2009): 656-667. Online availability at [www.elsevier.com/locate/compedu](http://www.elsevier.com/locate/compedu)
- Ausburn, L.J. (2004.) Course Design Elements Most Valued by Adult Learners in Blended Online Education Environments: An American Perspective. *Educational Media International*. online © 2004 International Council for Educational Media.
- Bailey, K.B. & Morais, D.B. (2004). Exploring the Use of Blended Learning in Tourism Education. *Journal of Teaching in Travel and Tourism*. 4(4), 23.
- Bedi, K. (2008). Best Practices of faculty in facilitating online asynchronous discussions for higher student satisfaction. *U21 Global Working Paper Series*, No. 005/2008
- Benbunan-Fich, R. & Arbaugh, J.B. (2006). Separating the effects of knowledge construction and group collaboration in learning outcomes of web-based courses. *Information & Management*. 43, 778-793.
- Benfield, G. (2000). Teaching on the Web- Exploring the meanings of silence. Retrieved from <http://ultibase.rmit.edu.au/Articles/online/benfield1.pdf>, 6/11/2009.
- Buerck, J. P., Malmstrom, T. & Peppers, E. (2002). Learning Environmental & Learning Styles: Non-Traditional Student Enrollment and Success in an Internet-Based Versus a Lecture-Based Computer Science Course. *Learning Environments Research*. 6, 137-155.
- Clark, R.C. & Kwinn, A. (2007). *The New Virtual Classroom*. San Francisco,CA: Pfeiffer.
- Curran, V., Kirby, F., Parsons, E. & Lockyer, J. (2003). Discourse Analysis of Computer-mediated conferencing in World-Wide Web-based continuing medical education. *Journal of continuing education in the health professions*. 23, 229-238.
- Delaney, R. (2009). Web-Enhanced Pre-Service Training for Foster, Adoptive, and Kinship Parents. Phase I Final Report: A Small Business Innovation Research Grant from the National Institute of Child Health and Human Development Grant #1 R43 HD054032-01A1
- Giguere, P. & Minotti, J. (2003). Developing High-Quality Web-based Training for Adult Learners. *Educational Technology*. 43(4), 57-58.

- Gilbaud, P. & Jerome-D'Emilia, B. (2008). Adult Instruction & Online Learning, Towards a Systematic Instruction Framework. *The International Journal of Learning*. 15(2), 111-121.
- Harlow, J. (2007). Successfully Teaching Biblical Languages Online at the Seminary Level: Guiding Principles of Course Design and Delivery. *Teaching Theology and Religion*, 1368 – 4868
- Hartman, J. Moskal, P., & Dziuban, C. (2005). Preparing the academy of today for the learner of tomorrow" (book chapter from 'Educating the Net Generation') The Research Initiative for Teaching Effectiveness, The University of Central Florida.
- Henry, J. & Meadows, J. (2008) An absolutely riveting online course: Nine principles for excellence in web-based teaching. *Canadian Journal of Learning and Technology*. 34(1).
- Hlanpanis, G. & Dimitrakopoulou, A. (2006). A course model implemented in a teacher's learning community context: issues of course assessment.
- Hopper, K.B. & Harmon, S.W. (2000). A multiple-case study of exemplary internet courses. *Ed at a Distance Magazine*. September.
- Hsu, Y. & Shiue, Y. (2005). The Effect of Self-Directed Learning Readiness on Achievement Comparing Face-to-Face and Two-Way Distance Learning Instruction. *International Journal of Instructional Media*, 32 (2), 2005.
- Hull, D. M. & Saxon, T.F. (2008). "Negotiation of meaning and co-construction of knowledge: An experimental analysis of asynchronous online instruction." *Computers & Education*. Available online at: [www.elsevier.com/locate/compedu](http://www.elsevier.com/locate/compedu)
- Jelfs, A. & Kelly, P. (2007). Evaluating Electronic Resources: Personal Development Planning Resources at the Open University, a case study. *Assessment and Evaluation in Higher Education*. 32(5), 515-526.
- Jones, E.R. & Martinez, M. (2001). Learning Orientations in University Web-Based Courses. <http://www.thetrainingplace.com>
- Jung, I., Choi, S., Lim, C. & Leem, J. (2002). Effects of Different Types of Interaction on Learning Achievement, Satisfaction and Participation in Web-Based Instruction. *Innovations in Education and Teaching International*. 39(2), 152-163.
- Kian-Sam, H. & Lee, J.A.C. (2008). Postgraduate students' knowledge construction during asynchronous computer conferences in a blended learning environment: A Malaysian experience. *Australasian Journal of Education Technology*. 24(1), 91-107.
- Koszalka, T. & Ganesan, R. (2004). Designing online courses: a taxonomy to guide strategic use of features available in course management systems (CMS) in distance education. *Distance Education*. 25(2), 243-256.

- LaBay, D.G. & Comm, C.L. (2003). A case study using gap analysis to assess distance learning vs. traditional course delivery. *The International Journal of Educational Management*. 17(7), 312-317.
- Martinez, M. (1997). Designing Intentional Learning Environments. Snowbird, Utah.
- Martinez, M. (1999). An investigation into successful learning: Measuring the impact of learning orientation, a primary learner-difference variable, on learning. Author dissertation, Brigham Young University.
- Martinez, M. (2000). Successful Web Learning Environments: New Design Guidelines. The Training Place.
- Martinez, M. (2001). Key Design Considerations for Personalized Learning on the Web. *Educational Technology & Society*. 4(1), 26-41.
- Martinez, M. (2003). High Attrition Rates in e-Learning: Challenges, Predictors, and Solutions. *The E-Learning Developers' Journal*. July 14.
- Martinez, M. (2002) Designing Learning Objects to Personalize Learning. Retrieved from [www.reusability.org/read/chapters/martinez.doc](http://www.reusability.org/read/chapters/martinez.doc) May 15, 2009
- McKinney, D., Dyck, J.L. & Luber, E.S. (2009). iTunes University and the Classroom: Can podcasts replace professors? *Computers & Education*. 52, 617-623.
- Motteram, G. (2006). 'Blended' education and the transformation of teachers: a long-term case study in postgraduate UK Higher Education. *British Journal of Education Technology*. 37(1), 17-30.
- Osman, G., Herring, S.C. (2007). Interaction, facilitation, and deep learning in cross-cultural chat: A case study. *Internet and Higher Education*. 10, 125-141.
- Reed, G.M., Dilfer, K., Bufka, L.F., Scherer, M.J., Kotze, P., Tshivhase, M. & Stark, S. (2008). Three model curricula for teaching clinicians to use the ICF. *Disability and Rehabilitation*. 30(12-13), 927-941.
- Sanchez-Franco, M.J., Martinez-Lopez, F.J. & Martin-Velicia, F.A. (2009). Exploring the impact of individualism and uncertainty avoidance in Web-based electronic learning: An empirical analysis in European higher education. *Computers and Education*. 52, 588-598.
- Satterwhite, R. & Schoech, D. (1995). Multimedia training for child protective service workers: initial test results. *Computers in Human Services*. 12(1/2), 81-97.
- Sherman, L.W., Gottfredson, D.C., MacKenzie, D.L., Eck, J., Reuter, P. & Bushway, S.D. (1998). Preventing Crime: What works, what doesn't, what's promising. *National Institute of Justice Research in Brief*. July, 1998

- Trenton, G. (2003). Managing the complexity of e-learning systems. *Educational Technology* 43(6), 36-42
- Tynjala, P. & Hakkinen, P. (2005). E-learning at work: theoretical underpinnings and pedagogical challenges. *The Journal of workplace learning*. 17(5/6), 318-336
- Wang, M., Sierra, C., & Folger, T. (2003). Building a Dynamic Online Learning Community among Adult Learners. *Education Media International*.
- Wisher, R.A. & Priest, A.N.(1998). Cost-effectiveness of teletraining for the U.S. Army National Guard. *The American Journal of Distance Education*. 12(1).