



NeMTSS
FRAMEWORK



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NeMTSS Research Brief

Distance Delivery of Professional Development and Training

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Due to the 2020 Covid-19 pandemic, NeMTSS and related trainings are being given via distance learning technology like Zoom and other videoconferencing software. In the literature on distance learning and delivery of professional development, there have been many findings regarding best practices and effective strategies in delivering content via distance technology. Relevant findings are outlined below.

Distance Delivery of Professional Development and Training: An NeMTSS Research Brief

Best Practices in Distance Learning and Web-based Learning Environments

From Simonson et al. (2015)

1. Course (or content) quality is critical – quality is strongly related to learner satisfaction.
2. Interaction in distance education is important – learner to learner and learner to content interaction are most important, followed by learner to instructor and instructor to learner interaction.
3. Quality instruction delivered at a distance should be equivalent not identical to instruction delivered traditionally in a classroom when learning and satisfaction are measured.
4. Instructor expertise in distance education and instructor support are strong predictors of learning and satisfaction.
5. Frequency and quality of interaction is a key to effectiveness in distance education.
6. What works effectively in traditional education is a starting point for what works in distance education; equivalency should be the goal.

From Badia & Colosimo (2013)

1. **Recommendations on Introducing and Orienting**
 - a) Before introducing the session, it is necessary to provide an introduction and orientation to the [online] environment.
 - b) Indicate how participants can provide feedback if they are not satisfied with the pace or have questions or comments.
 - c) Icebreakers or other introductions are an easy way to allow everyone to interact with the environment.
 - d) In addition to the learning objectives established for the session, providing an agenda can help to set up expectations for those that are not familiar with the delivery method. The objectives and agenda should be provided in writing, as well as described verbally.
2. **Recommendations on Informing**
 - a) Presentation slides are often used for informing in the web conferencing environment. Slides should be loaded ahead of time and can include screenshots for those who are accustomed to having a backup in case of technology glitches. Give verbal cues to bring attention to elements on slides being discussed. At the same time, make use of drawing tools or turn on the option for participants to view the cursor.
 - b) It can be a challenge to devote attention to both presenting and scanning for questions or comments, so it is advisable to have a second person, whenever possible, to monitor and respond to chats. Otherwise, there may be a need to

develop strategies for multitasking, such as taking frequent breaks for question-and-answer periods.

3. Recommendations on Active Learning and Feedback

- a) Keep participants active by making full use of the technology and offering various means of interaction between instructors and participants. Alternate activities with periods of informing. Instructions, descriptions, or links to resources for activities can remain on a slide in the web conferencing environment. Set strict time limitations and bring everyone's attention back to the environment after exercises, otherwise participants will multi-task.
- b) Group work and peer-learning opportunities are possible in the web conferencing environment, although it may be easier to assign participants to a group beforehand. Breakout rooms can be used to allow for problem solving or discussion on a topic.
- c) Assessing the level of engagement of participants in the web conferencing environment is challenging, particularly without the ability to observe body language or facial expressions. To successfully integrate assessment, using questioning, polling, or quizzes, it takes planning, practice, creativity, and a propensity for risk taking. Stop periodically to check in with participants, request direct feedback, and probe for deeper learning.

4. Recommendations on Humanizing the Environment

- a) Referring to participants by name and addressing them often is a common best practice in the literature for humanizing the environment. You can speak to participants as individuals, using "you".
- b) Feedback icons, such as the thumbs up and applause options, allow fellow instructors and participants to show emotion and be spontaneous.

5. Recommendations on Closure and Follow Up

- a) Summarizing the content and activities at closing can also include revisiting the outcomes presented while introducing the session. It is easy to lose participants at the end of a session when offering time for reflection without giving clear instructions.
- b) It is difficult to determine how the learning experience was for participants without asking directly. Ask them to complete a short survey to get feedback.
- c) Stay on afterwards to answer questions. There may be individuals who were too shy or unwilling to ask questions previously. If a sole participant remains in the web conferencing environment after everyone has said their goodbyes, address them by name and ask if they are still there and if you can help further before disconnecting.
- d) Use email to obtain more in-depth feedback and provide links where more information may be obtained. Solicit ideas for future offerings in the web conferencing environment, if appropriate.

Research Findings on Distance Delivery of Professional Development and Training

From Berndt et al. (2017)

1. In a meta-analysis of professional development delivered via distance technology to allied health professionals, those studies that tested knowledge found positive outcomes from the education programs regardless of method of delivery.

2. Participants in the meta-analysis reported that they appreciated education that had an interactive component including contact with facilitators and other learners because it mirrored the kind of learning that occurs in the classroom and supported their engagement.
3. The meta-analysis found that multimedia delivery of content appeared to be favorable, possibly because this suited different learning styles.

From Maher & Prescott (2017)

1. A study analyzing the effectiveness of professional development delivered to teachers via distance technology found that the use of videoconference technology allowed for effective professional development to be undertaken for teachers from dispersed geographical locations.
2. The teachers in the study reported that since the interactions were conducted in real time, discussions with participants occurred and immediate feedback was provided. Suggesting that the synchronous nature of the interactions was important.

Limitations of Distance Delivery to Consider

1. Maher and Prescott (2017) reported that videoconference works well for small groups and allows for personalization and collaboration. However, a downside to this is that the opportunity for teachers (or training recipients) to network and grow a community of learners is not as high as it might be compared to a traditional face-to-face session where many individuals are present.
2. In Maher and Prescott (2017) some of the teachers receiving training commented that the use of the videoconference was not as effective as face-to-face sessions. To combat this, Maher and Prescott suggested providing participants with multiple channels of communication that could provide a greater collaborative experience.
3. Berndt et al. (2017) found that individuals participating in a day long videoconference reported feeling fatigued, with sore eyes from looking at the screen. This suggests that spreading out training over multiple sessions may help combat fatigue among learners/trainees.

References

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