Using Videoconferencing to Create Authentic Online Learning for Volunteers

Abstract
Face-to-face training for Extension volunteers is no longer the only viable delivery mode. In times of rapid technological advances, we are faced with a plethora of options for offering volunteers the training and support they need. Zoom, an online videoconferencing platform, can easily be used to engage volunteers in professional development. Creating interactive virtual sessions with a face-to-face feel can be a win-win situation for both Extension staff and volunteers.

Introduction
Is face-to-face training for volunteers becoming a thing of the past? In 2005, Kaslon, Lodl, and Greve said that alternative training should be developed due to volunteers' increasingly busy schedules and Extension staff and program budget decreases. Many state 4-H programs now offer web-based asynchronous sessions for volunteers. These sessions allow volunteers to move at their own individual paces. However, with many online training opportunities, the participant's level of engagement is reduced to watching videos, reading, and completing a quiz or typing into a text box. What is missing is the benefit of a visual link among members, allowing them to learn with and from one another (Sobrero, 2008).

Confidence and competence in facilitation of science, technology, engineering, and math (STEM) programs increase when professional development is provided (Junge & Manglallan, 2011). When designing training for volunteers, it is important to recognize what is needed to support the transfer of learning and to incorporate strategies the volunteers will be expected to apply (Haugen, Stevenson, & Meyer, 2016). As videoconferencing becomes a more widely accepted method for delivering training, Extension staff should realize that the design aspect comes with a higher level of complexity. We conducted pilot testing of an intentionally designed online training experience intended to increase both the skills and comfort levels of adult volunteers. To meet volunteer needs and achieve desired programming outcomes, we used Zoom to provide online training with the "face-to-face feel" of an in-person session.
What Is Zoom?

Zoom is a cloud-based high-definition videoconferencing and desktop-sharing software (Zoom Video Communications Inc., n.d.). The system offers a user-friendly layout compatible with desktops and mobile and tablet devices. Participants also can call in from a landline or cell phone. Sessions can be recorded, and screen sharing is available. Zoom offers breakout room and chat box features that allow for both individual private chats and whole-group interactions. Meetings can be scheduled in advance, with meeting notifications shared to calendar systems, or participants can be invited to join a meeting in real time. Free videoconferencing is available for up to 40 min/hr, or a Pro Plan, with unlimited meeting durations and additional features, can be purchased for $14.99/month.

The Virtual Experience

Maine Math and Science Alliance recently launched Afterschool Coaching for Rural Educators in STEM (ACRES), a professional development opportunity for afterschool program providers and 4-H volunteers. We partnered to create a completely virtual version of the sessions. Using Zoom and guided by a coach, cohorts of five to 10 participants were able to engage in face-to-face conversations, participate in small-group activities, and report their experiences and findings using the breakout room feature. Videos from the online STEM resource Click2Science were used for demonstrating targeted skills to the whole group. Screen sharing allowed volunteers to share short video clips and receive feedback from peers about their own youth development practices. We revised hands-on science activities with intentionality so that they could be integrated successfully into the online experience.

Advantages for Volunteer Engagement

Videoconferencing is a useful communication method within Extension, especially for one-on-one meetings and committee work. Although webinars have become more popular and aim to offer synchronous experiences, they are often one-sided and do not allow for a good deal of interaction beyond the chat box. Robideau and Vogel (2014) stated that an "intentional design and development process is key to the expedient implementation of a high-quality interactive training product for delivery via distance technology" ("Introduction," para. 3). Using a synchronous platform such as Zoom allows for high-quality interactive training, eliminating the need to create entire online modules and, thereby, saving both time and expense.

Learning to use new technology can take a bit of time, but the Zoom platform is user-friendly and has simple features that are clearly marked on a menu bar. Users can click camera and microphone icons to disengage from participating in the video or audio interactions while still viewing the presentation or hearing the conversations.

The option to access web-based training reduces volunteer participation barriers such as issues with distance, travel, work schedules, and childcare (Lobley, Ouellette, Lesmeister, & Gross, 2013). Another advantage to using Zoom is the ability to connect through both computers and mobile devices. If an Internet connection is not available, users have the option of calling in to the session. Having this flexibility works well as not all volunteers have access to a computer but many have access to a smartphone or a landline.

All users (not just the host) have the ability to share their screens. Sharing a draft document from a desktop, capturing ideas during a brainstorming session, or sharing a video clip for discussion and feedback can be accomplished at the click of a button.
Using breakout rooms where participants can actually see each other is a game changer in making virtual sessions feel more personable. The host can assign people randomly or manually to rooms and can "visit" rooms. Breakout room members can easily signal the host if they need help or have a question. This feature allows for think-pair-share activities or small-group discussions. With a little preparation prior to the session, the host can plan hands-on activities to be carried out by partners or small groups.

**Conclusion**

From the perspectives of both the volunteer and the trainer, lack of connectedness, engagement, and other components of in-person trainings is no longer a concern when using Zoom. Allen and Ouellette (2016) stated that "pilot testing has shown high enjoyment levels and self-reported skill gains by most participants" (p. 13) who use the platform.

When compared to other videoconferencing platforms, Zoom tended to be the most reliable and accessible for those who had slow or no Internet connectivity. The call-in option allowed anyone with a telephone to participate.

So is face-to-face training for volunteers becoming a thing of the past? Our experience suggests that using videoconferencing for volunteer training is a viable option for providing high-quality interactive training from a distance. With its potential for virtual face-to-face contact, its ease of use, and the capability for volunteers to access real-time training from home, videoconferencing has many appealing aspects.

**References**


