

Technology and Teaching

Tips, tools, and practices

Technology and virtual experiences of church are now mainstays in most every congregation. Whether we stream worship services, gather for online committee meetings, or provide podcasts for members near and far, technology is now a significant partner in ministry and virtual spaces are as embodied experiences. These are means through which we can extend our ministries as we engage across geographical boundaries as never before. Approached with insight, care, and intentionality, teaching with technology and including virtual contexts are a resource for expanding educational ministries as we form and nurture faith. The key is to understand that we cannot simply migrate what we have always done when teaching and gathering only in person to these ways of virtual and distance teaching. People often ask about new trends and Christian education. This is not a trend. This is our present reality and the future into which we move. It is exciting, fun and with a few tips and tools it can easily become comfortable and familiar.

Glossary

Let's begin with a basic understanding of the terminology involved in teaching with technology and in virtual settings.

- Virtual Teaching is creating, hosting, delivering and/or leading an online educational experience which participants access via a video conferencing platform (e.g., Zoom, Google Meet) or an online platform (e.g., VoiceThread, Wakelet, Slack.)
- *Modalities* learning methods for delivery (e.g., face-to-face, online, hybrid.)
- Distance everyone participates electronically from their respective physical locations and no one is physically gathered in a central place. Distance learning and experiences can happen synchronously or asynchronously.
- Synchronous—all participants meet together at an assigned time and someone is teaching or leading the group while everyone is gathered. The conversation happens in "real time" as participants engage with one another.
- Asynchronous the teacher or leader prepares material and posts it on an online platform, such
 as VoiceThread, Wakelet or Slack, and each person accesses and works through the material on
 their own time and schedule (self-paced.) Engagement among the participants happens by
 leaving comments in the online platform.
- Blended combines synchronous and asynchronous teaching.
- Hybrid creates a learning community of both in-person and distance students learning synchronously in the same class.
- *HyFlex* (a contraction of hybrid and flexibility) prepares learning materials for both synchronous and asynchronous experiences of the same class and allows students to switch between modalities.
- Flipped Classroom a pedagogical strategy that privileges group interactive learning during synchronous class time by providing individual direct learning content (recorded lectures, presentations, and assigned reading) before the class meets.
- Learning Community creating an equitable shared educational experience among all
 participants regardless of the modality through which people participate.

• *Video-Conferencing Platform* – is technology (usually web-based) that connects people in different physical locations through video, audio, screen-sharing, and other features with internet access. It is synchronous and simulates face-to-face meetings and classes.

Meeting Owl

Let's take a moment to highlight a very important partner in facilitating virtual learning: The *Meeting Owl Three*. (https://owllabs.com/) This small but mighty device connects to your computer and to your video conferencing platform so that people who are physically in the room and those who are virtually in the room can have a shared experience. The Owl is both a camera and a microphone. It turns to the person who is in the room speaking and projects their image on the screen so that those online can see and hear those who are speaking. It exponentially increases the quality of participation in hybrid settings. The Meeting Owl 3 also has an extension mic and can be paired with a second Meeting Owl to increase the size of the room that can be effectively used. More information is included in the Educational Technology for Expansive Ministry Wakelet with resource links found here. (https://wakelet.com/wake/Pn5gCMzWPV1XHY7iVPbja)

Tips and Tools

This next section provides some basic tips and tools for teaching in virtual settings. They are grouped by modalities and do not represent a comprehensive listing but rather provides a place to begin, and a few reminders, to aid you on your educational technology learning journey.

Synchronous Distance

- Always test technology before people arrive. Recognize that technology will fail at some point for even the most experienced user. Have a back-up plan and be able to pivot to alternative forms of teaching.
- Open the virtual room before the formal class/group begins for people to connect and share.
- Open all presentations, video or music clips, and any other media and have them ready to pull
 up for screen sharing.
- Be sure and "check" any boxes that allow for optimized video and audio sharing.
- If you plan on using screensharing for a significant time, join the video call on another device (smart phone or tablet) so you can keep track of questions put in the Chat function.

 Alternatively, designate another participant to serve in this capacity.
- Stop screensharing periodically so you can see everyone's face and foster conversation.
- Plan for breaks if the session is longer than an hour.
- If supplies are a part of the lesson, email the list to participants ahead of time so they are on hand. Email handouts ahead of time AND drop them in the Chat function. Remember, anything placed in Chat before a person joins is not visible to them.
- Create a personal and relational atmosphere even, and especially, when teaching online.
- Use multiple intelligences and varied teaching methods to engage learners. Do not read a
 lecture (or what's on the PowerPoint) but rather know your material well enough that you can
 deliver it conversationally. Be sure and use open-ended questions to foster discussion. (see
 more about teaching methods at https://odtd.net/educational-practices/teaching-methods/)
- Be intentional about opening and closing each class session. If this is the first time the class/group is meeting, ask each person to electronically raise their hands. Then, begin by inviting the first person to introduce themselves and lower their raised hand. When that person is finished introducing themselves invite someone whose hand is raised to introduce themselves. Repeat process until everyone has introduced themselves and all hands are lowered. This breaks the ice by ensuring everyone has had a chance to speak and no one is inadvertently left out. If it is not the first session, use the same process but invite people to share where they saw God that week (or another connecting question.)

- Plan to use breakout rooms for small group discussion. As the leader, drop-in on each group to see if there are questions or to engage.
- Appoint someone in class/group to be the point person to text if a connection fails, there is trouble with technology, or someone is in the waiting room after signing back on.
- Check in with the class/group at the end of each session to see what worked and what needs to be adjusted for the next session.

Asynchronous Distance

- Remember everything you would say in person (instructions and content) needs to be written
 out or recorded to provide clear communication for self-directed and self-paced learning.
- Organize your material well and sequentially. Consider using Canva to create an engaging learning environment. Communicate the timeline for when and how the content elements will be posted. (e.g., If this is an Advent series, indicate that you will post each week's new devotion on Sunday afternoons.)
- Consider using Loom, Flip, VoiceThread for delivering recorded content rather than only using written communication.
- Provide a means by which participants can leave insights, comments, questions, or responses.
 Consider embedding Padlet, VoiceThread, Flip, or Wakelet for collaborative learning as an alternative to more long unwieldy traditional discussion threads. (Learn about these and other technology applications here)
- As the leader/teacher, make sure you are reading and responding to participant comments on a regular basis.
- Personally check in with participants throughout the series outside of the meeting time.

Hybrid (in addition to synchronous distance teaching tips)

- Build an intentional learning community across in-person and remote participants. The goal is to provide an equitable learning experience for all.
- It is essential to engage those on the screen as much as engaging those physically present.
- Use a Meeting Owl or some other camera/mic combination rather than just having remote participants "Zoom in" as it enables full participation and avoids setting up remote participants becoming spectators. (See tips below for using a Meeting Owl.)
- Set the room up so that the screen is one end of a square. This will signal to both sets of students everyone is a part of the group.
- Include remote participants in discussions, be intentional about asking for their input, and check-in periodically to ensure connections are still working well so they do not become "after thoughts."
- If snacks or supplies will be used with those who are physically in the classroom, send a list of those items ahead of time to remote participants so they can gather the same items. Consider mailing/delivering/have available to pick up at the church a box or bag of those snacks and supplies for each person who will participate virtually.
- Create a personal and relational atmosphere between those physically participating and those
 who are participating remotely. At the beginning of each session, ask connecting a question to
 immediately engage and strengthen the learning community.
- When using breakout rooms, assign groups so that both on-stie and remote participants are
 integrated. This means asking at least one on-site person per group to have a laptop and videoconferencing link ready to connect with remote participants. It is also important they move to
 another room to avoid squealing feedback from multiple computers with audio on
 simultaneously.
- If you plan on using screensharing for a significant time, join the video call on another device (smart phone or tablet) so you can keep track of questions put in the Chat function.

 Alternatively, designate another participant to serve in this capacity.

Blended

- Carefully map out the series week by week and include what will be addressed each session. Then, create a single document (i.e., a syllabus) that outlines how the series will unfold for both synchronous and asynchronous participants. This will empower participants to choose the modality in which they want to participate for any given session.
- Create and maintain a consistent and accessible site (e.g., Slack, Learning Management System, blog or website) where all, regardless of modality, can find materials.
- Consider using Loom to create content that will be delivered asynchronously. You may want to consider a Flipped Classroom strategy for synchronous participants if content is being created and posted for asynchronous participants.
- Build an intentional learning community across in-person and remote participants. The goal is to provide an equitable learning experience for all.
- Vary teaching methods and strategies.
- Designate (and post) a digital time you will be available each week for participants to "drop in" with questions and dialogue.

Meeting Owl

- A Meeting Owl is meant to be connected to a single computer that the teacher/leader is using and on which all PowerPoints, videos, movie clips, and other teaching material is located.
- Two Meeting Owls can be paired using the Meeting Owl app downloaded on a phone or tablet.
- Both Meeting Owls must be on the same Wi-Fi network and be updated to the latest software
 to pair. The app will search for devices and let you know if a software update is needed. Arrive
 and connect early in case one or both Owls need an update.
- When pairing two Meeting Owls, only one (the primary) Owl needs to be connected to the computer. The second Owl is connected wirelessly.
- Make sure your video-conferencing software is open. If you are using Zoom, make sure the video and microphone (bottom left corner of the Zoom window) have selected the Meeting Owl for each rather than the computer's video and audio.
- Depending on how your room is set up, a tripod may work best to mount the Meeting Owl –
 especially if the teacher/leader is walking around. If everyone is seated, having the Meeting Owl
 on the table will work fine.
- Once the Meeting Owl is connected, everything is then controlled by the video-conferencing software just like any other meeting.

Teaching and leading with technology is here to stay. It means learning new ways of teaching and expanding our pedagogical repertoire. Most importantly, learning to teach with technology and in virtual settings is being faithful to our call to the teaching ministry as we walk with disciples and partner with the Holy Spirit in growing in the life of faith.

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