

## Report on Distance Learning Research, 2019 Distance Learning Committee

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The Osher Lifelong Learning Institute (OLLI) network began with a single program at the University of Southern Maine in 2001. Today, the OLLI network is comprised of 124 university-based lifelong learning programs across the United States. Each OLLI has received endowment funding from The Bernard Osher Foundation and continues to receive a variety of services from the National Resource Center for Osher Lifelong Learning Institutes (Osher NRC) at Northwestern University. The OLLI network's total enrollment reached approximately 200,000 individuals during 2019. In general, OLLI members are at least 50 years old and retired from full-time employment, but OLLI programs and members are not homogenous.

In January 2019, a Distance Learning Committee was organized by the Osher NRC. The 12-member committee is composed of Institute members, Institute staff, and Osher NRC staff (see Committee Listing). The goal of the Committee is to guide and assist the Osher NRC in developing research, resources, and materials for distance learning classes/programs. This includes examining current distance learning offerings within the OLLI network, compiling external distance learning research, and advising on future distance learning efforts for the network.

This report offers four areas of content based on research conducted by the Distance Learning Committee between April and October of 2019: **Technologies for Distance Learning; Technology Usage and Older Adults; Online Learning Communities for Older Learners; and Online Pedagogy**. It presents results from a survey of Osher Institute directors on distance learning, secondary research in distance learning, and, forecasts of distance learning within the OLLI network.

Originally, the committee was formed to explore distance learning education and social opportunities for members unable to attend an in-person class because of health challenges, conflicting appointments or travel, caregiving responsibilities, lack of physical mobility, or other reasons. The COVID-19 pandemic in 2020 caused dramatic changes in the distance learning landscape. While much of the original information gathered by the Committee in 2019 is no longer applicable, an abridged version of the relevant research is offered in this report.

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## A: Technologies for Distance Learning

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When considering distance learning opportunities for Osher Lifelong Learning Institutes, it is important to focus on both community formation and pedagogy (explored in later sections), and on the types of technologies used to facilitate the learning experience. The technologies can directly impact the experience of involved learners. They may also influence the endorsement of distance learning by the instructors/facilitators of the program who are involved in the purchase, operations, maintenance, and/or data storage aspects of the technologies. It is imperative to find technology that is both useful and accessible to a variety of users along a spectrum of technology adoption. This applies to both the instructors/facilitators of the learning experience, as well as to the learners. Finally, any integration of distance learning formats may mean re-thinking the way members enroll in classes, the way instructors/facilitators present information, and the way staff interacts with members regarding class content.

As Institutes look to expand their distance learning offerings, a suggested first step is to explore options within their host university/college. Some departments or divisions that may be of assistance include: information technology (IT); distance learning/online learning; learning design; television/film/journalism/media; and, library services. Beyond asking these departments for in-class support or training, it may also be beneficial to ask for recommended or available technologies. This can include access to learning management systems (LMS), and cloud-based services such as file storage, software, and hardware. Technologies that require licenses or paid access may be available for free or a reduced price as a university affiliate (often known as enterprise systems), and tangible technologies such as hardware may be available through the university.

Recommending specific technologies – Internet and cloud-based services, software, and hardware – can be difficult due to the varying needs of each Osher Institute. Considerations include their budget, interest in and knowledge of technology, relationship with their host university/college, and the ever-evolving nature of technology. To overcome these disparities, the distance learning modalities outlined within this section will discuss the basic technologies needed to be effective. There are multiple other distance learning options beyond those listed within this section, and technologies for these formats are continuously evolving and expanding. Regardless of which distance learning option(s) is the best fit for an Institute, specific and detailed training materials must be created for both instructors/facilitators, and users.

The most common types of distance learning modalities:

1. **Supplements to In-Person Classes:** class materials and resources are provided to in-person classes through online mechanisms
2. **Recording or Live-Streaming In-Person Classes:** classes take place in-person and are recorded and made available immediately for interaction with online viewers or for future playback
3. **Discussion Groups:** a group meets online to talk about learning and content
4. **Hybrid Classes:** classes take place both in-person and online
5. **Self-Paced or Online Classes:** classes take place entirely online

### ***Supplements to In-Person Classes***

Providing materials or resources to in-person classes through online mechanisms is one of the least technologically challenging distance learning options. Materials such as handouts, PowerPoint presentations, web resources, videos and pictures – among other things – can be a way to enhance learning and create lasting connections. To offer supplements to in-person classes, an Osher Institute

would need access to internet-based storage that has sharing and downloading capabilities. Examples include DropBox and Google Drive. For members to participate in this distance learning opportunity, they need to have an email address or account to access the files.

### ***Recording or Live-Streaming In-Person Classes***

Classes that take place in-person and are recorded for either immediate interaction with online viewers or made available for future playback are a great way to connect content or community with members. While watching a recorded lecture is one-sided with a viewer watching strictly for information, live-streaming offers viewers the option for interaction with the instructor and other participants during either Q & A or class discussions.

Recording or live-streaming in-person classes can be less challenging than other distance learning options. Once the technology is purchased, maintenance schedules are developed, and a routine for preparing and disseminating the recording links is created, the work for instructors/facilitators becomes less challenging and more routine. Access to the live-streams and recordings can be password-protected, available only to those who have the link, or can be open to the public. Like all modalities, training, orientation, and some basic computer skills are needed to participate.

Suggested trainings may include ensuring instructors/facilitators and participants speak loudly enough to be picked up by the audio recorder, repeat questions before answering them, and do not talk over each other. This format can lend itself to higher member engagement for members with hearing or visual impairments as they have increased agency over their listening volume and viewing experience.

Prior to live-streaming or recording a lecture, Osher Institutes must receive instructor consent and consider whether the class structure lends itself well to this distance learning option. The Institute also needs access to video conferencing software with recording and downloading capability, and potentially, video editing software. Some examples of video conferencing software include Adobe Connect, GoToMeeting, Skype, WebEx, YouTube, and Zoom. Some examples of video editing software include iMovie, Adobe Premiere, and Final Cut Pro. If an OLLI is interested in recording or live-streaming higher-quality videos, a camera (along with a tripod and digital storage) is recommended. Digital storage capacity limitations should also be considered.

### ***Discussion Groups***

Groups that meet online to learn from discussion with one another are one of the least technologically challenging distance learning options. Discussion groups are unique because not only do they provide opportunities for interaction between participants, they also nearly replicate the on-ground discussion group model. Like other formats, the Institute will need access to video conferencing software or text-based discussion modalities.

Challenges for developing video conferencing discussion groups in a distance learning format include establishing and enforcing protocols for participation, such as members must have a working camera, or, members must use functions within the technology such as digitally “raising their hand.” This not only means training both instructors/facilitators and users on the functions of the technology, but also asking them to use it in specific ways over a sustained period. However, technologies for facilitating this distance learning option often provide a wide range of added features for users, including the ability to share files in real-time and use of a virtual whiteboard. Class coordinators who are available to serve as technology support assistants by monitoring participation and user interaction may be beneficial when introducing this technology.

### **Hybrid Classes**

Hybrid classes take place both in-person and online and can be either synchronous or asynchronous. This format allows members to have deeper discussions, interact with materials or resources mentioned in class in more meaningful ways, and provides a communal space for the transfer of knowledge and ideas. Hybrid classes are one of the least approachable distance learning options because they take a great amount of foundational work. They also require significant knowledge or training in complex technologies, and they can be costlier to develop and maintain. However, with proper development, facilitator and member training, hybrid classes can be a way to significantly increase the impact of a class on enrolled members. To offer recorded hybrid classes to members, an Osher Institute should have access to video conferencing software with recording and downloading capability, potentially video editing software, and a learning management system (LMS). Some examples of LMS systems include Blackboard, Canvas, Edmodo, and Moodle.

Programmatic considerations for this distance learning format must include all the considerations of recorded in-person classes and live-streamed classes, as well as some of the considerations of self-paced classes. Technology support for instructors/facilitators and users is highly beneficial during the development of the hybrid class workflow and needs to be maintained over time. It is imperative to determine who will manage the LMS, how the LMS will interact with online registration systems, and how technology support will be available for both instructors/facilitators and users.

### **Self-Paced or Online Classes**

Self-paced or online classes might be the most difficult distance learning format for Osher Institutes to adopt. They require technical mastery of an LMS by instructors/facilitators and users, integration with the online registration system for the Institute, and significant technology knowledge. Self-paced classes that take place online are not typically community driven. They develop at the pace of the individual learner's interaction. In contrast, classes that are completely online, as found in most university/college settings, are not fully self-paced because they require users to stop at intervals to discuss learning with each other through community-centered online forums, such as discussion boards or video chats. Online classes provide new and exciting ways for members to connect with their peers and contribute to a community of learning. Self-paced classes do not usually provide these opportunities.

## **B: Technology Usage and Older Adults**

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Offering distance learning course options presents challenges for Osher Lifelong Learning Institute members and instructors/facilitators. Adoption of distance learning methodologies may require those members and instructor/facilitators to learn new technology skills, adapt their learning and teaching preferences, and change well established face-to-face-classroom meeting patterns. For many Osher staff administrators, such cultural and curricular changes may seem overwhelming. However, adopting distance learning course options may also offer Institutes many new learning opportunities and benefits.

### **Technology Usage**

*“Our members don’t use or understand technology.”* This common misperception about older adults suggests that using technology is beyond their interests or capabilities. Several past research studies suggest otherwise. AARP has conducted numerous studies which dispel this misconception. A 2019 AARP study established that 91% of older adults owned a computer or laptop, 75% owned a smartphone, and 42% owned a tablet (See Figure 2). As indicated in Figure 3, older adults primarily use their devices for traditional web activities such as viewing the internet, making purchases, getting

news, and banking. According to this research, among older adults between 50 and 70, text messaging has surpassed email as the tool most used to stay connected, though most older adults used at least three technology communication channels (email, texts, and social media) to keep in touch with others. Figure 1 demonstrates the top seven technology activities of adults 50+. According to AARP's research, "The 50+ have a strong and growing interest in new technology and use technology to learn and grow." (Frank, AARP, 2018). Additionally, SeniorLiving.org reported that among older adults who use the internet, 71% are going online daily. Once online, they engage deeply with online resources that help them find information, communicate with health care providers and caregivers, shop online, keep up with community news, view government websites, watch videos, and a wide variety of other activities that assist with daily living. (Schlenker & Hoyt, SeniorLiving.org, 2019)

### ***Attitudes toward technology***

For non-digital natives, ease of use, simplicity, and intuitive instructions are highly valued characteristics of devices and applications. Many older adults have a practical attitude about learning to use new technology, i.e., "show me how it will help me do something that I need to do, and I will try to learn it." This notion of usefulness is a key motivator. With proper support from trusted others – relatives, friends, and community organizations – older adults are usually willing to take on the challenges associated with becoming technologically proficient.

One area of concern among many older adults is data security and personal privacy. A 2017 Pew study notes that only 18% of 50+ adults are extremely or very confident in their online privacy; therefore 82% of older adults are not confident about their online privacy. Despite privacy and data security concerns, 23% of older adults take no security measures to protect their data. One role Osher Institutes can play is in helping members learn how to use technology, take steps to protect their personal data, and thereby become more confident about their online safety.

### ***Barriers to adoption of technology***

A common barrier to technology adoption by older adults is a lack of comfort with electronic devices (Anderson, Pew, April 2017). The common antidote to this barrier is making technology training available (Frank, AARP, 2018). Technology training classes create new ties to family, friends, and learning, which in turn, builds connections and personal confidence in being able to successfully navigate the digital world.

Owning an electronic device does not necessarily mean that an individual knows how to use it. Specifically, they might not be able to use the various applications that exist on the devices. Many older adults tend to gravitate to the use of tablet devices such as iPads because they are easier to operate and understand, have simple touchscreens, and provide large icons denoting specific applications (Schlenker & Hoyt, SeniorLiving.org, 2019).

The physical limitations of older adults can also be barriers to technology adoption. "Disabled Americans are about three times as likely as those without a disability to say they never go online (23% vs. 8%)" (Anderson, Pew, April 2017). Whether a disability limits the ability to read a computer screen, dexterity on a keyboard, or keeps someone homebound, the impact may restrict an individual's potential for technology adoption. Conversely, technology can help some people overcome limitations, by allowing the individual to experience a digital world not bound by physical reality. In addition, there are many assistive technologies such as voice recognition, voice-to-text, text-to-voice, and screen magnifiers available on electronic devices.

## Online Learning Communities for Older Learners

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An important aspect of distance learning for OLLIs is creating and maintaining a sense of community in the digital environment. Institutes can create behaviors and best practices for fostering connections with the intent of helping OLLI members feel connected within digital spaces. For this purpose, consider an OLLI sponsored distance learning course to be distinct from other distance learning offerings in which acquisition and/or demonstration of learning is the primary goal. When asked about distance learning, one OLLI director stated, “Creative pedagogy that emphasizes community building in co-creative learning processes are precisely what would work for our members - not available elsewhere. Furthermore, shared learning experiences with our global partners would bring cultures together and provide cultural immersion experiences that we cannot provide in face-to-face classroom experiences” (Osher NRC 2019 Distance Learning Staff Survey). As this director outlines, it is possible to build and support communities online so that Osher Institute members do not have to choose between learning or community.

### ***Building an online community***

Learning communities form around common interests and goals, a desire to engage in a shared journey of learning and discovery, a curiosity about other people, and a willingness to listen and learn from others. There are several excellent resources that provide concrete, actionable recommendations to build and maintain these learning communities online. Two recommended resources listed at the end of this document are: a presentation by Dr. Leann Kaiser, an adult education specialist and professor in the School of Education at Colorado State University; and, a website from the library of McGill University which offers strategies and technologies for transitioning from face-to-face teaching to online environments.

Three key elements are critical to creating and maintaining healthy online learning communities:

- **Environment** (technical, social) toward supporting safe, flexible, interactive learning
- **Facilitation** toward establishing and modeling norms of behavior
- **Peer to Peer Communication** among learners toward building connections

### ***Environment***

Online learning communities must support a safe, flexible, engaging, and interactive learning environment. The learners should be engaged with the topic, be comfortable asking questions, and be eager to participate in discussion. The basis of support begins with a technical environment that provides learners with easy access to the content of the course including preparatory and supporting materials, as well as clear audio and video of each class. Equally important is supporting learners’ social needs. Online learners need to feel a sense of identity, commonality, connection and trust with the other members of the class, which will lead to a willingness to engage in constructive and respectful discussion towards their shared learning goals. This social environment is addressed, in part, by establishing norms of behavior. Many of the standard expectations and behaviors in a traditional on-ground OLLI class apply. However, in an online setting, the likelihood for misunderstanding and loss of information is increased, making it necessary to be more explicit about expectations than in face-to-face settings.

Also contributing to a community’s social environment are the size and composition of a class. If there are too few learners, there may not be enough momentum to sustain robust class discussion. On the other hand, if the class is too large, it can be difficult to manage interactions and hard for learners to get to know each other. Similarly, learners can benefit from having a diversity of knowledge, experience, and perspective in their classmates. Strong communities arise when members share in

maintaining it rather than letting all the direction come from the instructor/facilitator. Thus, it is beneficial for online courses to include several volunteers who take on roles such as liaison, technical assistant, or small group leader. In this way, responsibility for the community can be shared by multiple people.

### ***Facilitation***

Most of the responsibility for establishing norms and behaviors falls to the instructor/facilitator. They can direct peer-learning and peer-support networks. Additionally, the instructor/facilitator can provide opportunity for reflection or manage participation especially among learners who are more quiet or unsure of the technology. They can encourage learners to address responses to each other, beyond just the instructor/facilitator, and develop a sense of connectedness and social presence through immediacy (email, audio or videos of instructor, welcome message, emoticons, humor, phone calls). Finally, the instructor/facilitator can model community participation skills and values (turn-taking, thoughtful responses to peer's posts) and encourage discussions amongst small groups.

### ***Peer-to-Peer Communication***

A successful online learning community is marked by a high level of communication (synchronous and asynchronous) among its members. This communication can be supported through encouraging learners (and instructor/facilitators) to create personal profiles that include photos, stories and some personal background. Also, it can be achieved by integrating small group meetings or projects. Other communication techniques include the instructor/facilitators promoting online discourse, creating a shared discussion board for questions about the class that can be answered by any learner, and foster conversations about topics unrelated or tangential to the class.

## **Online Pedagogy**

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Many of the tools that Osher instructors/facilitators use can successfully be transferred to online learning environments. Conversely, online forums can be unforgiving for those who do not actively and intentionally engage with their class. Pedagogy for distance learning offers different opportunities, methods, and key areas of consideration. They include a focus on pedagogy beyond the interactivity, innovation, and accessibility of the technology.

### ***Focus on pedagogy beyond the technology***

Pedagogy is the foundation for success in any learning environment. Distance learning is no exception although it offers different opportunities and limitations. The principles of effective instruction, engaging learning practices, and interactivity do not change regardless of a physical or online classroom. Various distance learning platforms, applications, or options offer numerous pedagogical opportunities so it is valuable to consider the pedagogical methods a class or instructor may want to utilize or how the class time will be spent when considering technologies.

### ***Interactivity***

Distance learning should not be a one-way modality. Taking advantage of online tools will facilitate increased interaction between instructors/facilitators and students, and between students and peers. Examples include small group breakout rooms, polling, sharing documents, screen sharing, and partnered projects. Although there is a misconception that older adults are unfamiliar with technology, many became experienced in video conferencing or online meetings prior to their retirements. Interactivity can apply to distance learning courses that are lecture-based with additional elements. For example, an instructor can promote engagement through: fielding questions from students; utilizing chat functionality for quick feedback; using polling features for aggregate student feelings



around a subject; calling on particular students for questions; and, by utilizing small group/breakout discussion groups.

### ***Innovation***

Distance learning platforms offer a unique opportunity to enhance classroom material. An instructor can add additional resources, activities, and methods that are not possible within a physical classroom. For example, some platforms allow for screen sharing and editing a document in real time. A distance learning class is a chance to try new ideas and methods, which may prove useful in a physical classroom as well. Additionally, a new venture into distance learning usually allows for a forgiving environment where students are likely to be understanding of small technology problems. Take advantage and use the expansiveness of the technology to try new methods and explore new tools.

### ***Accessibility***

Distance Learning platforms offer accessibility benefits, as well as some potential drawbacks. For example, text-based material online can be enhanced with online tools such as screen readers and magnifiers that allow greater readability. Closed captioning services are available for online content in some video platforms. Some open source online videos have the closed captioning text pre-built into the recording. Instructor/facilitators can instantly share files or videos so the student can view them in a format that works best for them. Finally, the university's accessible education office and disability resources may have additional tools and services that can be utilized within an online classroom.

## **Distance Learning Committee Members**

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Figure 1:

## Adults 50+ have embraced technology to make life easier

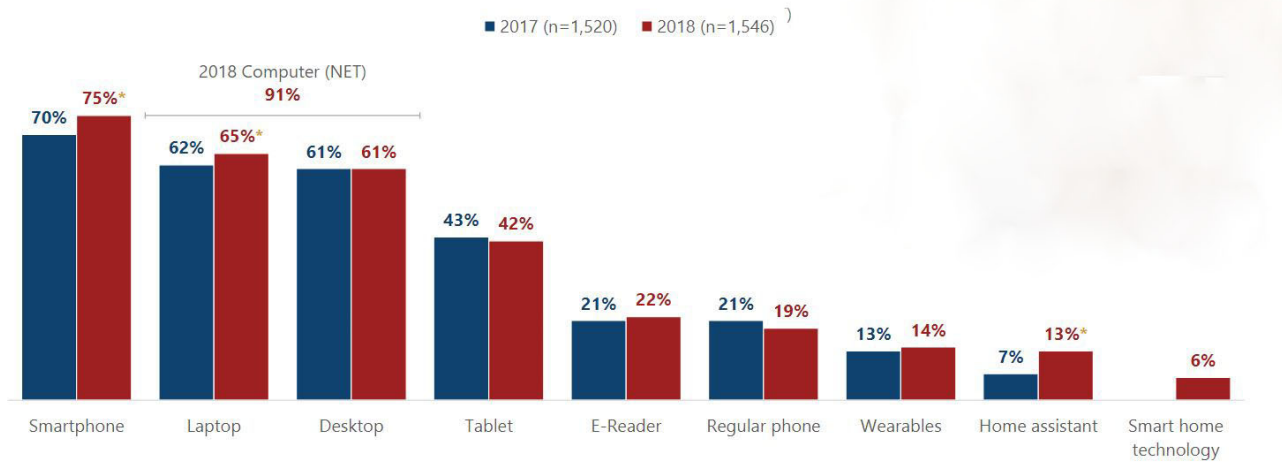
Top Tech Activities Regardless of Device



Source: AARP (2019) Tech and the 50+ Survey

Figure 2:

Device Adoption Among Adults 50+



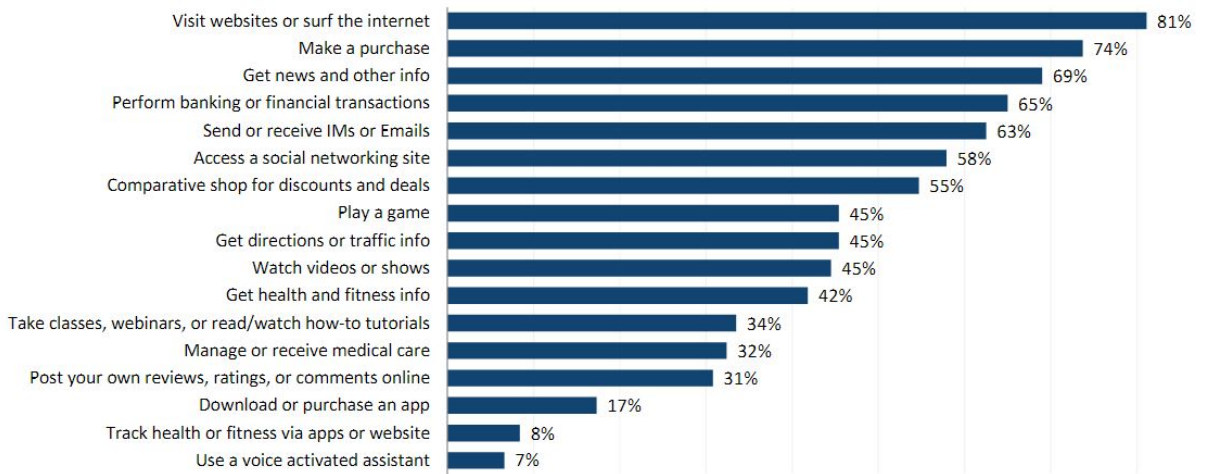
\* represents a statistically significant difference between years at the 95% confidence level.  
 Base: Total Respondents. Q. Tech1 Which of the following items do you have?

Source: AARP (2019) Tech and the 50+ Survey

**Figure 3:**

**Activities Performed on Desktop/Laptop**

(among those who own device)



Q.Tech2 (Base: Those who own computer/laptop. N=1402). Please indicate whether you do each activity for each device you own.

Source: AARP (2017) Technology Use and Attitudes among Mid-Life and Older Americans