This fourth publication in the *Road to Recovery* series explores the challenges Extension professionals may encounter in reaching clientele virtually during a pandemic. The concept of digital equity is discussed, and recommendations are provided to evaluate efforts to access and connect with key audiences.

**Introduction**

Maintaining programming and relationships with clientele and communities amidst a pandemic can be challenging and overwhelming. The abrupt onset of COVID-19 forced many educators to shift to using virtual educational and communication platforms without previous knowledge and training (OECD, 2020). During a pandemic, when clients’ needs are exacerbated, one of the first questions you should ask is whether your audience faces barriers in accessing and engaging remotely. To answer this, it is crucial to effectively evaluate who your virtual programs are reaching and who may be alienated, discouraged, or unable to connect.

The COVID-19 pandemic highlighted the need to understand and address digital equity for youth and adults. The National Digital Inclusion Alliance (n.d.) claimed digital equity is achieved when “…all individuals and communities have the information technology capacity needed for full participation in our society, democracy and economy.” Furthermore, “Digital Equity is necessary for civic and cultural participation, employment, lifelong learning, and access to essential services” (p. 1). Therefore, promoting digital equity in educational and Extension programming entails accounting for environmental, social, and economic systems that impact your client audiences (Sharp, 2020).

While withstanding the challenges of a pandemic, there have also been new opportunities for Extension to innovate and rethink how to communicate efficiently and creatively using virtual platforms like Zoom and social media. However, there remains a dearth of resources directed toward Extension professionals to learn about virtual programming and issues frequently encountered. To address this gap and as a critical first step in promoting digital equity, this publication provides recommendations for Extension professionals to use simple techniques to evaluate audience reach and access in virtual programming.

**Virtual Engagement for Whom?**

Ensuring equity in virtual educational programming cannot be oversimplified to whether clients have access to remote devices such as laptops or phones (Sharp, 2020). Aside from the characteristics of the devices themselves, device users operate in unique contexts and rely on networks that directly impact their abilities and quality of engagement. The following are factors or challenges your clients may experience relating to access and engagement with virtual Extension programs:
• Broadband internet access is still a major constraint for many clients. Depending on where they live, clients may lack reliable internet connectivity. Additionally, certain households may not be able to afford access due to economic burdens (e.g., paying for medical bills instead of internet) (OECD, 2020; Sharp, 2020).

• While most clients may have access to a smartphone or computer, devices are often dated, slow, and limited in capacities, which can inhibit the level of sophistication you can achieve in virtual programs (Sharp, 2020).

• Many clients are “digitally illiterate” or “digitally challenged.” They lack the knowledge and skills to properly use different technologies to communicate, retrieve trustworthy information, and engage in virtual professional, social, and community functions (NDIA, 2020).

• The Extension audience is extremely diverse, and virtual platforms and programs may not be sensitive to people's language differences, hearing or vision disabilities, or formal education and literacy levels (Rewa & Hunter, 2020).

Tips and Strategies

A holistic approach is necessary to truly achieve virtual equity by accounting for program promotion, design, facilitation, and delivery. As a starting point, we provide tips and strategies that focus on documenting your audience's characteristics and evaluating measures taken to accommodate clients' differences and potential environmental impediments. Analyzing such data, you can then determine whom you are most effectively reaching and where you need to refine promotion and outreach efforts. The following recommendations provide useful techniques and resources included specifically for Extension professionals:

• **Participant data using Zoom**: Start by capturing a snapshot of who participates when you host a virtual event. While each platform differs, for UF activities, Zoom is often preferred and offered free of charge. We therefore recommend following the six steps in this linked resource from the University of California (n.d.) to access and export participant data from a Zoom meeting: [https://csuf.screenstepslive.com/s/12867/m/59146/l/1219888-taking-attendance-in-a-zoom-meeting](https://csuf.screenstepslive.com/s/12867/m/59146/l/1219888-taking-attendance-in-a-zoom-meeting). Also, consider the tips and information below when examining and interpreting data about your participants:
  
  • Zoom participant data may not be available until 30 minutes after a meeting concludes.
  
  • When available, examine the duration information for each participant. This indicates how much time they spent in the call/meeting. Ideally, all your participants would spend the full amount of time, but some may lack stable internet access, causing interruptions or loss of connection. Alternatively, attendees who are not engaged or interested are less likely to remain connected to a virtual program. It is important to understand and maintain both engagement and connection with your participants.

  • Participants’ emails may also be useful for sending follow-up evaluations or promotions for future activities.

  • A similar participant reporting process is also available for Zoom webinars: [https://support.zoom.us/hc/en-us/articles/201393719-Webinar-Reporting](https://support.zoom.us/hc/en-us/articles/201393719-Webinar-Reporting)

  • **Participant data using social media**: Even before the COVID-19 pandemic, modern Extension had swiftly tapped into social media as an important channel to reach and engage with clientele (Thakur & Chander, 2018). Valuable insights can be gained from social media's engagement and reach metrics. For more information on interpreting reach on Facebook, Instagram, and Twitter, we recommend reviewing Tran (2020): [https://blog.hootsuite.com/social-video-metrics/](https://blog.hootsuite.com/social-video-metrics/)

  • **Audience segmentation**: Relevant for various platforms, audience segmentation, often applied in commercial sectors, is a technique you can also use to better analyze the different demographics and groups who participate in virtual programs (An et al., 2018).

  • In simple terms, segmenting your audience means categorizing your participants based on their key characteristics, such as age, gender, location, and identity attributes.

  • You can also segment based on behaviors, but because virtual platforms typically only provide basic usage data, you would likely need to create a separate online survey to do this. Using a program like Qualtrics, you can easily send your participants a link to a survey using a chat function and/or a follow-up email with a post-evaluation. For more information on development of online surveys, refer to the Savvy Survey EDIS article Online Surveys: [https://edis.ifas.ufl.edu/pd077](https://edis.ifas.ufl.edu/pd077).

  • We recommend interpreting data based on who you determine to be your target clientele (e.g., urban middle-income households, rural livestock producers, Florida farmworkers, early adopters of smart irrigation). When possible, consider populations that may be particularly vulnerable during a pandemic. Through analyzing the various segments from your participant reporting, you can determine groups with more or less access, interest, or awareness about your
programs. During this process, ask yourself who is missing and why. Who is the segment you need to target for future virtual events? Whom do you need to reach through in-person programming?

• To gather segmentation data or other information, Zoom also offers an anonymous polling function that can be used in real time. It is possible to share with the group the results of each poll item and then later download the data in a report. For more information on polling, check out this information from Zoom: https://support.zoom.us/hc/en-us/articles/213756303-Polling-for-meetings.

• You should not assume participants already know how to use functions such as Zoom polling. An evaluation metric you can track is the proportion of participants who actually use the different functions of the platform to determine whether virtual how-to knowledge has been equitably disseminated.

• **Planning and promotion**: We also recommend basic evaluation of your planning and promotional methods to better ensure equity and inclusion. The following are key questions to ask:

  • Was the program accessible and attractive to non-English speakers? Consider providing information and instructions in languages that may be spoken by your target audience. Zoom and other platforms are available in a variety of languages.

  • Was the event promoted to people with learning, hearing, or vision disabilities using multiple modes of communication (e.g., captions, audio, and recordings available afterwards)?

  • Were you sensitive to the audience’s variance in digital literacy and technological comfort level by providing simple but thorough technical instructions and support resources? Short videos on using the platforms are often useful for newer users.

  • Can you engage your audience virtually? To promote true equity among clientele and to reach vulnerable populations, you should be mindful that many households face insurmountable barriers in their access to and capacities related to high-speed internet and technology (Puckett & Rafalow, 2020). Hence, to reach and engage with such groups, in-person programming, following safety and health guidelines, is recommended. See the second article in the Road to Recovery series, for more information on in-person engagement during a pandemic.

• **Reflection**: Finally, it is also extremely important to use less-formal evaluation techniques, such as a reflection-type discussion with participants in real time, to help you better learn about your participants, their ideas for improving your programs, and engagement or accessibility barriers they may have encountered. Just remember to document such discussion using notes or a recording. You can also solicit suggestions for improvement through follow-up client experience surveys in Qualtrics.

**Conclusion**

The COVID-19 pandemic has highlighted many challenges we face in transitioning to online and virtual modes of communication, learning, and outreach. Digital equity has become a key concern because many client communities face constraints in connectivity and access to virtual programming. Techniques such as participant data reporting, using live audience polling, applying audience segmentation, and assessing your promotional methods can help improve the reach and attractiveness of your virtual programs for diverse audiences. For those interested in this topic, UF/IFAS Extension has compiled and produced additional resources and articles (including several in Spanish, Haitian Creole, and Mandarin), to support Extension professionals in addressing client needs related to the COVID-19 pandemic (https://edis.ifas.ufl.edu/topic_covid19). The Southeastern Coastal Center for Agricultural Health and Safety (SCCAHS) also has valuable COVID-19 information targeted for agricultural and farmworkers (http://www.sccahs.org/index.php/covid-19/).

**References**


Appendix: The Road to Recovery Series Overview
The COVID-19 pandemic created the need for this Road to Recovery series of EDIS publications. Six publications are included, covering topics to assist Extension professionals and State specialists in addressing client needs and evaluating techniques for virtual engagement. Brief summaries of each publication in the series are provided below.

The Road to Recovery #1: Introduction
Summarizes the implications of the COVID-19 pandemic on Extension professionals’ operations and presents necessary adaptations and key considerations to safely improve delivery and impact.

The Road to Recovery #2: Building Physical and Emotional Trust When Engaging with Extension Clientele
Provides information and recommendations to address emotional and physical trust gaps clientele may experience in the face of a pandemic by using intentional, strategic efforts when engaging in the field or via virtual platforms.

The Road to Recovery #3: Facilitating Community Resilience for Effective Pandemic Response
Considers challenges posed by the pandemic and the importance of community-led initiatives and provides alternative strategies for facilitating building resiliency, capacity, and social capital involving community stakeholders and clients.

The Road to Recovery #4: Evaluating Virtual Techniques to Reach Clientele and Promote Equity
Offers guidance on how to effectively assess which audiences are being reached through virtual engagement and which audiences may be “falling through the cracks;” includes information on leveraging social media and virtual platform analytics, applying audience segmentation, and using online surveys and polls.

The Road to Recovery #5: Self-Assessment of Virtual Facilitation to Build Trust
Provides information on how educators can self-assess their efforts to facilitate trust through remote learning and virtual engagement, especially important during a pandemic; considers users’ concerns about cybersecurity and common anxieties, discomfort, and competency gaps using online platforms.

The Road to Recovery #6: Evaluating Virtual Strategies to Build Community Capacity and Resilience
Offers support for agents interested in evaluating their use of virtual strategies to promote participatory engagement and community capacity building; provides recommendations for agents to better assess whether virtual techniques improve users’ perceptions of collective efficacy and community capacity during pandemic scenarios.