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Strategies for Preparing and Delivering an Effective Online Presentation

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INTRODUCTION

With the excitement of seeing old friends, the anticipation of establishing new collaborations, the buzz of new science, many of us are familiar with the fall conference season. This fall will be quite different, however, as we find ourselves facing a pandemic. To better protect geoscience communities, many professional societies and organizations are pivoting to virtual conferences for the remainder of 2020. While this may create a more accessible conference in some contexts (e.g., cost), there are other challenges to consider (e.g., technology access). As we navigate this uncertain transition, how can the vibrant exchange of knowledge facilitated by such events be best transferred to an online setting? Here, we provide a summary of best practices for presenting in these environments, many of which have the potential to be highly impactful and effective while being relatively simple to implement.

LOGISTICAL STRATEGIES

Fall conferences will likely blend live keynote talks, pre-recorded presentations, and live Q&A sessions. With these changes come adjustments to our personal preparations. For some, this may require additional planning or resolving unexpected challenges. Be proactive and be prepared: (1) review the event's code of conduct; (2) check guidelines/rules; (3) contact session chairs and organizing committees with questions; (4) download and familiarize yourself with required conference software/apps; and (5) when possible (and if applicable) upload content in advance.

VISUAL STRATEGIES

The geosciences rely on tables, figures, and animations to communicate quantitative data and qualitative observations (Carr, 2002; Libarkin and Brick, 2002). These visuals are important, as they communicate content to others and provide presentation cues for ourselves. Keep in mind that your audience may have significantly different amounts of prior knowledge, association, and inference (Dutrow, 2007). Thus, it may take time for audience members to absorb visual nuances and understand relationships. For this reason, it is critical to guide the audience through your presentation, emphasizing the various components of your visuals (e.g., data) and connecting their significance to your broader message. Below, we provide a list of recommendations (see Gallagher, 1965; Cheney, 1996, 2013; Dutrow, 2007; Schwertly, 2014; Zarnetske and Zarnetske, 2015):

1. Number presentation slides/poster sections and use titles to emphasize content (will facilitate Q&A);
2. Consider elements of design (e.g., fonts, color palettes, placement of figures/tables);
3. Eliminate distracting "chartjunk" (e.g., decorative fonts, grid-lines);

4. Consider figure resolution and size. Audience members may view your presentation from a range of devices (e.g., tablets, laptops);
5. Avoid busy backgrounds. Use white or pastel colors (reduces eye fatigue);
6. Avoid red and green fonts (~15% of the population is color blind);
7. When possible, consider simple animations to "show" rather than tell;
8. Always cite all of your sources; and
9. Above all else... KISS (keep it simple, stupid).

VISIBILITY AND AUDITORY STRATEGIES

Ninety percent of human communication occurs via nonverbal actions (e.g., facial expressions; Hansen, 2020). The extent to which face-to-face interactions traditionally occur at in-person meetings is challenging to recreate online, especially where faces and voices can be easily muted. While muting video and audio can work to support meeting access (e.g., reducing bandwidth load), it can also work to perpetuate an isolating environment. There are, however, approaches that support the attendance of others, while enhancing your own visibility online (see Hansen, 2020; Harper, 2020):

1. Do not be a faceless voice. Include a photo of yourself on your opening and closing slide;
2. Find time to practice. Be cognizant of the time allocated for your presentation and stick to it (be respectful of the audience's and attendees' time);
3. Listen to your recording and identify how you use your voice to emphasize or present content (consider tone, varying volume, projection);
4. Embrace the pause. A well-placed pause can generate anticipation and provide your audience time to process what you have discussed;
5. During live sessions (e.g., keynotes, Q&A), unless speaking, mute your microphone; and
6. As you prepare to record your presentation and/or attend the meeting, when possible, work to eliminate distractions.

CONCLUSIONS

As you prepare to present in an online environment, remember to consider why you are presenting and who your audience will be. Through presentation of your work (whether it be online or in person), you are communicating information to a broad audience with the likely aim of highlighting your research, initiating engaging dialogue, and working to facilitate future research directions.

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