Chris McEntee – Framing the AIP Letter Report (0:09)

Hello, I'm Christine McEntee Chair of FACETS, the AIP letter panel to envision the future of scientific convening. Scientific conferences are integral to our societies and science as a whole. They bring us together and advance our fundamental understanding of the world and its benefits for society. Scientific conferences are communities in action for exchanging results and ideas, forging new collaborations and supporting professional careers. Rapid technological change accelerated by the reality of COVID-19 is changing scientific conferences. Our Letter Report is geared toward helping societies look beyond the immediate disruption and consider the opportunities for evolving conferences to be even more impactful for scientific progress and more valuable to the scientific community.

Our Letter Report panelist is made of individuals who volunteered their time over a compressed timeframe. Each in their own work is helping to improve the art and practice of convening. The report is not meant to offer formal defined recommendations, nor is it exhaustive of every possible new idea and approach. In essence, it is a menu of ideas and suggestions to inspire further thought, dialogue and experimentation. Drawing on the collective experience of the panel, the report considers new styles of convening for both in person and virtual components of conferences, with new approaches to science exchange and networking, essential elements for any meeting no matter what form it takes.

The report suggests four characteristics for the future of scientific convening: omni-channel where attendees will have access to content when, where and how they choose; blended hybrid physical and digital experiences that will prompt easy exchange and interactions among both in-person and virtual attendees, before during and after the conference; diverse, inclusive and safe all voices welcomed, included and embraced; and adherence to environmental stewardship. The discourse evolves to being much livelier moving from traditional presentation to active exchange before, during and after the scheduled conference dates. Themes throughout the report are:

- Linking the conferences strategy to a society's overall strategic plan, providing a framework to be creative within guideposts that make experimentation and a certain level of risk taking okay.
- Applying the principles of design thinking and user experience design.
- Enabling participation customized to meet an individual's unique needs, and.
- Leveraging technology to expand accessibility to the scientific community and research. Innovation does bring financial challenges.

This report discusses opportunities to diversify revenue streams and potential tactics to stabilize the conference business model.

Retooling our well-established conference practices can seem overwhelming, especially with so many moving parts. By maintaining their primary focus on their mission, societies are better equipped to affect the change they desire.

Next, Jamie Murdock will introduce design thinking and how it might help get us started.

Hi, everyone. My name is Jamie Murdock and I'm with Maritz Global Events, delighted to be coming to you live from a meeting from Amelia Island, Florida. All safety precautions have taken place. People were tested. People are wearing masks, there are vaccination stickers and I'm more enthusiastic now more than ever about the power of face-to-face meetings and delighted to be part of the AIP letter committee and talk to you today about design thinking.

You know, envisioning the future of scientific convening starts with the approach. And Chris mentioned that having a strategic plan for your society's conferences could go a long way to streamline your efforts. This can help organizers design a meeting to meet the defined objectives that enable them to employ design thinking. So what is design thinking? Well, it's an iterative process used to challenge assumptions, and redefine problems to identify alternative strategies and solutions that might not be instantly apparent. It involves dissecting our traditional approaches to meaning planning, and it compels us to see challenges from a different angle, and to experiment with solutions. And now more than ever coming out of this pandemic, we need to experiment, and design thinking supports that.

So design thinking really focuses on the participant's experience and that's the core that empathetic perspective taking. Keep in mind, the experience will be very different depending on the audience that you're serving and their unique needs and how they want to participate, whether that's live face-to-face like I am here today, or virtually, or maybe it's a combination of both. User experience design is not a new concept but what we have found is that it's not often employed to its fullest extent.

The first step in designing for the participant is understanding your audience and their needs and wants, and their feelings about the experience that you're about to create. Individuals are selective, especially now with how they're going to spend their time and they're going to seek future engagement based on their prior experiences. So when you extend the effort to really understand what your audience is looking for, our bet is you're going to design something that they feel that you were intentional about in the experience that you created is going to benefit them.

The next step is creating a tailored experience to meet the stakeholder needs. Giving special attention to the needs of different stakeholder groups can help organizers think through programming options that are likely to resonate with different conference goers. Involving people from those stakeholder groups in the planning can help a great deal. Imagine the diversity of thought that you bring when you bring together all these different stakeholders that can create a very different experience. So please go beyond your traditional planning scope and seek out different stakeholder opinions.

There are other factors that are essential to a successful meeting that are embedded in design. By baking in aspects like safety, diversity, equity, and environmental impacts into the meeting design phase, societies may find themselves better equipped to meeting their related goals. Environmental scanning can help societies understand external forces like federal policy changes, visa restrictions, and the emergence of new fields and their potential impact on their conference. And then finally, practicing agility will help organizers retool quickly.

Now more than ever, we see changes happening at a rapid pace. So agility is going to be critical, and you need to respond immediately to unforeseen developments. We've all experienced that this past year when it comes to conference planning.

So conference planning will look very different depending on a society's audience and their resources. However, leveraging partnerships of all kinds with sponsors, exhibitors, industry, academia, and other societies can help advance objectives for mutual gain in support of the wider scientific enterprise.

Next, you're going to hear from my friend Gabe Filippelli…I hope I pronounced that right, Gabe…about re-envisioning science exchange.

Gabe Filippelli – Future of Science Exchange (7:42)

Hi, I'm Gabe Filippelli, Editor-in-chief of GeoHealth.

The pandemic has amplified the need for serious thought about where and how we convene the shift to virtual formats and has also yielded significant innovations that could be incorporated into our future conferences. This emergency shift has brought to light a number of new key opportunities for inclusivity, accessibility and engagement, as well as creative ways to deliver content through digital platforms and the concept of expanding the traditional duration of a conference from the four-day slot to actually a rolling window of engagement.

Our vision is that science exchange will be more broadly accessible before, during, and after scheduled scientific conferences. Prior to conferences, participants will have the opportunity to watch prerecorded oral and poster presentations and pose questions or comments to speakers and other attendees via a platform's designated chat or text function. And of course, during the live conference, the focus will really be on sharing scientific engagement, discussions and networking in person, which have always been value drivers for conferences. At the highest level, though, the future of convening will be omni-channel in which participants will be able to consume content when they want and how they want and engage with whom they want when they want. So extending the ability to engage community with content can help us advance scientific collaborations.

Accessibility issues have always been there, especially for those who cannot travel, and conferences of the future could be able to offer a participant experience outside of a particular destination. Even in-person conferences can be run at multiple locations simultaneously, perhaps around the world to allow for international engagement in different time zones.

Now it's reasonable to expect a rise in hybrid conferences in the future. But to be truly impactful, a hybrid event will include integrated virtual elements, instead of treating virtual and in-person attendees as two separate groups, and distinct, ideal conventions will use virtual components to amplify that in-person experience, and vice versa to more fully integrate into the into the sense and feeling of actually convening a conference. No matter how attendees engaged with a conference, they will have opportunity to learn from the content and become more connected to their scientific community.

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Societies could develop a robust plan for protecting participants' intellectual property, societies may consider treating recorded content similarly to preprint journal entries, and use identifiers such as DOIs, to reinforce intellectual property rights. Valuable content shared and curated as part of the conference can be preserved and offered to a range of constituents, including society members, other stakeholders, and the general public. Such access can be used to promote the scientific organization, attract new members and reach outside the community.

Next we will hear from Amandeep Gill who will address accessibility and audience reach.

Amandeep Gill – Accessibility and Audience Reach (11:13)

My name Amandeep Gill. I'm a PhD candidate at the University of Nevada-Reno.

Accessibility is about engaging all of our audiences more fully, inviting new nontraditional participants, and sharing the story of our science to an expanded audience and an interested public. To fully engage in the scientific discourse all participants need to feel like they are welcome and respected. They need to feel safe from harassment and bias, and they need to feel that they absolutely belong in the conversation. Their contributions are valid and valued. Keeping diversity, equity, inclusion, belonging and accessibility top of mind and planning every aspect of the conference will enable societies to create safe spaces that harness all the brainpower the community has to offer. To best pursue our mission, to best advance our science, we best include everyone.

Societies can begin this process by taking stock of the current state of diversity and conference participation. Do your organization's conferences attract and retain international participants? People from underrepresented represented and marginalized groups? Early career members? Students? Scientists and engineers in industry? Others outside discipline who have a role in the value chain? Do you see demographic diversity related to dimensions like race and ethnicity, gender identity expression and sexual orientation, and people with disabilities? Investigating why diverse groups might not be actively involved will provide societies with an opportunity to engage members from such groups and potentially provide insight about the culture they have cultivated, and how it needs to change.

Including people from diverse groups in conference planning and decision-making bodies can make planning efforts more effective for the entire community. Also, seeing people from diverse groups in significant and visible roles, like plenary or keynote speakers, session conveners, and award winners can help a conference foster a sense of belonging.

There are many pathways to accessibility and inclusion. Incorporating the principles of design thinking into planning can help societies craft experiences in which participants feel safe, can educate each other, and can effectively network with colleagues. Programming options tailored for stakeholder groups at different career levels, and/or with particular interests with non-technical sessions aimed at the development of soft skills and networking events can help participants structure their meeting experience for optimal value.

One of the most impactful ways for societies to address accessibility concerns is to continue offering regular remote access to conferences. Virtual participation reduces certain barriers to participation and when coupled with services like closed captioning and translation, the conference can become even more accessible and inclusive.

The changing demands of our stakeholders are compelling us all to envision the possibilities for tomorrow. It is possible and imperative to construct new methods of convening that serve stakeholders from all positions and backgrounds. Conferences and meetings have been a cornerstone of the scientific enterprise for generations. The future of association convening will build on that legacy and translate what we have learned from these game changing times into a brighter way forward.