Towards Design Patterns for Participatory Online Events

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0. Abstract

Online, synchronous events are one of the main formats that many virtual communities of practice use to engage with members of their community. However, many of these online events adopt a webinar format that typically does not support opportunities for participants to contribute or connect with one another. This paper reports on 12 design patterns that focus on both platform and event design for a more participatory format for online events. The design patterns are divided into three categories: culture and mindset, facilitation strategies, and event flow. In this paper, two patterns are introduced. The process of developing the patterns and some insights from this process are discussed.

1. Introduction

A wide variety of organizations and networks, ranging from grassroots initiatives to professional associations, are defined in part by their community members: individuals who share interests, purposes, and backgrounds. When people in these organizations and networks regularly interact with one another on topics of mutual interest, they are said to be participating in a community of practice (CoP) (Lave & Wenger, 1991; Wenger, 1998; Wenger, McDermott, & Snyder, 2002). Communities of practice are predicated on the belief that learning is a social process (Vygotsky, 1962, 1978) and that by sharing ideas, knowledge, and expertise with others, individuals construct new forms of understanding.

Regular social participation—a prerequisite for a CoP to emerge and thrive—can be difficult to support and sustain for a community that is geographically distributed. One strategy is to design a virtual community, leveraging the internet, networked technologies, and remote collaboration. Typically these distributed, online communities leverage both asynchronous formats (e.g. listservs, discussion forums) and synchronous formats (e.g. video calls, webinars) to encourage regular interaction among their members and support the emergent development of a CoP (Johnson, 2001).

When it comes to synchronous, online video-conferencing events, many online CoPs utilize a webinar format, where a few experts broadcast information to an audience that usually has limited access to means of participation. These webinar-style events not only fail to take advantage of participants' experiences and expertise, but also undermine the participants'

motivation to contribute to the development and maintenance of their CoP by making them passive recipients of information.

Yet, increasing opportunities for participation in synchronous online events faces challenges. Firstly, the vast majority of video-conferencing platforms out there (e.g. Youtube Live, BlueJeans, Zoom, Webex, etc.) are designed to support the traditional webinar format. Thus, the feature sets of these tools are not primarily designed to support interactions among participants or create opportunities for them to contribute and produce shareable artifacts. Additionally, there is a perception that participatory events are harder to organize: in order to ensure that all participants engage in meaningful conversations with one another in online environments, event organizers need to make careful design decisions based on their goals, their communities, and their capacity to run these gatherings (Sethi, 2015), and this can seem difficult, especially online. In order to host a successful participatory online event, both platform design and event design need to be taken into consideration.

Unhangout—a platform for hosting participatory, online events—was developed in 2014, and alongside its development, a wide-range of experiences in event design were documented. Taken together, this paper introduces elements of the platform and event design as a series of design patterns (Gamma, et. al., 1995) for participatory online events. Identifying patterns and constructing a unifying language around them requires documenting and understanding issues, practices, and ways of being that occur repeatedly in a given field and documenting solutions so that others can apply this knowledge to their own contexts. This strategy was originally developed to describe design strategies in architecture (Alexander, 1979) and has since been widely adapted to the field of software development (Beck & Cunningham, 1987) and other fields such as education, creativity, and collaboration (Iba, 2013; Weiss, 2017).

In this case, these patterns are intended to be used by anybody in a CoP looking to engage in synchronous, online interaction with their fellow community members, regardless of whether they use Unhangout or something else entirely.

2. Unhangout, an online (un)conference platform

These design patterns for participatory online events emerged out of the design project of Unhangout, an open-source platform for hosting large-scale, participatory online events (Sethi, McConachie, DeTar, & Schmidt, 2014). Through several design iterations, the Unhangout platform has been designed to support a participatory online event format where participants can interact with one another and are given the opportunity to contribute to the event and produce shareable artifacts together.

Each Unhangout event has a landing page, which is referred to as the lobby (Figure 1). When participants arrive, they can see who else is there and chat with each other. Event hosts can offer a video welcome message that gets streamed into the lobby. They can also control the playback of videos (live or recorded) for all participants. Participants can break out into smaller

sessions (up to 10 people per session) for in-depth conversations, peer-to-peer learning, and collaboration on projects (Figure 2). These breakout rooms allow participants to communicate with each other via webcam and audio, text-based chat, and a document co-authoring tool. Breakouts can be pre-created by hosts, or proposed and voted on in an unconference-mode. Participants can access Unahangout via a desktop web browser, without the need to download any software to their machines. The project is open-source, and an instance is hosted by MIT that allows anyone to host their own Unhangout event free of charge.

Figure 1. Screenshot of an Unhangout event lobby
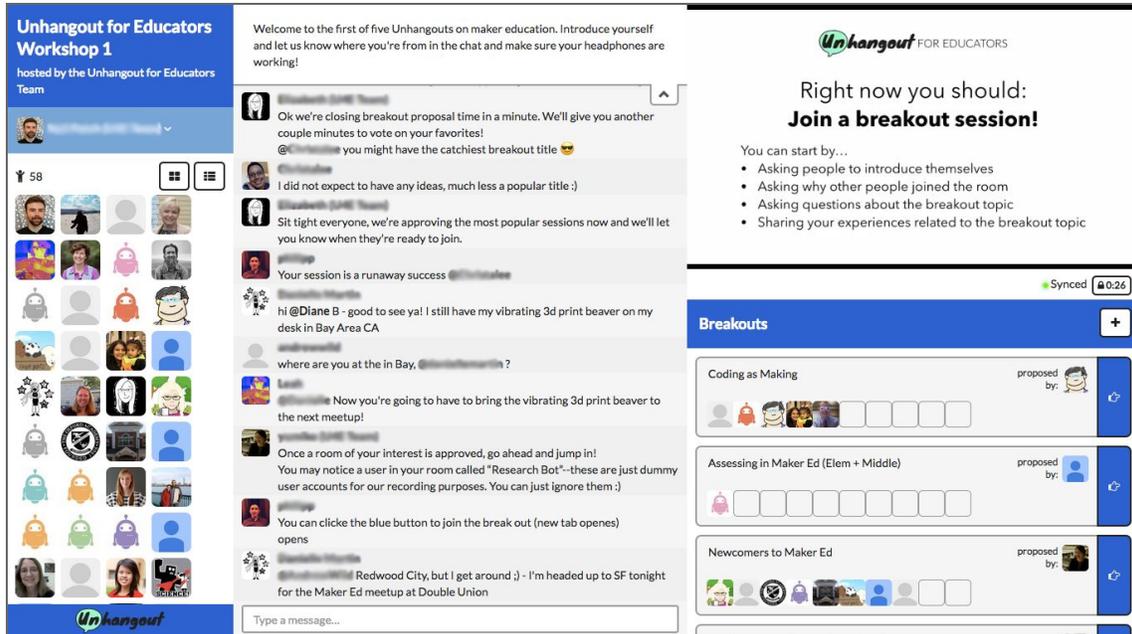
Figure 2. Screenshot of an Unhangout breakout room.
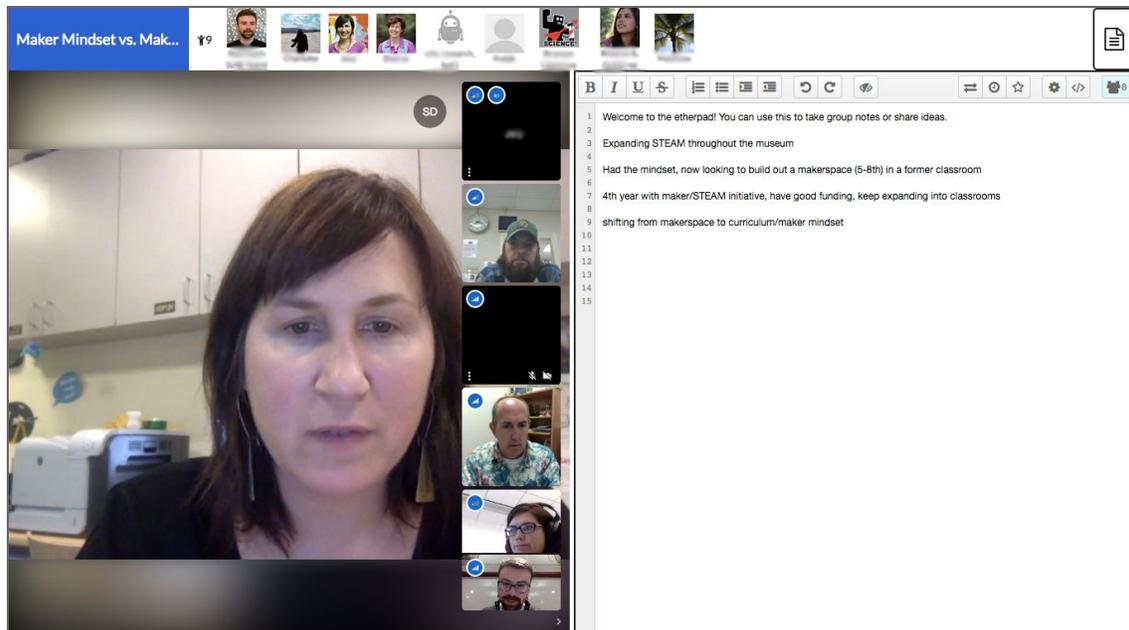
A preliminary version of what would later become Unhangout was initially designed to host a participatory online conversation that was part of a Massive Open Online Course (MOOC) called Learning Creative Learning in 2013 (Schmidt, Resnick, & Rusk; 2014). Since then, the Unhangout platform was created and has been through two rounds of iterations based on the user feedback gathered from hosting and supporting hundreds of events. Some of the design patterns identified in this paper have been built into the design of the Unhangout platform itself; however, these patterns may also be applied to the design and usage of other video-conferencing platforms and environments as well.

3. Methods

These design patterns for participatory online events were identified while iteratively designing the Unhangout platform, using the platform to host events, and also providing support to many hosts as they designed and ran their own participatory online gatherings. These experiences generated a diversity of participant and host feedback gathered from events that were designed for a variety of use cases: community gatherings, professional development workshops, and online course discussions.

Community gatherings are events designed mainly to convene an existing online community. Typically, organizations that hosted these sorts of events had an online, asynchronous "home" for their CoP and were leveraging the synchronous event as an additional format they hoped would contribute to the strengthening of their community. For example, the non-profit organization Peer-to-Peer University (https://p2pu.org) hosted a series of monthly participatory online events as a way of creating a space for their practitioner community to hang out, converse, and share relevant updates.

Another event type is a participatory professional development workshop. In this type of event, a group of professionals, like K-12 teachers, convene to share knowledge and practical skills with one another, in service of their professional growth. For example, in 2017-2018, the authors hosted a series of online, participatory workshops for maker educators. These workshops were designed around a series of relevant themes and invited participants to draw on their own experiences in the classroom to inform group discussion and activities (Murai, Patch, Choe, McConachie, & Schmidt, 2019). In this type of event, participants often do not know each other beforehand, but have a shared interest or passion that brings them together.

Finally, the last event type that we draw on is the online course discussion event. For example, the authors collaborated with several Massive Open Online Courses (MOOCs)—where hundreds or thousands of learners participate on platforms like edX—to host synchronous, participatory discussion events. These events allowed learners to meet one another while engaging with course topics, activities, and materials.

Moreover, the sum of these experiences have enabled the authors to develop a depth of first-hand experience with the participatory event format. This experience was synthesized with

user feedback, collected through surveys and interviews, via several cycles of brainstorming, prototyping, writing, and editing (Iba, Sakamoto, & Miyake, 2011) to articulate the patterns introduced in this paper.

4. Overview of Patterns

These design patterns for participatory online events can be divided into three categories: culture and mindset, facilitation strategies, and event flow. Culture and mindset refers to the set of attitudes and practices that hosts should adopt for themselves and strive to cultivate among participants. Facilitation strategies refers to a series of patterns that inform host behavior and actions during a participatory online event. Finally, event flow refers to concrete strategies for event and tool design and selection in order to support participation. Table 1 provides an overview of all fourteen patterns, organized by category.

You can use these patterns to design and host a participatory online event for your distributed community. You can use them to design a workshop or showcase for your online course; or host a monthly gathering of your nonprofit's global partner community; or throw a meet-and-greet to connect your volunteers or site-coordinators with each other; or simply host a webinar that doesn't suck. You can use it to help you select the software you'll use to host your event. You can use it to guide you and your event participants in the actual process of participation during your event. If you're a software developer, you can use it to guide you in the development of new tools or features for your online event platform.

In this paper, two out of the twelve patterns will be introduced in detail.

Table 1. Design Patterns for Participatory Online Events

	Category	Pattern Name	Patlet
1	Culture and Mindset	The people who show up are the right people	All the people you expected to come to your event may not show up. Therefore, design an event that inherently embraces and builds upon the unique group of people who are there.
2		Party host	There tends to be a power dynamic that emerges between event admins and participants. Therefore, act like a party host: plan for and set up an environment where everyone can have a good time, and when people show up, participate rather than trying to control everything.
3		Opportunity to contribute	You want every participant to contribute in conversations. Therefore, create an event environment that gives participants as many opportunities as possible to choose to contribute.
4		Collective troubleshooting	Technical troubles become unmanageable for a single host when many attendees are participating. Therefore,

			encourage participants to help one another and share tips and resources to collectively solve the issues.
5	Facilitation Strategies	Modeling	You want to provide tips to contribute in conversations for participants but it is not easy to explain how to make meaningful contributions. Therefore, model good participation and community stewardship through your attitude, tone, and actions in an event.
6		Anti-surveillance	You want to make sure all participants are having a good time and contributing, but people tend to feel uncomfortable openly sharing their thoughts when they are being monitored. Therefore, do not surveille your participants actions or conversations, and trust them to co-create their own experiences.
7		Good constraints	You want to encourage participants to connect with one another in a meaningful conversation. Therefore, designate a specific time when participants can meet with one another instead of leaving them to meet anytime.
8		Designate facilitators	You want to avoid the situation where a talkative participant dominates a small group conversation. Therefore, designate a facilitator to help ensure that airtime is equally distributed among all participants.
9	Event Flow	Balanced small and large group conversation	You want to give participants a sense of the scale and diversity of your community as well as a sense of intimacy that comes from interacting directly with other community members. Therefore, design an event that strikes a balance between small and large group conversation formats.
10		Minimum talking-head introduction	You would like to welcome and orient participants to your event while still allowing for maximal participatory time. Therefore, design an event flow that requires minimal talking head introduction from the event hosts and constrain speakers to short, provocative presentations.
11		Co-creation	You would like your event to support lively small group conversations, but sometimes it is challenging for participants to strike up a conversation on their own. Therefore, offer an activity or discussion prompt that participants can use to co-create an artifact or new understandings in their small groups.
12		Community showcase	The limited amount of social cues available in online environments makes it harder for participants to begin building personal connections with others. Therefore, opt for features and event designs that enable you to showcase the community to itself.

5. Patterns

The following section describes the selected design patterns for participatory online events. Each pattern consists of the name of the pattern, contexts in which the pattern can be implemented, and articulation of the problem, forces that set up the problem, the potential solution, potential consequences of the solution, known uses of the pattern, and related patterns.

5.1 Opportunity to contribute

Context: You are designing a participatory online event. You want to make sure each participant participates in the conversation rather than passively listens in.

Problem: How do you engage all participants in the conversation?

Forces: People will be more open and contribute meaningfully when they are invited to participate rather than being forced to take part.

A rigidly structured event often fails to address the diverse needs, interests, and backgrounds that participants bring to the event, and as a result, few participants can actively contribute or have influence over how the event unfolds.

Many participants come to online events with an expectation that it will be in a webinar format, where one speaker talks at a group of listeners for most of the event. These participants may need to reframe their understanding of the kind of event they are attending, and as a result may not immediately feed comfortable sharing their thoughts or questions.

Participants are sometimes reluctant to share their thoughts and questions when they do not feel safe to make contributions.

When participants can see their peers interacting with other participants similar to themselves, they are more likely to engage in conversations.

Solution: Cultivate an event environment that gives participants as many opportunities as possible to contribute and create shareable artifacts with others.

Create small breakout rooms where participants can come and go. Create opportunities for participants to propose their own ideas and questions. If you have pre-selected the topics you want participants to discuss in small groups, describe the intentions of each room and let them choose which room to join.

If you want an activity to be done, provide an open-ended prompt that allows participants to bring in their own interests and expertise.

Consider an unconference format—where there is no set agenda and participants collectively propose, vote-up, and choose what they want to talk about with other people at the event.

Consequences: Creating small breakout groups will not only help participants to showcase their own interests, but also may support participants' independence.

Finding the right breakout room or people to talk with could be difficult for some participants if there are many options.

Some participants may approach the topics they want to learn more about, but they may not be confident or feel comfortable enough to share insights with others.

Example: The Unhangout platform allows participants to propose breakout rooms, vote up or down on the proposals, and join the group that they are interested in. This function allows participants to engage in an unconference-style event, where participants can propose or choose the breakout they want to participate in.

During Unhangout for Educators—an online gathering of educators who were all interested in a maker-centered approach to teaching and learning—the participants were prompted to share challenges they are facing, pick one challenge as a group, and collectively brainstorm potential solutions. This type of open-ended activity prompt allows participants to choose what they are most interested in talking about.

The Unhangout platform allows a host to open the room before and after the official event time for participants to informally interact with one another. On the other hand, many other online video-conferencing platforms do not allow participants to interact with one another outside the set event time. This function for a host to set the open time before and after the event provides an option for participants to come early to connect with others and explore the environment, or stay longer to keep having conversations with fellow participants even after the event has ended.

Related patterns: When hosts can always be watching, participants may not feel comfortable sharing their thoughts and questions. Thus it is important to have an Anti-surveillance (6) policy in your event, where participants can focus on their conversation without any interruption by the host. If you adopt at Party host (2) mentality, it will be easier to create an event environment that seems open and friendly, thus encouraging participants to make contributions and shape the event. By starting your event with Minimal talking-head introduction (10), you will signal to your attendees that the majority of event time is for them to participate and contribute. Finally, by Modelling (5) good participatory behaviors and ways of talking, hosts can help signal the ways that other participants are invited to contribute as well.

5.2 Party host

Context: You want to facilitate the conversation between participants so that each participant can explore topics that are relevant to them.

Problem: How do you facilitate conversations between participants that address participants' interests and intentions?

Forces: There is often organic power dynamics that emerge between participants and hosts, where whatever a host says or does has a greater influence over how the conversation develops than participants' do.

When there are power dynamics, participants start to rely on you and refrain from taking any proactive actions without being told to do so.

You as a host feel responsible for making sure all participants are having a meaningful time. You are worried that some participants may have a negative experience without your intervention.

Small actions, such as ways of talking (top-down, formal), can set the tone of conversation, signaling and nurturing the power dynamics.

Solution: Think of yourself as a party host. As a party host, you would not join each and every conversation happening at the party; you would set up an environment in which everyone can have a good time and allow participants to form groups of their choice and strike up conversations that they choose.

Create an online event environment that allows everyone to feel comfortable participating, and let them discover their own style of participation. You might also want to join the conversation as a participant, not only as a host.

Instead of formally starting the event, start by introducing yourself just like you would do if you met someone for the first time at a party.

Consequences: When participants can see you acting like a party host, they will feel increased ownership of their experience during the event. As a result, they may start to take more initiative to facilitate conversations, or they may start to share their interests and questions more openly.

This will also help participants feel safe and respected, which may result in more open conversations.

By participating casually and proactively as a participant, hosts can model the ideal ways of participating to other participants. This will be very helpful for participants who have little experience with participatory events.

Without a host controlling conversations, there will be a higher risk that some participants might dominate the conversation in a way that detracts from the safe and open environment you are striving to create in your event.

Similarly, it will be more difficult to control the outcome of an event or a conversation. This may result in varying quality of conversations in dimensions such as depth of thoughts, direction of conclusions, and distribution of participation.

Example: Sometimes, event hosts have the instinct to briefly join each breakout room in order to check-in and make sure that everyone is having a good time. While this might be coming from a place of good intentions, in practice this action typically ends up being disruptive to the conversations that were already happening among participants before the host dropped in. Instead, event hosts can choose to participate in a group that is most interesting to them, as if they were also just a participant in the event.

The Unhangout platform displays the names and icons of all people in the room equally, including the icons of the hosts of the event (i.e. there is no special visual designation for host accounts).This is designed to signal that a host is also a participant and make it easier for a host to participate as one of the participants. This is not to imply that hosts should be secret—indeed, it is clear who is hosting the event because they are the ones welcoming folks, kicking-off the event, and handling the logistics. Many other platforms make a point of labeling hosts, which serves to reinforce power dynamics that can work against a participatory format.

The Unhangout platform also allows a host to pre-fill the shared notepad inside breakout rooms. Using this space, a host can set up breakout environments with tips and suggestions in order to enable participants self-organize breakout sessions without them needing to be present. Other platforms, such as Adobe Connect, also allow a host to set up breakout rooms before events begin, however, these configurations are typically unmodifiable by normal users. In Unhangout, participants are given an option to erase the text set up by the host if they want to use notepad for other purposes.

Related patterns: With a party host mindset, you want participants to feel safe and comfortable to choose their own way of engaging in the event. Thus, adopt an Anti-surveillance (6) policy and set-up conversation prompts that emphasize Co-creation (11) in order to support the emergence of authentic social interactions. Because it is important during events for hosts to act as a participant, you can Designate facilitators (8) to help support small group conversations and ensure that airtime is equally distributed among all participants. Finally, create Opportunities for contributions (3) in your event design so that when participants arrive, it is clear how, where, and when they can jump in to participate and shape the event.

6. Conclusion

This paper introduced 12 design patterns for designing and hosting participatory online events. These patterns were mined through the iterative development of the Unhangout platform, using the platform to host events, and also providing support to many hosts as they designed and ran their own participatory online gatherings. Although these patterns are still work-in-progress, they highlight that small design considerations can help resolve large issues that repeatedly occur for online communities who gather using a synchronous, online event format. As a next step, these design patterns need to be tested, examined, and refined in order for them to be relevant in more contexts.

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