

Design for Participation

by Nina Simon

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I'm visiting a museum. It's the end of the experience. I'm flipping through videos that visitors have made about freedom, and they are really, really bad. The videos fall into two categories: 1. Person stares at camera and mumbles an inane, marginally decipherable sentence. Static. Or, 2. Group of teens, overflowing with enthusiasm, "express themselves" via shout-outs and walk-ons.

This is not the participatory museum experience of my dreams. But I don't blame the participants. I blame the design.

Why Design Frameworks Matter

When we talk about visitor participation in museum experiences, design is not one of the first words that comes up. The motivation behind creating opportunities for participation is typically about fulfilling visitors' desires for self-expression and transforming the museum from a one-way content distribution system to something more conversational. The idea of a participatory cultural venue stems partly from mass cultural changes, accelerated by Web technology, that have allowed mass media consumers to become media producers, critics, and curators in their daily lives.

The participatory museum also reflects a fundamental goal of many museums to be community gathering places, town squares for the discovery and debate of tough issues of the day.

But town squares are not born of comment books and talk back walls. To fulfill these civic aspirations, we need to design participatory frameworks that support complex visitor engagement. Just as museum experience designers have integrated a wide range of learning styles into the ways that we present

visitors with content, we need to consider the diversity of participatory styles embodied by those who create, remix, share, critique, and consume user-generated content. Just as we establish content goals for didactic exhibitions we need to develop concrete participatory goals for what we are trying to accomplish beyond "giving visitors an opportunity to share their thoughts." Even classic participatory exhibit elements deserve a deeper look. When designing talkback walls, we should be asking questions like: How would you design a station to encourage people to interact with each other's comments? How would you design one that is optimized for long, thoughtful comments? How would you design one that would attract teens in particular?

We have answered these types of questions for many kinds of design in museums. We know how to write labels for different audiences. We know what kinds of physical interactions promote competitive play and which promote contemplative exploration. And while we may not always get it right, we are guided by the expectation that there are design decisions we can make to be successful.

Where do we start in developing rigorous design frameworks for participatory museum experiences? There are two essential components to improving the ways that we design for participation: understanding the participatory audience landscape and having a clear institutional goal in mind. If this is a conversation, it involves multiple parties—staff and visitors. And for it to be a great conversation, the parties have to feel supported, acknowledged, and that they are getting something positive from the experience.



Online Social Participation Styles as of July 2009. Forrester Research Technographics* surveys, 2008. For further details on the Social Technographics profile, see groundswell.forrester.com.

Designing for Diverse Participatory Audiences

How do visitors want to contribute to museums? There's more to participation than self-expression. When I talk about designing participatory experiences, I often show this graphic from Forrester Research. Forrester created this "social technographics" profile tool to help businesses understand the way different audiences engage with social media online. The researchers group audiences into six categories:

1. Creators (people who produce content, upload videos, write blogs)
2. Critics (people who submit reviews, rate content, and comment on social media sites)
3. Collectors (people who collect links and aggregate content for personal or social consumption)
4. Joiners (people who join social networking sites like Facebook and LinkedIn)
5. Spectators (people who read blogs, watch Youtube videos, and visit social sites)
6. Inactives (people who don't visit social sites)

The percentages keep changing (and are different for every country, gender, and age group), but one thing holds constant: creators are a small part of the landscape. You are far more likely to join a social network, watch a video on YouTube, send a link to a friend, make a collection of things you'd like on Amazon, or review a book than you are to produce a movie, write a blog, or post photos online.

And while about 20% of people who engage in the social web are creators in some capacity, on any given participatory site, the representation

of creators is much smaller. Only 0.16% of visitors to YouTube will ever upload a video. Only 0.2% of visitors to Flickr will ever post a photo. In 2006, researcher Jakob Nielsen wrote a paper on participation inequality, arguing that there is a 90-9-1 rule in which "In most online communities, 90% of users are lurkers who never contribute, 9% of users contribute a little, and 1% of users account for almost all the action."

Despite the paucity of creators and the diversity of popular alternatives, many museums are fixated on creators. I show colleagues Forrester's statistics and then they say, "Yeah, but we really want people to share their own stories about fly-swatters," or, "We think our visitors can make amazing videos about justice." Museums see open-ended self-expression as the be-all of participatory experiences. Allowing visitors to select their favorite exhibits in a gallery or comment on the content of the labels isn't seen as valuable a participatory learning experience as producing their own content.

This is a problem for two reasons. First, exhibitions that invite self-expression appeal to a tiny percentage of museum audiences. Fewer than 1% of the users of most social Web platforms create original content. Would you design an interactive exhibit that only 1% of visitors would want to use? Maybe—but only if it was complemented by other exhibits with wider appeal. When I encounter a video talkback kiosk in a museum as a visitor, I never

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*A visitor thoughtfully works on a rock poster remix in the **Side Trip** exhibition at the Denver Art Museum. Courtesy Nina Simon.*

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want to make my own video. I'm not a creator, and my only other option is to be a spectator. But I would love to rate the videos on display (critic) or group them (collector). Unfortunately, those potentially rich participatory experiences—ones which would develop my ability to detect patterns, compare and contrast items, and express my opinion—are not available to me.

The second problem with focusing on creators is that open-ended self-expression requires self-directed creativity. You have to have an idea of what you'd like to say, and then you have to say it in a way that satisfies your expectations of quality. In other words, it's hard, and it's especially hard on the spot in the context of a casual museum visit. What if I assigned you to make a video about your ideas of justice? Does that sound like a fun and rewarding casual activity to you?

Constrain the Platform

If your goal is to invite visitors to share their own experience in a way that celebrates and

respects their unique contribution to the institution, you need to design more constraints, not fewer, on visitor self-expression.

Consider a mural. If given the chance, a very small percentage of people would opt to paint a mural on their own. The materials are not the barrier—the ideas and the confidence are. You have to have an idea of what you want to paint and how to do it. But now imagine being invited to participate in the creation of a mural. You are handed a pre-mixed color and a brush and a set of instructions. It's easy. You get to contribute to a collaborative project that produces something beautiful. You see the overall value of the project. You can point to your part in its making with pride. You have been elevated by the opportunity to contribute to the project.

This experience is shared by the visitors who contribute data to Citizen Science projects or who nominated concepts for the Minnesota History Center's visitor-driven **MN150** exhibition (see the critiques elsewhere in this issue). In these successful participatory projects, visitors don't build exhibits from scratch or design their own science experiments. Instead, they participate in larger projects, joining the team, doing their part. There are often opportunities for partial self-expression—a flourishing brush stroke here, a witty Facebook status update there—but the overall expressive element is tightly constrained by the participatory platform at hand. I'm not suggesting that institutions need to control the visitor outcomes of participation or provide overly guided experiences. But we do need to use intentional design to set a stage for participation that is clear and comfortable.

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One of the best small-scale examples I've seen of this type of participatory experience is the rock poster-making activity at the Denver Art Museum in their temporary *Side Trip* installation, on display in the spring of 2009. *Side Trip* was an interactive space that accompanied an exhibition of psychedelic rock posters, and the educators wanted to invite visitors to make their own posters. Rather than giving people blank sheets of paper and markers (and reaching a narrow audience of creators), the DAM educators devised a low-barrier remixing activity that blends collecting, critiquing, and creating. Visitors were offered clipboards with transparencies attached. There were stacks of graphics, cut-out reproductions from the real rock posters on display next door, which visitors could place under the transparencies to arrange and remix into poster designs of their own choosing. Visitors could then use dry erase markers to trace over the graphics, augment them, and add their own flair. When someone was satisfied with her recombined poster, she handed it to a staff member, who put it in a color copier. The visitor was given a copy of her poster and the museum kept a copy as well. The results of this physical "remix" activity were beautiful, intricate posters. You couldn't easily tell where the remixed artifacts ended and the visitors' additions begin. I saw teens and adults who sat and did this activity for 45 minutes, and I wasn't surprised to hear that some visitors spent over an hour on it. You didn't have to start with a blank slate – you were given a starting point via the graphics that also tied the activity tightly to the artifacts in the show. Brilliant.

This rock poster activity elevated the participatory museum experience in several

ways. It encouraged visitors not only to share their own personal expression but to contextualize it in response to museum-provided content. It invited visitors who did not think they could make art to engage confidently with a positive result. And it created a body of beautiful and high quality visitor-generated content for spectators to enjoy.

Why aren't more museums designing highly constrained participatory platforms in which visitors contribute to collaborative projects? The misguided answer is that we think it's more respectful to allow visitors to do their own thing, that their ultimate learning experience will come from unfettered self-expression. But that's mostly born from design laziness and a misunderstanding of what motivates participation. It's easy for museums to assign a corner and a kiosk to visitors and say, "we'll put their stories over there." It's harder to design an experience that leverages many visitors' expression and puts their contributions to meaningful use.

It's like cooking. If you have a bunch of novice friends, it can be maddening to find appropriate "sous chef" roles for them to fill. Many cooks prefer just to get those clumsy hands out of the kitchen. It takes a special kind of cook, artist, or scientist to want to support the contributions of novices. It takes people who want to be educators, not just executors.

Museum staff should be those special kind of people. We should respect visitors enough to engage them in work that we actually value, to find in-roads that support their participation. We should care enough about their potential usefulness to find the right job for them to do.

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How Does Participation Enhance the Museum?

If participation is truly a two-way experience in which visitors are contributing to the institution, museums should actively seek contributions that are useful. In audience-centered design, we often talk about designing “for” audiences instead of designing content and expecting them to take it on our terms. In participatory design situations, museum staff members need to also think about what will be valuable “for” the institution. The experience isn't solely about providing value to the participants. It's also about providing value to their critics and spectators, which include museum staff.

This is easier said than done. We're so used to asking open-ended talkback questions like, “What do you think?” or prescriptive ones like, “how do you define nanotechnology?” that we often forget to consider whether we actually care to hear the answer. When I design visitor contribution components to exhibitions, I'm always asking myself: how can we use this? What can visitors provide that I can't? How can they do some meaningful work that supports the museum overall?

One of my favorite examples of a well-designed, simple participatory element that improves an overall exhibition is the entry and exit experience of the Ontario Science Centre's *Facing Mars* traveling exhibition. *Facing Mars* is about “the real physical, psychological and scientific challenges of traveling to and living on Mars.” To enter the exhibition, visitors confront a large sign that reads: “Would you go to Mars?” and are forced to enter through one of two gates labeled YES and NO. Each visitor's response is tracked via overhead

displays that tally the total number of YESes and NOs registered to date. These same gates are placed at the end of the exhibition as well. When I visited in June of 2007 and looked at the overhead tallies, about two-thirds of visitors entering the exhibition said they would go to Mars. About one third still felt that way when they left.

The gates form a literal and metaphoric frame to the *Facing Mars* experience. They personalize the exhibition, and the tallies drive home the message that living on Mars is much more complicated and dangerous than many people think. The exhibition is about how “we” will feel if we go to Mars. The gates, and the visitor participation, breathe life into that “we.” They provide a valuable emotional device for the exhibition designers, a message that could not be conveyed nearly as powerfully through introductory and closing label copy.

Making a binary voting decision is a constrained form of participation, but that doesn't diminish its ability to be useful. Many museum exhibition designers are wary of the idea of giving visitors useful work; it sounds like we are ignoring the personal expressive goals they might have for which we designed the participatory experience in the first place. But constraints, whether on a small scale as in *Facing Mars* or on a large scale in a co-created exhibition project, help visitors feel confident that their participation matters.

In August of 2008, I worked with the Chabot Space & Science Center on a design institute in which eleven teenagers designed media pieces for an upcoming Smithsonian exhibition on black holes. When we did the final evaluation for the project, one comment from the teens

surprised us: they complained that it felt like we were "hiding" the goals of the project from them in the first of three weeks. At first, we didn't understand what they were talking about. Hiding?! We gave them all the information we had, and on the first day they had a 90-minute conference call with the exhibit designers.

But we were not entirely specific about where their media pieces would fit into the completed exhibition. The answer was: we didn't know. The Harvard-Smithsonian Center for Astrophysics folks knew that the media would be included on the exhibition website, but that website is several months from being initiated. There was no initial design, no graphics, and no idea of where the teens' work would fit into an overall structure.

The adults thought (as many would) that this was an opportunity, not a setback. The teens were free to be as creative as they wanted, without limitation of pre-existing requirements or criteria. But what staff thought of as "being open," the teens saw as "hiding" the real needs. They wanted to know where their media projects would be featured in the exhibition and what the specific criteria were for success. The client kept saying, "do whatever you want," which they thought meant, "we support your unique self-expression." But the teens heard, "Do whatever you want—we don't really care what it is." The teens wanted the constraints, both so they could be good contributors and to put some limits on the vast openness of "whatever."

We shouldn't have been so surprised by these teens' feedback; it reflects what many of us know about scaffolding educational experiences

with instructional support. The cognitive psychology theory of scaffolding focuses on learners' needs for sufficient skills, materials, and social support to successfully attempt new tasks. Throughout museums, exhibit designers and educators are sensitive to these needs and design experiences that bridge visitors' perceived cognitive levels with their potential attainment of new information or abilities. But when it comes to participatory activities, we often fall back on a simplistic notion that people need complete freedom to creatively and authentically express themselves.

Exhibit designers (and almost all creative professionals) work within constraints all the time. We want to know that we are designing things that will work, be valued, and achieve our personal and institutional goals. When the goals are hazy or we don't receive feedback on our work, we are discouraged and confused. We stop being our best creative selves, and eventually, we may opt out of participating altogether.

Visitors are no different from exhibit designers in their desire for structure. If anything, they need more support and guidance as they operate in the unfamiliar territory of museums. Visitors need meaningful, responsive, clearly defined frameworks for participation and contribution. And it's time for us to start designing them. ✨



Teens may be more enthusiastic about task lists and deadlines than you expect. Black Hole Summer Institute at Chabot Space Science Center. Courtesy Nina Simon.

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