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From “Let Me Show You Something Cool” to “What Do You Notice?” Preparing College Interns for Floor Facilitation in a Natural History Museum

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ABSTRACT

The use of facilitators to engage visitors in conversations at collections-based institutions has the potential to greatly impact and deepen visitor experience. The job requires the development of complex skills across specific strands of study. In this article, we share details on the strands of study in the training of youth floor facilitators from diverse backgrounds for work in a collections-based museum. This training program has been developed over several years. In this article, we review lessons learned, discuss issues we continue to grapple with, and recommend opportunities for further research for practitioners and researchers.

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Introduction

The American Museum of Natural History (AMNH) in New York City has a Museum Education Experience Program (MEEP) in which college youth learn to have conversations with visitors on the museum floor. Affectionately called “MEEPers,” these youth are competitively selected, live or go to school in New York City, and represent the racial diversity of New York City. The MEEP program is founded on a desire to bring diverse youth into the museum, both as a way to support visitor learning while also exposing youth to broad workplace skills and potential employment pathways in museums. Approximately 60 youth participate annually, and many have told us how the training program deepened their communication and public speaking skills, provided opportunities to work collaboratively with like-minded peers and to meet people with different jobs within the museum, and exposed them to scientific content they would never have considered learning on their own. The program originated more than twenty-five years ago and has evolved over that time, although the goal of the program remains the same. Since its inception, MEEPers have gone on to discover an interest in museum careers and have entered jobs in this field, working in institutions across New York City but also in different cultural institutions across the country in a variety of entry-level and senior-level positions. Of the approximately 100 staff in the Education Department at AMNH, more than 15 are former

MEEPers, including one of the co-authors of this paper who was part of the program in its early years.

Although natural history museums such as AMNH are often described as highly trusted public-facing institutions,¹ their histories, collections, and practices have traditionally been unexamined and problematic,² especially with respect to race, colonialism, and a lack of inclusivity.^{3,4} The MEEP program draws diverse youth from the city into the museum, positions them as knowledgeable and competent educators, and offers visitors a chance to experience the museum through dialogue with enthusiastic and attentive guides and facilitators who represent the makeup of the city's population. Consistent with our goal of pushing back against the idea of museums as elite, exclusionary places, MEEPers are trained to facilitate conversations that draw out the observations, interests, and lived experience of visitors. Believing that visitors learn best through active observation and discussion, a MEEPer's role is to help visitors look for patterns, make connections between what they are seeing and what they already know, and to engage in sensemaking about particular science phenomena. When done well, this facilitation support visitors in connecting content across several exhibits and constructing new questions about what they are seeing.

Several studies have illuminated that having a facilitator is helpful to visitors,⁵ and have shown that the presence of educators increases visitor satisfaction and time spent in exhibitions.^{6,7} Some prior work on family learning experiences has suggested that the presence of mediators may cause parents to become less engaged or passive participants. For example, Pattison and colleagues explored the nature of role negotiation in facilitation with family groups in museums, and suggest that adults act as gatekeepers to the interaction with the family.⁸ These collection of studies about facilitation suggest the complexity involved in scaffolding family learning in exploring exhibits. This informed our thinking and led us to realize that what is yet to be shared is what goes into the preparation of the facilitators so they can deploy learner-centered facilitation techniques.

AMNH practice is based on the belief that when facilitation is at its best, the facilitator uses questions to solicit visitor observation. For instance, opening lines might include, "Can you describe what you see in this diorama?" "There are so many beautiful minerals; which one is catching your eye?" followed up with, "Are there any similarities you notice among these minerals? Look at the details." Effective facilitators use wait time throughout their dialogue and provide space for visitors to think and initiate their own line of questions. Effective facilitators help visitors in sense-making and in making connections with prior experiences or other exhibitions in the museum. For example, if looking at a diorama of a mountain environment with animals and plants in their natural setting, a facilitator could ask: "Just by looking, can you imagine what this lion is doing?" or "How many different animals are in this diorama? What might be the connection between them?" intermingled with "Which of these animals have you seen in real life or maybe know a little bit about?"

Effective facilitation also means including all members of the visitor group and creating situations where people in the group are talking to each other, pondering together, and helping each other engage in sensemaking. Effective facilitation stands in opposition to weak facilitation in which the facilitator focuses on meeting their own conversational agenda – in essence, explaining or lecturing and/or asking closed-ended questions probing the visitor for declarative information or definitions. While soliciting answers to these kinds of questions might seem to support conversation, in fact, the answers do not function to open up new space for dialog, but instead help the museum facilitator

to move to the next section of their “script” in their own mind. As such, the training that MEEPers participate in must focus on the several principles of engagement that prepare the facilitators to have such conversations. This training design has emerged after three iterations of testing and revisions supported by a grant from the Institute of Museum and Library Services over a two-year period and with three cohorts of undergraduate youth.

Inside the MEEP training

Recruitment

In order to identify a diverse cohort of undergraduate youth who may be interested in this internship, we partner with job placement/internship offices at City University of New York colleges as well as local private colleges. When possible, we identify a person at the college who can serve as our liaison, and shepherd students to consider this opportunity. We are looking for a youth who are motivated to pursue new experiences and learn more about science in the process. Our application and interview process includes questions designed to assess a candidate’s interest in independent forms of science learning, their interest in pursuing an internship at our Museum, and their ability to reflect on their prior learning experiences as well as on issues of access and equity in learning science.

To foster a culture of interdisciplinary understanding and mutual support, we intentionally create cohorts of youth interested in both STEM and liberal arts fields. STEM-focused facilitators can provide technical insight and content support to those interested in liberal arts, and liberal arts majors help bridge connections to ideas and people outside of STEM disciplines. We look for youth who want to develop their public speaking skills and engage with the public, but having prior customer service experience is not necessary. For many applicants, this would be their first academic internship. We prefer youth who don’t have affinities with NYC museums yet, as we was hoping to build connections with youth who do not already feel a part of the museum world. MEEP training currently takes 58 hours and encompasses several interwoven strands that have the ultimate goal of supporting college youth to develop a sense of belonging within museums, along with the goal of supporting visitor learning ([Table 1](#)). Below, we describe the strands of our training workshop and how it contributes to support effective facilitation.

Strand 1: getting to know AMNH and the museum field

MEEPers need to understand the physical building so they can support basic visitor needs, understand the different occupational roles within the Museum, and understand how AMNH is situated as part of broader museum industry. We use a Museum quest activity to help MEEPers learn navigation and the various routes to get from one exhibition to another. They learn where all of the bathrooms and cafes are, as well as the location of iconic exhibits that many visitors ask about, such as the Titanosaurus or Blue Whale model. As part of the activity, they take photos of their peers and themselves encountering exhibits and upload them. Since the activity happens early in training, they experience what it is like to be a visitor to the museum. The goal of the activity is for them to reflect on and remember what it was like to be entering a new space and develop empathy for visitors trying to do their best in a large and confusing building. We

Table 1. The five interwoven strands of MEEP training.

Strand	Duration (in hours)	Sample activity
1. Getting to know AMNH and the museum field	17	<ul style="list-style-type: none"> • MEEP Museum Quest & Photo Journey • Visiting another Museum and Discussing Issues of Access
2. Visitor motivations, behaviors, and how people learn	6	<ul style="list-style-type: none"> • Visitor Observation Activity – read literature on visitor motivations for visiting museums, make observations of visitors, and brainstorm strategies for facilitating to different visitors based on perceived motivation
3. Exhibit content	7	<ul style="list-style-type: none"> • Facilitator Guide
4. Observing, practicing, and reflecting on facilitation	22	<ul style="list-style-type: none"> • Critical Friends Video Reflection • Jigsaw the Hall (facilitate each other's guides), peer facilitation, and deepening content understanding • Improvisation training with Theater Troupe
5. Career Exposure and Preparation	6	<ul style="list-style-type: none"> • Try-Out Application to a Museum job of your choosing
Total	58	

know these activities are critical for MEEPers to understand their role and their value as floor staff.

One MEEPer recalled an incident that began when visitors, speaking a language not understood by the security staff, sought directions. The security guard, unable to communicate verbally, resorted to gestures to direct them to their intended destination. The guest was left to interpret the signals. Knowing that the security guard was not able to leave their post, a MEEP intern, noticing the situation, stepped in to further assist, guiding and walking the visitors through the corridors using non-verbal cues similar to those of the guard. When they arrived at the destination, it was clear the intern also faced a similar language barrier. Nevertheless, the MEEPer stayed with the visitors in the gallery, offering a reassuring and comforting presence, which helped put the visitors at ease. The intern reflected on the experience, saying, “As an intern, I strived to create memorable experience in the Museum. I didn’t want visitors to just pass through like – “that’s nice” – without experiencing the things more closely. Making visitors feel comfortable is important; it allows them to not only see but observe and take in information.” The interaction demonstrates the MEEPer’s understanding of how empathy and engagement enhance the museum experience and facilitate learning. By empathizing and finding ways to increase comfortability, the intern ensures that the museum environment supported active and meaningful engagement with the content by these visitors.

After gaining an understanding of the physical place, the journey of developing a sense of belonging to AMNH begins. For many youth who identify as people of color and grew up and/or live in New York City, visits to museums occurred as field trips and not as part of a regular leisure time activity with their family.⁹ They might think that they are visiting a cool place, a special destination, but the museum is not a place that represents them, their culture, and their viewpoints. Museum security and admissions staff are often from similar ethno-racial backgrounds, but many museum staff in positions of authority are White. At times, MEEPer youth face microaggressions in the way they are treated at the museum entrance or made to feel othered in subtle ways. One activity we have MEEPers engage in while in training is to visit another cultural institution and be in the role of a visitor. More often than not, they report back that they were followed while exploring exhibits in an art museum. These experiences contribute to youth

feeling that these museums are not spaces for them: they are not just outsiders, but unwanted.

We know that for youth to start developing their career interests, they need to experience museums as spaces that welcome them, where they can imagine themselves being at work and also being in those spaces safely and comfortably.¹⁰ Therefore, in our training, it is critical that we have explicit ways to foster a sense of belonging early on, so that MEEPers can feel safe and thrive within a floor facilitator's scope of work. Getting comfortable with navigating the space, using staff-only staircases, having a badge, and most importantly, knowing that you can help a visitor find amenities or an exhibit provides the MEEPer an agency within that space; a type of ownership that they develop of that space. Meeting others like them who work in these spaces in different professional roles, hearing their stories and knowing that the museum field is actively trying to develop anti-racist practices supports the development of a sense of belonging.

Toward the middle of the training program, we introduce the idea that AMNH is part of a larger community. By showing MEEPers websites that list all of the other New York City museums, as well as the websites of such groups as the Association of Science and Technology Centers, the American Alliance of Museums, and the Association of Children's Museums, we review how we are embedded in these various communities, each having commonalities but also unique identities. We discuss career/job postings from a variety of museums locally that MEEPers might consider after leaving this internship or when they complete their undergraduate degree. We do a job hunt activity where MEEPers search museum jobs and then create a cover letter and resume as if they're going to apply. We then discuss the application and provide feedback. In a recent cohort of 20 MEEPers, 20% ($n = 4$) secured part-time positions in various departments of AMNH as result of exposure to immediately available jobs and scaffolded support in applying for them. As part of training about museum careers, we discuss equity, access, and accessibility issues that museums face, as well as the larger systems of racism and oppression that resist progress on those issues. We discuss why having a diverse floor facilitation staff is important for the cultural sector and for attracting and making comfortable audiences of different racial and ethnic communities. Our training includes articles that address the issue of lack of diversity in museum collections and viewpoints in their curation, and the misrepresentation of culture or omission of context when talking about indigenous cultures.¹¹ MEEPers explore these issues that face visitors during a visit to another local museum. They bring these experiences as visitors to think about their own role in supporting AMNH visitors.

Strand 2: visitor motivations, behaviors, and how people learn

This strand weaves the literature on visitor motivations and learning together with MEEPers' own observations of visitors. We rely heavily on the inquiry practices in the Reflecting on Practice curriculum¹² and from the Next Generation Science Standards¹³ by exploring cross-cutting concepts such as form and function, patterns, and science practices such as making observations and comparing/contrasting. We also explore seminal articles that are widely used in museum studies programs. For example, one of the ideas they get exposed to early in the training is the concept of identity-related motivations for visiting museums.¹⁴ After reading and discussing the article, they then

walk the exhibit floor with the goal of noting what might be a visitor or visitor group's motivation for coming based on body language, gestures, and talk. Upon returning to the training room, MEEPers brainstorm different engagement strategies they could use based on these different types of motivations they just witnessed.

MEEPers also participate in a structured observation activity to examine what visitors are doing at exhibits, such as taking pictures, pointing, reading signage, or looking at their phones. In another activity, they make observations of which dioramas are more visited and less visited so they can narrow down the areas they may want to focus on based on the visitors' interests. They practice approaching visitors, introducing themselves, and welcoming them to the museum to become comfortable approaching strangers. MEEPers have reported that this activity is critical in addressing the anxiety associated with visitor engagement.

Strand 3: exhibit content

MEEPers are asked to create a content guide for a gallery space of their choice. After exploring the galleries, one MEEPer might choose one of the many fossil halls, while another might choose the gems and minerals hall, and a third might choose one of the mammal halls. They are asked to select one to three exhibits in a space and spend some time talking to visitors in order to discover typical questions and reactions to the exhibits. Using this experience as a jumping-off point, an MEEPer is then asked to conduct their own content research on that exhibit with an eye toward devising questioning and approach strategies that will involve visitors in dialogue, observation, and the practices of science. This research becomes a personal content guide to exhibits. MEEPers who have chosen an exhibit in the same Hall collaborate and share ideas on how to facilitate visitor engagement. They then participate in "MEEP Meet the Experts" where they are paired with graduate students in the PhD program at AMNH to gain a deeper understanding of current research and engage in expert dialogue on a particular topic.

MEEPers are now fully steeped in directing their own learning journeys using Museum resources. Learning the content gives them the confidence to have some science background, but they recognize that their job is to facilitate and not lecture. Semi-structured interviews conducted with MEEPers after the Internship as part of the funded project revealed that they understand what their role is. One MEEPer shared, "the internship isn't really about being a complete expert in the subject. It's more just about being able to present it in a way that's engaging and just, you know, making connections." Another MEEPer acknowledged, "You need to sometimes like, as I said, improvise more and change your strategy like quickly, according to the person in front of you." Meepers bring together the key ideas they are gaining from training in terms of how people learn, the content and learning strategies of engagement responsive and flexible to the visitors they encounter.

Strand 4: observing, practicing and reflecting on facilitation

Strand 4 of the training focuses on helping MEEP to develop the skills of facilitating a learning conversation in front of their chosen exhibits. MEEPers interact with strangers

all day, and the stress of approaching visitors and maintaining a conversation can be overwhelming. Stressed-out MEEPers are at a higher risk of sliding back from visitor-centered learning practice, which requires more effort and risk-taking, to the safer and more comfortable place of lecturing visitors on well-rehearsed content. To help MEEPers become comfortable approaching visitors and developing strategies to maintain a conversation even when what the visitor will say is unpredictable, we partner with an improvisational theater company that specializes on working with teens. MEEPers learn techniques for being responsive, creating an easy conversational flow and comforting environment, and dealing with rejection.

AMNH education staff also model effective facilitator moves which are further stressed with one-on-one informal coaching on the exhibit floor. Role modeling helps MEEPers consider what different initial approaches could look like; how open-ended observation questions could be used, and how to do the dance of being responsive to visitor interests, focusing on the exhibit, and making space for their voices. For example, in order to access visitors' prior knowledge, a popular facilitator move is to "prompt the visitor to compare what they are seeing to something similar they have seen or experienced." To create the space for conversations, a facilitator is taught to "revoice" an observation a visitor has shared and immediately invite others in the group to add their experiences. Video reflection is a proven technique for supporting the development and ongoing practice of school teachers¹⁵ and informal educators,¹⁶ and it played an important role in our training as well. To start, we watch a video of AMNH staff facilitating visitor conversations and discuss the norms and protocols for how to give constructive feedback to the facilitator trainee. The list of facilitator moves is reviewed before any video is shown so that focus is on whether a particular facilitator move was used and in what ways or how often it was used. Once MEEPers go through a whole experience of video reflection with the example video, they are then videotaped interacting with visitors. Several videos are collected per person so that an MEEPer can select a video that illustrates an episode where they feel they could use some feedback. In small groups and using very structured protocols with clear roles and responsibilities, MEEPers review each other's videos and make plans for improvement.

Strand 5: career exposure and preparation

Our training program offers MEEPers the opportunity to work in a museum setting, but we also focus on providing an integrated career preparation experience. The career preparation components in our program are designed to provide practical and valuable insights to ensure MEEPers have the tools and knowledge necessary to pursue careers in the Museum sector and related careers. We look for engaging, interactive activities to practice networking and informal interviewing skills early in our training. The training protocol interweaves exposure to various professionals to explore careers and issues in the museum sector and gain practical guidance while working on their facilitator guides, learning how our visitors engage with our exhibits, and other issues relevant to their practice. We invite professionals working in different museum departments to meet with our interns throughout their time at the Museum. Each professional is invited to share a bit about themselves and their career journey to the Museum to either kick off or close any activity with the interns.

Centering community building

While those who work in youth development know how important community building is when working with youth/young adults, it is often excluded from the explicit design of the program curriculum. This is a program where the MEEPers are doing a lot of learning, both to prepare for and during their internship. Learning is a social activity, and MEEPers need to feel trust toward each other, have ways to celebrate small successes, empathize and support struggles, and know that everyone wants everyone to succeed. We expect that the informal moments when people have breaks and get snacks together, or are traveling home together, will be enough to get them to know each other. While these are effective, in our design, we have several activities explicitly to foster community. For example, the activity mentioned above where they take pictures of the museum early in the training collates into a single document that they revisit at the end of the training. Reflecting on those pictures garners laughs and excitement, as MEEPers recognize how far along they have come, and this not only supports the community but also deepens a sense of belonging. The improv training workshops are fun and full of laughter, and are specifically designed to develop trust and to break down barriers in approaching and talking to people. This process results in MEEPers having some shared experiences of awkwardness and then success.

The design of the training

With each iteration, program staff revised how much time to devote to each module, in what order the concepts needed to be introduced, and effective ways to balance agency and autonomy for the MEEPer in selecting exhibits for facilitation with the needs of the Museum. For example, activities focusing on how to approach visitors were added when staff recognized that MEEPers were able to have great conversations when they had a captured audience, but were shy and didn't have strategies for approaching strangers. The creation of a facilitator's guide provides another way for MEEPers to document how they want to approach visitors, to include key ideas they could discuss and interesting cool facts they could have in their back pocket. In addition to being a useful tool for MEEPers, the guide also functions as an embedded assessment so that staff would have a better understanding of what MEEPers knew about techniques and content.

Conclusion

Working with diverse youth as floor facilitators serves two major goals. First, it exposes youth to an industry that they are familiar with but might not recognize to be a viable option for jobs and careers. It gives them the opportunity to develop a sense of belonging and envision themselves as possibly having a career in this industry in a scaffolded, supported way while developing several skills that can be applied to any job in the future. The second goal is that visitors are met with energetic floor staff who engage them in conversations at exhibits, which has the potential to enhance their visit and learning experience. Preparing youth staff to engage in the hard work of having visitor conversations requires focus concepts covered in the modules described above. We advocate that museums should invest this time and think about the organizational structures that either support or hinder such work.

Our recommendations for practitioners are to use the strands we have shared and articulate what types of ideas and activities could be built as related to the local context. Based on the type of museum and the nature of audience, what must floor facilitators understand about the place they work, and the people they will encounter. Based on the types of exhibits, what are the pedagogical approaches that must be introduced early on and serve as foundational as floor facilitators develop their craft of having visitor conversations. Our recommendation for educational researchers is to continue to further define effective facilitation and observe how that definition is mediated by the types of visitors in the interaction, the nature of the institution (collections-based versus phenomena-based), and also the nature of the exhibition itself, such as a live collection (e.g. an Insectarium), or a place where fossils are reconstructed to tell a story about living things from the past, such as dinosaur halls, or exhibitions focused on conveying natural environments such as North American mammals or forests.

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Notes

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R. Chaffee is a Senior Education Researcher at the American Museum of Natural History. Her research focuses on the potential ways that out-of-school learning environments can shape youth academic and career pathways and contribute to their sense of belonging and flourishing in STEM. She leads the collaborative youth co-research component of a NSF 10-year year study on youth pathways and is developing a youth research internship opportunity for MEEP alumni that focuses on engaging youth in participatory frameworks that center their experiences and voices in research and evaluation at AMNH.

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