Inside: Truth-Telling at National Museum of the American Indian

Plus: Engaging Children in Museum Planning, and MORE!
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When I was a young day care teacher, I asked my kindergarteners to draw their ideas for a playground for our community center. I was quite intrigued when one of the children drew a giant underground crawl-through guitar. The detail showing children climbing inside the guitar was full of action. I wanted so much to use this and other ideas in planning the playground but I didn’t know how. That moment launched a long, slow journey on engaging children in planning.

Until relatively recently, involving community in museum planning was rare. Over the past decade, however, museums have increasingly opened their planning processes to involve a broader range of their communities. Prototyping with visitors has become a best practice. Nina Simon’s book The Participatory Museum (http://www.participatorymuseum.org/) offered an inspiring and practical guide to actively engaging audiences in the life of the museum. Design firms have been involving community design advocates for design justice. Design Thinking brings a visitor centered approach that helps focus on the needs and expectations of museum visitors. Routinely, museums hold focus groups for stakeholders, members, and community partners. They bring educators and artists together to co-construct experiences.
Children, however, are noticeably absent in these practices. Across many museums (and other settings) children are often considered a non-subject or an inconsequential one—and the younger the child, the less importance and weight their views and perspectives are given. While planning teams may plan with children in mind, consider developmental milestones, or review content standards, listening to children themselves, considering their perspectives, and reflecting their ideas is missing.

We might believe that welcoming children to our museums is enough. Would we, however, consider that acceptable for other groups of end users, BIPOC, visitors with special needs, non-native English speakers, or the elderly? If children are part of a museum’s audience—and we know they visit every kind of museum, aquarium, and zoo on field trips, for camps, and with families—then, like any other audience group, we are compelled to involve them in planning.

A blend of audience research, stakeholder input, and pedagogical documentation, engaging children in museum planning is an approach with both near and long-term benefits to museums and to children.

Museums are multi-generational spaces that draw family groups with children, parents, and grandparents. As community anchors, museums will welcome children in the future when they are adults, parents, and grandparents; as future staff, trustees, and volunteer; and as the decision makers in cities and towns museums rely on.

When we **make time to listen to children and understand** their perspectives, ideas, and priorities we learn something from children and about ourselves. We can glimpse what children wonder about and strategies they use to learn with the world.

Children find value in being a part of these experiences. Inviting them into the planning conveys an interest in them and their ideas. They feel a growing sense of belonging, possibilities in connecting with other children, and pride in seeing their ideas made visible. Learning is a likely benefit of this approach including an awareness of museums and how they work.

**SEEING CHILDREN**

Just like other museum planning projects that actively engage visitors and community members, planning with children brings together a museum project, a team, areas of interest and questions, tools and methods, time for reflection and interpretation. Everything is virtually the same including the need to start with understanding the audience—children.

We each carry an image of the child with us, an image that invisibly directs us as we approach, talk to, listen to, and design for them. At the core of planning with children is our view of the child. Do we see the child as capable or as needy? As competent learners with mastery over skills and ideas or as smaller, messier, unfinished adults?

Having a view of children as strong, active, and capable changes how we interact with and plan for them. If we see them as passive and needing help and we focus on what they can’t do, we will have low expectations, plan for assumed limitations, and create simplistic designs. If, on the other hand, we see them as resourceful, capable of making choices, using many modalities to express their ideas and preferences, then we will involve children as co-constructors of experiences with us. This mindset—the child as rich in ideas and potential, strong in spirit, and an active agent in their own learning—recognizes that children have something valuable to contribute to our understanding and to their museum and museum experiences.

Our view of children matters in all of our considerations and interactions with them: shaping spaces, welcoming them at the museum door, selecting objects and materials, framing content, communicating with them, and facilitating activities. When we have a strong, positive view of the child, we ask different questions and we listen with care to their responses. We work with children’s capabilities rather than exclude them because of what they can’t do. We respond to their flights of imagination and appreciate their fresh ideas when we see them as competent novices rather than inadequate adults. Children are sources of information and expertise that is otherwise unavailable to us in creating friendly, engaging museums. In working with children, we can investigate our questions and theirs about how they understand a corner of the world in an exhibit in ways that make our designs better and expand opportunities for them to explore, discover, and learn now and in the future.

**CHILDREN’S INCLUSION**

Creating encounters that enable children (of all ages) to contribute to the full life of their museums is a rich, layered, on-going process. This carefully constructed work centers on children in the context of a project and its broad goals, whether for a new museum, capital expansion, exhibition, initiative, or program. Coordinated with project phases, it reflects the multi-disciplinary interests of internal and external players: exhibit developers, educators, curators, designers, researchers, evaluators, fabricators, and architects. Listening and learning throughout the process helps reveal what children are curious about, connections they have made, where they see possibilities for exploration, play, and learning that adults overlook. These
insights and ideas can inform building architecture, space adjacencies, experience approaches, activities, materials, tone, content, communication strategies, and graphics.

Involving people who are important in children’s lives—parents, grandparents, and caregivers—can yield valuable insights to help enrich a team’s thinking about children and shaping experiences for them. These adults know their children in other settings; can add background to what a team is hearing and seeing; and can add social-emotional context for children’s ideas or questions. These adults are also co-learners and play partners with children at the museum; they serve critical roles in managing visits, supporting children, and scaffolding experiences.

Children of any age can be involved in planning. A two-year-old’s fascination with sensory material, expressed with giggles, gestures, and facial expressions, is as revealing as a 10-year old’s elaborate description of a shipwreck they would like to explore. Appropriate ages for involving children align with the museum’s audience and the nature of topics to be explored. Regardless of the child’s age, questions and activities need to be based in children’s lived experience, not abstractions or specific content knowledge.

This planning work is not a single session with an artist or a focus group facilitator. A planning team brings groups of children together at multiple points during a project. Children might be recruited from museum visitors, program attendees, students in an existing school, or a partner program. A group might participate once or several times as, for instance, a visitor panel. Group size depends on ages and the nature of the inquiry. Is it about place? A topic? Risk and challenge? Involving multiple groups of 10 or 15 early in the process can provide inspiration for gallery direction or surface what is intriguing to children about a topic. At the same time, multiple sessions with one group of 8-10 allows probing a big topic like climate change. Observing different age groups, for instance, in exploring materials, assessing risk, or giving a tour of a building provide age-related perspectives that can be informative any time.

FORMAT, FOCUS, QUESTIONS

Every project is embedded in its particular time, museum, and community. Consequently, there’s no single road map for engaging children in planning. Practices and tools are adapted from various sources: the Municipal Schools of Reggio Emilia (https://www.reggiochildren.it/en/reggio-emilia-approach/), Design Thinking, placemaking, and museums themselves. Workshops, visitor panels, prototyping, free-play sessions, and mini-experiments are formats adaptable to age groups, group size, and lines of inquiry. Whatever the format, these sessions are not a one-time focus group nor are they highly structured. They are more like a dialogue with children around a set of questions that supports but does not lead children’s thinking. While several team members are involved in planning a session, a moderator who might be a research partner or educator on the team facilitates it.

The focus of sessions with children may emerge from any aspect of the project, the group of children, or museum values. An investigation might be around how children interact with spaces; the qualities they notice in an ob-

Figure 1: Children’s drawings from visitor panels and workshops are used in gallery and wayfinding graphics throughout Louisiana Children’s Museum.

Figure 2: A parent shares his son’s water journal at the 3rd Louisiana Children’s Museum visitor panel.
Good questions for engaging children’s thinking, imagining, and sharing take time to find and shape. (https://museum-notes.blogspot.com/2013/12/2014-resolution-shiny-questions.html) Questions may tap into special experiences or everyday moments but need to be relevant to children’s lived experiences. They focus on the child’s point of view. How is water important and interesting in your life? What does it feel like to be in this place? Open-ended questions catalyze a dialogue of both knowledge and emotion. Rather than asking, do you like this or that, good questions are framed to deepen an understanding about what children notice, wonder and care about. Questions with yes/no answers, with known answers, or intended to confirm preferences truncate discussion. Some questions will simply fall flat and some conversations veer off course even with careful consideration of questions, context, and knowing the children.

Multiple visual and verbal tools invite and encourage children to explore and share their thinking and ideas in response to questions and group discussion. Appropriate tools and methods generally follow from the questions and group of children. These are qualitative tools that can be adapted to work across an age range. At virtually any age, children can draw, use expressive materials such as clay, paper, fabric, markers, paints, found materials, natural objects, bricks and blocks. Toddler’s and children’s talk, gestures, and bodies communicate interest, feelings, and ideas. Cameras allow them to document what they think is important. Even a young child can make a simple map or take an adult on a tour of a place. Team members can observe children at play, using materials, acting out a story, or problem solving in a group. Team members or parents can be recorders and notetakers for sessions.

LISTENING TO CHILDREN

Listening is being open to other perspectives and involves many senses and languages. A session that uses multiple verbal and visual tools to capture children’s thinking and ideas generates tangible traces to support continuing dialogue and inform the project. Discussing, reflecting on, and interpreting photos, videos, recordings, maps, and drawings involve the team, and, when possible, children and other adults. Working from assembled notes, photos, interviews, etc. the team discusses and reflects to make meaning from children’s thinking and ideas following a session. The team asks, for instance, what are we seeing here? what might the deeper structure of these ideas be? It considers what children did, not what they didn’t do, and it probes responses that seem cute or funny for other meanings. Summarizing relevant ideas and displays for the team to see, read or listen to informs the team’s thinking and choices and suggests ways to continue the dialogue.

Clearly, the ideas and comments children contribute do not represent all children. These small sample sizes are not intended for generalizing about how children think, see the world, or interact with others. As part of a continuing dialogue with children and in the context of a project, however, this information reveals something meaningful about these children, what they have experienced, and what they know. Reflections on traces of children’s thinking and ideas become a platform for communicating with the wider team, guiding choices, forming new questions to explore, and changing the museum.

INVOLVING CHILDREN

While children’s engagement in museum planning is relatively limited, it has been of interest in children’s museums for a decade or more. Several projects I have been fortunate to be involved in have engaged children in significant ways. The following brief descriptions highlight examples of partners and players, formats and strategies, questions, and how children are contributing to their museums.

• Early planning for the new Louisiana Children’s Museum (https://lcm.org/) began in 2011 with a 3-part visitor panel coordinated by Gyroscope, Inc., an architecture, museum planning, and exhibit design studio (https://www.gyroscopepeinc.com/) and facilitated by Slover Linett an audience research firm (https://sloverlinett.com/). The panels which consisted of a dozen children, 5 - 10 years and their parents, brought children’s and adults’ perspectives into the project to inform exhibit design, architecture, landscaping, and graphic design. During the first meeting, children explored the museum’s current food market exhibit and then drew and talked about their ideal exhibits. These experiences tended to be immersive, open-ended, active, and educational. They reflected children’s interests in food around family and a knowledge of New Orleans food and culture. One drawing, “Artist’s World”, showed a 3-d walk-in painting which inspired the theme and design of Play with Me, the early years zone. During the 2nd meeting parents discussed their children as thinkers and doers.
using their drawings. Between the 2nd and 3rd meetings, children created water journals about how water was interesting and important in their lives reflecting Hurricane Katrina’s impact. Children notated selected photos which informed the 100-foot water table modeling the Mississippi River and the Port of New Orleans.

• “Seeing Everyday Places” was a collaborative project between Minnesota Children’s Museum (https://mcm.org/) and some Twin Cities early years programs. In redesigning the Our World gallery as part of its renovation, MCM invited children to think about communities and places that make up communities. Different groups of children researched hardware stores, the bank, nature parks, and the mail. Their fascination with the variety of mailboxes and how letters and packages move from one place to another was picked up by museum developers and incorporated into the gallery’s redesign as was a fascination of switches and controls.

• WonderTrek Children’s Museum, (https://www.wonder-treksmuseum.org/) an emerging museum in North Central Minnesota, has a long-term interest in the question about how children find their place in the world. Over the last 2 years, WonderTrek has fielded multiple outdoor play sessions for groups of elementary-aged children at a city park in order to better understand how children use features of the environment and open-ended materials to build something new together. Documented in the team’s observations, photos, and video, a narrative of the session also captures the child-directed play, their movements around the park, how they select and used materials, and regrouped themselves. These experiences and records are informing the architecture-exhibit interface, and outdoor exhibit experiences.

• As part of creating a new gallery space that would change with children’s ingenuity and imagination at Minnesota Children’s Museum, the Gyroscope team set up a half-day drop-in materials exploration in the Museum’s Atrium in 2013. Part of an investigation into how children use materials to reimagine and reshape spaces to develop the new Imaginopolis gallery, children worked with large-scale, open-ended materials. Photos and team observations captured children working alone, with parents, and other visitors to use saplings, ropes, clamps, cardboard tubes, large pieces of fabric, scissors, and lots of tape and reinvent the space by the hour.
START SMALL
A set of underlying features are embedded in the examples above and begin shaping a framework for doing this important work.

• The approach is a mix of planning, research, design, learning, and evaluation built with multiple perspectives.
• Engaging children in planning works at the scale of a museum, a program and in between.
• Children’s curiosity and lived experience are the frame of reference, not abstract concepts or specific content.
• Engagement strategies are varied and adaptable and allow as many children as possible to engage in meaningful ways.
• Children’s contributions are shared and made visible.
• Multiple meanings of children’s ideas and responses are valued, not evaluated.

Figures and Related Resources

Museums and their communities have been experiencing the positive benefits of welcoming and engaging new friends, partners, neighbors, and end-users into the museum. It’s time to bring children into the planning and into the full life of the museum. This is something every museum can do, on its path and at its pace.

RELATED RESOURCES

• Listening to How Children See the World: https://museumnotes.blogspot.com/2021/04/listening-to-how-children-see-their.html
• Because a Good Question is Hard to Find: https://museumnotes.blogspot.com/2021/12/because-good-question-is-hard-to-find.html
• Dialogues With Places. 2008. Preschools and Infant-toddler Centers Instituzione of the Municipality of Reggio Emilia and Reggio Children

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Unify the Museum Field

By John W. Jacobsen

**This article is adapted from John W. Jacobsen’s forthcoming book, The Effective Museum: Rethinking Museum Practices to Increase Impact (working title), to be published in 2022 by Rowman & Littlefield.

The rich diversity of American museums is both the museum field’s strength and our weakness. Museums pride themselves on their uniqueness, and the differences among America’s museums are indeed vast. I would never want to take away any museum’s distinct identity. Yet even very different museums have common components, needs and aspirations, and much that they can share with other museums despite these differences. This article looks at the benefits from working together to unify the museum field and provide it with backbone support organizations for more effective services, advocacy, and impact.

Unify:
1) to unite people or countries so that they will work together; 2) to make things work well together.” (Macmillan Dictionary.com)

We could share more among museums for mutual benefit and to further professionalize the field. True, museums already share operating data, travelling exhibitions, collections, staff, and program scripts, but the process of exchange is often hassled by snags, retrofits, misunderstandings, timing issues and lack of business models to cover the costs. I wish sharing were easier, so museums could efficiently trade their wisdom and best creations and host more content, saving money while increasing relevance and effectiveness.

Sharing is my umbrella term for all ways two or more museums might use the same resource. The resource might be digital, like a school program script or a data field definition, or it might be unique and physical, like a travelling exhibition that is shared sequentially, or a UV meter borrowed like a book from a central library. Potentially, there are lots of other resources that could be shared in other ways. Sharing is not the same as collaborating, partnering, associating or networking, though many of those relationships involve some form of sharing. I am suggesting establishing deeper protocols of exchange to make sharing in any of these relationships more predictable, simpler, more meaningful, and less expensive.

The five suggestions in this article relate to facilitating more exchange among museums:
- Strengthen the Museum Associations
- Share Standards and Specifications
- Share Program Components
- Facilitate Intermural Commerce
- Professionalize the Museum Field

I admit these suggestions may be difficult to achieve, but the results will address critical decisions facing museum managers: How to manage the field’s needs, how to compare to other museums, how to change content more frequently, how to save money, and how to develop tomorrow’s museum professionals. All these suggestions involve multiple museums, in some cases the whole museum field. To achieve these results, museums need to work together. Historical barriers to sharing stem from museums’ uniqueness and independence, which over time cement separate ways of doing things, making it harder to exchange data, expertise, and content. The first obstacles to increased sharing may be the existing practices—aligning to new shared data definitions may sideline historical data; importing shared programs may idle in-house staff and certifying job skills may threaten traditional career ladders. Overcoming inertia may incur costs.

Museums will not make the effort unless the benefits are clear, so this article focuses on the benefits from my five suggestions to increase exchange and sharing among museums

STRENGTHEN THE MUSEUM ASSOCIATIONS
I am fond of and indebted to the museum associations. They bring us together to catalyze sharing. Annual conferences, newsletters, webinars, publications, and emails create communities among museum professionals. I and our firm have been members of at least eleven museum associations internationally, but I lose count, and the edges between associations and service organizations can get fuzzy. All brought me together with colleagues who became friends, sharing ideas, gossip, and trends in the breakfast buffet line and over drinks.

Museum associations already help their museum members share ideas and resources. In addition to online and in-person conferences and meetings, museum associations support our collegial community through advocacy, accreditation, trend watches, publications, member surveys, periodicals, webinars, professional development, and job searches. These are the foundations of museum sharing.
In response to a growing desire to share more, groups of museums have created a bewildering array of associations, alliances, networks, agencies, and boards to support intermural sharing, often with little provision for their administration and sustenance, much less longevity. When two or more museums worked together, they often needed a neutral third party as an intermediary, honest broker, organizer, catalyst, guide, administrator, midwife, or facilitator. And, over the last fifty years, groups of museums created lots of them:

- **Museum associations:** The International Council of Museums (ICOM) includes museums globally. Other associations subdivide the globe by continent, nation, region, and municipality. Slice our profession by discipline instead of by geography, and there are associations for art museum directors, science centers, children’s museums, railroad museums, history museums, zoos and aquariums, and many more. Then there are the format and professional associations for planetariums, visitor studies, giant screens, conservators and exhibits, to name a few. These are member-supported and governed; the larger national and trade associations have staff and headquarters.

- **Intermural organizations:** include funded initiatives serving museums with specific sharing needs on an on-going basis, such as visitor research standards and specifications (COVES), informal science programs and exhibits (NISE Net), and theater format specifications (DIGSS). MIT’s Science Festival links hosts including museums in many cities for their annual street fair. The Center for Advancement of Informal Science Education (CAISE) is a model for other museum sectors to follow for sharing research findings on museum learning. SMU DataArts, started by the Pew Charitable Trusts as the Cultural Data Project, collects operating data from cultural nonprofits using rigorous data definitions and reporting protocols to generate data required by funding foundations; museums are included, along with orchestras, dance companies, operas and other arts organizations. All these have some funding and sometimes staff; COVES is administered by ASTC, a useful precedent for other associations.

- **Museum networks** are more ad hoc, informal ventures for museum sharing, typically covering a specific program, format, or exhibit. The museum I worked for joined eight such networks in the Eighties, ranging from sharing automated dinosaurs to producing films shared by the members. Many of these were motivated by sharing capital costs and by covering operating costs with pro rata assessments. Some were just loose listservs, while others incorporated new nonprofits to manage significant production contracts for the group, such as the Museum Film Network, LLC. The shareholder museums were the directors who voted on policy, strategy, and tactics. Typically network meetings aligned to conference dates, though now Zoom facilitates intermural sharing and collaboration. Such networks are staffed typically by a manager at a member museum.

Yes, there are a bewildering array of entities already facilitating sharing among museums. I shy away from suggesting more entities. Instead, I suggest that consolidation and schedule coordination might be a long-term goal. I think the museum field would be more effective with fewer, stronger, big-tent organizations coordinating many sharing initiatives, centralizing standards and specifications, and hosting fewer, larger national conferences and regional satellites, with more virtual forums and webinars.

I am suggesting consolidation at the administrative levels. Do we need all those headquarters? Layers of managers? Overlapping memberships and duplicate data dumps? With consolidation, establishing field-wide standards is easier, and advocacy for the field more powerful. The sectors can be represented within an umbrella organization.

In making this transition, the museum field cannot lose the support they bring to new and local museum staff at different stages of their careers and to smaller museums. Regional and metropolitan meetings can complement national conferences by offering services and connections locally that attract newcomers and lower-level staff who cannot afford to attend larger national or international meetings.

This consolidation could lead to efficiencies of scale, which alone could increase service to museums. However, these larger organizations should be able to launch deeper, better, and longer sharing initiatives. This should make museums more effective and the museum field more influential. The corollary to my suggestion to increase sharing services is that museums increase the money they spend on sharing and shared programs and embed the museum economically in its local and professional communities as a guiding principle.

Specifically, a museum’s partnerships, collaborations and exchanges among museums require administrative support and management involvement that should appear on one or more staff job descriptions, as well as in the museum field’s “backbone organizations.”2 The museum field could benefit from one or more centralized backbone support agencies that manage vision and
strategy, help administer intermural initiatives, establish definitions and data collection methods, advocate for museums, liaise with international museum organizations, catalyze debate and resolution on policy, and develop funding sources.

With strong backbone organizations, the museum field might share more standards and specifications, program components and intermural commerce, leading to a more unified professional field, as the next sections describe.

SHARE MORE STANDARDS AND SPECIFICATIONS

In our travels from one museum client to another, I likened our planning teams to bees carrying pollen from one flower to another. Museum leaders were interested in what other museums were doing, particularly if they were peer museums wrestling with similar issues.

Peer museums are the same type, discipline, or sector of the museum field; funded by similar business models; operators of similar resources (roughly the same building size, staff size, annual budget and/or capital assets), located in contexts and markets as similar as possible, and using the same kinds of galleries and theaters.

Peer museums can make meaningful comparisons and assess relative performance for specific key performance indicators (KPIs) if they use the same data definitions and understand each other’s anomalies.

Our comparisons of museum data were always popular and revealing. We imported loads of data provided by a group of peer museums into Excel tables and visualized the comparisons in charts, which became Power Point slides we interpreted for their boards, staff, and funders. “Your membership renewal rates are above average, but your per caps in the gift shop are too low.” “Your galleries host relatively high numbers of visitors per SF, which means you’re crowded… should you expand?” “Your utility costs per SF are way high… you might ask these other museums how they do it.” “Your attendance to population ratio is low, but your city doesn’t have tourists like the others.”

Such peer-to-peer comparisons were typically shared among six to twelve similar museums in size, budget, climate zone, discipline, and other peer brackets. These data comparisons inspired probing questions and informed management decisions, but they were a huge amount of work, one-shot deals, and full of what we called “yes, buts…” as in “Yes, your utility costs are high, but you’re stuck heating an old railroad station.”

Many of the museum associations collect and share raw operating data under a variety of definitions and degrees of compliance by members. Data entry by members can be spotty and inconsistent. SMU DataArts also collects data from cultural organizations, and their exacting data specifications increases reliability and accuracy. They have collected deep data from their submitting cultural organizations, including grant-applying museums. The need, however, is for museum-experienced advisers who not only read these databases, but also know the “yes, buts.” This scaffold of museum-expert interpretation can help museums draw meaning from the databases relevant to their needs.

Museums can share more when they adhere to the same standards and specifications. Standards are usually principles, measures, and examples, while specifications are usually more concrete needs and requirements. “Adhering to the AAM’s Code of Ethics” is a standard, and “Fourteen (14) feet clear height” is a specification.

There are already some well-developed museum practices that set standards, definitions, and specifications, such as collection nomenclature, FASB accounting, and LEED commissioning. Several museum associations have established data field definitions, and the museum field has adopted practices defined by others, such as universal access specifications.

Yet, adoption of even these standards is not universal, as each museum has its needs for customization, plus years of historic data collected their way. I think museums can do more by agreeing to share more standards and specifications.

Each sector of the museum field currently has its own set of definitions, and some professional interest groups have defined the terms they use. But not at the field level. We do not know how many museums there are in America because there is not a unified definition, much less a central census. The IMLS posted a definition,3 but even they do not apply it to their database of museums. We do not know how many museum engagements there are because we do not have a unified definition of visit or visitor or guest or learner or participant or user. Public libraries, on the other hand, have such numbers down pat.

Some museum managers monitor daily dashboards of data, but others do not yet see the value because the museum field faces a vicious cycle: Spotty reporting of museum operating data means inconsistent collected data, which leads to managers’ lack of faith in such data, which leads to making decisions in other ways, which leads to lower priorities in reporting and using data. Meanwhile, the museum field’s data-informed cultural competitors and NGOs lure away data-demanding donors and Tripadvisor
customers.

At a 2007 meeting in Philadelphia convened by AAM and the White Oak Institute and hosted by the Franklin Institute, all museum association leaders agreed the field needed to align definitions. Turns out no one was willing to lead the effort, much less give up their existing definitions without strong leadership and clear benefit.4

The foundational need is to share operating data field definitions and a glossary of museum terms. Only then can we count national visits per year, keep accurate track of the number of museums and their contributions to the economy, and enable meaningful field research.

SHARE PROGRAM COMPONENTS
Program components are pieces or parts of produced and completed programs. I use “programs” as an umbrella term including all forms of museum offerings, from exhibitions to art classes to wedding rentals to outreach busses. Program components might include the props for a demonstration, bases for an exhibit, video introductions, scenery for a display, licenses and permissions for animations, and collection objects for an exhibition. Finished, complete programs can also be shared, or leased, but that would be the subject of a different article.

The Digistar Users Group is a model for sharing program components that more museums could follow once their peers share compatible platforms. Staff at one museum with a planetarium or fulldome with a Digistar starfield projector5 can create a show segment (aka, program component) such as a comet fly-by or a 3D model of the James Webb Space Telescope that other member museums can download and use in their star shows. These components are exchanged for free among dues-paying members. A commercial market also exists for leasing fully-produced programs, such as Black Holes: The Other Side of Infinity, and Destination Mars: The New Frontier. In this example of intermural sharing, program components are shared for free, while fully-produced programs are leased for money.

The Digistar Users Group starts out with a lot more going for it than other potential museum groups: The components and whole shows are digital and easy to copy and download; the projection systems are compatible because the supplier makes them to the same specification; the content is geared for educational museum use, and there is a robust global market of users.

There are already category specifications for traveling exhibitions. The General Facilities Report (AAM, Registrars, 2020) and ILE’s Traveling Exhibitions Database (TED) set parameters for spaces and sizes of travelers. But fleets of trucks carrying bases and cases, lights and projectors still cross the nation, when much of that weight could be inventoried by each museum per a widely shared infrastructure spec.

I suggest that open-source standards and specifications for components will make exhibits and exhibitions better, cheaper, and greener. As we organized the new Science Center of Iowa with its multiple exhibit and program designers, we established technical standards manuals for lighting equipment, computers, hardware, text fonts, graphics and more, co-developed among all the designers and fabricators. The need for these component specifications was inspired by the Science Museum of Minnesota having to store and inventory over two hundred types of replacement light bulbs because each of their many designers had specified different lighting brands and types.

Shared program components already include collection loans, scripts, and templates for learning programs, both physical and virtual, presentation slides, and visitor research and evaluation studies. As digital programming grows, so do the opportunities to share digital files among museum virtual sites. Yet I feel these sharing routes could be made more efficient and rewarding to use. It feels like travelling on those old asphalt state roads before the interstate highways. Those of you swerving around the potholes know the problems and costs impeding sharing; perhaps now is the time to address them by strengthening how the sharing happens, as well as adding to the list of routinely shared components.

The clearest benefit from sharing program components is the cost saving, which is most immediate when your museum has been carrying the full cost for independent, one-time production in your operating budget.

Amortizing capitalization among sharing museums may fund higher quality through economies of scale and an increase in audience numbers, thereby affording better talents and production values.

There may be resistance because inevitably, sharing and re-use involve learning curves. It is easier to design for an empty, plain box gallery than for one richly outfitted with mezzanines, projectors, a lighting grid, flexible wall dividers, acoustically isolated pods and other Delta infrastructure. In the second instance, the designer has to learn both the constraints and potentials of the built-in elements.

Intuitively, many designers prefer to start with a clean sheet of paper, the so-called blank slate… until they see the budgets and deadlines. Then, the built-ins start making sense by saving dollars and time.
To make this model work for other kinds of programs in other kinds of museums, I suggest that groups of potential partners work together to define shared platform and program specifications, production values, content approaches and business models. If the sharing process is to be sustainable, it will help to have an organization or one of the members take on the administrative or backbone role.

**FACILITATE INTERMURAL COMMERCE**

Commerce, “the activity of buying and selling goods and services” (Macmillan Dictionary) may play a greater role in the museum field than many might want to admit. The $16 billion museum industry^6 not only attracts that much revenue, but also spends it. How can we manage all this buying and selling to benefit museums and help them achieve their purposes?

The museum field’s $16 billion industry is largely unmanaged. The museum associations manage a few critical aspects—accreditation, communication, advocacy, conferences, standards, resources, etc.—but no one monitors the billions museums earn and spend yearly in America. Which revenue sectors justify investment and growth? Which should be transitioned? What field-wide forces need to be addressed?

If rules-of-thumb for independent nonprofit museums apply to the whole field, then about $8 billion is spent every year on staff and their benefits. This is our profession. How are we treating ourselves? What is the average salary? Are we attracting talent? Are we productive and efficient?

Let’s say the other $8 billion is split between local fixed costs like utilities, and program costs like temporary exhibits. Part of the problem is that we know little about how our funds are spent, but whatever the real figure, how can those billions of program costs stay within the museum field for mutual benefit? How do we facilitate the exchange of money within the museum field?

Of course, museums need outside influences now and then, but I think museums will benefit more from buying from other museums and museum service providers because they understand museums and may share our principles and purposes. AAM’s MuseumExpo is a strong part of this, as it brings together buyers and sellers, both committed to museums professionally.

Administrative support for museum networks and grants is another potential growth area, along with establishing and maintaining their intermural business models. With field-wide economic data, the museum associations could champion research and development initiatives and evolve and certify compliance with shared standards, specifications and templates.

Museum associations are already helping with purchasing insurance and other services, but an even more active purchasing role might publish open specs for program components, admissions systems, monitoring equipment, floor cleaning products and many other supplies to reflect shared museum needs.

**PROFESSIONALIZE THE MUSEUM FIELD**

The evolution from our current collegial community to a credentialed professional field is well underway. In the last five decades, some professional practices have established standards and specifications, universities started museum studies programs, and the visitor studies professionals launched their association, among other advances to our profession. Also, there are now far more museums and museum professionals.

The museum field could license more museum professions within specific competencies, like our colleagues in theater, film, journalism, and library science. For instance, exhibit designers could be credentialed to attest that they know ADA and code. More museum evaluators could be credentialed to assure that human subject testing and bias issues are honored. These steps move us closer to being a professional field.

Yet...

I had some time to kill after a workshop in Dublin, Ohio a few years ago, so I drove around the OCLC campus out of jealousy. The OCLC is a global cooperative supporting libraries. They have an annual budget over two hundred million dollars and a sprawling campus for their headquarters and conference center. They say, “Through technology solutions, timely research, and community programs, OCLC empowers libraries to meet changing needs.”^7

Where is the museum field’s thriving think tank, central archive, global advocate and training ground? Where are the initials after your name certifying your expertise? AAM’s Center for the Future of Museums is the right start, as they identify trends and offer ways of adapting them to your museum, and AAM may be among the logical organizations to lead the museum field. IMLS has funding and responsibility for America’s museums, and perhaps they can lead. But I do not care who rises to lead the whole field as much as I hope some organizations do.

As the museum field develops professionally, it will need backbone organizations that coordinate among all museum associations, that convene all museums and strengthen the field. The increased flow of ideas and innovations among
all museums will enliven the field; peer comparisons and KPI calculators will make us better; capability certification will improve professional standing, and wider career ladders and professional development opportunities will help professionals achieve their career goals.

RESISTANCE
I have found few managers object in principle to any of these suggestions, the resistance comes from inertia and from dysfunctional but existing cycles of dependency. Staff workload is often a limit on the pace of change. It may take time to add sharing and intermural museum relations to job descriptions, and more time to see the results pay off. Fortunately, this is a careful, stately journey. We’ve been on it for five decades or more, and the evolution should proceed thoughtfully, but with vision.

The diversity of the museum field may resist unifying the museum associations under a big tent. Zoos have different needs from historic houses or children’s museums, for instance. These differences justify sub-groups, but their shared needs and collective strength justify some unifying, umbrella organizations.

IMPLEMENTATION
Review these suggestions in conversations among your colleagues to first determine if they too see a need for more unity among museums, more sharing, more alignment, and more centralized management of the field. Once enough museum leaders, particularly the association leaders, agree on the direction, then cautious steps can be taken, with the full vision on the horizon.

CONCLUSION
Museums already share with each other in many of the ways I am suggesting. I wish museums could share even more, at least among peers and possibly among the whole museum field in all its rich diversity.

Toward this long-range goal, I offer five broad suggestions: invest in museum associations to expand their services; move our field toward greater agreement and adoption of shared standards, specifications, and data definitions; share more program components among museums with similar needs; help museums do business with each other and with the museum service community more efficiently and economically; and develop professional practices and certifications for tomorrow’s museum professionals.

All these ideas share my passion for uniting our rich and diverse field. Yes, museums are unique, but they also share operations, aspirations, and ideas. I believe museums can help each other by working together more.

NOTES
1 Federal funding from the Institute of Museums and Library Services (IMLS), the National Endowment for the Arts (NEA), the National Endowment for the Humanities (NEH), the National Science Foundation (NSF), and the Smithsonian Institution have supported some of the most influential services.


3 From Section 9172 of the 2018 IMLS Reauthorization: “The term “museum” means a public, tribal, or private nonprofit agency or institution organized on a permanent basis for essentially educational, cultural heritage, or aesthetic purposes, that utilizes a professional staff, owns or utilizes tangible objects, cares for the tangible objects, and exhibits the tangible objects to the public on a regular basis. Such term includes museums that have tangible and digital collections and includes aquariums, arboretums, botanical gardens, art museums, children’s museums, general museums, historic houses and sites, history museums, nature centers, natural history and anthropology museums, planetariums, science and technology centers, specialized museums, and zoological parks.” https://www.imls.gov/sites/default/files/mlsa_2018_asamended.pdf, downloaded Feb 8, 2022.

4 Under contract to the IMLS, the White Oak Institute and the American Alliance of Museums worked with the other museum associations and with museum data managers in 2011 to define 59 survey questions and their data field definitions, with a short-list of 15 to make sure even the smallest museum could fill it in. Museums Count, the IMLS’s proposed museum census, was never approved, so the data definitions were never implemented. They would have established the Museum Operating Data Standards (MODS). The need is still there when the will and the backbone organizations are ready.

5 Digistar systems are manufactured by Evans & Sutherland


7 https://www.oclc.org/en/home.html, downloaded Feb 10, 2022

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**Author’s Note: I would like to acknowledge that as a non-Native person living in the United States, I have been afforded privilege that has too often silenced the Indigenous voices of this land. I aim to center Native scholars and their perspectives as the foundations for my assessment of the National Museum of the American Indian. I will also make frequent use of the terms “Native” and “Indigenous” but in no way mean to imply a cohesion or monolithic framing to incredibly diverse and distinct tribal nations and cultures.

The opening of the Smithsonian’s National Museum of the American Indian (NMAI) on the National Mall in Washington DC was the culmination of decades of Native activism, fundraising, and collaboration.

The NMAI promised something new for Indigenous communities, whose relationship to museums has been poisoned by colonialis
tist violence. It declared itself “museum different,” a rejection of Western methods of display, housed in an institution that was created by Native people, for Native people. Everything from the architecture, to the curving layout of the exhibit halls, to the commitment to community-based curation was meant to exemplify the “museum different” vision (Genetin-Pilawa 2016).

In 2004, the NMAI opened with three long-term exhibitions, Our Peoples, Our Universes, and Our Lives, to mixed reviews from both Native and non-Native reviewers. Many criticized the exhibitions for “lack of scholarship” and found the displays created through collaborative curator
tship to be overwhelming (Lonetree 2006). On the other hand, many reviews defended the museum’s commitment to Indigenous voices, ways of knowing, and collaboration and praised these exhibits as exemplifying a new “Indigenous museology” (Lonetree 2012). The strongest critique came from Native reviewers stating that the museum “fails to tell the hard truths of colonization and its lasting impact,” (Lonetree 2006) by placing emphasis on cultural survival without providing the context necessary to understand what Indigenous communities were up against.

Put forward by scholars like Amy Lonetree (Ho-Chunk) and Sonya Atalay (Ojibwe), “truth-telling” is an essential part of decolonizing practice for museums and, in the case of the NMAI, equally essential to their educational mission as a national museum. This paper seeks to compare two exhibitions from the NMAI, Our Peoples: Giving Voice to Our Histories, which opened in 2004, and Nation to Nation: Treaties Between the United States and American Indian Nations, which opened in 2015, and to determine whether the museum has improved in its truth-telling. Through analysis of these two exhibitions’ methods of display and didactic text, we can consider how the NMAI has changed its tactics to better suit its educational mission and more directly confront the lasting legacy of colonialism in the United States.

First, we must define the concept of “truth-telling” and understand how it functions in a decolonized institution. In Amy Lonetree’s review, “Acknowledging the Truth of History: Missed Opportunities at the NMAI,” she states...
that a museum cannot be decolonized if it does not discuss colonization (Lonetree 2008). Truth-telling can only be accomplished through direct acknowledgment of what took place in history, without compromising anything for the sake of a more comfortable narrative. In Indigenous museum practice, truth-telling gives meaning to the story of contemporary survival and functions to counteract misconceptions the public may have about Native history. If done correctly, truth-telling can also facilitate community healing of intergenerational trauma, by assisting “...Native people in understanding the historical events that led to Native communities’ unresolved grief” (Lonetree 2012). Finally, through documentation of suffering and by naming perpetrators of violence, truth-telling can be an important tool for seeking justice for both past and contemporary violations (Lonetree 2008). It is clear that a museum cannot call itself decolonized, if it does not embody truth-telling in its exhibitions and educational mission.

2004: OUR PEOPLES EXHIBITION

Amy Lonetree has written extensively on the three opening exhibits at the NMAI, stating that the museum appeared to want visitors to “accept a particular passive-voice presentation of the colonizing forces in our history” (Lonetree 2006). This “passive-voice” is used frequently throughout the exhibition text of Our Peoples: Giving Voice to Our Histories, and is demonstrative of a frustrating lack of truth telling within the museum at the time. The exhibition was intended to focus on the last 500 years of Native history and featured contributions from ten tribal nations in North and South America. The criticisms of this exhibition center around three areas: the effectiveness of the display, the emphasis on survivance, and the abstract and passive language, all of which contributed to a confused narrative that did nothing to course-correct the “willed ignorance of the past five hundred years of ongoing colonization” (Lonetree 2008).

When closely examining the didactic text used in this exhibit, the “passive-voice” Lonetree describes is self-evident. The exhibition’s opening statement notably does not use the word “colonization”. Instead it describes how “the arrival of newcomers in the Western Hemisphere set the stage for one of the most momentous events in human history” (NMAI Our Peoples 2004). This vague language is continued in the following sentence: “In the struggle for survival, nearly every Native community wrestled with the impact of deadly new diseases and weaponry, the weakening of traditional spirituality, and the seizure of homelands by invading governments” (NMAI Our Peoples 2004). This text obfuscates any perpetrators of these new diseases and weapons, it likens forced conversions with a “weakening” of tradition, and it does not specify which “invading governments” it is referring to. Using this opaque language provoked a strong response from Native critics and caused Lonetree to feel that “the museum fails to hold the United States government accountable for its genocidal acts” (Lonetree 2006).

This indirect quality of interpretation was continued through the methods of display chosen for the much-contested gallery entitled “Evidence.” In this gallery, historical events were given an abstract treatment and objects of violence were grouped together for metaphorical purposes. The most prominent examples are two display cases, one housing dozens of guns, all pointed in the same direction, and another housing dozens of bibles. Sonya Atalay was very critical of the fact that “…curators chose to give a large space in the gallery to a group of objects that were not made by Native people but were used to control them” (Atalay 2006). The complexities of this history and the many deliberate ways that the US government sanctioned violence against Native peoples were reduced, both in language and in display.

Atalay’s review, “No Sense of the Struggle,” provides us with a portion of the text within the gun case, which reads: “Why Guns? Guns are everywhere in the Native past. Like Christianity and foreign governments, they weave a thread of shared experience that links Native people across the hemisphere” (NMAI Our Peoples 2004). The text goes on, concluding with the statement that Native people also used the new technology of the gun to shape their own futures. This text says nothing of what guns were used for – wholesale murder, rape, and genocide – and conveys none of this terror to the visitor.

One has to consider, as well, whether the average museum visitor would engage with these displays in the way curators intended, as representations of colonial violence perpetrated against Native peoples, rather than at face value, as cases of old guns and bibles. Lonetree felt that this method of display was asking too much of the visitor: “Should an exhibition require a person be well schooled in postmodernist theory to engage effectively with the displays?” (Lonetree 2008). Beyond the issue of intellectual accessibility, she asserted that the abstraction of colonial forces would only serve to confuse “a nation with a willed ignorance of its treatment of Indigenous peoples and the policies and practices that led to genocide in the Americas” (Lonetree 2008). There was a disconnect between what was shown and what the visitor was meant to understand, a dangerous situation to be in when attempting to course-correct decades of inaccurate representation of Native history. This indirect acknowledgment of historical injustices, through non-confrontational language and poorly conceived display cases, served to muddle the museum’s educational narrative and disappoint many Indigenous
visitors.

While this may seem like an enormous oversight, there are many reasons why the NMAI, and indeed many other museums, have not engaged directly with the difficult past. Lonetree remarks on the hesitancy to lay out hard truths within a museum context, largely due to the idea that in doing so, one is subscribing to the “language of victimization” (Lonetree 2012) or reinforcing stereotypes. This hesitancy certainly influenced the early contributors at the NMAI and is still something that is wrestled with today. The museum’s director at the time, W. Richard West, stated that “they did not want this museum to be the Native American Community’s Holocaust museum” (Lonetree 2006). Community contributors to the early exhibitions wanted to emphasize contemporary survival, to declare to the world that Native people are still here. It is understandable for the contributors to these exhibits to want to focus on their contemporary continuance and not to linger on traumatic histories. However, many Native critics felt that the story of survivance cannot be told without telling it in full.

The concept of survivance, as developed by Anishinabe scholar Gerald Vizenor, is as follows: “...survivance is an active repudiation of dominance, tragedy, and victimry” (Atalay 2006). Sonya Atalay declares that “survivance is not about avoiding or minimizing the horrors and tragedy of colonization,” and she goes on to emphasize the importance of context for the many ways Native individuals responded and resisted (Atalay 2006). “In my understanding of survivance, Native people are active, present agents whose humanity is emphasized as their responses to struggle are poignantly portrayed” (Atalay 2006). Rather than ascribing to victimhood, survivance is a rejection of that narrative, but can only be accomplished by directly engaging with history, and in many cases, with tragedy.

The NMAI’s early exhibits emphasized survivance without first laying out the context for that survival, undercutting the power of that narrative and resulting in the sense that the truth was not being told. Truth-telling is difficult work, and it can be seen as traumatizing or even as an offense, but Native scholars and critics were firm in their desire for the museum to engage in this process. Perhaps Atalay said it best, “I argue that the primary concern of the NMAI should be with effectively presenting accurate portrayals of Native histories, regardless of whether the larger culture is ‘willing to accept’ it” (Atalay 2006).

2015: “NATION TO NATION” EXHIBITION
*The author’s observations of “Nation to Nation” are based on a visit to the NMAI in October 2021*

In this section, we will turn our attention away from the opening exhibitions of the NMAI and consider an exhibit which is currently on view, Nation to Nation: Treaties Between the United States and American Indian Nations which opened in 2015. This exhibit was the first of a new slate of exhibitions created in response to the criticisms the opening shows received. In 2012, the NMAI announced a new plan to restructure the museum’s permanent exhibits calling it the “Great Refurbishment” (Genetin-Pilawa 2016). These plans came about after an assessment of the museum’s strengths and weaknesses, marking a major change in the museum’s educational strategy. Commenting on this change, curator Gabrielle Tayac (Piscataway) stated that while initially the curators didn’t want to “do ‘Indians 101,’” over the years it became obvious that this approach is what the typical non-Native visitor needed (Genetin-Pilawa 2016).

With the opening of Nation to Nation, the shift in interpretive strategy is noticeable. While this exhibit does center the stories of many different Native nations, the exhibit is spearheaded by a single guest curator, Suzan Shown Harjo (Cheyenne and Hodulgee Muscogee). It presents information on a largely chronological timeline and showcases a clear narrative of national sovereignty and political relations between Native nations and the United States government. The exhibition also demonstrates a willingness to speak “the hard truths” that Amy Lonetree and Sonya Atalay felt were missing from the opening exhibitions. Let us now go on a brief walkthrough of this exhibit, focusing once again on didactic texts and methods of display, to assess the improvements made in truth-telling.

In his review of the exhibition, C. Joseph Genetin-Pilawa states that, “At its heart, Nation to Nation explores the concept of Native sovereignty, the idea that Native nations have been equal partners in their negotiations with the United States and that treaty violation represents a violation of sovereignty (Genetin-Pilawa 2016). The exhibition opens with a treaty document, the Haudenosaunee Two-Row Wampum Belt which recorded the agreement made
between the Haudenosaunee and the Dutch government in 1613 to respect each other’s affairs and coexist peacefully. The belt illustrates this agreement with two rows of purple beads on a background of white beads. The rows of purple beads represent two ships, one European and one Native, sailing next to one another but not crossing paths. The symbolism of the Two-Row Wampum Belt ties the exhibition together: “For Harjo, this ideal of equal, separate, and independent nations coexisting serves as a model for tribal sovereignty and the relationship between Native nations in the United States” (Genetin-Pilawa 2016).

The exhibition then examines several case studies of when treaties were negotiated, showing how initially, “the United States and Native nations embraced the Two-Row Wampum ideal through the treaty process, but that the United States violated this ideal through the nineteenth and into the twentieth century” (Genetin-Pilawa 2016). The show has five galleries, entitled “Introduction to Treaties,” “Serious Diplomacy,” “Bad Acts, Bad Paper,” “Great Nations Keep Their Word,” and “The Future of Treaties.” Overall, the show does a good job of establishing the history of Native diplomacy, then laying out how the United States government broke or created false treaties through the nineteenth and into the twentieth century, and finally how Native activists in the mid-twentieth century fought for Native sovereignty and a return to proper diplomacy.

For the purposes of analyzing truth-telling in the museum, I will place particular attention on the gallery “Bad Acts, Bad Paper.” Genetin-Pilawa states in his review that “the ‘Bad Acts, Bad Paper’ section more effectively faces the hard truths of US colonialism than previous NMAI exhibits” (Genetin-Pilawa 2016). This section of the exhibition focuses on the period in the nineteenth and twentieth centuries during which the United States government broke promises and deliberately used false treaties to steal Native land. It begins with a film entitled “The Indian Problem” which “describes the nineteenth-century US assault on tribal lands and peoples, including the concept of Manifest Destiny, the Removal Act, and post–Civil War policies of dispossession” (Genetin-Pilawa 2016). The film establishes that during this period of history, the treaty-making process became manipulative and deceitful, where the intent of the US government was no longer peaceful coexistence, but purposeful seizure of land through bribery, alcohol, and coercion. At the end of the film, curator Suzan Shown Harjo concludes with the question: “When you move a people from one place to another, when you displace people, when you wrench people from their homelands... Wasn’t that genocide? We don’t make the case that there was genocide. We know there was, yet here we are” (Smithsonian NMAI 2015). With this statement, the NMAI demonstrates a significant shift in the language used to describe colonial violence.

After viewing the film, the visitor is then presented with this opening didactic text: “In the 1800s, the United States abandoned the ideals of the Two-Row Wampum, and treaties became ‘bad paper’—tools for confiscating Indian land” (NMAI 2015). The exhibition text does something here that was not present in the opening text for “Our Peoples,” it explicitly holds the United States government and its citizens accountable for their actions during this period. Within this part of the exhibition, the visitor is presented with several case studies of racism, manipulation, and violations of human and sovereign rights. The display topics include policies of removal and displacement, the efforts of the many tribes to resist, the manipulative acts of non-Native treaty negotiators, the “civilization” efforts of boarding schools, and the near extinction of the bison. The language used in all of these wall texts is much more direct, detailing out the government’s disregard for Native
sovereignty and explaining the motivations behind their actions, while never excusing it.

The following wall text from the “Removal” section, which introduces the visitor to the Indian Removal Act of 1830, is a good example of this: “Among non-Indians, removal was also controversial. Public figures like Congressman Davy Crockett argued that it violated the law and honor of the United States. Advocates of removal had to make it look voluntary. They used a new kind of treaty: the removal treaty. To pressure Native leaders into signing, they tried persuasion, promises, bribes, threats, fraud, and coercion. The United States promised new land, education, economic help, and relocation aid in return for the Indian’s ancestral land. When nothing convinced tribes to consent, soldiers forced them out” (NMAI Nation to Nation 2015). The text puts forward multiple viewpoints, clearly illustrates the pressures Native leaders faced, and ultimately reveals the extreme violence the United States resorted to.

Further text showcases Native agency: “Native people east of the Mississippi knew their right to choose their own path was under attack...They objected strenuously and fought removal as long as they could” (NMAI Nation to Nation 2015). While the gallery does explicitly detail mass forced removals and other violations, it avoids “a wholesale declension narrative” (Genetin-Pilawa 2016) by continually highlighting native resistance. By including both the context for the forces causing struggle and the reactions against those forces, the NMAI more effectively utilizes truth-telling in this gallery and presents a clearer educational strategy.

Additionally, there is a significant departure from the abstract methods of display used in previous exhibitions. The use of objects in this gallery is minimal, but the ones chosen are powerful and act as support to the larger narratives told in the case studies. Among them are a Potawatomi prescription stick (ca. 1890), which records medicinal knowledge of a Potawatomi doctor. When Potawatomi people were forced from their ancestral home, thousands of years of medicinal knowledge was lost. This object adds another layer to the devastating story of removal, it shows us that, in addition to the loss of human life, knowledge and tradition were lost as well.

Other objects that stood out include an activist pamphlet (ca. 1893) entitled “The Red Man’s Rebuke” and a child’s boarding school uniform. The pamphlet allows the visitor to see evidence of active Native resistance to these government sanctioned policies, to read the words written by activist Simon Pokagon (Potawatomi). Throughout the gallery, it is continually emphasized that Native people resisted as much as they could, displaying the “active,
present agents” that Sonya Atalay was searching for in her review of “Our Peoples” (Atalay 2006).

Then there is the final object of the gallery, a child’s boarding school uniform, displayed in its own case.

**Figure 7: Carlisle Indian Industrial School uniform, worn by Osage teenager George Connor.**

It was worn by Osage teenager George Conner, while he was living at the Carlisle Indian Industrial School from the years 1885-1890, when he was between 12-14 years of age. The uniform showcases the active suppression of Native culture and tradition which occurred in boarding schools across the country. The object is accompanied by audio testimony from former museum director Kevin Gover (Pawnee): “I think a visitor can’t help but be moved by seeing that uniform because it’s so small, and it’s so clear that this was a child. To ponder that they were institutionalized against the will of their family at a very delicate age is just heartbreaking unto itself” (Gover 2015).

By displaying these objects individually, the stories behind them have room to breathe and are able to support the historical narrative presented by the gallery. While this method of display follows a more typical Western style, it meets the visitor where they are at and allows for better understanding of what the museum wants people to learn. Unlike the abstract displays described in the opening exhibits, these objects are not meant to be representative of larger colonial forces, rather they are presented as they are, and their stories are allowed to speak for themselves.

The next and last section of the exhibition centers Native political activism in the mid-nineteenth century and documents the return of Native sovereign rights. This gallery, entitled “Great Nations Keep Their Word,” brings the exhibition into the present day and demonstrates how contemporary issues such as violations of water and land rights are still occurring today. The exhibition ends with a powerful object, the mile-marker post (ca. 2016-17) from the Standing Rock Sioux Reservation in North Dakota. Indigenous people and their allies traveled many miles to join the Standing Rock Sioux Tribe in their fight against the Dakota Access Pipeline (DAPL), which was built without consulting the tribal nation it would most affect. The mile-marker post was built to show how far some of the protesters had traveled to be there, to fight for the sovereign rights of Native nations. It is a poignant end to the show, making it clear that Native peoples rights are still being violated to this day, and that the fight continues.

**CONCLUSIONS: IS THE WORK EVER DONE?**

In Amy Lonetree’s reviews of the opening exhibitions of 2004 she concluded that “until [the NMAI] and its exhibi-
tions describe the genocidal acts committed against Indigenous peoples, until we name the specifics of a shameful history that every American should be held accountable for, until we tell the truth to a nation and a world that had willfully ignored this history or tried to silence our versions of the past, this museum on the National Mall in Washington DC will remain a museum that serves the interests of the nation-state” (Lonetree 2008). In recent years the NMAI has taken significant steps to remedy this issue, shown a willingness to listen to criticisms, and has improved its truth-telling along with its educational clarity. Nation to Nation exemplifies this strategy for the NMAI, one that serves to educate its visitors through clear, direct language and a dedicated effort to confront the hard truths of the past.

However, there is always room for improvement. In her book, Decolonizing Museums, Lonetree is highly favorable to the Ziibiwing Center of Anishinabe Culture & Lifeways located on the reservation of the Saginaw Chippewa Indian Tribe of Michigan and calls it a model of decolonial practice. She praises the center’s extensive galleries on the “Effects of Colonization,” which allow “for no silences around the forces that sought to destroy the Saginaw Chippewa…” (Lonetree 2012). The galleries are specific, detailed, and thorough, and they explicitly connect “the social problems of today with what happened in the past” (Lonetree 2012). This practice helps Native visitors from the community to understand the past and how policies of colonization are still impacting their lives today. Additionally, Lonetree notes the Center’s inclusion of a healing gallery entitled “Blood Memory,” in which tribal objects are used to emphasize the following message: “even through the darkest and most painful period in their modern history, the Saginaw Chippewa’s ancestors managed to create works of great beauty” (Lonetree 2012). This gallery was specifically designed to be a healing space for community members who may be confronting the real legacies of colonization for the first time. It uses objects to connect the past with the present, and to remind community members of the strength and resilience of their tribe during the “crying time” (Lonetree 2012). Lonetree draws a clear line between effective, detailed truth-telling and a powerful, healing impact within communities.

It may be challenging for the NMAI to take this approach, as it requires intense specificity of community which may not be attainable for a national museum. However, the museum has proven its deftness in collaborative curation and could create exhibitions which utilize truth-telling in an even sharper way. Additionally, building a dedicated healing space within the museum would benefit their Native and non-Native visitors alike. Participating in truth-telling as a museum visitor can be emotionally difficult and having a space to process emotions that arise would enhance the museum’s engagement with empathy. With these improvements, taken from Amy Lonetree’s recommendations, the NMAI would move further along the path towards decolonization.

In comparing the exhibition language and the use of objects in displays of two exhibitions ten years apart, it is clear that the NMAI has made improvements in the quality of their truth-telling. Throughout the years, the NMAI has set the standard for community collaboration on a national scale and continues to uplift Indigenous voices. Lonetree believes the NMAI “represents the most ambitious collaborative project to date” and praises them for not shirking “from the important responsibility to collaborate with Indigenous people” (Lonetree 2006). They have continued to serve Native communities since their opening, and with the shift towards more accurate and direct truth-telling, they have sharpened the clarity of their educational mission as well. While there certainly is room for the NMAI to improve, the changes they have implemented have already had a great impact and their responsiveness to their Native critics also bodes well for their decolonizing journey.
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OVERVIEWS
The Novel Coronavirus (COVID-19) pandemic has caused a seismic paradigm shift. It has changed how people socialize, communicate, work, eat, and care for one another. It revealed the need for an infrastructure at the ready to mobilize public health resources to respond to future unexpected health challenges.

COVID-19 is not the first health crisis we have seen that is wrought with misinformation and lack of effective educational outreach resources to help communities make appropriate science-based decisions. Examples include the Spanish Flu of 1918 and the AIDS epidemic of the 1980’s. We have seen Ebola epidemics in other countries that hit too close to home. In all of these, disparities in health education and the delivery of health resources and information made our national response less effective. While there are many excellent sources of information (e.g., from NIH, CDC, public health departments, and universities) about how to keep people healthy during pandemics, like COVID-19, information alone is not sufficient.

There are many other endemic health crises that did not disappear during the pandemic such as the seasonal flu, cardiovascular disease, substance abuse, and the continuing mental health challenges that have been exacerbated by COVID-19. Other critical issues need to be addressed. They include disparities in health outcomes for various ethnic populations, lack of access to healthcare services in many rural areas in the U.S., and low levels of health literacy for so many of our citizens.
The COVID-19 pandemic, and our national response to it, is a wake-up call for all communities to take immediate action. If communities are going to effectively respond to current and emerging health challenges, they will need to engage the whole community in order to have the necessary collective impact (Kania and Kramer, 2011) to improve the health and well-being of all their citizens. The collective impact model requires an anchor (or hub) institution that is trusted by community members that is willing and able to work with other community organizations such as hospitals, clinics, museums, K-12 schools, and community colleges. One institution that can serve as a community hub, for people of all ages and in every region of the country, is our public library system – the central focus of this paper.

**ROLE OF PUBLIC LIBRARIES AS COMMUNITY HUBS**

Communities value their public library as a hub for community engagement and lifelong learning. As places that offer their services for free, public libraries have become the “public square” by providing a place where members of a community can gather for information, educational programming, and policy discussions (The Aspen Institute, 2014; Dusenbery 2014a; American Library Association, 2018). In 2019, there were 1.2 billion in-person visits to the 16,560 public libraries and 647 bookmobiles in the U.S. (Pelczar et al., 2021). This is equivalent of about 4 million visits each day. Public programming expanded 17% since FY2012 (Reid, 2017); in 2019, public libraries offered 5.90 million programs across all age bands and on a variety of topics, which were attended by over 124.7 million people (Pelczar et al., 2021).

STEM disciplines and careers are an increasing focus of public library programs and services (Baek, 2013; Hakala et al., 2016; LaConte & Dusenbery, 2016). Libraries may provide STEM programs on their own, or in partnership with other libraries, museums, businesses, and schools to educate and engage the public in STEM topics (Koester, 2013; NRC, 2015).

They hold great promise for promoting STEM education and learning (Dusenbery, 2014a; Shtivelband et al., 2016; Gilbert et al., 2019). These informal, free-choice institutions (NRC, 2009) are creating makerspaces (Hartnett, 2016) and hosting STEM exhibits (Dusenbery et al., 2020). They also offer hands-on STEM programming, both in-person (Dusenbery 2014b; IMLS, 2018; Dusenbery et al., 2020) and online (Johnson et al., 2019; Vierow-Fields et al., 2021). The latter program type was especially important during the COVID-19 pandemic.

When the Space Science Institute initially surveyed libraries in 2008 (prior to [STAR Net](#)), many librarians did not feel comfortable conducting STEM programming, didn’t know that STEM exhibit opportunities were available to them (they were far more comfortable with history and literature subjects), and did not feel like they had received any instruction on how to implement a hands-on STEM program (Dusenbery, 2014a).

The latest STAR Net library survey, reported by Shtivelband et al. (2017), found that of the 717 responding libraries (49% of which were in rural/small communities), 75% offer STEM programming “more than once per month” or “monthly.” Most libraries surveyed (91%) were extremely interested or interested in offering more STEM programming, and 69% felt “ready” to offer STEM programs and activities to their patrons. In just a few years, libraries...
HEALTH LITERACY AND PUBLIC HEALTH: THE ROLE OF INFORMAL SCIENCE EDUCATION INSTITUTIONS

Health literacy and the importance of public health are in the news practically every day because of the COVID-19 pandemic. It’s important to understand the link between health literacy and science literacy. Health literacy and public health depend upon an understanding of science (e.g., anatomy, physiology, diseases) and the scientific process (including critical thinking and scientific uncertainty). There has been an astonishing amount of misinformation about vaccines and related health issues. Much of this misinformation comes back to a lack of understanding what science is and how scientific knowledge builds over time. The public’s confusion about science is a fundamental challenge not only for addressing the current pandemic but future ones as well. Public libraries and other informal science education (ISE) organizations (like museums and science centers) can play an important role by providing their communities with up-to-date and accurate information (and active learning programs) about relevant health topics that enhance health literacy.

For example, the Oregon Museum of Science and Industry received Science Education Partnership Award (SEPA) funding from the National Institutes of Health (NIH) to produce interactive STEM exhibitions on a variety of health and wellness topics (Coats, 2020). These included healthy eating and the importance of physical exercise (Eat Well/Play Well), our body’s microbiome (Zoo in You), and brain health (Happy Brain). These traveling exhibitions were developed with the help of biomedical scientists and used OMSI’s extensive bilingual and bicultural development process. The exhibitions have been on tour beginning in 2005.

The Association of Science and Technology Centers (ASTC) is leading a national COVID awareness program called Communities for Immunity. It is a partnership with the Institute of Museum and Library Services, the American Alliance of Museums, and the Network of the National Library of Medicine, with support from the Centers for Disease Control and Prevention. Collaborators include the American Library Association, the Association of African American Museums, the Association of Children’s Museums, the Association for Rural and Small Libraries, the Association of Tribal Archives, Libraries, and Museums, and the Urban Libraries Council. Its focus is on supporting the work of museums and libraries in engaging their communities in improving COVID-19 vaccine acceptance and confidence.

HEALTH LITERACY PROGRAMS IN PUBLIC LIBRARIES

Over the last ten years, public libraries have begun to develop various types of health programs for their communities from providing basic health information to improving health literacy. For example, the Public Library Association (PLA) contributed to the U.S. Department of Human Services report (2010) called the National Action Plan to Improve Health Literacy. This plan emphasized the importance of cross-sector collaboration between public libraries and community health organizations particularly to “support and expand local efforts to provide adult education, English language instruction, and culturally and linguistically appropriate health information services in the community.”

The Public Library Association published Health Happens in Libraries Part 1: Libraries Promote Health Literacy (Morris, 2016) to draw attention to this important topic. OCLC’s WebJunction offers a variety of health resources (such as webinars and infographics) that can assist libraries (and other ISE organizations) interested in building an effective health literacy program. See its Health Happens in Libraries initiative for help in getting started.

Two recent published studies address how public libraries can play a critical role in improving community health awareness and disparities. The first is the Libraries as Partners in Health study funded by CDC (Whiteman et al., 2018). This study used a 100-question survey that was sent to all library directors in Pennsylvania to investigate the types of interactions between library workers and patrons. The report concluded that “the challenges library staff members experience in meeting their patrons’ information needs suggest opportunities for public libraries to advance population health. Library staff members need additional
training and resources and collaboration with public health and health care institutions to respond to community needs through effective, evidence-based public health programming.”

The second study (Philbin et al., 2019) focused on the social determinants of health to examine the potential of libraries as a community-level resource to reduce health disparities. Social determinants of health inequality include factors such as transportation, addictions, food insecurity, and unemployment. For each determinant (10) they described how libraries could mitigate the inequality and offered several examples of past and ongoing services that U.S. public libraries are providing. The authors conclude that evaluation measures and resources need to be improved to really understand the outcomes of certain library interventions and to better understand the efficacy of library programs compared to those of other community-based institutions.

A LIBRARY EXHIBITION ON HEALTH

Discover Health/Descubre la Salud (Discover Health) 1.0 was a bilingual English/Spanish informal health education project funded by a SEPA award from NIH. The project period was from 2014-2020. It included the following partners: Colorado Area Health Education Center (COAHEC) at the University of Colorado Anschutz Medical Campus in Denver (lead organization), the STAR Library Network, the Latin American Center for Arts Science and Education (CLACE), and Knight Williams, Inc. (independent evaluator). Dr. Robert Russell served as its Media Outreach Advisor.

Six regional Colorado AHECs partnered with 10 Colorado libraries (regions are shown in Figure 4). The AHECs served residents in the same regions as the 10 participating libraries. The project’s main deliverables included an 800 square-foot, traveling library exhibit supported by community education programs and resources designed to engage library patrons within the state of Colorado to learn about key public health issues in their communities related to cardiovascular health, diabetes, and obesity. The project was designed to engage underserved Latinx and rural communities with the exhibit and programming and to encourage youth from these communities to pursue careers in health care professions.

The exhibit included a variety of interactive multimedia experiences, ranging from computer-based interactives to large-scale models of the heart and torso and other hands-on interactives (see Figure 5). The exhibit was hosted asynchronously by 10 Colorado libraries beginning in January 2017 at Sterling Public Library and ending in November 2019 at Penrose Public Library (Colorado Springs). During the planning and early implementation phase, the project team hosted a two-day training workshop in Brighton, Colorado in 2016 for participating library and AHEC partners. The training covered a wide range of topics including how to enhance the library-AHEC partnerships, understanding the exhibit components, ideas for library programs and outreach events, promising media strategies, and the project evaluation plan. The project team also conducted an abbreviated training workshop in Colorado Springs in 2019, at the Penrose Public Library.

EXTERNAL EVALUATION FINDINGS

Before the first Colorado library hosted Discover Health in January 2017, there was little precedent for the use of health-focused exhibits in the library setting. Based on the evaluation team’s cross-site analysis of the ten libraries that hosted the exhibit from 2017-2019 and in-depth case study of patrons’ experience with the exhibit at the final library site, the project findings indicated this is a promising approach. Taken together, the results demonstrated that the library and AHEC partners had a positive experience collaborating on their implementation of Discover Health and that the exhibit positively impacted patrons’ personal health and STEM engagement, as well as their interest, learning, motivation, and intentions to follow-up. These findings add to and extend the results reported from prior evaluations of library-based STEM exhibit projects (e.g., Dusenbery et al., 2020).
HEALTH SURVEY METHODOLOGY
The Colorado Area Health Education Center (COAHEC) in partnership with the Anschutz Medical Campus, the Colorado State Library, and the STAR Library Network released a twelve question survey on March 16, 2021 asking Colorado public library staff to provide information about their interest (and their community’s interest) in a variety of health related concerns. It also ascertained their willingness to join a trusted network of health professionals that would disseminate health information and learning opportunities to all communities in Colorado. The goal of this learning network would be to address chronic health issues and emerging crises in medicine and public health. The survey was open for a 2-week period that ended on March 30, 2021. A total of 64 library staff from public libraries in urban, suburban, and rural communities in Colorado completed the survey. This paper presents key findings from the survey.

HEALTH SURVEY RESULTS
Most respondents (61%) listed themselves as a library director or manager. This category included associate directors, branch managers, digital services managers, and supervisors. The next largest group was adult services staff (19%) followed by youth services staff (13%). The “Other” category (8%) included a librarian generalist, a librarian, library aide, and staff working in collections and outreach. The large percentage of directors/managers responding to the survey may be a consequence of the listserv used by Colorado State Library and the key purpose of the survey (learning about how Colorado libraries and library systems are confronting public health challenges). The unusual size of the adult services staff (19%) could also be due to the interest in developing effective health resources for adults.

Library Community Type. When asked to define the type of community where their library is located, 30 (45%) respondents identified their community as either rural or suburban/rural. Another rural category is resort (e.g., Aspen and Vail) though these communities are very different from other types of rural communities. They totaled 7%. Adding all the rural communities together the result was 52%. This is very close to the Hakala survey results of 54% found in their national sample and the 49% from the Shvivelband survey. Urban, urban/suburban, and suburban communities totaled 43%. The “Other” category (4.7%) included libraries that served a mixed population: urban/suburban/rural. The following pie chart represents the total respondents’ self-identified community types (n=64).

WHO ARE THE COMMUNITY MEMBERS YOU FEEL ARE UNDER-UTILIZING YOUR SERVICES?
This was the first of three open ended questions that helped the authors understand what community members/patrons were under-utilizing library services. This captures the populations that libraries feel are underserved. Selected responses are on the next page (Table 1).

Survey responses reflected the burning need for communities to provide critical services (such as food, shelter, and healthcare) and programs for their underserved and underrepresented populations. Diversity, Equity, Inclusion, and Accessibility (DEIA) are key factors in designing and implementing public library programs. In fact, DEIA is a core value of librarianship (ALA, 2019).
“More outreach to our homeless population”

“Our seniors, Latinx community, and homeless community”

“Low-income families”

“Some young families/20-30 somethings”

“Town Council! Teens”

“Domestic violence victims, people with mental illness issues, also regular community members who mistakenly still think we’re simply warehousing books.”

“Patrons for whom language, technology, and transportation are barriers.”

“Disabled Spanish speakers, immigrants, poor”

“Working parents”

“People who speak multiple languages and/or non-English speakers”

“Immigrant, refugees, teens”

“Spanish speakers, teens, and young adults (college aged)”

“Teens and school-age children; Seniors with Covid-related concerns”

“Everyone. Since the library had to shut down due to the pandemic our patronage has not totally picked back up to what it was.”

“Parents/middle-aged people”

“The elderly and teens.”

“Minorities, non-English speakers, more affluent community members”

“Males in their 20s-30s; Parents of High School Students; Business Owners; Working Professionals”

**DURING THE PANDEMIC, WHAT COMMUNITY MEMBERS WERE NOT ABLE TO ACCESS GOOD HEALTH INFORMATION AND RESOURCES?**

During the pandemic many services went to an online mode of operation including education classes for youth, ordering groceries and meals, tele-medicine, Zoom meetings, and workshops. Many rural communities were not able to take advantage of this changing landscape. Access to affordable and reliable internet service was a major barrier not only for Colorado communities but for many communities nationwide. The pandemic elevated the long-standing digital divide as an equity issue in the public’s eye.

The digital divide is real and has many deleterious impacts on a community’s ability to function in our ever-increasing technological world. The digital divide includes not only the lack of internet access in homes and/or the lack of computer access but it also includes lack of knowledge in using computer technology and the internet. Predominately seen in lower income, marginalized, and rural communities, the lack of internet access has many negative consequences in education, income disparities, and healthcare.

The COVID-19 pandemic has transformed libraries and their communities. Library staff have had to learn how to deliver essential assistance safely, while also pivoting their in-person programming to online delivery. As discussed in *Libraries Respond to COVID: Part 1* (Vierow-Fields et al., 2020), the beginning of the pandemic impacted library operations severely between furloughs, closings, and the need to engage with at-risk communities in a safe and healthy way. These changes will likely have impacts far beyond the period when COVID-19 is a threat. Bridging these gaps are essential aspects of social inclusion for just, fair, and equitable access to resources and opportunities to achieve a higher quality of life and well-being (van Deursen & van Dijk, 2014).
WHAT HEALTH TOPICS ARE MOST IMPORTANT TO 
YOUR LIBRARY AND COMMUNITY?

Figure 7: Important Health Topics

There was broad interest across many health topics as shown in Figure 7. A rust-colored line was placed at the 50% level to make it easier to see which topics were rated particularly high. These included Access to Healthcare, Health Insurance Information, Health Literacy, Aging, Child Health, Vaccinations, Lifestyle, Substance Abuse, and Mental Health. Notice that there where many topic areas near the 40% level. With the increase of air quality concerns due to pollution and wildfires, respiratory diseases (e.g., asthma, COPD, emphysema) will likely become more important in the future.

The Other category was small (10%) but included some interesting perspectives. One respondent said that “Housing is considered a public health (crisis) issue in our community.” Housing is related to homelessness and other socio-economic factors. Several respondents mentioned that “information and resources for children that are on the autism spectrum” would be beneficial. Another mentioned “health information in languages other than English (particularly Spanish in my community).” And finally, one said that “generally, access and awareness and opportunity for ANY type of health needs” would be important for their community.

WHAT GENERAL AGE LEVELS DO (OR WOULD) YOU 
TARGET WITH HEALTH-RELATED PROGRAMMING?

In the Hakala survey, Pre-K, elementary and middle school-aged children were the primary targets for STEM programs. Because of the health topic focus of this survey, the target age bands skew to older patrons: tweens/teens, adults, seniors, and multigenerational groups. This result is
consistent with the responses tabulated in Table 1, where health needs are a serious concern for all ages. Library staff felt that this topic would be of particular interest to older patrons. The large percentage for the tweens and teens category is particularly noteworthy. Respondents felt that library health literacy programs could be an effective way to engage this hard-to-reach demographic.

Interest development is a key aspect of learning and is tied to other concepts such as motivation, engagement, identity, and attitude (c.f., Hidi and Renninger, 2006). These learning constructs are important when considering how to design learning environments and programs that can have deep impact upon library patrons and community. They all include various elements of affective, cognitive, and social/cultural interactions (Falk and Storksdieck, 2005). This survey found that a large percentage (81%) of the respondents were interested or very interested in providing health programs with health organization partners (See Figure 9).

The results shown in Figure 10 demonstrate that many health program types (e.g., exhibits, screenings, kits, workshops) have high interest levels in the combined Interested/Very Interested categories. Those that are substantially greater than 50% include hands-on exhibits at 65% (such as Discover Health mentioned earlier); health fairs at 65%; health screenings at 71%; story time at 65%; hands-on workshops at 76%; circulating kits at 63%; and teen science cafes at 75%. The latter result is very surprising and exciting because it shows that public libraries feel that programs like this could attract tweens and teens, a challenging demographic to reach (YALSA, 2016). Interest in health-related story time programs was strong (65%) and would be appropriate for children birth-six. For adults, interest in health screenings and hands-on workshops is very high (>70%). These results clearly show that library staff feel that health programs could be an effective strategy to engage the whole community!

WHAT ORGANIZATIONS DOES (OR WOULD) YOUR LIBRARY PARTNER WITH FOR HEALTH-RELATED PROGRAMING? The two largest responses to this question (see figure 11) were public health departments (72%) and K-12 teachers and school districts (43%). The next group of responses (20%-30%) included many organizations that libraries are currently or are planning to partner with (health clinics, hospitals, science museums, community colleges/universities, and the “Other” category). The “Other” category included the following types of organizations: Tri-county Health Network, local experts, Catholic Charities, county mental health departments, Early

![](Figure 10: Interest in specific health programs)

![](Figure 11: Library partners for health-related programming)
Childhood Councils, health food stores, and the Alzheimer’s Association. Libraries can develop collaborations with these types of organizations to expand their community reach.

Communities in Colorado, and beyond, are faced with many daunting health-related challenges (e.g., COVID-19, health disparities, homelessness). Developing and nurturing key partnerships is an important strategy to address these challenges. By working closely with like-minded organizations, libraries and their partners can achieve much more than if they worked in isolation.

CONCLUSIONS
Public libraries are particularly ideal for reaching populations in need of quality health information and resources as they serve people of all races, ages, and socio-economic backgrounds and are re-envisioning their mission and role in the community to be more inclusive and sustainable. But more needs to be done.

Disparities in health education and the delivery of health resources and information to vulnerable populations are at the crux of many of the health challenges our country faces. On a national level, it is far from certain when public libraries, or our nation and world, will return to a new “normal.” Challenges, such as digital divide inequalities, homelessness, access to affordable healthcare services, will need to be addressed locally as well as nationally.

This survey showed that library staff in Colorado are very interested in establishing a robust health literacy program that covers all age bands from Pre-K to seniors and are enthusiastic about partnering with community-based organizations who can help them achieve long-term success. Library respondents were also interested in establishing a Health Response Network that included libraries, public health departments, universities/community colleges, and other community-based organizations.

The COVID-19 pandemic made it abundantly clear that informal science education (ISE) institutions cannot operate in a vacuum. While libraries and other ISEs have always found their collaborations to be important, the pandemic has shown it’s even more critical now. Such partnerships can improve access to health services and provide the necessary training for community members to better understand how to maintain their physical and mental health.

There are, for instance, cross-sector models where community partnerships between libraries and science museums have been established and are successful (e.g., in Ithaca, NY; Columbus, OH; Portland, OR; and Seattle, WA). Similar efforts can make a real long-term difference to the health and vitality of all communities, large and small, across the country.

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WALTER’S HIERARCHY OF MUSEUM NEEDS

By Charlie Walter

In 1943, Abraham Maslow proposed a hierarchy of human needs\(^1\). His theory noted that a person must satisfy basic, physiological needs (food, water, shelter) before directing behavior towards upper level needs, such as esteem and self-actualization. After reviewing Maslow's model for a museum administration class I was teaching, it struck me that museums “behave” in similar ways.

A MUSEUM’S PHYSIOLOGICAL NEEDS

At the most basic level, a museum needs attendance and revenue to survive. If the numbers do not work, the museum will struggle. When this happens, many museum meetings focus on attendance and the budget. How do we attract more people? Can we charge more? Do we need to layoff staff? Can we do a better job fundraising? Sustained financial stress can lead to deferred maintenance on the museum building itself. When the roof starts leaking and you must close a gallery, financial trouble caused by poor performance operationally now compounds into capital funding needs. These critical issues dominate and often keep the organization from talking about new exhibits, programs, partnerships, or professional development. Most of the energy is focused on day-to-day survival. This is a hard place for a museum professional to stay in for very long and staff turnover could be high. A Board might turn to a financial manager as a director because getting the numbers right is so important to the organization’s survival.
A MUSEUM’S SAFETY AND SECURITY NEEDS
If a museum can adequately meet its Physiological Needs, it can then start thinking more long-term about how to more fully embed itself into the community to further stabilize its operations. Thoughtful consideration can now be given to how the institution is perceived. Brand messaging about the institution’s value can be developed and marketing dollars expended to embed this in the community.
Staff begin to attend meetings outside the facility to build relationships. Perhaps the museum is now able to increase wages, start or upgrade health insurance coverage, or begin a 401K matching program in an attempt to lessen staff turnover?

A MUSEUM’S NEED FOR BELONGINGNESS, SOCIAL, OR LOVE
Once a more sustainable operating model is achieved, the institution may decide to invest in a membership with a museum association to build its capacity and reputation statewide or nationally. Cross-institution collegial support is one of the hallmarks of museum practice. Because more of the basic needs are being met, the institution and its staff can now take time to go to a conference or reach out to a sister institution and spend a day visiting them to learn.

A MUSEUMS ESTEEM NEEDS
Now that a museum has a solid reputation, and continued presence at statewide or national meetings, it may begin to think about achieving higher recognition in and beyond its community. The institution may encourage its staff to present at conferences to further its reputation. Senior staff may join a community of practice, now able to use their growing experience to help others while improving their own professionalism. The museum’s capacity and professionalism are now at a point where it can consider writing a national level grant (to IMLS or NSF for example) because it feels that it has earned a solid reputation which will be furthered through the awarding of a national grant.

A MUSEUM’S SELF-ACTUALIZATION NEED
At this level the museum has achieved its greatest potential. It is a true leader in the field and can point to many field-wide priorities and show clearly how it is addressing these. The Director may sit on the ASTC, ACM, or AAM Board. Senior team members represent the institution on exhibit or program partnerships with other museums or on the City’s Leadership program. The museum is pushing the field forward through its creative, new approaches.

This can occur when the museum decides to expand its facility. The complexity and stress involved in museum expansion can require all of leadership’s attention. This can draw it away from existing “higher level” work. Capital fundraising for the new building can take away dollars usually raised for operations. Creative time usually spent on new exhibits and programs may be needed for architectural programming. Professional development and conference travel may be put on hold because of the need to make detailed choices about what areas in the planned new building may have to be cut or reduced due to escalating costs.

And when the new facility finally opens, it may not perform as expected. They rarely do. Attendance and revenue may fall short. Donor fatigue can decrease gifts for operations. The community may not embrace a new interpretive approach. Maintenance and operating costs could increase dramatically. New exhibits may not hold up. Substantially more staff may be needed to run the floor. It can take a decade or even longer to achieve a new, stable operating model and begin to work towards higher level needs once again.

This Hierarchy of Museum Needs can help you evaluate an organization and your place in it. If you like the challenge of meeting attendance and revenue goals, a good fit for you may be in a new museum just getting started. If you are looking for a good, professional museum experience, perhaps a museum with a solid reputation and stable operating model is where you should be. If you have been in the field for some time and are hoping to make an impact at the highest levels, a museum with a stellar reputation that has just expanded may require a closer look to see how the focus may have changed due to new operational realities. Thoughtful consideration and reflection of where a museum sits along this hierarchy of needs may help you predict what lies ahead, avoid the frustration that comes from unmet expectations, or as a professional seeking just the right career challenge, find the perfect new position.

NOTES

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Community Listening Project: Front End Research With the Harwood Model

By Charlie Trautmann, Bill Booth, and Lola Adepoju

Looking Outward... Within a Community

The Community Listening Project was a two-year, front-end research study carried out during 2019–21 to assess the aspirations of, and for, youth in Tompkins County, New York. We undertook this project as the first step in planning a new program for middle school youth throughout the six school districts in the county.

The project was initiated by the Discovery Trail, an upstate New York association of seven museums plus the regional Finger Lakes Library System. The organizational goal was to “look outward”: to listen to the youth and adults in the community and focus on identifying aspirations to be supported, rather than problems to be solved.

The Discovery Trail runs an extensive educational field-trip program for elementary-aged children that reaches more than 5,000 children (over 80%) in the county each year. The aim of the organization is to create a follow-on program to maintain students’ informal learning experiences with its members. The existing elementary-age program, Kids Discover the Trail!, began in 2005 and, in addition to funding a field trip to one of the eight Discovery Trail sites for every child annually, the program provides a book for each child each year that supports the field trip. For example, all second graders visit the Sciencenter—a member of the Discovery Trail—each year and receive a book on renewable energy, reinforcing the windmill activity they participate in during their field trip. Also included in the program are teacher workshops, plus pre- and post-visit activities that support the New York State educational standards.

In its role as an association that advances learning through its member museums and libraries, the mission of the Discovery Trail is: “To engage the curiosity of Tompkins County residents and visitors through nature, culture, science, and art.” The association’s vision is: “A vibrant, informed, and engaged community.” In addition to addressing the community’s aspirations for youth, as identified in the study, the new middle-school program will also have an overarching goal of engaging all youth in ways that advance the missions and visions of each Discovery Trail organization and its partners.

Overview of the Study

The first of three phases, the Pilot Phase, began in Fall 2019 and consisted of 23 interviews—conducted in-person or over the phone—to test and refine the interview questions and process. The resulting questions from this phase were used for the remainder of the project.

In March 2020, the Interview Phase began. Most interviews were conducted by Zoom and phone, although some in-person interviews and focus groups were also conducted. Online surveys, using Qualtrics survey software, were conducted during student classes (distributed by teachers) and through social media. In-person focus groups, primarily with teams of youth, were held at community centers and schools. The interview phase took 14 months and was completed in April 2021.

In March 2020, the worldwide coronavirus outbreak began, limiting our ability to conduct in-person interviews for much of the study. Although it could be argued that our top theme—Foster Relationships—is simply a reflection of the sudden termination of regular in-person socialization, we were careful to ensure that our study was not biased in this way. First, the questions we asked were broad. In the few cases where we heard a reference to the coronavirus in an interview, we asked the participant to look beyond the pandemic and think about before and after the current situation. Second, we heard few responses dealing with a lack of personal contact. Instead, many participants spoke about a broad lack of empathy, understanding, and appreciation among the residents of our county.

The resulting interview, questionnaire, and focus-group data were coded (tagged) after each interview, using ATLAS.ti software provided by the Cornell Center for Social Science. During the coding process, researchers at Cornell’s Environment and Community Relations (EnCoRe) Lab noted dozens of themes expressed by Tompkins County residents, tagging them with labels—or “codes”—for subsequent analysis.

The third and final phase of the project, the Analysis and Write-Up Phase, took place from March to August 2021. During this phase, the survey data were analyzed for common themes and promising outlier ideas.
OUR STUDY PARTICIPANTS
Tompkins County is located in the Finger Lakes Region of central upstate New York. It includes the City of Ithaca and nine towns. The U.S. Census estimated the county’s 2019 population as 102,180, with the following demographics:

- 77% White (not Hispanic or Latino)
- 10% Asian
- 5% Hispanic or Latino
- 4% Black or African American
- 4% Two or More Races
- 0.5% American Indian and Alaska Native
- 0.1% Native Hawaiian or other Pacific Islander

15% of the population is under 18, and 15% are 65 or older. 51% are female. Of residents 25 and older, 94% have a high school degree, and 54% have a Bachelor’s or higher degree. These statistics, however, don’t reflect the true diversity in the county, which ranges from highly degreed academics, professionals, and wealthy entrepreneurs to low-moderate SES suburban households to farmers, rural poor, homeless individuals, non-English-speaking Southeast Asian immigrants, urban Black families, and other diverse groups.

In conducting this qualitative front-end survey project, our goal was to reach the broadest possible spectrum of Tompkins County’s residents, because we wanted to gain the fullest possible understanding of our community’s aspirations. We wanted to hear from various age groups, races, ethnicities, and municipalities within the county; so rather than seeking a random sample, we specifically targeted a diverse array of groups of county residents and talked with enough members of that group to understand their likely range of responses.

With this approach, we were able to learn from immigrant communities, urban youth of color, rural communities, and professionals who work with these groups, along with suburban youth, and professional adults, teachers, and many others.

We used a networking approach to identify and then connect with youth and adults in all six school districts. Our survey included, for example: downtown Black teens; rural youth; county youth program administrators, leaders, and participants; teachers, administrators, and school board members; Vietnamese immigrants; business leaders; university professors; and non-profit educators and CEOs.

During the course of this project, we gathered input from 317 individuals through more than 250 interviews, focus groups, and online surveys. The breakdown of outreach methods was:

<table>
<thead>
<tr>
<th>Method</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviews</td>
<td>90</td>
<td>29%</td>
</tr>
<tr>
<td>Questionnaires</td>
<td>176</td>
<td>56%</td>
</tr>
<tr>
<td>Focus group participants</td>
<td>51</td>
<td>15%</td>
</tr>
<tr>
<td>Total participants</td>
<td>317</td>
<td>100%</td>
</tr>
</tbody>
</table>

The participants were 57% female, 40% male, and 3% nonbinary/of unspecified gender. Students in grades 7-12 constituted 62% of participants, with adults making up the remaining 38%. Residents of all six public school districts within Tompkins County participated, namely: Ithaca City, Dryden Central, Groton Central, Lansing Central, Newfield Central, and Trumansburg Central School Districts. 81% of responses came from residents living in the Ithaca City School District (the largest in the county), while 19% of responses came from residents living in the remaining five, largely rural school districts.

THE SURVEY
In coordinating the Community Listening Project, we were inspired by the approach of the Harwood Institute for Public Innovation, which is:

rooted in a philosophy of Civic Faith, which holds that placing people, community, and shared responsibility at the center of our shared lives will create a more just, fair, inclusive, and hopeful society for all.

– The Harwood Institute

The Harwood approach is based on the concept of “Turning Outward”—which means having a mindset in which the community itself is the reference point for creating change, rather than any one organization or its board.

To lay the groundwork for sustained success, we sought to understand our community’s aspirations and how we might use the resources of the Discovery Trail to support those aspirations. In essence, we sought to look for intersections between community aspirations for youth and the capacity of the Discovery Trail and partners, as indicated in Figure 1.

**Discovery Trail Community Listening Project**

**Figure 1: The Community Listening Project sought intersections between the community’s aspirations for youth and the mission of the Discovery Trail.**
The Community Listening Project was based on four open-ended questions:

**What kind of community do you want to live in, and why is that important to you?**

**What kind of community do youth need to develop to their fullest potential, and why is that important?**

**How would that be different from the way you see things now?**

**What would it take to create a kind of change?**

These four questions served as the basis for all of our interviews, focus groups, and online surveys. Data collection began as Tompkins County was shutting down at the start of the coronavirus pandemic. Because of this shutdown, only a small number of interviews were conducted in-person, with the majority occurring over Zoom or by phone. The Discovery Trail board members—along with the members of the Steering Committee—were the primary interviewers for the Community Listening Project. Initially, we tested the survey by interviewing friends, family members, and work associates of Discovery Trail board members. Following this pilot phase, we identified a wide range of sub-communities and forged connections via the Steering Committee, prior interviewees, and networking. We connected interviewees to interviewers through virtual introductions, often made by a previous interviewee or a person familiar to the interviewee.

The steering committee, which was composed of well-connected individuals from local educational, business, and community organizations, were instrumental in identifying the diverse array of youth and adults to interview, as noted above.

After coding, we counted the themes mentioned in each of the transcripts, and then calculated their percentage as the number of transcripts in which a particular theme was mentioned, divided by the total number of transcripts. If the focus group was of mixed gender, the interview was counted with both males and females. In regard to gender demographics, 57% of responses were from female residents, while 40% were from male residents. The remaining 3% of responses came from participants who either identified as nonbinary or did not report their gender identity. About two-thirds (62%) of responses were from students, while the remaining responses (38%) were from adults.

Our analysis of the answers to the four questions focused on two goals: 1) to explore the key ideas noted in the responses, along with how people feel and talk about them, and 2) to prioritize these aspirations, as expressed by study participants. To accomplish these tasks, we compiled the aspirations we heard and grouped them into themes, from which we determined the percentage of participants mentioning each theme. We calculated these percentages for the entire participant group, as well as for sub-groups stratified by gender, age, and school district.

A secondary goal was to look for good, creative ideas that could be implemented immediately, as well as high-impact ideas that may have been mentioned by only a small number of study participants, including those with the potential to be implemented by other community organizations. Overall, the study was oriented toward overarching aspirations, with the intention of leaving solutions up to a subsequent program planning group.

**WHAT WE HEARD**

When asked the initial question “What kind of community do you want to live in?”, a rich dialogue often ensued, with substantive—sometimes poignant—and occasionally profound—responses. Two dozen major themes emerged, with those mentioned by more than 15% of study participants shown in Figure 2 (next page).

While many of the conversations were inspiring, the act of coding them with terse labels for statistical analysis by necessity removes much of the inspiration, and with it, the essential nature of the response. To preserve the “juice” of what we heard, we flagged a number of memorable quotes to share with others. A few examples include:

**Foster Relationships**
- “I feel like inequality, besides being deeply rooted in most aspects of society, is partially caused by people’s tendency to only focus on their own needs, and not the needs of others.”
- “COVID has shown us that we are always going to need one another. If we don’t have these connections now, we won’t have them during times of crisis.”
- “A lot of people leave because they don’t feel connected. The more youth are connected and feel valued, the more likely they are to stay in our community when they become adults.”

**YOUTH DEVELOPMENT**
“My ideal community gives outlets for youth to express their gifts, talents, and abilities. This will help them blossom, develop roots to grow, and wings to fly.”

**DIVERSITY, EQUITY, AND INCLUSION**
- “One of the challenges of living within a culture that isn’t very rich in diversity means that the “other” can be scary. We must work to make this reaction, to other
cultures that are different from our own, manageable.”
• “If we are not inclusive, we aren’t a community, we’re just a bunch of people living in the same general area.”

In addition to summarizing the data as a whole, we segmented the data by gender (male & female), age (youth & adult), and geography (Ithaca City School District & five rural districts combined). As the data below show, the groups, however segmented, were remarkably similar in their responses.

MALE VS. FEMALE RESIDENTS
When broken down by gender, the top five themes for each subgroup are as listed in Table 1 and compared in Figure 2. Participants who reported their gender identity as nonbinary or who did not specify their gender identity (3%) were omitted from these groups.

Both male and female residents mentioned the same five themes as their top aspirations. Both groups mentioned “Foster Relationships” and “Youth Development” in their top three. Males, emphasized “Personal Growth and
Wellbeing”, to a greater extent, while females placed more emphasis on “Diversity, Equity, and Inclusion”. These gender-specific responses, while not large enough to alter the conclusions of the study, will be taken into consideration during the program planning phase of the overall project.

**ADULT VS. STUDENT RESIDENTS**

When broken down by age, the top five themes for each subgroup were as listed in Table 2 and compared in Figure 3. Here, we observed a strong difference in the perceived importance of Diversity, Equity, and Inclusion, with adults almost twice as likely to mention DEI as an aspiration, and about one-third more likely to mention Youth Development. On the other hand, students were about 50% more likely to mention Personal Growth and Wellbeing: a possible analog for Youth Development.

Overall, regardless of whether the survey participants were taken as a whole (all 262 responses) or segmented (such as by males and females, or students and adults), the top five priorities for each group included the themes listed in Figure 5.

<table>
<thead>
<tr>
<th>THEME</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foster Relationships</td>
<td>Residents desire better communication with, and connection to, other members of the community.</td>
</tr>
<tr>
<td>Youth Development</td>
<td>Residents want adolescents to grow up in an environment that allows them to flourish mentally, emotionally, socially, and academically.</td>
</tr>
<tr>
<td>Diversity, Equity, and Inclusion</td>
<td>Residents desire greater diversity in all aspects of their community—racially, culturally, politically, religiously, and age-based.</td>
</tr>
<tr>
<td>Personal Growth and Wellbeing</td>
<td>Children and teens need support from adults to develop emotionally, build their self-esteem and self-confidence, and reach their potential.</td>
</tr>
<tr>
<td>Engaged Community</td>
<td>Residents want to live in a community that is interested in its own self-improvement and active in involving all members in that growth.</td>
</tr>
<tr>
<td>Social Climate</td>
<td>Residents want their community to be welcoming and tolerant toward every person living or visiting there.</td>
</tr>
<tr>
<td>Safety</td>
<td>Tompkins County should be safe and peaceful, with low crime. No one should be targeted for their ethnicity, language, or skin color.</td>
</tr>
</tbody>
</table>
The highest priority themes are listed again in Table 5, in this case with the themes (in rows) ranked for each group segment (in columns). Notably, the theme “Foster Relationships” was the top-ranked priority for all participant groups, regardless of any segmentation. (If a group ranked two themes within 2% of each other, we assigned those themes the same ranking.)

The four key findings of the study, based on our analysis of what we heard in the interviews, were:

1. “Foster Relationships” was the top priority for a significant majority of participants (74%) throughout all age, gender, and geographic groups.

2. Most groups cited their second and third priorities as either “Youth Development” or “Diversity, Equity, and Inclusion” (~50% of participants cited both). As a group, students prioritized “Personal Growth and Wellbeing” as their second priority, which we interpret as being similar to adults citing “Youth Development” as a high priority, except from the personal perspective of youth themselves.

3. Rural participants cited “Safety” as a high priority, citing it equally with several other themes, after “Foster Relationships” and “Diversity, Equity, and Inclusion.”

4. Adults cited “Social Climate” as a priority, a theme that has some overlap with “Diversity, Equity, and Inclusion” but more specifically addresses the need for greater acceptance of alternative viewpoints and marginalized individuals and groups.

Taken as a whole, we interpreted the consistency in the three themes to be an indicator of the unanimity of the aspirations of our countywide community and a strong mandate for the program for which this study was intended to lay the groundwork.

**USING THE RESULTS**

The Community Listening Project provided a remarkably clear consensus among the residents of Tompkins County, New York, that a future program for middle school students should address three key aspirations by:

1. fostering relationships among people at all levels, from individual interactions to those at the community, regional, national, and global levels.
2. embracing best practices of youth development, including respecting youth for their energy, creativity, and their future participation in their community.
3. Building diversity, equity, and inclusion among all people in the community.

As a next step, the Discovery Trail has begun to assemble a diverse group of community members to develop potential program ideas, vet them within the group and with the community, and conceive a pilot program that incorporates the above goals while advancing the mission and vision of the organizations involved.

A significant outcome of the project is an understanding that the goals above should not only guide the pilot program, but just as importantly, they should guide all of the work of the program planning committee, and the community, as the pilot is developed and implemented. This process will likely require several years and will depend in part on how the current coronavirus pandemic plays out.
Once the group has planned a pilot program, the Discovery Trail intends to proceed with securing funding and testing the pilot.

ACKNOWLEDGMENTS
The authors are grateful to the many individuals, organizations, and school districts that contributed their experience and expertise in providing hundreds of hours of interviews, questionnaire data, and the organization of focus groups for this study. The steering committee, and in particular Randi Beckmann and Beth Pallace, helped the group reach a broad spectrum of residents of Tompkins County through their connections, expertise, and patience.

We thank the Cornell Center for Social Science for its generous support of this project through both software and technical support. Without them, this project would not have been possible.

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RELEVANT LINKS
Community Listening Project Report

Community Listening Project Study Data (262 transcripts of interviews and questionnaires)

Discovery Trail
https://discoverytrail.com/

Harwood Institute
https://theharwoodinstitute.org/

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ON THE COVER:

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