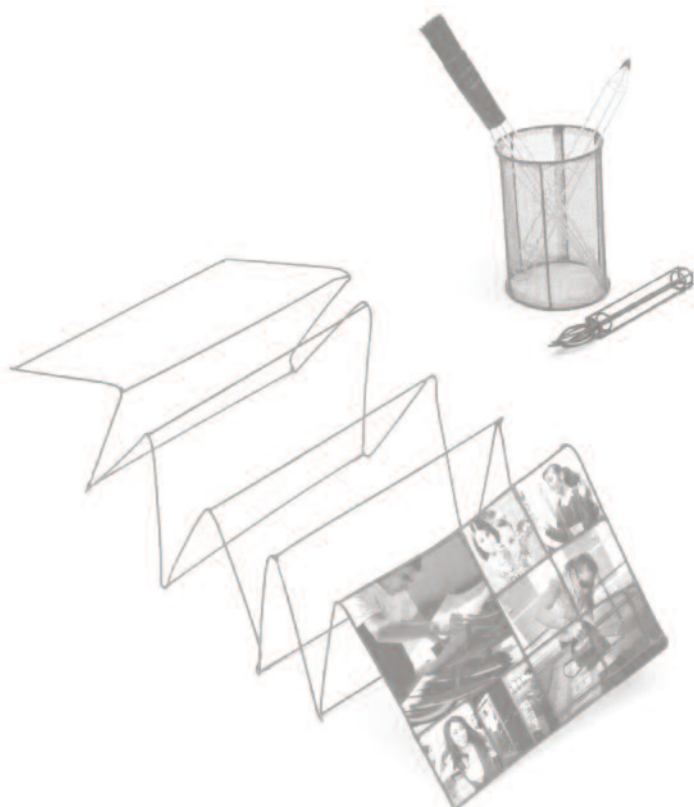


Inspiring Wonder,  
Discovery,  
and Learning  
through Interdisciplinary  
Museum-Community  
Partnerships

# Interplay



THE NATURAL HISTORY MUSEUM OF LOS ANGELES COUNTY

Lauren Stevenson, Elisa Callow, and Emiko Ono  
With a foreword by Richard J. Deasy

Interplay

Copyright © 2009 Los Angeles County Museum of Natural History Foundation, all rights reserved.

The Education and Arts Roundtable of the Natural History Museum of Los Angeles County is supported by a grant from The James Irvine Foundation. This project is also made possible by a grant from the U.S. Institute of Museum and Library Services, the Joseph Drown Foundation, and the Karisma Foundation.

the James Irvine foundation



EVALUATOR AND RESEARCHER: Lauren Stevenson  
ADVISORS: Elisa Callow, Richard J. Deasy  
PRODUCTION SUPERVISOR: Adrienne Lee  
PRODUCTION ASSISTANT: Erica Vasquez  
COPY EDITOR: Gregory A. Dobie  
DESIGNERS: Marika van Adelsberg / Jenny Yee  
COVER ART: Kim Abeles  
COVER ART PHOTOGRAPHY: Ken Marchionno  
PHOTOGRAPHY: Sean MacGillivray  
PRINTING: Typecraft, Inc.

# Interplay:

Inspiring Wonder,  
Discovery,  
and Learning  
through Interdisciplinary  
Museum-Community  
Partnerships

THE NATURAL HISTORY MUSEUM OF LOS ANGELES COUNTY

Lauren Stevenson, Elisa Callow, and Emiko Ono  
With a foreword by Richard J. Deasy

# CONTENTS

6	<b>Preface</b>
8	<b>Foreword:</b> THE MUSEUM AS MUSE
11	Chapter 1: <b>Interplay</b> A NEW VISION FOR THE MUSEUM
13	Public Programs
	Education
16	Bringing Outside In
17	Interdisciplinary Collaboration
20	Dedicated Exhibition Space
	Balance and Risk
23	Chapter 2: <b>Collapse?</b>
26	The HeArt Project
32	Kenneth L. Moffett Elementary School
41	Chapter 3: <b>The Mysterious Bog People</b>
45	Interdisciplinary Integration
59	Chapter 4: <b>Implications for Practice</b> CREATING RELEVANCY
61	ENHANCING RELEVANCY FOR MUSEUM CONTENT: Inspiration, Wonder, Discovery, and Learning
62	Imagination and Inquiry
63	Museum as Learner
65	RELEVANCY IN TEACHING AND LEARNING: The Role of Authentic, Professional Partnership
	Developing Partnership
67	Teacher and Artist Learning and Development
71	Student Learning and Development
74	CONNECTING WITH COMMUNITY
	Locating Community
76	Inter/Act
78	Interplay

81	Chapter 5: <b>The Day-to-Day</b> STRATEGIC DECISIONS AND PROGRAM PRACTICES
83	Partner Selection
	Meeting Logistics
84	Project Stipends
	Inter/Act Exhibitions
85	Project Resources
	Documentation
86	Museum as Partner
	Strategic Collaborations
87	Configurations of Project Partnerships
88	Saying “Yes” More Than “No”
	Approaching Museum Content Conceptually
	Growing and Sustaining the Roundtable
90	Conclusion
93	Chapter 6: <b>Extending Impact</b>
94	Context: Museums and Change
95	Challenges from Three Directions
99	Institutionalizing Innovation
102	“The Field”: What Questions Remain?
106	<b>Afterword</b> A RECENT HISTORY OF THE EDUCATION AND ARTS ROUNDTABLE
107	Responding to Change within the Museum
109	Impact on Teaching Practice
111	Impact on NHM Education Practice
114	<b>References</b>
116	<b>Acknowledgments</b>
118	<b>Photo Credits</b>

# PREFACE

JANE G. PISANO *President and Director, Natural History Museum of Los Angeles County*

The Education and Arts Roundtable comprises an innovative partnership of K–12 educators, community arts organizations, and the Natural History Museum of Los Angeles County. The program began nearly five years ago, and in 2006 a multiyear grant from The James Irvine Foundation enabled this idea to come to fruition. The Roundtable continues to be a robust incubator of ideas and exhibits. This report documents the impact of this program on schools, artists, and on our Museum. We believe our story can benefit other programs and institutions that may wish to adopt some of the approaches piloted by the Roundtable.

The Roundtable embodies the emphasis in our mission statement on the Museum as a force for inspiration and demonstrates ways that the Museum can realize its strategic objectives to serve as an essential resource for our communities and be a catalyst for change. We are particularly excited to work with K–12 schools and with artists to create transformative experiences for students, teachers, and artists and to make that transformation visible to their families, neighbors, and friends as well as the larger community of all Museum visitors. It is rewarding indeed to see the pride and enthusiasm of young children and their mentors as they stand beside the work they have created, sharing their experiences and explaining their ideas.

It is especially gratifying because these students, almost all of whom come from Title I schools, and their families might not otherwise imagine that the Museum could make such an important and rewarding contribution to their lives. It is not just a matter of access. The students and their parents return to the Museum outside of the project because the institution has become a place with which they are entirely comfortable. We are beginning to collect data about the long-term impact of the Roundtable on student performance in school, but observations we have made suggest that we also need to evaluate the influence of their participation on their lives and the lives of their families outside of school. It is not just that we have been added to their options for recreational destinations but that some parents and grandparents have sought information about volunteering at the Museum to continue and deepen their relationship with the institution.

The program has had an equally important impact on the artists who are integral to the process, from inception to completion, and on the larger education community—from prospective teachers in preparation programs to classroom teachers and school administrators. These partners value their access to Museum collections and staff, and they are energized by the interaction and supportive environment of the Roundtable. Perhaps even more gratifying to the partners are the ways the Museum has relinquished its traditional role as authority to embrace the Roundtable not as an adjunct but as a constituent of the Museum community.

Change is most successful when it is a two-way street, and this program has made significant contributions to the ways we in the Museum think about and implement all of our education programs. Indeed, the Roundtable has also become an important partner for our curators in science, history, and culture as they explore new methods of connecting their work to the public through exhibits, programs, and projects. We look forward to the ways this relationship will inform the half-dozen new galleries currently in development at the Museum.

We offer this book as a resource for those who seek a new model for transcending the limitations of current education practice—

in museums as well as in schools. We hope that the Roundtable experiences will inspire others as they have inspired us. We are grateful to many people and institutions for their contributions to the Roundtable; they are listed in the acknowledgments.

I would like to add a special acknowledgment to the Institute of Museum and Library Services for its support to continue and expand the reach of the Education and Arts Roundtable. As this report neared completion, we were gratified to learn that the Roundtable has been recognized by the American Association of Museums through the EdCom 2009 Award for Excellence in Programming.

The James Irvine Foundation has been an essential partner in this initiative, and I believe that readers will agree that the Education and Arts Roundtable has indeed succeeded as an innovative way to embody the mission of the Natural History Museum of Los Angeles County, “To inspire wonder, discovery, and responsibility for our natural and cultural worlds,” and to further the mission of The James Irvine Foundation as it seeks “To expand opportunity for the people of California to participate in a vibrant, successful and inclusive society.”



# FOREWORD THE MUSEUM AS MUSE

RICHARD J. DEASY *Founding Director, Arts Education Partnership*

This important report explores the impact and implications for a cultural institution that decides to take seriously what research has taught us about how people learn, specifically in this case, children, older students, and young adults.

The decision was implicit in the mission statement adopted by the Natural History Museum of Los Angeles County to guide the directions laid out in a new strategic plan: “To inspire wonder, discovery, and responsibility for our natural and cultural worlds.” It became explicit as the Museum’s leadership and staff sought to align their thinking and program activities with this new challenge.

The efforts of the Museum’s Education Division to respond to the new mission is the primary focus of this report, based on data gathered through observations and interviews conducted by researcher Lauren Stevenson over a two-year period. More specifically, the report explores the creation within the Education Division of the Education and Arts Roundtable—a “think tank” composed of educators from community-based cultural and educational organizations and administrators and teachers from county public schools invited to collaborate with museum researchers, curators, and education staff in exploring how the new mission statement should ramify within the Museum and in its relationships with the communities of Los Angeles that it serves.

The dynamics of the Roundtable’s interplay with the Museum itself—its institutional culture, structures, staff, and resources, and with the comparable factors in the public schools and community organizations of the Roundtable participants—yield a compelling story with findings and lessons important to the museum field and to education in general. At root, this is a story about the impact of taking learning seriously.

Deep understanding, we’ve been reminded lately by cognitive scientists and other researchers, requires active engagement in experiences that are relevant and challenging and where the learner demonstrates what has been learned in visible and tangible ways. Meaningful learning, that is, is a decision of the learner: the decision to invest the time, intellectual discipline, and willingness to participate in self-directed activities or opportunities provided by others to acquire and demonstrate new knowledge and skill. Opportunities arranged by teachers or educators must embrace this perspective if the activities are to have a positive impact on learners, particularly children and young adults. The emphasis shifts from teaching as the act of experts conveying information to learning as a collaboration in which the learner is assisted in developing the capacities and enthusiasm to find and act on personally relevant meaning through developmentally appropriate activities; that is, to be “inspired” by and take “responsibility” for what is being learned.

The insight—and the risk—that Museum leadership and staff, together with consultant Elisa Callow, embraced for making this shift was that the involvement of artists and arts learning processes could be a catalyst for the transformation of the Museum into a center of deep learning: the fulfillment of the intentions of its new mission statement. This report describes the rationale and impacts of this decision, among them the illuminating perspectives and processes that artists brought to the interpretation of museum artifacts; the extraordinary projects developed by students of all ages from the participating schools, demonstrating in artistic forms what they had learned from the museum exhibits; and, of great significance, the investigation of the interrelationships of science, history, and

the arts as manifested in the work produced and exhibited by the students.

Both Vanda Vitali, the vice president then heading the Museum's Public Programs Division, and Callow, consultant to the Museum and the Education Division, comment in the text on their rationale for the arts as a dimension of the learning experience in a natural history and science museum. "Effective learning occurs if you approach something from various perspectives," says Vitali. "Many roads lead to cognition. . . . Artists give us bridges to the imagination and imagination takes us to the edge where new knowledge is made." Callow adds: "In my work, I have observed a natural affinity between artists and scientists in their exploratory and iterative work process. They do not say, 'I believe this is so because I have been told so.' Instead they question, observe, take things apart, reanalyze. They start with conceptual sketches and continually refine. But artists are more used to working in community settings than scientists. And because artists' work is dependent upon honoring their inner voice, it was more natural for them to think about encouraging the visitor's imagination and personal connection to experience."

The validity of these insights is captured in Stevenson's descriptions and accompanying images of the experiences and projects of the students, teachers, artists, and administrators serving on the Roundtable. I was invited on several occasions to attend Roundtable sessions where the participants reported on the impact of these experiences on their own professional development and teaching methods and strategies. I was particularly struck by the passionate and eloquent comment by middle school teacher Cate Samson about her two years of participation: "The Museum has become my muse," she said. For her, its mission to inspire wonder and discovery was fulfilled.

Whether the efforts and outcomes described in this report achieve their fullest impact on the Museum itself is yet to be determined. The report is candid and thoughtful in recognizing the constraints the Museum, and by extension any educational or cultural institution, faces as it strives to preserve the values embedded in its current structures and processes while adapting to the demands from its various constituencies for greater service and relevancy. Callow, in a concluding chapter of this report, lays out those demands and the questions that must be addressed. What the report provides is a level of confidence that there is great value, demonstrable impact, and high potential in taking the path and risks it describes. For taking those steps and commissioning this report, the Natural History Museum of Los Angeles County is to be congratulated and thanked.



Chapter 1: Interplay <sup>A</sup>  
New  
Vision  
for  
the  
Museum

## CHAPTER 1: INTERPLAY

In 2002 the Natural History Museum's new director, Jane Pisano, proposed a strategic plan compelling the Museum to expand its focus from research and collecting to developing more active and inclusive community engagement. The Museum's board approved this plan to reinvigorate the then financially strapped and struggling institution and adopted a new mission statement to guide the shift: "To inspire wonder, discovery, and responsibility for our natural and cultural worlds." In structural terms, this new mission meant experimentation with exhibition design, changes in staffing, and an expansion of audience-development strategies. In philosophical terms, it meant reconsidering the visitor experience to create what consultant Elisa Callow called "interplay," or reciprocal action or interaction between the Museum and its constituents.

This focus on interplay aligns with learning theory conveying the importance to learning and motivation of active inquiry driven by curiosity and personal relevance (Csikszentmihalyi & Hermanson, 1994). The Museum sought to create museum and educational experiences in which visitors could not only access information about natural history and science but also actively engage with museum content and draw connections between this content and their own lives. Museum staff believed that experiences of this kind would help visitors learn, inspire them to want to learn more in the future, help them cultivate an appreciation for the importance of natural history and science, and motivate their stewardship of our natural and cultural worlds.

## Public Programs

The Museum began its exploration of the new mission in the Public Programs Division, headed by its newly hired vice president, Vanda Vitali. Public Programs explored a number of experimental approaches to the permanent collection and special exhibitions beginning with *L.A.: light/motion/dreams*—a multimedia exhibition considering the natural and cultural history and future of Los Angeles—and continuing with an exhibition series called *Conversations*. Through *Conversations*, Vitali invited practicing artists in the Los Angeles community to collaborate with Museum curators and researchers in the interpretation and development of exhibitions. Her premise was that artists bring a unique set of perceptions to bear on objects and aspects of the physical world and extend these perceptions in aesthetic forms and processes that illuminate their dimensions and meanings for other observers. Vitali saw artists as engaged in the creation of metaphors that aid in grasping the meanings of exhibitions. The engagement of artists with other Museum staff, she felt, would enhance visitors' experience of the complex scientific and historic material in the collections by inviting them to interact with the content in new ways, sharpening and intensifying their observations and interpretations.

Exploring how the collections could spark interplay with visitors and inspire “wonder, discovery, and responsibility” became an experiment in collaborative, cross-disciplinary work among Museum staff and community artists. In three different iterations of the *Conversations* concept, the Museum paired artists from various disciplines with curators and researchers in a collaborative exploration of the content of the Museum's permanent collections, including material that was not on view. In one instance, artist Ed Moses created a large-scale installation of African and South Seas totems found carefully wrapped in Museum storage. Through Moses's presentation, the carved

wooden figures appeared not as stored objects but actual personages held against their will, thus echoing the history of the totems' creators.

## Education

As the experimentation continued to evolve in the Public Programs Division, Pisano addressed the challenge of how the revised mission would affect the orientation of the Education Division. How should it respond thoughtfully to the new, aspirational mission, one that focused on profoundly deepening the educational experience by creating interplay with Museum visitors? She engaged Elisa Callow, a museum educator with extensive experience with community-based cultural organizations, to help the education staff evaluate the balance of their current programs in terms of audience, depth, breadth, and innovation as well as to develop some pilot projects to help them visualize a different form of connection with the Museum's communities.

“I realized,” Callow says, “that the institution, like many others, was an output machine—lots of material was created. To begin, I asked the Education Division staff three simple questions that are often forgotten in the concentrated energy and pressure of producing materials: Were the produced materials used? How were they used? And how did the staff know? And because they could not adequately answer these questions, the focus of the consultancy became clear to me—to help the staff shift from production (creating teaching materials) to learning to reflect on what the visitor was experiencing.” Prompted by the same view as Vitali that artists affiliated with cultural organizations could enrich the Museum's work, Callow proposed inviting local community arts organizations to collaborate with the Education Division to imagine what deep community engagement with the Museum and its collections would look like.







“I want to take these fabulous artifacts and turn history into a verb.”

—LISA CITRON, *(Out)Laws @ Justice*





### Bringing Outside In

With the Museum's blessing, Callow recruited community arts organizations representing multiple disciplines that had a clear intentionality around pedagogy and community engagement. She invited representatives of these organizations to join a community "think tank"—a small group she charged with working with Education Division staff to develop ideas and mechanisms that could help the Museum to fulfill its new mission. She asked each arts organization to invite energetic school personnel with whom they had worked to join along with them. "Since the group was conceived as a 'think tank,'" says Callow, "we had the luxury of starting and staying small and by invitation. I was looking for brilliance, creativity, flexibility, and experience with and belief in collaborative work."

Capturing the aspirational nature of the undertaking, Callow initially called this group of artists, educators, and Museum staff the Brain and Heart Trust. The name captured the essence of

the invitation the Museum was presenting to the group—to innovate work that could help shift the way the Museum conceived of itself as an institution and how it related to its constituents. The group later came to be called the Education and Arts Roundtable of the Natural History Museum of Los Angeles County.

From the beginning, the Roundtable was given an open frame in which to work. The Museum presented the group with a challenge, and rather than giving instructions or specific tasks, it offered Roundtable members time, space, and resources to create their own responses to the challenge. At their first meeting, Callow articulated the challenge to the Roundtable this way: "What would happen if this group received optimum materials, a project stipend, transportation for your students, time, thinking space, and the ongoing encouragement of a collective? How deep could you go, and what could the Museum learn from your work?" As Roundtable members discussed how they would respond, these nascent questions turned swiftly into a set of ambitious goals:

**"You have the objects and greater resources . . . we are smaller and have greater connection to our communities."**

—CYNTHIA CAMPOY BROPHY, *The HeArt Project*



- To provide a forum for educators to provide feedback about exhibitions.
- To see what might happen if teachers and artists had optimum time, support, and connection with one another to develop independent ideas about exhibition content.
- To support the participants' development of emergent curricula based on ideas presented in exhibitions.
- To share ideas and emergent curricula with one another and Museum staff to extend their value to other Museum programs and to the more casual Museum visitor.
- To participate in codifying and exhibiting the experience of their students for the benefit of others through a Web site or physical space within the Museum.
- For the Museum to learn from the strong program- and community-development practices exercised by smaller, more nimble youth-serving organizations.

### Interdisciplinary Collaboration

The central activity of the Roundtable became interdisciplinary projects in which artists, teachers, and students explored the content of particular Museum exhibitions together. Although each Roundtable project unfolded differently, they all shared some common qualities. All of the projects integrated at least one artistic discipline—sculpture, theater, or poetry, for example—with additional academic disciplines such as science, social studies, or English language arts. The projects connected the skills, processes, and content of these disciplines with the content of a particular Museum exhibition and the skills and processes practiced by Museum staff—including research and curatorial. These interdisciplinary projects provided students with a range of ways to engage with the Museum and to develop and make visible their capacities for exploration, discovery, and wonder. In addition, each project naturally developed components—through the collaboration of students, teachers, artists, and Museum staff—that drew out issues of community and identity and a sense of responsibility on the part of participants for the natural and cultural worlds represented in the Museum.

Roundtable members generally created projects working in small teams—one artist working with one teacher and his





### Past and Present Education and Arts Roundtable Partners

- 1 24th Street Theatre
- 2 & 23 826LA East & 826LA West
- 3 Angels Gate Cultural Center
- 4 Armory Center for the Arts
- 5 California Dance Institute
- 6 Child Educational Center
- 7 Cienega Elementary School
- 8 CityLife Downtown Charter School
- 9 The HeArt Project
- 10 James Monroe High School
- 11 Kenneth L. Moffett Elementary School
- 12 Kranz Intermediate School
- 13 LA Theatre Works
- 14 Los Angeles Public Library
- 15 Metropolitan Water District of Southern California
- 16 Natural History Museum of Los Angeles County
- 17 Northridge Middle School
- 18 (Out)Laws & Justice
- 19 Page Museum at the La Brea Tar Pits
- 20 Parras Middle School
- 21 Pasadena High School, Visual Arts and Design Academy
- 22 Poets & Writers
- 23 Social and Public Art Resource Center (SPARC)
- 24 Stella Middle Charter Academy





“The Museum’s potential impact is to be a framer of ideas, to be a creator of circumference where interaction occurs in a number of places.” —ELISA CALLOW, *NHM Consultant*

or her students. The meetings of the whole Roundtable—held every other month—served as an opportunity for the Museum to orient members to particular exhibitions and for members to exchange ideas. Over time, the group became more and more sophisticated in its use of the whole group convenings, as members began to document their projects richly, compiling student work, photographic and video records, and student, teacher, and artist reflections. This documentation fueled the exchange of ideas and members' ability to strengthen their projects by building thoughtfully on past efforts.

The project documentation also provided the Museum with rich material with which to interpret the significance of Roundtable projects for the Museum as a whole, in particular its education, public programs, and curatorial divisions. In their growing sophistication, Roundtable projects showed how the Museum collections and exhibitions could become more powerful learning experiences for children and the young adult population the Museum sought to reach. The projects also helped the Museum to connect with the deep roots that Roundtable members had in communities in Los Angeles, many of which regarded the Museum as disconnected from their lives before their engagement with Roundtable projects.

### Dedicated Exhibition Space

From the inception of the Roundtable, members advocated for creating a dedicated space in the Museum to exhibit their projects. In response to these early requests, Vitali and Callow, along with Education Division staff, developed an exhibition space called Inter/Act, designed to showcase the work that Roundtable members and their students created in response to exhibitions. The student work, in turn, acted as an invitational springboard for Museum visitor commentary. At times, the space became crowded with visitor responses—draw-

ings, questions, ruminations—all adding community “grist” to the space. Ownership of this valuable “real estate,” as Vitali called it, was given over to Roundtable members. The space, initially thought of as a mechanism for recognizing the culmination of work and developing connections between Roundtable members and the Museum, evolved into something more vibrant and multifaceted. It came to serve as evidence of the impact of exhibitions on Roundtable students, as a means to expand Museum visitors' understanding of exhibitions, and as powerful proof of the value accorded to the work of students and, by extension, their communities.

### Balance and Risk

Over time, Education Division staff saw that not only Roundtable projects but also the organic and open design of the Roundtable itself provided an important catalyst for the Museum in readying itself to achieve its new mission. The Roundtable required the Museum to take risks and to step outside of its usual ways of doing business. The Roundtable's success hinged on the Museum's willingness—and that of its researchers and curators—to share Museum resources and to relinquish its role as sole interpreter of its collections and exhibitions. For the Roundtable to have an impact within the Museum as a whole, the institution would need to embrace members' expertise in learning theory, practice, and community engagement. The more collaborative the relationship, the greater the impact would be on Museum and Roundtable members.

The following chapters tell the unfolding story of this collaboration and its contributions to thinking and activities at the Museum. They also describe Roundtable members' discovery of ways in which the collections of a major cultural institution could be mined as valuable learning experiences for students and communities, and of how participation in the Roundtable



enhanced their own practice as teachers and artists. In chapters two and three, researcher Lauren Stevenson describes in detail the involvement of Roundtable partners with two of the Museum's exhibitions: *Collapse?*, a special exhibition drawing on the arguments and themes in Jared Diamond's popular book *Collapse: How Societies Choose to Fail or Succeed*; and *The Mysterious Bog People*, an exhibition exploring the lives and cultures of the Mesolithic Period peoples of northwestern Europe, where human remains have been excavated from peat bogs. In chapter four, "Implications for Practice—Creating Relevancy," Stevenson summarizes the lessons derived from her evaluation of the Roundtable initiative. In chapter five, "The Day-to-Day—Strategic Decisions and Program Practices," Emiko Ono, the Roundtable's first manager, who is now on staff at the Los Angeles County Arts

Commission, elaborates on the processes she developed for managing the initiative, providing useful practical guidance to other museum professionals and their collaborating cultural and educational partners. In chapter six, "Extending Impact," Elisa Callow provides insight into the fundamental strategic and tactical decisions behind the initiative and analyzes how its full institutionalization at the Natural History Museum of Los Angeles County as well as at other museums would address the fundamental pressures and challenges currently facing the museum field. In an afterword, Carl Selkin, Vice President for Education at the Museum, describes the continuing growth of the Roundtable and how the project is influencing decision making and programming within the Education Division.



PRINTER FIX IMAGE



The background is a hand-drawn illustration on a light-colored surface. In the top left, there is a green, textured area representing foliage or a tree. A dark, winding line, possibly a path or a river, starts from the foliage and curves across the middle of the image. In the bottom right, the word "over" is written in a large, dark, cursive script. To the right of the word, there are some dark, scribbled lines that look like a signature or a set of initials.

# Chapter 2: Collapse?



## CHAPTER 2: COLLAPSE?

In February 2005, as the Education and Arts Roundtable was assembling for the first time, the Natural History Museum of Los Angeles County was in the final stages of developing an original, special exhibition called *Collapse?* It explored the role that environmental circumstances and other factors have played in the destinies of different societies, both past and present. The exhibition was inspired by ideas in the book *Collapse: How Societies Choose to Fail or Succeed* (2004) by the Pulitzer Prize-winning author Jared Diamond. Museum staff introduced the exhibition at a Roundtable meeting and gave the group an overview of the five areas on which the exhibition focused: 1) overall climate change, 2) management of environmental factors, 3) society's ability to perceive problems and act upon them, 4) change in trading partners, and 5) change in enemies.

After the overview, Roundtable participants discussed how they and their students might engage *Collapse?* "The Museum's primary activity is to collect and present static objects," said consultant Elisa Callow, facilitating the conversation. "You, as educators, are key to developing interaction with these objects." The group's conversations took on three broad questions posed by Callow: "How can you use an exhibition to advance your own work? What circumstances and resources would make this possible and optimum? What initial ideas do you see in the *Collapse?* exhibition?"



The Roundtable's community arts organization representatives and classroom teachers immediately began to develop possibilities for partnering with each other and the Museum to do interdisciplinary, arts-integrated projects related to *Collapse*? They imagined projects that could help students learn about the exhibition content as well as enable teachers and artists to address other teaching and learning goals and state education standards. These early conversations grew into a series of sophisticated and widely varying projects. Two exemplify the range of work the Roundtable produced in relationship to *Collapse*? The first is a program that the HeArt Project, one of the Roundtable's nonprofit arts organizations, created with high school students in five local continuation high schools, schools that Peter Harris, former director of programming at the HeArt Project, describes as designed for "dropouts, pushouts, and students who learn better in alternative settings." The second is a project that two first-grade teachers at Moffett Elementary School created in partnership with one of the Roundtable's participating visual artists.

### The HeArt Project

The HeArt Project links "overlooked teenagers" in continuation high schools with professional artists, cultural centers, and communities to imagine, produce, and present new work. The HeArt Project believes that "these young people are extraordinarily creative; that artists are a significant civic resource; and that their ideas, collaborations, and work benefit the entire culture." The HeArt Project currently brings its art programs to 24 continuation high schools in the Los Angeles Unified School District and the Los Angeles County Office of Education. The organization is guided by four core principles:

- **OVERLOOKED TEENAGERS** are intelligent, creative, powerful people who possess the capacity to meet the highest expectations.
- **ART** is indispensable; it enables us to communicate and inspires an empathetic society.
- **LONG-TERM** investment creates progress.
- Cultivating effective **PARTNERSHIPS** between artists, educators, and community organizations amplifies our collective impact on the students we serve.







Engaging the *Collapse?* exhibition, HeArt Project students and their teacher artists examined the “processes through which past societies have undermined themselves, and how societies can develop insight, creativity, and policies to avoid decline and ensure a healthy future for their citizens.” They explored questions posed by the exhibition and by Diamond’s book: How could a society that was once so mighty collapse? Might such a fate eventually befall our own wealthy society?

The HeArt Project created programs related to *Collapse?* with five of its partner schools: Central High School/All Peoples Branch, Central High School/Angelus Plaza College Preparatory High School, Central High School/La Familia Branch, Central High School/Northeast L.A. Branch, and Youth Opportunities High School. Each school worked with a different teacher artist from the HeArt Project in a different artistic medium. Each project culminated in a public presentation at the Museum.

In one project, dancer and choreographer Adrienne Campbell-Holt worked with students at Angelus Plaza College Preparatory High School to create a dance and theater piece on the concept of collapse. She remembers walking into the exhibition to get a feel for it before beginning work with her students. The date was September 8, 2005, and Hurricane Katrina had just hit the Gulf Coast and New Orleans. At the time, she says, “I felt like I was watching and experiencing many collapses. An entire city, individuals’ lives, the state and federal governments, the various agencies, people’s faith, and so on.”

As the project got started, Campbell-Holt found that students also felt a strong resonance with the theme of collapse and drew connections between the theme and what was unfolding in New Orleans and between the theme and their own lives. “Collapse is an idea that every one of my students has experienced in some way,” says Campbell-Holt. “The various horrific disasters of the [prior] year on a global scale—hurricanes,

“Collapse is an idea that every one of my students has experienced in some way. The various horrific disasters of the [prior] year on a global scale—hurricanes, tsunamis, earthquakes, and war—were the big picture, while private personal experiences were the close-up details we zeroed in on.” —ADRIENNE CAMPBELL-HOLT, *Dancer and Choreographer*





tsunamis, earthquakes, and war—were the big picture, while private personal experiences were the close-up details we zeroed in on.” A section of the exhibition focused on Southern California was particularly provocative for many students. “I think it raised consciousness about what is going on with the environment in California, how everything is interrelated, and what we can do,” she says.

Working together over the course of their fall semester, the students and Campbell-Holt created a dance and theatrical piece exploring the connections between the theme of collapse, New Orleans, their personal stories, and the future of the environment. “I started by listening to my students,” Campbell-Holt says. “We did brainstorming exercises using the poem by Shelley [“Ozymandias”] that Jared Diamond put at the beginning of his book; using text from Anna Deavere Smith’s *Twilight*, a play of interviews dealing with issues related to the L.A. riots; and images from art, history, and the daily newspaper.” Campbell-Holt set out to create a script for the performance from the students’ own words. To do so, she says, “I had to wait until they were willing to express themselves and then shape my vision for the piece based on the tone and themes they let me know were important to them.”

Early in the project, students participated in theater and movement exercises designed to help them find their own voice and to experiment with putting themselves in someone else’s shoes. These exercises, Campbell-Holt says, also helped “to get the students to begin thinking about the issues of collapse in a physical way. We worked together to get out of a classwide ‘Human Knot,’ to hold each other in trust falls and lifts, and we learned to listen to each other in games where we closed our eyes and completed a simple task such as counting.” These theater and movement exercises also helped students to develop the skills that they would need to create and perform their final piece together.





“Over the course of the term,” Campbell-Holt says, “the students’ trust in me and each other grew a great deal, and this enabled us to work better together. I also found that the commitment to the assigned projects grew quite a bit, and the students were willing to dig deeper into themselves in their writing, for example, and then share it with the class.”

As the students delved further into the project, the focus gradually shifted from skill and trust building and the development of material for the script to rehearsing for the performance that students would give at the Museum. It was important to Campbell-Holt and the students that the performance be “something everyone would be proud of.” Campbell-Holt observed, in particular, that the combination of increasing group cohesion, a sense of having fun, and a belief that they were working toward something that had “the potential to be great” helped any resistance students had to the work “fade away.”

At the end of the semester, the students in Campbell-Holt’s classroom performed their original piece at the Museum in concert with groups of students from four other HeArt Project sites. The students performed for each other and for Museum staff, talked about their work, and toured the Museum. Harris explains that such performances are an important part of HeArt Project classes for three reasons. First, students have the opportunity to share their learning, ideas, and hard work. Second, giving students the opportunity to present and discuss their work with others “cultivates the ability to speak.” Third, performing at the Museum helps to connect the students with the institution as a cultural resource. “So many of our youngsters,” Harris says, “don’t know our city that well.”

When the HeArt Project convened at the Museum to share its work on the *Collapse?* exhibition, student projects included not only dance and theater performances but also photo essays, writing, visual art, and video production. The Museum

displayed samples of the visual artwork in the Inter/Act gallery for visitors to view. Students provided reflections on their projects and the theme of collapse to serve as captions. In some cases the writing spoke directly to Museum visitors that might enter the gallery after going through *Collapse?* in hopes of prompting them to reflect on the exhibition in new or deeper ways.

Shafarra Norville, a student at Central High School/All Peoples Branch, wrote, “I would like to tell the public that, as a people will and are currently facing problems. If we continue to act carelessly about poverty, global warming, and other important aspects that we continue to bypass, we will face much more worse consequences.” Shafarra’s classmate, Janneth Arellano, wrote, “To me, collapse is how something that happens in another part of the world could affect all of us. For example, Katrina affected all of us, not just New Orleans. Now it [is] like everything that happens feels like the end of the world.”

Through their artwork, students participating in these projects expressed their own interpretations of the theme of collapse and their beliefs about why the theme and various components of the *Collapse?* exhibition matter in their lives. Developing and expressing these beliefs is an important part of the HeArt Project’s curricula. As Harris says, at the HeArt Project, “we use art to teach thinking and critical commitment to students’ own vision.”



### Kenneth L. Moffett Elementary School

Because of its proximity to Los Angeles International Airport, Kenneth L. Moffett Elementary School was constructed entirely underground. Its classrooms have no windows. The nature of the school's physical plant is a daily reminder to teachers of the need to help students develop a positive sense of identity and to find ways to connect the physically isolated school to the broader community of Los Angeles. Over 68% of Moffett students are English language learners, and so language development and literacy are also key concerns for Moffett teachers. When two Moffett first-grade teachers, Lena Garcia and Patti Cruz, began work with the Roundtable, they brought these concerns to the conversations.

As Museum staff described *Collapse?* to Roundtable members, Garcia and Cruz saw important potential connections between the exhibition themes and the curricular content that they needed to teach students in social studies, English language arts, English language development, and the visual and performing arts. The teachers worked with Roundtable visual artist Meriel Stern to create an interdisciplinary project to draw out these connections.

Before taking their students to see *Collapse?*, Garcia and Cruz worked with them in the classroom to introduce the exhibition content. “We felt that it was important for the kids to get familiar with the exhibit that they were going to be experiencing so that it wasn’t all brand new, and so that we could front-load some of the vocabulary that they were going to be encountering,” says Garcia. This preparation for their Museum visit was important, she explains, “because, first of all, the students are first graders—they were not going to be able to read the information in the exhibit—and second of all, most of them are English language learners. We wanted them to understand what they were going to be seeing and come to it with some prior knowledge.”

Garcia and Cruz began by showing students photographs of the exhibition that the Museum provided. Using Visual Thinking Strategies—a teaching program designed to support learner-centered discussions about visual art—they asked students to look closely at the images, share what they saw, and explain what the images reminded them of and why (Yenawine, 1998). This process allowed students to bring their prior experience into the classroom and use it as a departure point for understanding the exhibition. One student, for example, shared that to him the samurai armor in a section of the exhibition focused on Japan made him think of soldiers. Others said the armor reminded them of a ninja. The teachers worked from these connections and talked with students about how soldiers and ninjas are similar to and different from samurai. They also helped students develop an understanding of the role of the samurai in Japanese society as well as the role of the shogun, another important figure in the Japan-focused gallery.

The teachers continued to prepare students for their visit to the Museum, introducing them to two of the central concepts in *Collapse?*—that change unfolds as a process, and that there is a relationship between choice and change. To help students understand change as a process, Cruz and Garcia drew on Stern’s expertise. She taught the students how to make collages, working with colored paper and glue on poster board, and asked each student to make a collage of an object changing, illustrating it at three different stages in the process. The project helped students develop an understanding of how change happens over time, addressed California state visual art standards related to developing artistic skills and creating original artwork, and helped students to understand sequence—beginning, middle, and end—as required by California’s English language arts standards.

The Moffett teachers then introduced their students to the concept of choice and its relationship to change. This rela-



tionship is key to the *Collapse?* exhibition, which presents several examples in different countries—including Japan, Australia, and the United States—of how specific choices led to substantial change in the societies and natural environment of particular locales, while other choices were more sustainable and led to lesser changes. The exhibition demonstrates, says Garcia, that “the choices that we are making either lead to or keep us from the collapse of our society and our world as it is. The choice that the shogun in Japan made that every time you cut down a tree you have to plant another one, for example, we thought was central. The choice that people made to bring rabbits to Australia and then suddenly they take over everything—that was a choice that someone made that had a domino effect. We thought the students needed to understand what choice meant and our part in making choices.”

To explore how choices affect the natural environment, students read *The Lorax* by Dr. Seuss. They learned how the Lorax’s decision to cut down trees to build a city negatively

affected the environment. Students explored the story visually, drawing images of the effects of particular decisions made by characters in the book. One student drew a picture of the Lorax’s city showing that, without trees, the sky was polluted and black. After the students read the book, they also formed small groups and acted out parts of the story. Garcia and Cruz worked with performing arts frameworks in this part of the project to make sure that the students’ performance experiences were as rich and valuable as possible. Students, for example, developed skills in directing and acting and learned to create costumes and write scripts based on experience and literature.

The teachers believe that the multiple modes that the performing and visual arts offer for students to enter, explore, and relate to text are invaluable for all first graders and in particular for English language learners. As a whole, the interdisciplinary exploration of *The Lorax* allowed Cruz and Garcia to address California state language arts and English language development standards—in particular, standards related to reading com-

prehension (including relating prior knowledge to textual information and retelling the central idea of a story) and literary response (including identifying and describing characters, plot, and setting and the beginning, middle, and end of a story).

“When we finally went to the Museum to see *Collapse?*,” says Garcia, “we were sensitive about what we were going to see, what we were going to look for. When the students got there, they were ready to soak in the other information they could learn. From that standpoint,” she says, “we are grateful to have a need to get deeper into the field trip and to consider how to create as much meaning as possible. It’s not just that last field trip in May that is fun. It affects the whole school year and motivates us to link to the children’s lives.”

Of all the halls in the *Collapse?* exhibition, Moffett students connected most with the one focused on Japan. Students had developed a sense of connection with this gallery in their early conversations about the samurai armor it featured, ninjas, and the shogun. For the students, Garcia says, the shogun was important because “he was the one that made this really good choice that every time someone in Japan cut down a tree, another

would be planted. Just as *The Lorax* was our anchor piece for the classroom,” she says, “the story of the shogun and the image of the armor in the Japan hall were the anchor pieces for the exhibit. The students could really understand the concept of choice based on the shogun’s story and then make the connections to the other parts of the exhibit.” As students reflected on and explored exhibition themes in their visual artwork after their field trip to the Museum, the two teachers noticed that the shogun and samurai armor featured prominently in many of the students’ drawings.

During their field trip to the Museum, students used disposable cameras to document the parts of their visit that they found most important. Shortly after the visit, the teachers laid the developed photos out and had students do a “gallery walk” through all of the images to reflect on what they had seen. Garcia and Cruz asked students to select one photo apiece that represented what they thought was the most important part of their experience at the Museum and to write about why they had made that selection. One student wrote, “The most important thing that I want to remember is the thing that is most impor-







6-21-05  
 growing flower

The growing flower started with a seed  
 but then it got bigger and then it got better  
 then it was red and cute.

The End The End

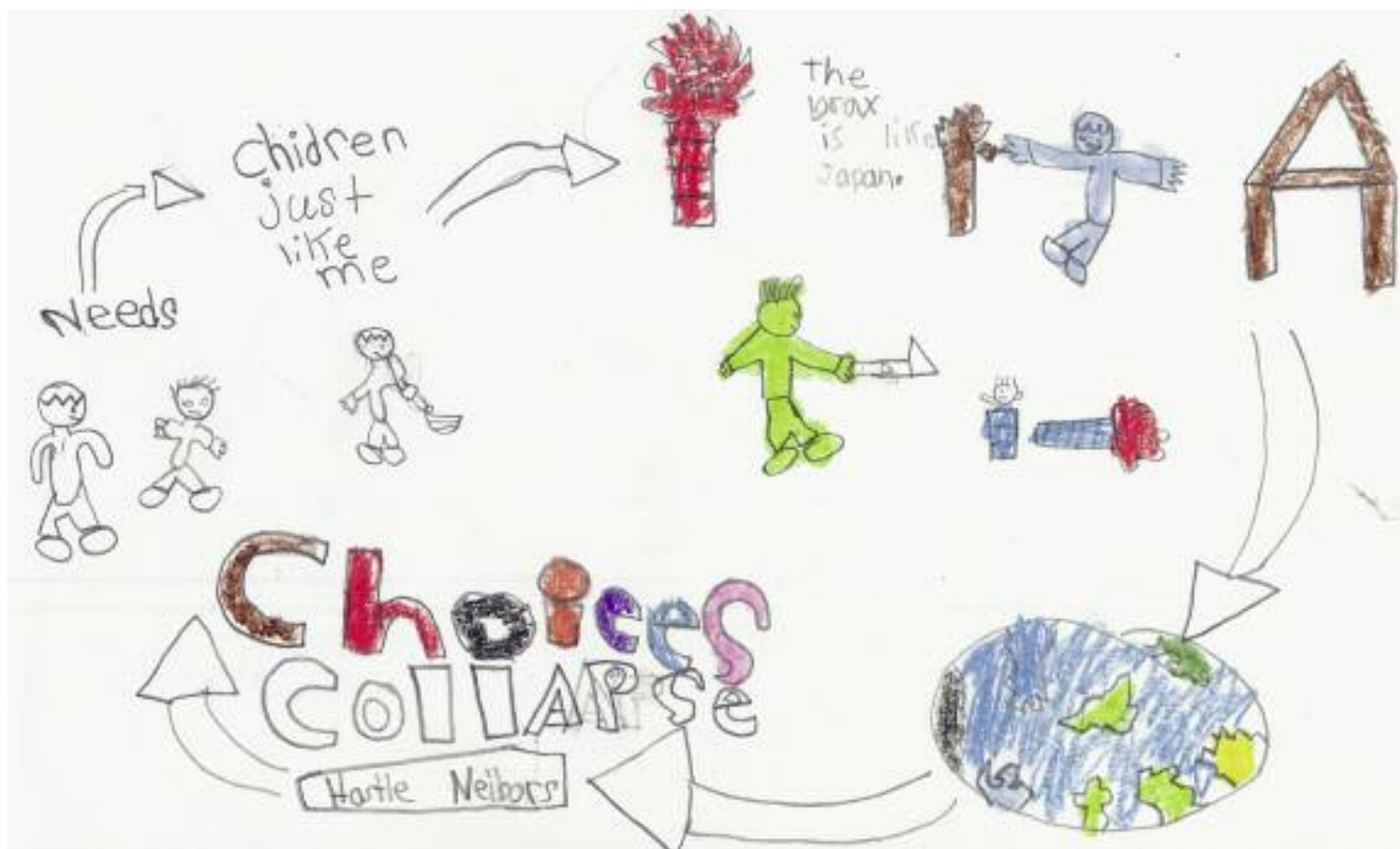




choice

now I changed





tant—to always change well, to always choose the good thing” (translated from Spanish).

Garcia and Cruz could have anticipated some of the photos that the students took—images of the samurai armor, a Mayan temple, and dinosaurs. Others, however, surprised them—images of loose change in a fountain and of a Museum stairwell, for example. Some of these latter images, they discovered, spoke to what students, many first-time visitors to the Museum, noticed about the institution itself as a place. One student took a photograph of a security guard that might have been interpreted within this latter category of documentation of first-time visitor experience. When the student described the importance of the image, however, he related it to the themes of the *Collapse?* exhibition. The security guard, this student said, was important because he was there to make sure no one made bad choices.

Moffett students continued their engagement with *Collapse?* for many weeks after their Museum visit until finally documenting their whole process of learning in personal journey maps, visual representations of what they had learned and the steps in their learning process. One student’s map began with the idea that all children have needs and that there are children all over the world “just like me”—concepts the class studied at the beginning of the project. The student then juxtaposed an image of the Lorax cutting down trees and not replanting them with one of the shogun planting a tree. The journey map ends with an image of a globe and a note about the importance of being a good neighbor. Garcia explains that this is a reference to another Dr. Seuss book they read during the school year, *The Butter Battle Book*, about respecting your neighbors and the idea that “how we choose to treat people will affect the world and what happens.” In the center of the journey map the student wrote the words “Choices” and “Collapse.”


The students’ journey maps make visible the process of

learning that was catalyzed as students engaged with Museum content in complex, interdisciplinary ways, over time. The glue for this project was the “big questions” that students were exploring throughout the experience. “When you have a ‘big question’ that you are wondering about,” explains Garcia, “such as ‘How do we affect the world with our choices?’ or ‘How does change affect the world?’ and you go to the Museum, the Museum serves as another resource for you in answering these questions. The Museum is one stage in your learning, and it can help to propel more questions, inquiry, and exploration. This is different,” she says, “from the way most people use the Museum, as an end product—‘we study Native Americans and then we go to the museum and see them.’ For us, the Museum was one of the parts of our journey map; it wasn’t the end.” Rather than being only an isolated data point, for Moffett students and teachers, the Museum became a catalyst for a complex journey of teaching and learning.







A young man with dark hair, wearing a white t-shirt, is focused on painting a large, abstract design on a wooden board. He is using a paintbrush to apply blue paint, which is already partially visible on the board. A blue cup is on the table next to him. The background is a plain, light-colored wall.

Chapter 3:

# The Mysterious Bog People

## CHAPTER 3: THE MYSTERIOUS BOG PEOPLE

“People stereotype my community all the time,” said Rafael Martinez, a twelfth grader at James Monroe High School in Los Angeles. “They look down on us . . . we can feel these stereotypes. Every time someone looks down on me or categorizes me in a group, I want to prove them wrong.”

“I would like people to see the better side of my community,” said Ethel DeGuia, a classmate of Rafael’s. “I would like them to know that we have great ambitions and dreams, and we are making our way to get there.”

These comments were sparked by the students’ explorations of an exhibition at the Natural History Museum of Los Angeles County called *The Mysterious Bog People*. The exhibition examined the lives and rituals of people living near the peat bogs of northwestern Europe from the Mesolithic Period almost 12,000 years ago to the end of the 16th century. Kelly Hanock, the students’ English language arts teacher, and Maura Draheim, their social studies teacher, were participating in the Museum’s Education and Arts Roundtable when the exhibition was installed at the Museum.

When the exhibition opened, curator Scott Van Keuren and Vanda Vitali, then head of the Public Programs Division, presented an overview of the exhibition to the Roundtable and facilitated conversations about the exhibition content with Roundtable participants. The Museum also gave the participants copies of the exhibition catalogue to take back to their classrooms and arts organizations.



*The Mysterious Bog People*, as Van Keuren explains, “deals with nearly 10,000 years of European archaeology.” The exhibition includes six bodies found in the bogs—uniquely preserved due to the chemicals created by peat decay—and a range of artifacts, from jewelry to musical instruments. Because bodies and artifacts were placed in the bogs over such a long period of time, says Van Keuren, the exhibition is not just about one group or tribe. Instead, the exhibition addresses “a whole sequence of cultures beginning with very early hunting and gathering groups in Europe all the way through the medieval period. There is not only a wide diversity of cultures represented in this time line but also a wide variety of objects in the exhibit.”

After their introduction to the exhibition, Hanock and Draheim initially had reservations about whether there would be dynamic links between the content of the exhibition and the content of the two curricular areas that they taught. As was their practice in beginning projects with the Museum, they brought the information on the exhibition back to their students and invited them to consider what “big questions” it raised for them. As the students and teachers began to explore these questions in depth, plans for an interdisciplinary project based on *Bog People* began to develop naturally. Despite their earlier reservations, Hanock and Draheim found that their students readily drew rich connections between the exhibition, the school curricula, and their own lives.

The students were initially intrigued, in particular, by the photographs of bodies in the exhibition catalogue and the ethical questions that the exhibition raised about handling and exhibiting human remains. The students engaged with their teachers in Socratic seminars about the exhibition. In these discussions, students raised questions about the topics of sacrifice, folklore, violence, morality, spirituality, legacy, survival, preservation, ritual, cultural investigation, research, and reconstruction



of the past. Students also wondered about their place in history, their own individuality and values, their need to understand and study history, society's failure to understand many historical lessons, and the role of stereotypes and judgments in American society.

More than two years later, Hanock and Draheim still remember the moment that they introduced the exhibition to their students and the series of related projects that unfolded over that school year. For these two teachers, these projects marked an important shift in both their students' lives and their own teaching.

After their initial introduction to the exhibition, the Monroe students took a field trip to the Museum to experience the exhibition in person. Before they entered the gallery, Van Keuren gave the students a presentation on the exhibition. Because of the students' connection to the Roundtable, he was prepared for their visit and had geared his presentation to their emerging interests. The students then visited the exhibition. They wondered together about the "mystery" of the bog people—Why were they put into the bogs, by whom, and what did the act signify? What might the artifacts found in the bogs with the bog people tell us about their lives and cultures?

In taking up these questions, students were exploring some of the fundamental issues raised by the exhibition curators. As Van Keuren says about the included artifacts, for example, "Some of these objects were undoubtedly placed in the bogs as ritual offerings, but I don't think we'll ever know—as archaeologists, as scientists—much more than that. We know where the objects are coming from and we generally know how old they are, but I don't think we have a good idea of why many of these objects were taken to the bogs. This is the challenge in archaeological interpretation: much of the past is mysterious and difficult to interpret."

Back in their classroom, the students began to connect the questions they had about the exhibition to their own lives. They moved from discussing how they might interpret the *Bog People* artifacts to discussing how scientists might interpret artifacts from their community if they were found in the future. Contemplating this question, the students did a neighborhood walk to look more closely together at items that might later be considered the "artifacts" of their community.

"If an outsider came to look at your community just on the exterior," Hanock asked the students, "what would they see?" The students responded: "they'd see a *polletero* pushing an ice cream cart," "they'd see the Goth teenager," "they'd see a day laborer and a gang member."

As they identified things that visitors might see in their community, students began to describe the stereotypes that they believe many hold about their community. They described to each other and to their teachers the differences between these stereotypes and how they themselves see and experience their community.

Tania Vargas, a twelfth-grade student, said, "From an outsider's perspective, I think that my community is viewed as poor, uneducated, and full of illegal immigrants. They see homeless people, vendors on the corner, and gangs on the streets. It would be easy for them to assume that everyone who lives in such a neighborhood must be ignorant. Right?"

Brittney Halterman, an eleventh grader, said, "When people look at my community, they probably see trouble. . . . However, it's not what it seems to be. It's a community where I live and where my friends and family live. It is a place I am loved and can love."

Reflecting on the students' conversation, Hanock says, "Most of these students live in a very poor neighborhood. There are all kinds of icons that suggest the negative elements and

influences on their lives, but the kids didn't see themselves in this way; they saw themselves as a positive force for change. They were moving toward believing they could go to college even though their family members had little, if any, college experience. They recognized a difference between how others viewed them and how they viewed themselves. The kids saw themselves much like the bog people and wondered how they could show others their 'real' selves."

The students further examined the difference between surface-level judgments or stereotypes and the deeper, more meaningful interpretation of artifacts conducted by scientists and curators. The students sought to create a project—a work of visual art—that would debunk the stereotypes of their community by juxtaposing the surface-level stereotypes that people hold about the community with artifacts from the community that would make visible the "real" lives and values of its members. The students decided to call their project "Artifacts of Our Lives." Hanock and Draheim, using a stipend from the Museum supplemented by a grant they wrote specifically to finance this project, brought in visual artist Miya Osaki as a partner.

Student Angela LaBerge had the idea to create visual representations of some of the stereotypical archetypes of the community in such a way that each stereotype could be peeled back, revealing the "real" person behind it. The students created four assemblages in the form of doors. Each displayed on its surface one of the stereotypical archetypes students identified on their walk around their community: a vendor, a Goth teenager, a gang member, and a day laborer. Once open, the doors then revealed artifacts from the students' lives collaged in the silhouette of the outside image. The students selected artifacts for the collages that they felt gave an authentic depiction of the life, culture, and significance of their community. The artifacts included perfect attendance certificates, report cards, family photo-

graphs, family recipes, rosary beads, awards, and personal letters and artwork.

Hanock vividly remembers the students working on this part of the project. "I was surprised," she says, "by how willing they were to sacrifice ribbons and certificates that they had earned. In class, kids tried to act nonchalant about their contributions, but they had saved and treasured these artifacts and were still so willing to donate them. When I reminded them that they would probably not be getting their items back, they said, 'It's OK, Miss, they're going to the Museum.'" The students worked on the doors for four weeks in their classroom and the school parking lot during school and—voluntarily—on weekends.

### Interdisciplinary Integration

This partnership between the Museum, Monroe students and teachers, and Osaki was emblematic of Roundtable projects. The project was interdisciplinary in two ways. First, it engaged multiple disciplines: social studies, English language arts, and the visual arts. Second, it engaged multiple dimensions of a Museum exhibition. In the course of the project, the students not only examined the content of a particular exhibition but also the practices and processes that are central to the Museum, in particular, research, the interpretation of artifacts, and curating.

The students worked with their teachers to explore a series of overarching "big" or "essential" questions: 1) What judgments would future scientists/historians/educators form about the Monroe High School community if given the artifacts of our modern lives to examine, 2) What judgments/stereotypes do our contemporaries form when they view our community's external artifacts/symbols, and 3) What views do we hold of ourselves, and what would we like others to see of our inner culture when they look at us as individuals and through our community? Many Roundtable partners orient their projects with the Museum





“I would like people to see the better side of my community.”

—ETHEL DEGUIA, *James Monroe High School*





around these kinds of questions. The questions they and their students select hold the overarching “big ideas” that frame the projects. Expert practitioners of interdisciplinary, arts-integrated teaching and learning identify seven qualities of a strong “big idea” or topic for framing interdisciplinary inquiry (Thompson, Barniskis, & Aronson, 2005, p. 86). The overarching questions and ideas that Roundtable partners use to frame their projects—like those used by the Monroe students and teachers—embody these qualities.

**You know a topic matters when it:**

- resides at the heart of a discipline
- generates a lot of thinking, exploring and discovering
- inspires students to have “hard fun”
- matters and is useful beyond this classroom right now
- opens up connections to each student’s experiences, both in and out of the classroom
- excites the teacher, artist and students
- challenges students’ misconceptions and misunderstandings

(THOMPSON, BARNISKIS, & ARONSON, 2005, p. 86)

The questions that Monroe students used to frame their exploration of the exhibition proved so compelling to them that the project gathered momentum throughout the school year. Students’ door assemblages were only the beginning. Energized by the desire to destroy stereotypes, especially those of today’s youth, the students produced, directed, and filmed a documentary that explored life in their community. They created the film based on interviews with their peers and adults in their community in which they asked: 1) What do others see when they look at you, and 2) What would you like them to see or what should they see based on your reality?

Working with Osaki, individual students also wrote and produced digital stories to show their own, personal truths. Students read Víctor E. Villaseñor’s *Rain of Gold*, a book telling the story of young people who emigrated from Mexico to the United States. Many of the students, recent immigrants themselves, drew connections between the book and their own lives. As part of their larger “Artifacts of Our Lives” project, Hanock says, “Students considered the bog people—what were their lives like back then and what could you tell about their lives by looking at their artifacts—and paired their reflections with what they had read in *Rain of Gold*. Students examined their own lives and considered which of their own stories were important to tell. They wondered what lessons could be learned from the lives their families had led.” Each student picked one story from his or her own personal history to develop metaphorically into a digital story.

To place this work and their own lives in a historical context, students then made personal, historical time lines. Visual artist Meriel Stern visited the classroom to discuss using symbols to represent significant points in their personal histories. Working in visual and symbolic terms, the students first created time lines out of beads, using different shapes, sizes, and colors of beads to mark important milestones in their lives. Students then created paper time lines. On these time lines, Draheim and Hanock asked the students to include the bigger picture of what was going on in the world during the time period selected for their personal time lines. Students’ responses were elaborate—one student made her life into a Monopoly board; another, into the shape of a guitar.

During this project, students considered the value of studying history and culture. They wondered about whether we ever truly learn from our mistakes. They also considered how the history of their own families and cultures affected their lives.





WHY DO WE  
**KILL**...



INSTEAD  
OF  
**LOVE?**



STOP THE **GENOCIDE**

Many of the students said that this exploration changed their understanding of their own lives in important ways. For example, twelfth grader Silvana Carrion said, “Coming from Peru at such a young age (age 5), separated me not only from my family but also from my culture. It is hard not to feel connected to my culture since it affects my everyday life. This feeling of separation became stronger with the death of my grandmother. While completing this time line, all of the separation became a connection to my past and present. Learning about the past connected me to the struggles my family faces today.”

Lastly, as part of the “Artifacts of Our Lives” project, the students explored the issue of genocide. When considering how the bog people might have ended up in the bogs, the students noticed physical evidence on the bodies—for example, a rope found around a neck and a fractured skull—suggesting that some of the bog people had been murdered. Some of the students wondered whether certain kinds of people might have been murdered and put into the bogs. In the context of this conversation, the topic of genocide arose.

The curators of the exhibition have found that a large range of individuals were placed in the bogs—without consistent patterns in regard to, for example, age, tribal background, gender, or social class—suggesting that genocide is not a likely explanation for the bodies found in the bogs. In wondering about the topic of genocide, however, the students raised important issues that were pertinent to their history and social studies curricula.

The students became motivated to explore more about the topic. Draheim was struck by the fact that many students didn’t know that genocide was still occurring in the world. She, Hanock, and Osaki worked with students to create a project to study genocide and related history and social studies concepts. Hanock and Draheim remember that the students connected immediately with Osaki’s skills as a graphic artist and her ability

to work creatively with digital technology.

In this component of their project, Monroe students explored the questions: How do we learn from history? What is the “truth” of a situation? How does one’s perspective shape or alter the truth? How do our personal experiences shape our view of others? How is memory of the past shaped by our present experience? How is the future shaped by the past and the present? Have the forces of good and evil changed over time? How does what we know about the world shape the way we view ourselves? How do we define who we are?

The students began by getting books on genocide, such as Edwidge Danticat’s *The Farming of Bones* and Leon Z. Surmelian’s *I Ask You, Ladies and Gentlemen*, and doing reading circles on the topic. “In the students’ minds,” says Hanock, “we learn history so we don’t repeat the past. They had no idea that there were other genocides in the world; they hadn’t heard of Darfur.” The students, Hanock adds, “started seeing connections,” and the final phase of the *Bog People* project developed from there. The students wanted to express what they had learned about genocide in such a way that their understanding of the topic and related history could help stop future killings. They wanted to find a way to create greater awareness among others.

After reading the books they chose about specific genocides, students gave class presentations describing both the historical details of the events and their repercussions. From this information the students then worked in small groups to create posters for a public awareness campaign about genocide. The students brainstormed ideas and sketched drafts of their thoughts. They then worked with Osaki in Adobe Photoshop to create the final posters. She helped the students to understand and work with concepts of artistic choice, symbolic values, connotation, and metaphor to help strengthen the impact of their original ideas. Art Center College of Design, where Osaki was a



student at the time, printed the posters for the students.

Hanock says that by the end of this project, “students, some of whom were unable even to define ‘genocide’ at the beginning of the semester, were debating how best to use the information they had learned about Haiti, Rwanda, and Kosovo to draw the community’s attention to the world’s continuing atrocities.” Reflecting on this part of the students’ exploration of the exhibition, Hanock says, “I loved the entire project, but watching the students create these posters was incredible.” By this time the students had developed a higher and higher level of ownership over the project and their own learning. “They really planned it out,” says Hanock. “In English we talk about making choices as a writer depending on your audience, but the kids don’t always get that. When they started creating their posters based on what they had read about genocide, though, they started making those choices themselves. That is when it really clicked. They were more comfortable with images than with language. We only had five native English speakers in the class, and our artist, Miya Osaki, was hip and cool and could show the kids how to use technology to produce something of professional quality that would have impact. Every time I look at the posters, it blows me away.”

As part of this project, the students went to see a performance based on *I Ask You, Ladies and Gentlemen*, a memoir of the Armenian genocide of 1915, and wrote reflections on a specific passage from the book. This passage raised questions about the connection between the past, present, and future and about the role of young people in creating the future. Analyzing this connection, one student, Reyna Alfaro, wrote, “Children today . . . can probably make a difference. They can be the key to that door that all of the adults have been looking for—the key to peace. We can be part of all this by helping our children to see that war is not the solution. Maybe if we all work together, take a risk, and

try our best, we can make a change, because we don’t want to look back at our childhoods and say, ‘those were the days.’ We should keep looking forward and say, ‘these are the days.’”

With this project, the students circled back around to one of the central concepts that the exhibition was intended to raise—our own responsibility for the stewardship of our natural and cultural worlds. Curator Scott Van Keuren explains that such stewardship is a central part of the Museum’s mission and that the exhibition presented many opportunities for addressing this issue. “We should use the exhibit to think about our shared responsibility for preserving our cultural worlds,” he says. “As archaeologists, we emphasize the protection and stewardship of archaeological resources and cultural landscapes. Many of these peat bogs are endangered landscapes; they’ve been heavily impacted by economic use for centuries now, well into the modern period, and are still mined for garden products. These are endangered landscapes where on a daily basis we lose archaeological treasures. There’s a real opportunity in this show to talk about the need to protect these landscapes, why they should be saved, what they can tell us about the future, and the overall importance of preservation and stewardship—this is a central theme of the exhibit.”

In their explorations of the exhibition, Monroe students consistently considered issues of stewardship, perhaps most clearly visible in the posters they created for the public awareness campaign about genocide. In this project the students took action to try and preserve our cultural worlds. The students displayed their posters at the Museum and in the hallways, offices, and classrooms at their school. Students had hoped to create a bus stop campaign to give their posters a wider audience but ran out of time and resources to complete that phase of the project before the end of the school year. Hanock notes that although the students who participated in the







project have all graduated now, the posters are still hanging in her office and “generate more conversation than any other single item on display.”

Cultivating a sense of stewardship, in addition to having potential benefits for preserving our natural and cultural worlds, also had benefits for the students themselves. In stepping into the role of those who had the ability to affect the world around them in meaningful ways, the students felt empowered. As their posters and sculptures were displayed in their community and at the Museum, they also received positive feedback about their work. Visitors from the Museum and others who had heard about their project visited their classroom. The students saw evidence that their work interested and affected others positively.

Hanock explains, “People from the Museum and other unfamiliar adults would come in to see what the kids were doing and interact with them. These kids don’t typically have experi-

ences like that. They don’t have people in the community coming in and taking an interest and congratulating them on coming up with great ideas. It was a huge experience for them, and they saw that their voices had power.”

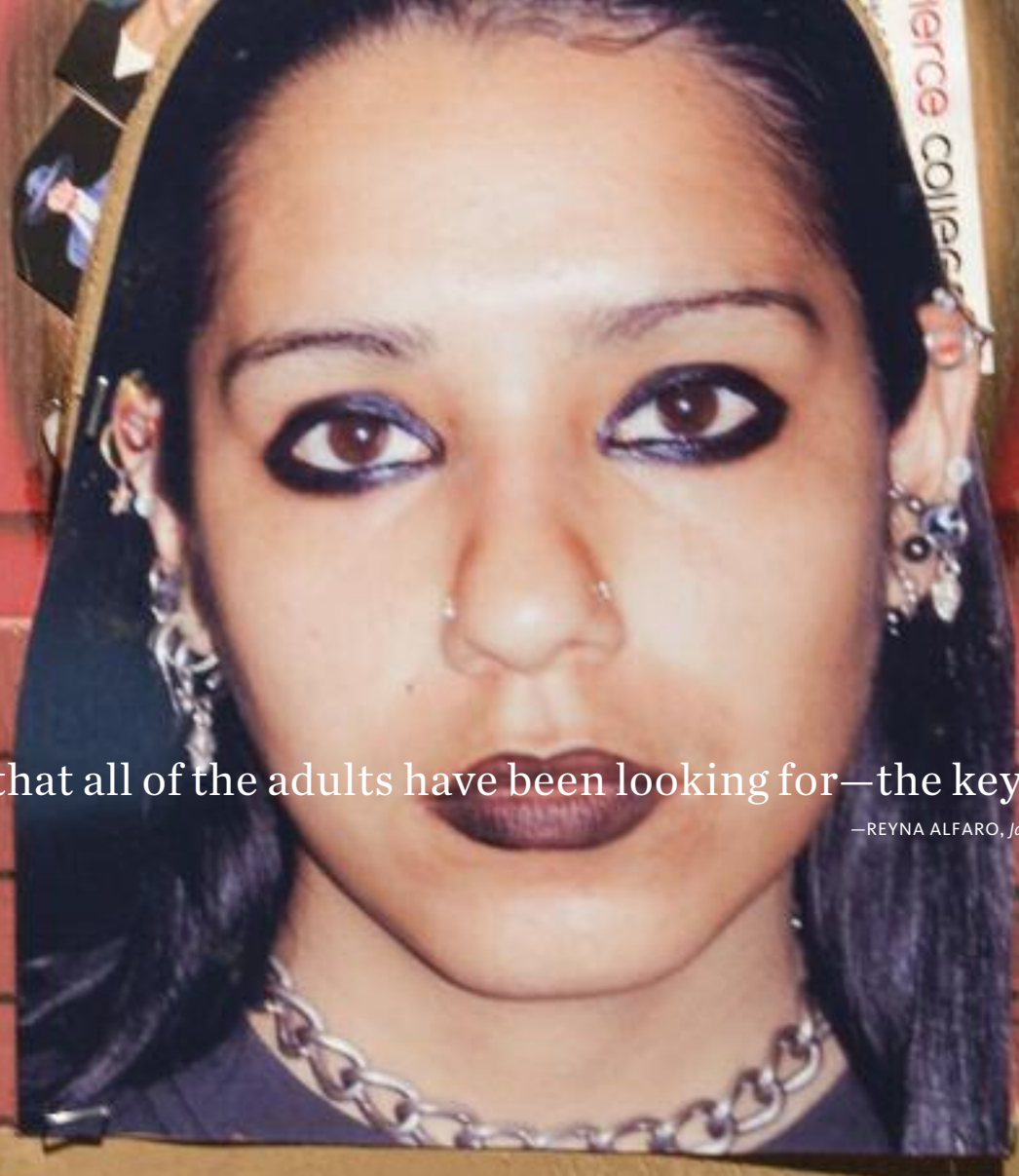
The teachers participating in the Roundtable at the Museum agree that the fact that their projects with the Museum culminate in student artwork that is exhibited at the Museum is key to the efficacy of the projects for fostering rich teaching and learning. The visibility of the projects helps students to develop a sense of stewardship because they see the direct connection between how they express what they’ve learned in their artwork and the potential for that artwork to affect other people and what those people think and do.







“Children today . . . can probably make a difference. They can be the key



to that door that all of the adults have been looking for—the key to peace.”

—REYNA ALFARO, *James Monroe High School*





Chapter 4: **Implications**  
**for Practice**  
Creating Relevancy



## CHAPTER 4: IMPLICATIONS FOR PRACTICE

Natural history museums store and display a vast number of artifacts. Curators use these artifacts to make scientific discoveries and to teach the public about natural history. When the curators at the Natural History Museum of Los Angeles County talk about their work, they describe the excitement of the scientific process, of investigation, and of discovery. Each curator is engaged in meaningful and extended interaction with the artifacts in the Museum. As Luis Chiappe says, sitting in his office among the Museum's dinosaur artifacts, "you end up loving what you do—up here around this incredible stuff—this is what life is about when you are a paleontologist."

In entering a typical natural history museum exhibition, however, few visitors have the opportunity or inclination for such deep engagement with the artifacts. Visitors to the Natural History Museum of Los Angeles County, for example, spend an average of less than three minutes in the Museum's most popular exhibition hall, featuring its dinosaur collection.

In implementing its new mission—"To inspire wonder, discovery, and responsibility for our natural and cultural worlds"—the Museum is working to change the visitor experience. It is attempting to offer visitors a window into the experience that curators and scientists have, one of deep engagement with the artifacts and their significance to our intellectual, cultural, and physical lives.

At the heart of this effort is the Museum's belief that if you inspire visitors, they will look. They will seek understanding while in the Museum and when they leave, and, if they are actively looking, they are more likely to feel connected to the Museum and remember their experience. "Having an emotional experience, an experience of inspiration," says Vanda Vitali, "creates a link between the visitor and the Museum." That connection can be nurtured to engage visitors in new and more meaningful ways, through authentic experiences of discovery and the creation of personal narratives that are at the heart of learning. The Museum invited Education and Arts Roundtable participants to serve as a community "think tank" to help determine the most effective ways to realize these new goals. Over the Roundtable's years of partnership with the Museum, it has illuminated lessons for the Museum and the education and curatorial staffs at similar institutions. These lessons cluster along three themes: 1) enhancing relevancy for museum content, 2) supporting relevancy in teaching and learning through partnership, and 3) strengthening connections between the Museum and the communities it serves.

### Enhancing Relevancy for Museum Content: Inspiration, Wonder, Discovery, and Learning

In their projects, Roundtable students have opportunities for deep, sustained engagement with exhibition content. Their experiences with exhibitions stand in contrast to the average visitor's short, sometimes cursory tours through the Museum. The students prepare to engage the content of a particular exhibition before visiting the Museum. The Museum shares information with their classroom teachers and teaching artists and gives the teachers opportunities to work together to develop expertise with the material, which they in turn share with

students. Students and teachers discuss the exhibitions together, and even the youngest students, in first grade, develop questions about the exhibitions and the "big ideas" that exhibition content raises for them. These questions often elicit connections between exhibition content, school subjects, and students' own lives. Students continue to explore the exhibition content in at least one visit to the Museum and then again back in their classrooms.

This continuum of engagement embodies the kind of museum experiences through which museum education research finds students remember most—experiences in which there are multiple visits, teachers link the visits to the school curriculum with a variety of activities and group projects, and students are able to make choices and draw connections between the museum content and their own lives (Falk & Dierking, 2000a). For the Museum, however, the benefit of having Roundtable students engage with exhibitions in this way is not just that the participating students are getting more out of their experiences at the Museum. It is also that these students reflect back to the Museum what and how they have learned from these experiences and give the Museum feedback on the facets of Museum content that most interest and inspire them—information that the Museum might use to enhance the experiences of other visitors and enact its new mission. Museum researcher C. G. Screven (1993) finds that exhibitions stand a better chance of providing meaningful experiences for visitors if museum planners have access to information "on the knowledge, attitudes, expectations and misconceptions that visitors have about prospective exhibit topics, objects and artists and on the kinds of questions they might pose, their special interests, personal experiences, beliefs and preferences" (p. 165). Roundtable members and students through their projects and feedback provide just this kind of rich information that the Museum can then use in designing its educational programs and exhibits.

### Imagination and Inquiry

In their projects, Roundtable students identify what inspires them about exhibition content and use this inspiration as a spark for learning. They move fluidly from interest and inspiration to wondering about “big questions” to working with teachers and artists to develop projects that will allow the exploration of ideas and discovery of new insights. The through line in this sequence is the cultivation and use of the imagination. “Effective learning occurs if you approach something from various perspectives,” says Vitali. “Many roads exist to cognition. We have a hard

### What makes creative endeavors in the arts and sciences come about?

- Holding onto deep interests that lead to a sense of quest (which, in turn, always leads to questions)
  - Figuring out basic techniques of looking carefully and taking apart your interests
  - Trusting in incubation—giving ideas time to linger
  - Hoping for accidents or the chance to come upon something unexpected, previously unseen
- (HEATH, PAUL-BOEHNCKE, & WOLF, 2007, p. 16)



time understanding that through art we can learn about science. What Elisa Callow and the Roundtable partners have brought to us is the role of imagination in cognition.”

In their research on Creative Partnerships, England’s arts-integrated education initiative, Heath, Paul-Boehncke, & Wolf (2007) find that “the process by which creative ideas move from initial spark to action, invention, or discovery for the arts as well as the sciences turns out to be highly similar” (p. 16). Indeed, the combination of imagination, wonder, and discovery found in the Roundtable projects is one that would be familiar not only to artists but also to most scientists. These capacities are also key ingredients in the scientific process. “We don’t know everything, that’s why we question and wonder,” says Chiappe. “Knowing all the answers is boring and unimaginative,” he adds. “Students need to be able to come up with an interesting, imaginative question.” Roundtable projects build on this dynamic relationship between the creative processes in art and science. As Callow explains, “In my work, I have observed a natural affinity between artists and scientists in their exploratory and iterative work process. They do not say, ‘I believe this is so because I have been told so.’ Instead they question, observe, take things apart, reanalyze. They start with conceptual sketches and continually refine.”

For Callow, there were two additional reasons for artists’ participation, given the Museum’s goal to learn how to better engage visitors. First, she hypothesizes, “Artists are more used to working in community settings than scientists. And because artists’ work is dependent upon honoring their inner voice, it was natural for them to think about encouraging the visitor’s imagination and personal connection to experience.” Second, the arts could help provide evidence of how and what kind of learning was happening as a result of students’ experiences with Museum exhibitions. “The arts are concrete—you see, you touch, you

hear. They are sense based. I believed that responses to content, special exhibitions or the permanent collection, could be made visible through the arts and that seeing the evidence of learning could be very important for the Museum.”

### Museum as Learner

A challenge for the Museum in integrating this feedback is that Roundtable students often reflect back the value of their experience at the Museum not strictly in terms of science learning but in terms of the relevance of a particular exhibition’s content to their lives. Projects, for example, frequently illuminate the facets of students’ personal experience and communities with which the exhibitions resonate and the “big questions” that students formulate about the relationships of exhibition content to broader social, political, and scientific concerns. In a Museum where the responsibility of staff has traditionally been to convey discrete bodies of information in natural history and science, interpreting this kind of feedback is challenging.

Some Museum staff, for example, were originally unsure what to make of the projects that Monroe High School students created in response to *The Mysterious Bog People*. The curators of the exhibition focused heavily on the forensic science related to the artifacts and human remains on display. By contrast, Monroe students were captivated by the untold stories of the people “deposited” in the bogs, the circumstances that might have led to their deaths, and the process of interpreting artifacts. The students’ interests led them to investigate the personal, political, and ethical issues surrounding judgment and stereotyping, which eventually led them to reflect on the status of their own community in larger contexts and on the topic of modern-day genocide.

Monroe’s *Bog People* projects demonstrate that learning, as researchers John Falk and Lynn Dierking (2000b) find,





“does not respect institutional boundaries.” Instead, “in a very real sense, the knowledge and experience gained from museums is incomplete; it requires enabling contexts to become whole. More often than not, these enabling contexts occur outside the museum walls weeks, months, and often years later. These subsequent reinforcing events and experiences outside the museum are as critical to learning from museums as are the events inside the museum” (p. 142). In working with Roundtable partners to understand visitor learning in a more contextualized sense, the Museum is helping to break important new ground in museum education and visitor studies.

Traditionally, museum education and exhibition evaluation has focused on visitor experience within the bounds of the museum itself, using concrete measures such as head counts and visitor surveys to assess exhibition outcomes. In its partnership with the Roundtable, however, the Museum is learning about the impact of exhibitions in multiple dimensions, over time, and as it transcends the boundaries of the Museum itself. Importantly, one of the clearest streams of feedback that the Roundtable students are offering to the Museum has to do not with what they have learned about natural history and science

from Museum exhibitions but what they have learned about how and why natural history and science are important—important to them personally and important to the world as they see it. It is this type of feedback that seems to hold the most promise for the Museum in figuring out how to create future exhibitions and education programs that will effectively engage and inspire visitors.

The Roundtable has made clear the important contributions that it has to offer the Museum, given the group’s unique constellation of expertise: 1) their projects allow students to engage the Museum content in depth, over extended periods of time; 2) the interdisciplinary frame for their projects allows students to consider this content in multiple dimensions; 3) students’ sustained, flexible engagement with Museum exhibitions gives them an opportunity to identify what inspires them most about the Museum’s content and use it to catalyze new learning; 4) artistic media allow students to express and share their learning with others; and 5) the artistic process supports students in drawing connections between the ideas that they are exploring and their own lives.

## Relevancy in Teaching and Learning: The Role of Authentic, Professional Partnership

### Developing Partnership

Effective partnerships, like those at the heart of the Roundtable—between artists and classroom teachers, and among schools, community organizations, and public institutions—are “like a dance,” says Moffett Elementary School teacher Lena Garcia. They require “people being flexible and recognizing you may have an agenda and a goal, but a school site, for example, has its own culture, its own needs and limitations and desires, and you have to be willing to explore how you fit into that.” The Roundtable projects are shaped by considering each partners “have-tos”—that is, the cultural and structural dynamics of each partner’s organization, the needs of the organization’s constituencies, the resource possibility and constraints each brings to the table, the integrity of the mission of each partner, and the integrity of the discipline or disciplines

each partner is committed to teaching. An effective partnership requires constant collaboration and bridging of the needs and goals of all involved. The common touch points for the Roundtable partners are the desire to create opportunities for rich teaching and learning and the concept and/or exhibition that they are exploring with the Museum in each project.

Moffett principal JoAnn Isken says, “What’s different about this relationship [with the Roundtable] is that this is really being created by the partners, by the partners working together. What ends up happening in the classroom is the product of everyone bringing their expertise to the table.” The fact that the members created the Roundtable and its projects collaboratively and organically appealed to many of the educators involved in the group. Cienega Elementary School teacher Annie Lefkowitz said, for example, at one of the groups’ first meetings, “I am here for the opportunity to be part of a process, to start from the beginning.”

Going into the Roundtable, Isken says, “I didn’t expect this. I usually get, ‘Here’s the curriculum. Teach it before you get





“Because the Museum trusted us as educators and creators, we had the license to develop projects that extended far beyond the classroom walls and the Museum space. The expertise landed on the students as Museum visitors, asking the questions and developing work that was linked to Museum content.” —CATE SAMSON, *Stella Middle Charter Academy*



to the museum.’ Or, the teaching artist co-constructs the experience only so far because there are some preset ideas about what the kids ought to know. Or, kids should come to the Museum and have the three classes, but the Roundtable is not like that.” She adds, “I think there’s a real elegance in the simplicity of the Roundtable. There are no predetermined ideas and structures, which often make things far more complicated. In a more structured model, you spend time on things like logistics and scheduling rather than spending time thinking about the real possibilities.”

The Roundtable at its core is an organic and symbiotic set of interrelationships that benefit all of its participants. Key to the success of the Roundtable for all involved, says Peter Harris, the former director of programming at the HeArt Project, was the Roundtable’s flexible design, the Museum’s willingness to adapt to the strengths of the participating artists and educators, and the Museum’s “straight talk” about its own goals for learning from the work of the Roundtable. As Isken summarizes, “If we don’t contribute as much as we get, then it’s not really a partnership. That’s part of what I see to be the strength of this partnership. By the very nature of it being organic, that happens. With prescribed delivery and outcomes, it is difficult to contribute.” An important measure of the success of the group, Isken says, is that through this type of partnership and collaboration, all the participants “walk away changed and thinking differently.”

Vitali describes this goal of the Roundtable as “mutual resonance.” “What is really important,” she told participants, “is to have you with us so that we can all benefit.”

### Teacher and Artist Learning and Development

Many of the teachers and artists in the Roundtable have found that participation in the group and its interdisciplinary projects has changed their teaching practice in important

ways. Monroe teacher Kelly Hanock, for example, explains that, “Because the challenges facing public education today often seem overwhelming, insurmountable, and conducive to failure, they can contribute to sterile, joyless learning environments at the school site and to cynical competition rather than to productive community for both students and their teachers.” The Roundtable, she says, in contrast, “has allowed and inspired us, the classroom teachers, to challenge the historical precedent—the authoritarian, teacher-centered classroom—to develop positive, democratic learning environments and to change the face of public education in Los Angeles.”

Garcia says similarly, “The feeling of the Roundtable is different than what is happening in education right now—standards, a list of rules and protocols, and must-dos. With the Roundtable—because it centers on partnership between an arts organization, a school, and the Museum—nothing is defined as a must-do; it’s about finding the interrelatedness of the three and how each one can contribute to the other.” Looking back on the *Collapse?* project and other projects that her students have done with the Museum, Garcia says that one of the things that has kept her interested in the Roundtable is “the idea that it’s changing, that we’re not going to pull the same thing out of the bag every year. We constantly have to challenge ourselves to think creatively and integrate the concept. The state gives us a curriculum that we have to teach, and it can be very stagnant, and it helps to have creativity and a different lens on different areas we are studying.” “The process” of the Roundtable, she says, “feels creative—the allowance to find your way feels creative and collaborative.”

For Garcia, partnering in her classroom with an arts organization has been a particularly important part of the Roundtable projects. Working with an arts organization, she explains, “breathes fresh air into your room, into your practice. There is



an inherent desire to reflect. And it may be just a small portion of your day, but it can energize the other aspects of the curriculum as well; it affects the rest of your day.” From these collaborations, Garcia has learned “to trust the process and to sit back and listen and watch, to learn what the kids already know and see what becomes uncovered when they have an opportunity to interact with material in a new way, in an integrated way.”

Other teachers in the Roundtable describe similarly that the Roundtable projects help to “create a pulse in the classroom” and to create a new and more effective kind of “classroom culture.” “Through the inspiration of the Museum and arts organizations,” Stella Middle Charter Academy teacher Cate

another artist comes in to teach. We have the genuine ability to integrate what they are doing.”

As Hanock says, “The innovative collaboration between the Museum and the classroom has encouraged all of us to accept the responsibility to change. The Roundtable has provided us an original and dynamic context to nurture and honor learning, teaching, and sharing. By including our students in the development of Museum exhibitions, through the completion of service learning projects (projects where students determine the problem, the appropriate research, and the actual implementation of a solution), and by encouraging students to think artistically and metaphorically in creating their displays, the Museum has pro-

“The HeArt Project is not trying only to make artists, but we are tapping into the creative imagination of teenagers to engage the issues of the world—Why do science and history matter? Why does art(making) matter?”

—MARGIT EDWARDS, *The HeArt Project*

Samson says, “the average curriculum is enhanced and becomes amazing.” The work is so inspiring, says one teaching artist, that it makes her “want to go back to all the things I thought I wasn’t interested in and reconsider them.”

To create effective, interdisciplinary projects, the teachers and artists in the Roundtable have learned that they must teach together, in close collaboration. This kind of collaboration helps to ensure that each of the integrated disciplines is taught with integrity and that there is maximum possibility for students to draw dynamic connections between the disciplines, the overarching themes and concepts that the projects address, and the students’ own lives in and out of school. Part of this, explains Garcia, is that the teachers “don’t just take a coffee break when

moted a sense of community where students, parents, teachers, and other caring members of our society collaborate with a sense of mutual respect.”

Another aspect of the Roundtable that participants find important is that Roundtable projects allow them to be learners as well as teachers. Participating educators learn from the Museum, from their students, and from their other classroom teacher and artist partners while working on interdisciplinary projects. They also learn from each other through their collaboration in Roundtable meetings. Moffett teacher Patti Cruz explains, “The professional discussions outside of our grade level or district—getting to know what other learning communities are working on and working towards—takes us out of our microcosm





and shows us the bigger things that are happening, and we then get to expose our students to that.” Garcia, Cruz’s colleague at Moffett, says similarly, “It’s rewarding to share with other professionals what you have done and mesh what you are doing with other partners. It helps for us to feel like professionals.”

Arts organization participants also identify organizational learning that has occurred as a result of participation in the Roundtable. Harris, for example, says that, upon joining the Roundtable, one of the HeArt Project’s internal goals was to strengthen its advance planning and communication with its teaching artists, who were working day-to-day with students in 20 different continuation high schools. Participating in the Roundtable, he believes, helped to enhance the organization’s “in-house dedication” to doing more advance preparation work. The organization staff and teaching artists, for example, knew that each project with the Museum would culminate in an exhibition in the Inter/Act gallery and/or a performance at the Museum. Knowing this from the outset of the project required advance planning and strong communication between and among HeArt Project staff, the Museum and other Roundtable partners, and the different groups of students working on projects related to the Museum (generally between four and six classrooms at different schools). Having this kind of structural reference built into the work, Harris found, allowed the organization to become more limber and nimble “in moments of inevitable improvisation.” Such moments emerge not infrequently at the HeArt Project as a result of changes in public education policy, administrative concerns typical to nonprofit organizations, and in regard to events in students’ lives—personal tragedies, such as the loss of a loved one; transitions in and out of regular public schools or juvenile justice facilities; and the effects of violence in the neighborhoods where they live.

Harris’s colleague, HeArt Project Director Cynthia

Campoy Brophy, adds that, to her, “What is exciting about the Roundtable is that the Museum itself wants to partner.” The HeArt Project, she says, partners with local cultural institutions regularly, but the Roundtable partnership is notably different from the others. “It is coming from a different place,” she says. “It is more integrated into the Museum’s philosophy. It is not a one-off; there is a potential for doing a project, evaluating it, and doing it better. There is potential to grow and to make the work stronger.”

### Student Learning and Development

As a result of the Roundtable projects, the participating educators not only recognize important shifts in their own practice and in the culture of their classrooms but also important learning and development outcomes for their students. Monroe teachers Hanock and Maura Draheim found, for example, that the *Bog People* projects engaged their students deeply and meaningfully in a way that they had not previously been engaged in school. Hanock observed in particular that, in such projects, when they as teachers are “able to relinquish established authority to become guides rather than the expected ‘givers of knowledge,’ students relinquish previously accepted complacency to participate in a dynamic process of inquiry and idea.” They found that students gained confidence and control and developed a new commitment to learning. Other members of the Roundtable recognized similar developments among their students as a result of their interdisciplinary projects with the Museum. The teachers have found that as the projects changed the paradigm of learning in the classroom, students often experienced “aha” moments, made important connections on their own, and developed ownership over and accountability for learning.

As happened during Monroe’s *Bog People* projects, teachers working on other projects with the Museum also noticed



that their students were more engaged in school and exhibited increased self-regulation in the classroom. Teachers participating in the Roundtable universally shared these observations about the impact of the Museum projects, regardless of whether they were teaching elementary, middle, or high school students. These observations were also shared by the educators working in in-school, after-school, and nonprofit arts settings and resonate with research linking arts-integrated education to improved student engagement and attendance (Deasy, 2002).

At Monroe, the shifts in student engagement and learning translated into increased attendance, improved test scores, and dramatically higher graduation rates for participating students in comparison with their peers in other classrooms. All but one of the participating students graduated, compared with Monroe's overall graduation rate, estimated at about 71.5%.<sup>1</sup> Draheim and Hanock recognize the importance of their students' graduation statistic in a school that is in program improvement status with the state due in large part to consistently low graduation rates.

Draheim and Hanock are careful to note that their students were not selected to participate in the Museum projects because they were higher achieving or distinctive from their peers in any particular way. At the beginning of the school year, their class was similar to the average class at Monroe: 45% of the students were English language learners, and 75% were eligible for free and reduced-price lunch.

Hanock explains that in the course of the *Bog People* projects, their students developed "an increasing belief that they are capable of succeeding in and belong at four-year colleges and universities. It changed their lives," she says, "because most of them had never considered going to college before. . . . There were only five native English speakers; most of them hadn't passed the high school exit exam yet; hadn't thought about col-

lege; their parents didn't come to school events. There was very little connection to school, but after completing this project, all but one of them graduated on time, about 90% of them applied to and were accepted to colleges, and their parents began to attend school events regularly."

Most importantly, though, Hanock says, "through their participation in this Museum partnership, our students have begun to recognize and understand that they are necessary members of a civil society." This shift occurred as students developed ownership over their learning and as they found that they were able to make a positive impact on others.

When Monroe students completed door assemblages for a *Bog People* project on stereotypes, the Museum exhibited them in the Inter/Act gallery, the exhibition space designed to showcase the work resulting from Roundtable projects. This exhibition made their learning visible to an audience outside themselves. It also gave the students an opportunity to make publicly visible the contrast between the stereotypes they find others often hold of their community and the experiences of the real people behind those stereotypes.

The students' stake in their exhibition was so high that when it came time for their doors to be taken to the Museum for the exhibition, the students didn't want to leave it to the





Museum to pick them up at the school; they wanted to deliver the doors themselves. On a weekend, a parent lent the class his pickup truck, and together the students loaded the doors and carefully took them all the way into the Inter/Act gallery.

When the exhibition opened, the Museum hosted a reception for the students. While they were at the reception, says Hanock, “there were elementary school students coming through the exhibit. They recognized the kids’ faces who were on the doors as students who were attending the reception, and they began asking them questions. And that, the Monroe students said, was one of the best experiences of the entire project—talking about their work to people visiting the Museum.” The Museum stenciled the names of the students who contributed work to the exhibition on the wall of the Inter/Act

gallery. At the reception, students proudly posed for photos pointing to their names on the wall.

Looking back on the *Bog People* project, Hanock says, “It has a huge impact. More than anything I’ve ever done as a teacher, and I’ve been teaching a long time. The kids need opportunities where they see why their learning matters, and this gives it to them. The context they had, and opportunities they had, to share their work in a public forum and have respect given to them for something academic, and the fact that they were forced to use the skills they were learning in class, were invaluable. They had to speak, they had to write, they had to use persuasive information, in history they had to do research, they had to document. All of those things we generally ask them to do completely out of context, they were now using for a purpose.

They saw many opportunities opening up for them. Everybody who came talked to them about college, invited them places, offered to write them letters of recommendation. It changed how they saw themselves, and it changed how they saw where they were going in the future.”

For the students the stakes of the project are also raised in motivating ways by the relevancy of the work to their own lives and communities. The Monroe students, for example, drew explicit connections between their social studies and English language arts curricula, the Museum exhibition content, and their own lives. Research on arts-integrated teaching and learning—in which art and other nonart disciplines are learned in tandem—similarly finds that such projects support both student academic and personal development (Catterall, 2002; Stevenson & Deasy, 2005).

### Connecting with Community

The goals and design of the Roundtable challenge a number of assumptions generally held by museum professionals about the role of the museum as an arbiter of cultural experience. Museums, in general, feel enormous ownership of and responsibility for the shaping and delivery of content. “Few museums,” says researcher Richard Sandell (2003), “share decision-making with individuals or groups outside of the organization or genuinely empower audiences to influence their direction. Museum practices are traditionally rooted in a belief in the authority of the museum professional as ‘expert’ that serves to constrain dialogue between the museum and the communities it seeks to engage with” (p. 52). By contrast, the Roundtable invites individuals and groups outside the Museum into decision-making and other processes often reserved as the domain of the museum expert. Through these interactions, the Roundtable is helping the Museum build more effective relationships with the communities it is

attempting to serve—relationships in which each party informs and enriches the other.

### Locating Community

“A community,” says museum scholar Claudine Brown (1992), “is any group of individuals who have the potential of being members of an institution’s visiting public. . . . Once we have identified groups with fairly easy access to our institution who are not attendees, we must concern ourselves with whether our offerings are of interest to them and concurrently whether they have reason to believe they would be welcome at our institutions” (p. 144). When the Museum started the Roundtable, it was looking in particular to forge stronger relationships with several specific communities in Los Angeles: high school-aged youth and young adults and children and families often disenfranchised from the city’s major cultural institutions because of race, ethnicity, and/or socioeconomic background. Roundtable members brought to the Museum existing relationships with these communities that were of greater depth, consistency, and nuance than is often possible for larger institutions like the Museum to develop.

From the beginning, says Callow, all the participants in the Roundtable “understood that one of their core competencies could be to help the Museum to raise the bar for itself in considering what it meant to involve community.” The collaborative and organic design of the Roundtable helped to ensure that this potential contribution was realized. It created an even ground on which Museum staff and Roundtable participants could relate to each other. In this dynamic the perspectives of Roundtable members and their communities were as readily a part of the conversation, work, and learning as were those of the Museum.

The arts-integrated projects that the Roundtable produced additionally helped to forge a feeling of community and

connection among participants, which helped to set the tenor of Roundtable activities as a whole. According to Kurt Wootton and colleagues from Brown University (2003), a feeling of community is fostered in arts-integrated projects because such projects include: 1) *purpose*—they aim toward a tangible final product; 2) *audience*—work takes on extra importance because it will be shared with others; 3) *creation*—the opportunity to bring something new and original into the world; 4) *collaboration*—there is an opportunity for a diverse group of students, artists, teachers, and, in the case of Roundtable projects, Museum staff, to work together; and 5) *visibility*—participants and their work are made visible through performances and exhibitions.

This last quality, visibility, is particularly important in

Roundtable projects, not only for fostering a sense of community among participants but also for helping participating students develop a feeling of connection to and ownership of the Museum. Roundtable projects culminate in performances and exhibits that make student learning visible to peers and teachers in the classroom. Additional benefits are accrued when this work is displayed in the Museum's Inter/Act gallery. Inter/Act makes the work visible to wider, public audiences. Perhaps even more important, Roundtable members recognize, displaying student work in Inter/Act changes the relationship that students have with the Museum because not only is student work made visible in the Museum but students come to feel visible to the Museum. As their work was welcomed into the space, they







became not only recipients of what the Museum might offer but also contributors to the institution. “Coming to a natural history museum that is allowing students to participate rather than just look,” Hanock explains, “is a good lesson in itself, and the fact that students realize that the adults there are looking to them to see how they learn so they can change what they do is also a good lesson for them.”

### **Inter/Act**

Learning from the Roundtable the value of a two-way relationship between the Museum and its visitors, the Museum experimented with how it could use the Inter/Act gallery space to engage the general visitor in experiences with a similar quality. Located at the end of the Museum’s main temporary exhibition hall, Inter/Act was well situated to act as a decompression chamber, giving visitors an opportunity to reflect on the exhibition they had just experienced. The Museum realized that the

Roundtable projects exhibited in this space could help model processes of reflecting on and connecting with the exhibitions. Building on these models, the Museum offered opportunities for visitors themselves to interact with the space—to reflect upon and record their feelings about an exhibition and share their responses with others. Visitors were asked, for example, to add their own written or artful responses to Inter/Act—including poems, sketches, stories, or comments—that would extend the conversation about the exhibition’s impact for visitors. Visitors were prompted, “Tell us what you thought,” and asked, “What will you remember?”

By simultaneously capturing reactions ranging from the very deep (from Roundtable participants) to the casual (from visitors), Inter/Act became a repository for experience. This storehouse would enable the Museum to explore two important questions surrounding its relevance: “Where has learning occurred through the experience with an exhibition?” and “What are the



**In/ter/act** is dedicated to the exploration and exchange of ideas. Guests and Community Partners are invited to become part of the exhibition by expressing their own thoughts, ideas, and feelings about the powerful questions raised by the *Collapse?* exhibition:

- How do societies come to make ill-fated decisions?
- Are we aware of the consequences of environmental damage?
- What can we learn from the fates of others? Will we learn?

circumstances for the deepest experiences leading to learning?” Volunteer and paid interpreters who had curiosity about learning and memorable museum experience and wanted to be experts in museum education were invited to experiment around the idea that interpretation in Inter/Act could be different from the kind of content-driven interpretation happening elsewhere in the Museum. In Inter/Act, docents and interpreters were invited to engage visitors in a conversation that elicited their personal opinions and feelings and supported their experience above the Museum’s intended message.

The docents who participated said that this new kind of interpretation was “more intimate” and “more risky.” One said, “When you work as a tour docent, you have a designated group, you meet them, and you know pretty much what is going to happen. In Inter/Act you don’t know what [visitors] will say when you ask them how they liked it. It takes more courage and more guts.” An important outcome for the Museum of its experimentation with Inter/Act is that docents said that through their interactions with visitors in the space, they became more connected with visitors and with what visitors want from a Museum experience. “I had no idea about the guests who come here,” said one docent. “You have teachers, archaeologists, paleontologist, families from all walks of life. You had students from Monroe High School and their parents come in, and they were so very proud. You had workers from that school say, ‘that’s my school!’ It enriched my learning to observe the numbers and kinds of people who come here . . . you never know who you are talking to.” It brought home the fact that “without visitors we wouldn’t have a museum.”

In addition to responding to the Museum’s exhibition, visitors left their reactions to the Roundtable exhibitions and to other visitors’ responses as well. When responding to one another, visitors’ dialogues could endure for weeks. Visitors often explained why they felt the way they did, told their personal sto-

ries, and left their names and occasionally their e-mail addresses. One docent working in Inter/Act reported, “Everybody who wrote wanted their writings posted. They wanted others to witness what they were feeling. I think it clarified things, to think about what you just experienced and what you will remember.” One visitor appreciated the opportunity to interact and contribute, saying, “I’ve never been able to do this before.”

Through visitors’ participation in Inter/Act, the Museum witnessed the willingness and ability of visitors to engage with one another around substantive questions. While some responses were cursory—“Amanda age 15 – Rock 4 evr”—the vast majority of the responses and dialogues “demonstrated that visitors were striving to contribute to a serious conversation that moved beyond criticism and into the realm of improving society,” says Emiko Ono, the Roundtable’s first manager. Inter/Act, she adds, “served as a vehicle by which the partners’ and visitors’ voices could be heard, helping to create a more vital, participatory museum experience.”

### Interplay

The Roundtable has made visible possibilities for creating interplay between the Museum visitor and museum content. It has also demonstrated the value of active partnership with Museum constituents—partnership structured to allow for the interplay of ideas and action and directed toward mutual benefit. Campoy Brophy summarizes the Roundtable’s central lessons this way: “You get to be part of being the change agent. . . . The Museum is moving to a place where the museum exhibition is a dialogue. It is trying to shift from static object to change. Through the Roundtable, the partners and students are a part of this dialogue.”

<sup>1</sup> Monroe’s graduation rate is difficult to calculate because of the school’s 40% student transience rate.



“My students feel a part of something bigger....They feel they have contributed to a greater cause and feel acknowledged and appreciated. Their funds of knowledge are being tapped into and are assets to them. This feeling of comfort has occurred because people are invested in them and want to see them succeed, connect, and understand.”

—LUISA BARBA, *Moffett Elementary School*





# Chapter 5: The Day-to-Day

Strategic Decisions

and

Program Practices

## CHAPTER 5: THE DAY-TO-DAY

How might practitioners—seeking to create or sustain a partnership like the Education and Arts Roundtable at the Natural History Museum of Los Angeles County—arrange processes and resources to encourage a high degree of creativity and flexibility yet guarantee the level of engagement, production, and accountability necessary for a healthy partnership, sequential education program, and public exhibition space?

This chapter describes the strategic decisions and practices that gave shape to the Roundtable. There are three things to keep in mind about its formation. First, the Roundtable was a highly experimental initiative. For every practice described here there are several more that were attempted and abandoned. Second, although the Museum is a large institution with an enviable set of resources, it executed the practices and projects described in this report with lean staff involvement. One full-time employee, with support from the Vice President of Education and an external consultant, managed the Roundtable with the assistance of a handful of other Museum staff. Third, rather than attempting to provide a recipe for creating a Roundtable-like project, this chapter describes the tactical decisions that Museum staff made in developing the Roundtable with its participants and how the group's particular working processes and practices grew out of these decisions. We hope that insights into these tactical decisions will be useful for others building partnerships as a mechanism for organizational and educational change in a range of institutional and community contexts.

### Partner Selection

Unlike many museum education programs, participation in the Roundtable was extended by invitation only. The Museum selected small and midsize arts organizations, known for their student-centered practices and focus on quality, to be participants in the Roundtable. The Museum then asked each selected arts organization to identify one or two schoolteachers who similarly shared these values, and these individuals were invited to join the Roundtable as well. This selection process ensured that the group was guided by a set of values that the Museum aimed to pursue. Also, by selecting participants who were known for the quality of their work, the Museum was able to confidently engage Roundtable members in work that would normally be done by a museum education division in isolation from its partners. For instance, Roundtable participants were almost immediately asked to develop work plans and projects with only a small degree of guidance from the Museum.

### Meeting Logistics

Roundtable meetings were held on Saturday mornings approximately every two months, which was as often as the group could consistently afford to come together to learn and share new information, as well as how often the group needed to come together to stay connected to the Museum and each other. The Museum sent participants detailed invitations to all meetings and reminders as the meetings approached. RSVPs were collected so that if a critical number of partners were unable to attend a meeting, it could be rescheduled. Museum staff arrived early to meetings, circulated during breaks, and were always present during and after all meetings. Food, paid for by the Museum, was a part of every meeting, and an effort was made to provide fresh, quality food. Whenever possible, meetings were punctuated by non-working breaks and meals where partners could connect with one

another personally. The time and care the Museum dedicated to the details of meetings showed Roundtable members that they were valued and enabled them to more fully focus on themselves and one another rather than paying attention to logistics.

*Meeting Locations.* Especially as the Roundtable was beginning to take shape, the Museum asked members to host meetings at their own sites. The Museum would handle the invitations, food, and logistics related to these meetings, and the host partner would facilitate the majority of the meeting, creating an opportunity for partners to understand one another's work and operating environments much more deeply than if they had met only at the Museum. As a result, the Roundtable knew what skills, resources, and approaches each member would bring to a project, which increased the ability to form mutually aligned projects quickly. "Off-site" meetings also encouraged members to observe one another's programs and led to learning from one another's practices and collaborations that extended beyond their projects with the Museum.

*Honoraria.* The Museum paid non-Museum Roundtable members an honorarium to attend meetings; each participant received the same honorarium (\$200) no matter the position (artist, educator, or principal), role in the meeting (host or participant), or length of the meeting. The amount was enough so that those who participated felt their time was honored but not so much that Roundtable members who were not engaged in the process would give up the majority of a Saturday to collect the stipend. Honoraria were paid directly to the individuals who attended meetings (much as the Museum would pay a contractor), because the meetings were held outside of normal work hours and, even though their organizations benefited from the Roundtable, Roundtable members were asked to give their personal expertise to the group. The only exception was that three executive-level Roundtable members opted out of the honoraria



because they felt their participation in the Roundtable could not be separated from their leadership role at their organizations.

*Meeting Content.* Roundtable meetings moved between a number of different functions: professional development, idea generation, and project initiation. Detailed notes from previous Roundtable conversations were used to build the subsequent work of the group. For example, when participants expressed a desire to know if what their students were creating was related to new learning or an expression of prior knowledge, the Museum invited Steve Seidel, Ed.D., then Director of Harvard's Project Zero and the Arts in Education Program at the Harvard Graduate School of Education, to both model and speak to the Roundtable about Rounds for Teachers, a monthly collaborative assessment discussion group based on principles from hospital medical rounds.<sup>1</sup> The structured protocol Seidel offers through Rounds encourages reflection and elicits insights about students and teaching practices. Although the Roundtable did not institute the Rounds for Teachers practice as a group, the meeting with Seidel sparked conversations among the group about reflection, documentation, and tracking student learning and led to a subsequent Roundtable meeting in which Mary Jo Thompson, the lead author of the *ARTFUL Teaching and Learning* handbook (Thompson, Barniskis, & Aronson, 2005), provided partners with specific tools for learning from student work. While the Museum intermittently brought in experts to deepen the thinking and professional development functions of the Roundtable in sessions like these—what one partner called a “spa for the mind”—partners were given equal time to think, learn, and work together so that they were continually motivated and rewarded, intellectually and practically, for being a part of the collective.

### Project Stipends

The Museum allocated Roundtable members a stipend

of \$1,500 for each of the projects they undertook. Stipends were directed to the lead partner on each Roundtable project, and all projects were allocated the same amount, no matter the number of students involved or the scale and ambition of the project. Roundtable members managed how the stipends were used and how the Museum would make payments (directly to teaching artists, to reimburse partners for supplies, or to pay other collaborating partners). Occasionally, Roundtable members supplemented their stipends with grants from other agencies, for example, Fedco and the Metropolitan Water District of Southern California. More often, they stretched the allocation by finding speakers who would visit their classrooms without charge and securing substitute teachers, bus transportation, and funds for field trips (other than to the Museum) from other sources, such as their school's Title I or Gear Up funds.

### Inter/Act Exhibitions

Projects exhibited in Inter/Act were allocated a small additional stipend for the time, energy, and materials it took to ready student work for display. In addition to providing the stipend, the Museum worked closely with Roundtable members to select and sequence the student work, create explanatory labels, and install the exhibition. The older the students, the more leadership they took over this process. Most Inter/Act exhibitions involving high school students were completely envisioned and produced by the students. All Roundtable members were provided with the measurements of the Inter/Act gallery so they could create work specifically for the space if they desired and were invited to drop off student work at the Museum or arrange to have it picked up by Museum staff. In several cases, teachers worked alongside staff to install the exhibitions over the span of a weekend or a long evening.

### Project Resources

Partners developed their projects over a span of time and at locations that were physically distant from the Museum. Materials and resources that would sustain the interaction between students and exhibitions were critical to the projects. Partners often identified the resources they needed, such as transportation to and from the Museum; lunches for students when visiting the Museum; catalogues, photographs, and explanatory information about exhibitions; lists of exhibition-related books and Web sites; classroom talks by curators; opening receptions for Inter/Act exhibitions for students and their families; and free Museum admission for all Roundtable members, students, and students' families. What the Museum gave one member, it made available to the entire Roundtable.

### Documentation

Roundtable members documented their projects to enrich their own professional practices, to evaluate the impact of the Roundtable for their constituents, and to enhance the Inter/Act exhibitions. Documentation included collecting student work, capturing students' and educators' observations and reflections on projects, and video and photography of students' activities. To assist with the development of consistent and useful documentation, Roundtable members worked with Museum staff and outside researcher Lauren Stevenson to develop a written protocol for capturing stories of learning. From time to time, Museum staff would also interview Roundtable participants to collect additional information about their processes and outcomes. The Museum hired a photographer who documented the students' work at visually rich points in their projects. The insights produced through these documentation efforts helped Roundtable members strengthen their projects while in process and share ideas and cross-pollinate projects more easily. They



also helped the Roundtable projects grow more sophisticated and have greater impact from year to year. One partner reported that the documentation processes modeled and supported by the Museum changed her organization's protocol for evaluation and documentation, making these processes a regular, required part of the organization's work. Roundtable members have used the resulting documentation to articulate the outcomes of their projects and to educate their colleagues, parents, and funders about the value of the Roundtable.



### Museum as Partner

Museum staff endeavored to be involved in students' learning as an active partner, rather than as an observer. To this end, staff visited partner sites when students were working on projects and tried to visit classes several times over the course of a project. When appropriate, staff interacted with students and participated in the creative or learning process, leading to staff and students getting to know each other on a one-to-one basis. When students visited the Museum, the staff they had previously met in their classrooms welcomed them to the Museum

and often stayed with them throughout their visit. The Museum's program manager carefully selected Museum interpreters (gallery teachers) who would be a good fit for each student group and used the same interpreters repeatedly so that students could build a relationship with these people as well. As students became familiar with the staff and the Museum, they cared more about the success of the project and developed a sense of ownership of the Museum, reflected, for example, in students' comments that they were excited to visit "my museum."



Staff also made a point to attend special events, such as open house and parent nights and other events involving partners' communities. The presence of staff at many types of events and places showed the students, parents, partners, and partners' colleagues and organizations that the Museum was a stable entity that was sincerely invested in the success of its partners and their students.

### Strategic Collaborations

In addition to the work of the Roundtable, partners were

intermittently invited to act as advisors to the Museum and to enrich the Museum's activities. For example, in anticipation of the *Mysterious Bog People* exhibition, the Museum's Manager of Training and Evaluation asked Lisa Cain-Chang, Program Director of the Child Educational Center and Roundtable member, to help prepare Museum staff to appropriately and sensitively talk with families and young children about the topic of death. To enrich the Museum's activities, Roundtable members were commissioned to produce programs and performances for museum

Museum invited the organization to perform an abridged version of the play for visitors during the Museum's "Evolution Month." Following the performances, Museum curators participated in a panel discussion about the play—which chronicles the Scopes trial between creationists and evolutionists in 1925—and its relationship to the contemporary debate about intelligent design versus evolution. Opportune partnerships between the Museum and Roundtable organizations, such as these, advanced the visibility and reach of Roundtable organizations and benefited the



visitors. For example, the Museum invited Kim Abeles, a visual artist and early Roundtable member, to create and facilitate an artful learning activity exploring the *Collapse?* exhibition for one of the Museum's monthly Family Fun Day events. Abeles crafted a collage activity in which visitors selected and artistically translated "lesser-known" leaders from modern society (such as Shirley Chisholm and Aung San Suu Kyi), which prompted visitors to explore their selections and contemplate what makes a leader.

When L.A. Theatre Works was preparing the play *The Great Tennessee Monkey Trial* for a national tour in 2007, the

Museum by providing visitors with additional programs and ways to gain insight into the Museum's content.

### Configurations of Project Partnerships

The Museum did not establish rules or constraints around the configuration of partnerships for Roundtable projects, but, in general, projects involved two Roundtable members—one educator and one arts organization. In some cases, two Roundtable members would come together and ask a third member to supplement their project with a specific contribution, for



example, a movement workshop or exploration of an audio play that illuminated a certain concept for students. In other cases, two partner teachers might work closely with one another and draw upon the resources of their community for collaborations. At one time or another, every Roundtable member led at least one project. As members grew more familiar with the goals of the Roundtable, it was not unusual for them to seek and secure teaching artists and other resources that were not part of the Roundtable. In fact, Roundtable members frequently connected one another to potential ideas, resources, and experts, including nonprofit organizations, making the Roundtable its own best resource through its connectivity.

### Saying “Yes” More Than “No”

Because the Museum had little prior experience working with strategic partnerships, arts organizations, and the range of students that the Roundtable members knew well, staff meticulously noted the requests and desires of Roundtable members. The staff made every effort to respond to all member needs, even if the idea was not fully formed, as in the case of the suggestion for student-created exhibitions, which was the spark that led to the designation of the permanent Inter/Act space. Although the staff knew that some Roundtable requests exceeded the abilities of the Museum, the staff almost always said “yes” to the partners and simply figured out how to make the request possible after the fact. Staff was deeply committed to meeting Roundtable members’ requests, because they knew more about what distanced students from the Museum than staff did.

### Approaching Museum Content Conceptually

One of the key differences between the Museum’s approach to the Roundtable and its other programs involving teachers and students is that Roundtable members were encour-

aged to access and work with Museum content at a conceptual level. Typically, a museum educator sifts and narrows exhibition content for a broadly defined group of teachers, and the teachers have to adjust themselves to the resulting study materials. With the Roundtable, the Museum moved beyond this norm and brought in curators and exhibition designers who perceive exhibitions at many levels to have a discussion with Roundtable members. From there, Roundtable members shared with the Museum what concepts would resonate with their students’ interests and experiences and the intersections with the content they aimed to cover as teachers. Members were entrusted to take the “Museum’s content” and adapt and interpret it in order to make the content of greatest significance to their students.

### Growing and Sustaining the Roundtable

Approximately ten months into the development of the Roundtable it became apparent that arts organizations with at least three full-time staff members, as well as classroom teachers who were used to working somewhat autonomously, were most able to give, take, and sustain involvement in the Roundtable. As participation from smaller arts organizations began to wane, the Roundtable and the Museum began discussing how to replenish and grow the group. At first, the Museum worked to maintain the size of the Roundtable by identifying and inviting additional like-minded teachers to participate. (Participation from midsize arts organizations remained consistent because multiple staff were involved with the Roundtable, and these individuals could be seamlessly integrated into the Roundtable as their roles changed.) However, it quickly became apparent that a consistent group that had accumulated a similar and sophisticated level of understanding about the Roundtable was necessary for the effectiveness of the partnership.

The Museum then changed course to both grow the



Roundtable and create support structures for its partner teachers through a single strategy: by extending the impact of the Roundtable by deepening its partnerships with existing schools. This idea came out of conversations with Roundtable teachers who indicated they were participating in the Roundtable and implementing projects with little to no support from their fellow teachers and administrators. Roundtable teachers welcomed the opportunity to bring colleagues into the group and identified teachers at their own schools that the Museum then invited to participate. By increasing participation at its Roundtable schools, the Museum aimed to create small teams that would operate as learning communities, relieving teachers of the feeling that they were working in isolation. At the same time, the Museum began discussions with its Roundtable teachers and administrators to find ways it could help develop supportive school administrators, with the goals of: 1) creating support for teachers and the Roundtable, 2) communicating the outcomes and impact of the Roundtable, and 3) creating multiple connections between partner schools and the Museum.

### Conclusion

Mary Ellen Munley, in her essay “Is There Method in Our Madness?” (1999), comments that “our work as museum educators is predicated on our beliefs about our audiences and our beliefs about human learning and capacity for understanding” (p. 244). The Museum’s beliefs about its audiences, the Roundtable, and human capacity for learning were deeply rooted in a constructivist theory of education, where teaching means connecting information to meaning and experience, and the objective of learning is for individuals to construct their own meaning rather than to recall the “right” answers. Out of this guiding principle came every other decision, such as establishing a culture of care that was highly responsive to both Roundtable and partners’

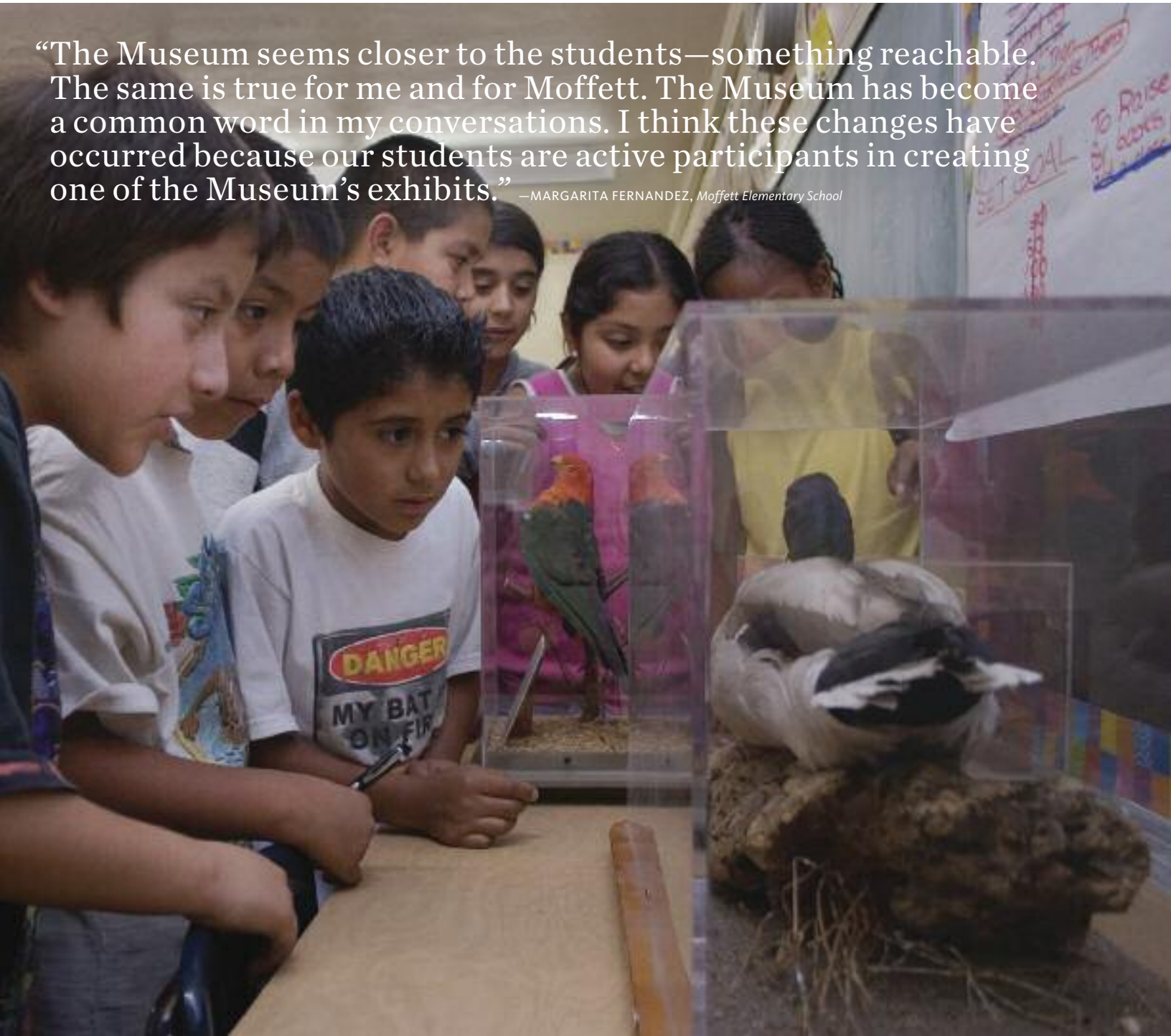
circumstances, which allowed Roundtable members and their students to be fully involved in their own learning. The decisions and practices made by the Museum showed Roundtable members that they possessed the capacity to lead and allowed them to determine their own paths to learning.

<sup>1</sup> [www.uknow.gse.harvard.edu/teaching/TC103-607.html](http://www.uknow.gse.harvard.edu/teaching/TC103-607.html)



“The Museum seems closer to the students—something reachable. The same is true for me and for Moffett. The Museum has become a common word in my conversations. I think these changes have occurred because our students are active participants in creating one of the Museum’s exhibits.”

—MARGARITA FERNANDEZ, *Moffett Elementary School*







Chapter 6: Extending  
Impact

## CHAPTER 6: EXTENDING IMPACT

### **Context: Museums and Change**

Today, many museums are contending with pressure to shift their focus and resources from collecting and conducting research to presenting and engaging public audiences. As museum scholar Gail Anderson (2004) states: “The last century of self-examination—reinventing the museum—symbolizes the general movement of dismantling the museum as an ivory tower of exclusivity and toward the construction of a more socially responsive cultural institution in service to the public. . . . At the heart of the reinvention of the museum is the desire by museum professionals to position the museum to be relevant and to provide the most good in society” (p. 1). The Education and Arts Roundtable at the Natural History Museum of Los Angeles County serves as one vibrant, real example of a museum moving its conceptual and resource needle toward public engagement. This chapter considers the implications of this effort—particularly during what Vice President for Education Carl Selkin describes in his afterword as the “heady” early days of the Roundtable’s development—for the broader field of museum studies and practice. It teases out the emergent concrete lessons the Museum learned about resources (money, time, and real estate), about balancing scholarship with participation, and, perhaps most importantly, about what it means for a large organization to consider an idea seriously enough to create lasting institutional-level change.

### Challenges from Three Directions

Most museums, while acknowledging the need to shift resources toward public-facing activities, are struggling to actualize this shift. Internal and external pressures are ratcheting up as competing priorities and an increasingly strident concern for a return on the public's investment trump the historic legacy rationale for museum support. Museum researcher Graham Black (2005) describes these pressures as originating from three directions: "from above (governing and funding bodies), from below (museum audiences) and from within the profession itself" (p. 1).



### Pressures on Museums from Three Directions<sup>1</sup>

#### **Pressures exerted “from above” by governing and funding bodies:**

- Strategic goals demanded in return for public subsidy.
- Demands for improvement in the quality and value of public service provision.
- Requirements to enhance access and diversify and build audiences that reflect the makeup of museum communities.

#### **Pressures exerted “from below” by audiences:**

- Competition for leisure time of traditional audiences.
- High-quality requirements demanded by new audiences from other information sources.
- Increasing demands from previously excluded audiences who want a say in how the museum is managed and presented.

#### **Pressures exerted “from sideways” within the profession:**

- Demands to address not one audience but plural audiences seeking different experiences from the same product.
- Competition to meet needs of visitors by deploying the most appropriate approaches.
- Desire to address the idea that heritage has a role in enhancing peoples' lives and the public good.



As the Roundtable project pushed against traditional ideas of a Museum's core work, it responded quite naturally<sup>2</sup> to challenges coming from each of Black's three sources. The following examples of such challenges and the Roundtable's responses to them hold learning that may be useful to other museum staff and leaders.

## Pressures from Above—Governing and Funding Bodies

### Challenge

*Requirements to enhance access and diversify and build audiences that reflect the makeup of museum communities.*

### Traditional practice

The visitor experience is narrowly conceived. The museum focuses on school-based field trips for the many, deeper experiences for scholars, and measures its success based on large numbers "served."

### Roundtable response

Community arts organization members of the Roundtable act as a strategic platform for the Museum to connect with neighborhoods consistently and deeply. Their work is not episodic; rather, it is ongoing and responsive and therefore rivals anything that most large museums could aspire to.<sup>3</sup>

By investing in an experimental approach involving a small group of deeply engaged participants—the Roundtable—Museum leadership is supporting more intense and embedded forms of assessment and evaluation that raise the bar for what is considered truly excellent and provide guidance and insight into its general education mission.

The Roundtable was created along the parameters of a "think tank," compensating its participants for their time and

committing itself to listening to their ideas and concerns as education professionals. In doing so, the Museum expresses a different level of respect for the value of community contributions. The teachers, artists, and Museum leadership evidence understanding that they are engaged in moving beyond their individual roles and contexts to make a collective impact on the Museum, the participating schools and community organizations, and their own professional activities. They are generating the possibility for change and transformation in each of these contexts.

## Pressures from Below—Audiences

### Challenge

*High-quality requirements demanded by new audiences from other information sources.*

*Increasing demands from previously excluded audiences who want a say in how the museum is managed and presented.*

### Traditional practice

Museums spend enormous resources on producing content but cannot provide evidence that learning occurs as a result of exhibitions and education programs. They emphasize output over input and cannot prove impact beyond participation numbers.

### Roundtable response

The Roundtable provides an ever-deepening loop of reflection, documentation, and evaluation through a number of integrated processes:

- Inter/Act—an exhibition space designed to hold Roundtable partner projects and to act as a forum for Museum visitor reactions.
- Regular Roundtable meetings, where discussions about pedagogy and strategies take precedence over tactical concerns.
- InterPlay (designed, but not yet fully implemented)—a Web-based holding space for Roundtable projects, lesson plans, and online conversations.

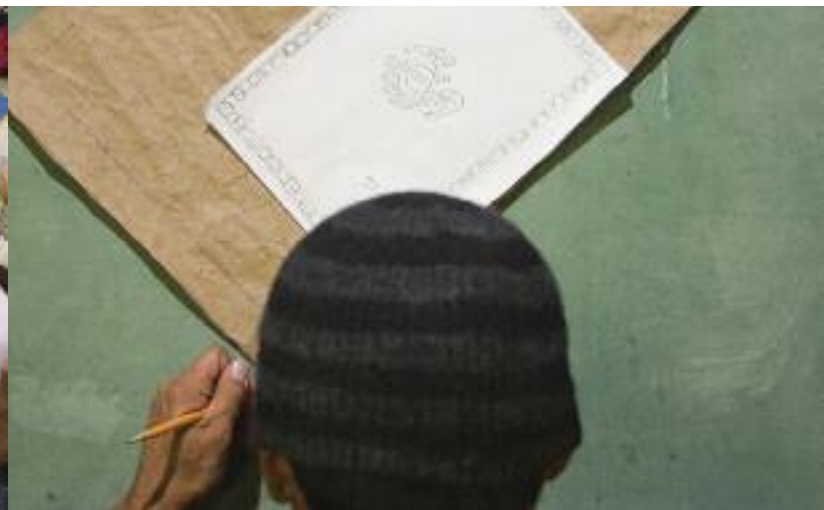
### **Traditional practice**

The museum is the expert. Education staff work focuses on the development of didactic and largely verbal explanatory materials designed to bridge the depth of content understanding of curatorial staff with the public's limited experience.

### **Roundtable response**

The Museum allows itself to become a learner. Its role as facilitator is complemented by unusually curious and open-minded staff members who consider the Roundtable projects a unique laboratory for teaching and learning. In particular, the midsize arts organizations, conversant in collaborative program development, provide instructive lessons in equity and shared leadership.

The Roundtable members represent a wide range of organizational types (visual arts, theater, dance, and literary organizations and public, charter, and continuation schools), thus extending the awareness of potential resources and relationships well beyond the normal circumstance for connections. The Museum is not the broker of partnerships; rather, it functions as a facilitator, allowing a number of rich and independently developed relationships to emerge.





## Pressures from Sideways— Within the Profession

### Challenge

*Demands to address not one audience but plural audiences seeking different experiences from the same product.*

*Competition to meet the needs of visitors by deploying the most appropriate approaches.*

*Desire to address the idea that heritage has a role in enhancing people's lives and the public good.*

### Traditional practice

The museum determines how and when the public participates.

### Roundtable response

The Roundtable partners are empowered to determine how they develop relationships with Museum content. They receive a stipend that allows them to fund extensive, semester-long explorations of exhibition content, and they determine and often independently find program resources (including contracted artists, payment for other organization expertise, and documentation costs).

The Museum's content and the unfolding explorations act as an impetus to wide-ranging and discursive conversations between Museum staff and Roundtable members that lead to inclusive rather than prescriptive planning. The Roundtable meetings evidence a distinctly collaborative, noncompetitive culture.

### Traditional practice

Education resides in one division.

### Roundtable response

Curators from the Research and Collections Division

support content understanding through school visits, making themselves available for Roundtable partner tours, and acting as experts and fact-checkers during project development. Public Programs staff provide ongoing design and technical support. The Roundtable work culminates in a public viewing in a dedicated space whose implementation is a project of the Museum's Public Programs and Education Divisions.

## Institutionalizing Innovation

After the first year, the focus of the work shifted from building a project to considering the possibility of its institutionalization within the Museum. The Roundtable faced both predictable and unique challenges in the earlier stage of implementation. As a living, breathing example of the new mission's focus, one that had not been embraced by the entirety of the Museum staff, opinions about the Roundtable's value were as divergent as those about the Museum's new direction.

The level of institutional change required for a museum shifting its mission can be breathtaking in the scope, depth, and energy required for execution. Wholesale institutional change is often slow enough as to seem invisible or so quick as to leave observers with a sense of loss, as there is a perception that the cup has been emptied before being filled. When this change involves "attempts to work effectively with communities, supporting diverse identities and satisfying multiple needs and expectations," institutional change can be particularly daunting, says museum scholar Sheila Watson (2007, p. 19). "The fact that such issues are debated so fiercely," she finds, "suggests that solutions are difficult and rarely uncontested" (p. 19). Indeed, when the Roundtable first began at the Museum, it became a proxy for a polarizing debate not uncommon in the museum field, a debate that Lang (2006) characterizes as about "elitism versus popularization or 'dumbing down'" (p. 30). Among the



Museum's staff members, the debate hinged on the relative value of research versus the engagement of the public with the Museum. This debate put questions about how to institutionalize learning from the Roundtable and its projects squarely amidst larger conversations about the allocation of and priorities for Museum resources.

Roundtable advocates faced another challenge in attempting to leverage the innovation of the project for broader institutional change within the Museum. At its inception, the Roundtable was peripheral to the concerns of the Museum's institutional-level planning processes. Superficially, the Roundtable appeared to many as a small-budget enterprise, directly affecting an even smaller group of individuals, whose impact on the Museum as a whole was questionable. Museum staff distant from the Roundtable wondered: Does this program really matter, and, if so, how and to whom? The overwhelming evidence was that through the Roundtable projects the Museum experience became something of deep value for Roundtable partners (teachers, educators, students, artists, poets, the culture of a school at large, and community art centers). However, the further away a Museum staff member was from the actual experience, the more difficult it was to inject sufficient commitment and ongoing will to keep the program vital. Although the program was growing fast, its roots in the institution remained shallow.

To address this concern, during the second year of the project, Museum Director Jane Pisano asked consultant Elisa Callow to propose a process of institutionalizing the lessons emerging from the Roundtable. Her report (Callow, 2007) detailed the complexity of the tasks and the number of integrated moving parts required for the Roundtable to help transform not only the Public Programs and Education Divisions but the Museum as a whole. For programs such as the Roundtable to move beyond boutique project status, Callow found, the Museum needed to work consciously

and continuously on three related areas: 1) committing to a sufficient and ongoing budget, 2) allowing enough planning time to support staff as the program grew—to be flexible to the emerging conceptual design so that the program could maintain its strength, and 3) embracing both internal and external conversations among its communities and staff and being prepared to address questions that surfaced about the implications of experimental (and at times controversial) work for the Museum: How has this external work animated the meaning of the Museum's core collections and exhibitions? How did this project affect cross-divisional work? What are we learning from external partners?

A visual map from Callow's report outlines a continuum of steps that this organization and others could consider to institutionalize structures and lessons from the Roundtable, to strategize how support for other small pilot projects could contribute to institutional change, and to address the fundamental pressures from above, below, and sideways.

## Recommendations for Institutionalizing Lessons from the Education and Arts Roundtable —A Snapshot from 2007

### **Program Leadership**

- Clearly define criteria for selecting Roundtable participants and recruitment processes.
- Design Inter/Act exhibitions to more clearly reflect their connection to current exhibitions.
- Codify Roundtable work (past and emerging exhibitions and programs) so members can build upon it. Use a variety of strategies/tools (Web site, publications, participation in conferences).
- Develop strategies to support the Museum visitor in the Inter/Act space.
- Define deeper engagement strategies of more seasoned Roundtable members. (i.e., mentors for new teachers; advisors to Public Programs; advisors to the New Museum project).
- Prepare annual program report and budget tied to both qualitative and quantitative program outcomes.
- Observe visitors throughout the Museum and Inter/Act. Interview Roundtable students about their Museum experiences.

### **Education Division Leadership**

- Clarify locus of authority regarding all partnerships (in depth, neighborhood, etc.). Develop consistent language to describe the Roundtable versus other constituencies.
- Identify strategic connections between the work of the Roundtable and the Museum visitor.
- Develop a staffing plan that provides sufficient support staff to extend the value of the Roundtable's explorations to other programs.
- Identify field-based implications and venues (Web site, publications, conferences).
- Develop staffing plan to support the integration of resources (including frontline teaching staff—paid and volunteer) to numerous programs and the needs of the Roundtable program.
- Develop processes to support interdivisional sharing and work.
- Lead the development of a division mission related to teaching/learning that cuts across all programs. Identify systems changes required to support the integration of Roundtable ideas in other programs.
- Develop and support a culture that values learning about learning. Support emerging insights through change and program revision.

### **Museum Leadership**

- Identify strategic goals for partnerships: What does the Museum need to learn from partnerships? How does it support these partnerships?
- Identify and support strong opportunities for visitor engagement among all divisions.
- Support research and development time in all program planning and resource development processes.
- Identify ongoing funding streams. Include in Web site planning, portals for interactivity.
- Support formative as well as summative evaluation and flexibility/responsiveness to problems and solutions as they emerge.
- Hire permanent division leadership (all divisions).
- Reinforce the relationship of Museum mission and strategic plan to program development, implementation, and support.
- Support reflection on assumptions about learning for both exhibitions and programs.

### “The Field”: What Questions Remain?

The Roundtable raised and continues to raise questions important to the Museum and to the field of museum education. These questions—about scale, resource allocation, qualitative evaluation, effective connections with the public, and an understanding of roles—are not answered simply or quickly. Rather, they move a museum from tactical concerns to strategy, deeper examination of its purpose and function, and greater precision and understanding about how it interprets and communicates the meaning of its collections.

### Process/Content

- Can a museum embrace an approach to its educational mission that creates meaningful learning experiences designed in collaboration with its communities over an approach that offers interpretations of its exhibitions and collections solely designed by its own staff?
- How can experimental, collaborative programs help a museum explore the kind of place a natural history museum needs to be today to attract, meaningfully engage, and expand the demographic mix of its visitors?

### Resource Allocation

- How does it benefit a museum to provide resources, space, and staff time to collaborate with external partners who create independent interpretations of its collections with the potential of attracting new and diverse audiences?
- How does a large institution justify resource allocation that supports a high level of experimentation and individuality for a few versus standardization of programs for the many?<sup>4</sup>

### Museum Culture

- What does it mean for a museum to invest in learning about learning?
- Is this curiosity about learning (as opposed to teaching) shared sufficiently by the museum culture to allow an investment of real value in external versus internal interpretation? Where does learning occur?
- How can a museum capture and share its learning about the learning process that is gained by experimental projects?
- What kinds of meaning and resonance extend beyond the source material (exhibitions, collections, workbooks, catalogues)?
- How does a museum capture impact and related learning experiences occurring away from the museum in classrooms and community educational settings?



These questions are purposely left unanswered to be pondered by individual museums as they consider the implications of experimental and inclusive work on their institutions' mission and program development. In the afterword, the story of the Roundtable continues and is presented through the lens of both the practical realities of this large institution and its interest in deepening the impact of the Roundtable inside and outside the Museum.

**1** Graham Black's (2005) pressures from three directions as expanded by Conal McCarthy (2008), director of the Museum and Heritage Studies Program at Victoria University of Wellington, New Zealand.

**2** The members of the Roundtable, mostly schools and community arts-based individuals, did not come to the project with the same institutional concerns of the Museum professional.

**3** Prior to the Roundtable, a gap analysis of the Education Division's audiences indicated an overlap of service for younger audiences and families and almost complete disregard for middle school and high school audiences. There was little awareness of the opportunity provided by the Museum's proximity to economically disadvantaged neighborhoods. Roundtable members include several individuals representing institutions near the Museum (a neighborhood theater and two schools).

**4** The Museum, a county institution, was expected to make a case for its investment of public funds in part through large numbers of participants and participants representing each of the five supervisorial districts.





A photograph of several children in a museum setting, seen from behind with their arms raised towards the ceiling. The child in the foreground on the left wears a light purple hoodie and pants. The child on the right wears a blue t-shirt and has purple hair ties. In the background, other children are also raising their arms. A row of colorful spotlights (blue, red, green) is visible on the wall behind them. The ceiling has exposed wooden beams and stage lights.

“At the heart of the reinvention of the museum is the desire by museum  
the most good in society.” —GAIL ANDERSON (2004, p. 1)



professionals to position the museum to be relevant and to provide

# AFTERWORD

## A RECENT HISTORY OF THE EDUCATION AND ARTS ROUNDTABLE

The inception and implementation of the Education and Arts Roundtable at the Natural History Museum of Los Angeles County were heady times. Building new relationships and ways of working, creating an innovative and dynamic forum for the development of projects and ideas, and participating in the process that brought those ideas into reality, into the Museum, and into the community, energized all of the participants and generated an optimism and sense of accomplishment that resonates in the previous chapters. But what happens when an exciting program matures? How long does that invigorating sense of newness last? What happens when the challenge shifts from conception and initial implementation to sustainability? Changes in the Roundtable have resulted from the maturation of the partnership, from shifts in the environment both within the Museum and in the broader community, and from circumstances that have buffeted us all—recession and education policy decisions among them. In this afterword I will describe the direction the partnership has taken over the past two years and the impact of the partnership on our practice—as museum educators, teachers, and artists.

First, however, a little logistical history. The Roundtable was conceived as a way to establish a new dynamic among the Museum and its school-related audiences. Instead of the Museum acting as dispenser of knowledge and the school audiences being passive beneficiaries, the Roundtable sought to establish a relationship in which all participants were equal, with the Museum serving as a benevolent resource but not a controlling force. In practice, the Museum needed to connect with the Roundtable partners every step of the way for a variety of reasons, from the constraints on materials used in Inter/Act exhibitions to the need for scheduling gallery interpreter or curator tours, from identifying and scheduling artists to writing work orders to Museum staff. It was only after Emiko Ono left the Museum for another position that it became clear how much work there was, *sub rosa*, in managing the Roundtable. The lack of a succession plan and delay in finding a new staff member with the right qualifications and skills exacerbated the anxiety of the predictable transition from founding staff to successor.

For a while, the Vice President for Education, the author of this afterword, attempted to provide oversight, but it quickly became clear that the “mother ship” needed a full-time manager at the helm. The lack of a full-time program leader at the Museum also adversely impacted the Roundtable partners, since the schools depend upon the Museum for the logistical and project development support that Ono had provided—in addition to her maintenance of the Museum-as-partner obligations—in arranging tours, providing access to curators, and ordering supplies and services. While it is not unusual for the first head of a program to have the workload expand and to respond by taking on ever more responsibilities, sometimes the scope of those increases does not become apparent until the founder leaves. It soon became apparent that the workload was just not sustainable for a single manager and certainly was not manageable as an addition to the other administrative tasks of the vice president.

The search for a new manager identified Adrienne Lee as a candidate with the experience to respond to the needs of the Roundtable—including experience at the Japanese American National Museum and at the Getty Education Institute working with teachers to build educator resources in social studies, history, arts education, and diversity education, as well as a personal background in music and the visual arts. When Lee began, it was important to gain consensus around realistic expectations for resources upon which the Roundtable members could depend without impinging on their innovation, which is the hallmark of the program.

**CARL SELKIN** *Vice President for Education, Natural History Museum of Los Angeles County*

During this transition, the existential question arose: If the Museum provides the springboard from which the projects take off, should there be a concern about how the Roundtable projects reconnect to the Museum? Some Roundtable members expressed sympathy for what they took to be the Museum's concern. The question was construed as: "What does the Museum get out of the Roundtable?" The issue may have been generated partly by transition anxiety, but it is a question that is of strategic importance to the Museum. The resolution of this issue, if not the answer to the question, is embedded in this evaluation report and in the continuing growth of support for the Roundtable.

In this period the Museum has expanded support for the Roundtable considerably, and the program has garnered critical external support by funders, including the Institute of Museum and Library Services. Besides the Roundtable manager, we have added further staff support for the Roundtable: a full-time coordinator position. Part-time technical staff, including a gallery preparator, has also been hired, and a videographer/photographer has been retained through contract. The sustainability of the program depends upon such support. As we journey through the beginnings of the latest recession, we will have to reevaluate everything we do, prioritizing the programs we want to keep. As we do so, however, one of our criteria has to be the long-term benefits of a program like this one. As we have already seen, the Roundtable has had an impact on quality and public value far beyond the relatively small number of partners and their communities.

What is the response to the question of value to the Museum? The Roundtable is the primary engine for changing our approach to museum education, and, as such, it is the laboratory for developing and assessing new education practices and ideas. The public value of museums hinges as much on our contributions to the lifelong learning opportunities for our audiences as it does on research, collecting, and exhibiting functions. The Roundtable affects our professional audiences of educators and our noneducator communities as well.

In this sense, the work of this education laboratory is as important for the Museum as the other research at the heart of the institution and as essential as the other ways—exhibitions, programs, etc.—in which we engage our visitors in order "to inspire wonder, discovery, and responsibility for our natural and cultural worlds."

### **Responding to Change within the Museum**

When the Roundtable started, the projects were centered around special, temporary exhibitions—*Collapse?*, *The Mysterious Bog People*, and *Sonic Scenery*. The Inter/Act gallery space was situated at the exit from the special exhibition galleries, on the path of return to the Museum proper. Inter/Act combined exhibitions of Roundtable projects inspired by the special exhibitions with commentary posted by Roundtable participants and other visitors. During the past two years, however, the Museum has not, for the most part, hosted temporary exhibitions. When the trustees and Museum leadership approved Phase I of the New Museum Project—the renovation and development of new galleries—the result was the closure of six galleries and a multiyear hiatus in the schedule of special exhibitions. Exceptions have been small exhibits from the Museum's holdings, including a display of highly prized objects selected by curators and beautifully mounted in the Director's Gallery (*Treasures from the Vault*), a dinosaur fossil preparation lab designed



for public viewing that followed in the same space and was developed to accomplish the preparation of a prize specimen for the new dinosaur galleries, and a visible storage area that holds many of the best pieces of pre-Columbian artifacts (replacing our now-closed Ancient Latin America Hall). These exhibits provide windows for visitors into the heart of the Museum but do not have the potential for the kind of work the Roundtable partners perform in mining exhibitions and Museum resources. For the Roundtable, the change in exhibition strategy wrought two effects, one on its space and one on practice. The Inter/Act space became isolated at the end of one of the least popular Museum galleries, removing it from the flow of visitors exiting the venue from temporary shows, and the special exhibitions that had been the inspiration for partner work would no longer be driving the projects.

In retrospect, these changes seem minor bumps in the road, and the interesting point is not that the Roundtable continued but that the strategic vision and collaborative atmosphere already established enabled the program not only to adapt to these changes but indeed to benefit from them. It is a classic case of taking the lemons we were handed and making lemonade. Inter/Act became territory that had lost a facet of its identity and purpose, as a place for the expression of visitor response to exhibitions. The Roundtable moved in to fill the partial vacuum. Under other circumstances, the transformation of Inter/Act into a gallery dedicated to Roundtable work might have been politically difficult, but as uncontested space, it has become a place where the intersection of the Museum with the arts and education communities is more robust and the stories told more complete and, I would contend, more compelling.

The Roundtable partners have developed and installed their work in much the same way, but the sense among partners that they have a place of their own within the Museum is a major advance. Large, festive openings have attracted not only the involved teachers, students, artists, and Museum education staff but also parents, relatives, friends, and other teachers and students from their schools. Monroe High School brought more than two hundred students and visitors to the opening of their last show; over one hundred students, family, teachers, and administrators (including a couple of school district board members) traveled twenty miles on a Saturday, largely by school bus, to celebrate the opening of the exhibit that Moffett Elementary School partners had completed during the prior academic year.

Looking back at this evolutionary history, it seems to me that when Inter/Act was shared with other visitor input, Roundtable partners were in a privileged position but not fully integrated with the core work of the Museum. There was still the persistent, subterranean feeling that the Roundtable was not fully embraced by the Museum and that Roundtable partners were transient visitors—paid much more attention to by curators, educators and other Museum staff, but visitors nonetheless.

The resolution that occurred was serendipitous: the content focus shifted to the Museum's permanent exhibits, in particular the Ancient Latin America Hall (prior to its closure), and to the Page Museum of La Brea Discoveries, the Natural History Museum's site for the retrieval, research, preparation, and exhibition of Ice Age fossils from the tar pits of Hancock Park. The Ancient Latin America Hall and the Page Museum were transformational in that Roundtable partner interest in these collections opened the door further into other core activities of the Museum—discovering, collecting, conserving, and displaying.

The process for partners was structured pretty much the same as it had been when special exhibitions were the focus: cura-

tors introduced teachers and artists to the collections, and the partners then worked with Museum staff to develop their themes and projects, returned to the Museum(s) on field trip(s), and developed projects for presentation or installation in the Inter/Act gallery or for performance on-site or at another venue. The resultant deepening of feelings of connection to the Museum may be a function of the longevity of the partner associations or due to the change in focus to permanent museum resources. Whatever the cause, there is a discernible increase in the belief among Roundtable partners that they are a part of the Museum, that they are familiar with and can access a wider range of Museum resources than ever before, and that Museum staff from all divisions welcome them and honor their work. Indeed, the Roundtable partners' perception is verified by increasing interest on the part of colleagues in the Museum's Research and Collections Division, evidenced by their inclusion of the Roundtable in exhibit content development and by Research and Collections staff seeking additional ways to interact with teachers.

### **Impact on Teaching Practice**

Roundtable partners were particularly energized by behind-the-scenes tours at the Page Museum and the deep involvement of researchers, preparators, and education staff. Projects included Stella Middle Charter Academy's creation of a prehistoric Mesoamerican civilization and its artifacts—crafted in ceramic—and even an invented language and mythology. Projects related to the Page Museum focused on themes of entrapment, limitations to freedom, and threats to survival.

HeArt Project students and other Roundtable partners found deep resonance in the archaeology of Latin America and the paleontology of the tar pits with their lives and experiences. Moffett teachers and their principal remarked on the enthusiasm of the students, their English language vocabulary development, and the pride they took in learning fairly sophisticated new vocabulary from the experience. Page Museum–related projects included a play developed by Moffett first graders and artists from the 24th Street Theatre, poetry projects by two different schools in collaboration with poets identified by Roundtable partner Poets & Writers, and a Monroe project that explored issues of identity.

The opportunity to repeat projects has promoted a new menu of choices. Teachers and artists are discussing the merits of novelty versus repetition. Some teachers enjoy the challenge of continually developing new projects, while others, particularly Moffett teachers, welcome the opportunity to revisit content, deepen their own resources—books and materials on Cenozoic mammals, for example—and improve lesson plans or curricula that incorporate Museum resources. Some variables that are influencing teachers' decisions may have to do with whether or not they teach the same grade level year after year. The Moffett teachers and a literacy coach will most likely remain with first-grade, Limited English Proficient students. These teachers are addressing the same grade-level content and performance standards each year, while other teachers may need to generate lesson plans and curricula for different grade levels and abilities. Roundtable teacher Annie Lefkowitz at Cienega Elementary School, for example, teaches different grade levels from year to year, and her assigned classes range from high achievers to special-needs students. Teachers who opt to revisit and build on past projects and themes have experienced the satisfaction of gaining deep subject knowledge and assembling resources that can strengthen the lessons based on this content. Strategies for expanding the projects themselves are also clear

in the products. An initial school-year project at Moffett produced a playlet with the help of the 24th Street Theatre. This year, the students are new to the project, but the product is longer and more complex. The in-class resources, or their increased use, appear to have benefited the project. Museum education staff commented, even during the first year, that Moffett teachers had discovered books and other resources with which Museum staff was unfamiliar. Their recent project work suggests that these resources have more fully informed the student performances.

Teachers have demonstrated extraordinary creativity in developing innovative projects instead of repeating prior ones. They have not only explored new concepts but also developed new relationships within the Museum and taken advantage of more Museum collections and resources for learning. Lefkowitz, for example, has added considerably to the scope of her projects for Cienega fourth graders. She develops and implements multiple projects each year and engages the Museum in ways that stimulate the Museum to discover possible new approaches to education practice as related not only to schools but also to family visitors. In one project, “What Is a Museum?” her students visited the Museum, interviewed staff from various areas, and developed an understanding of the nature and importance of museums while learning sophisticated interview, note-taking, critical thinking, and language skills.

Most recently, the Cienega students installed a project on land use in the Inter/Act gallery that evolved from student observations of how gangs seek to define or redefine the neighborhoods around the school. The students worked with Museum history curators Sojin Kim and William Estrada and Seaver Center for Western History staff John Cahoon and Betty Ueyda. The students examined actual historically important maps, learned about how their neighborhoods have been defined and redefined over time, and developed their own mapping criteria and maps of their neighborhoods—in effect, reclaiming their community by defining it in terms of their own experience.

One thing is constant: the various approaches to project generation are informed by the collaboration with artists and the Museum in ways that affect teacher practice. Earlier chapters point to the development of project-based learning, the application of constructivist-inspired pedagogy, and the ways in which the adaptation by participants to the “think tank” atmosphere—for many a very different atmosphere from the isolation and lack of real collegial support identified in teacher surveys—builds confidence, allows for the development and vetting of ideas in a supportive atmosphere, and builds a sense of community.

However, there is another attribute of the Roundtable that seems to me to have broad application for K–12 teaching. Because teachers, artists, and Museum staff work together both over the course of the school year and over several years, there is a true interdisciplinary approach that emerges. Teachers integrate content standards in a variety of subjects—science, history and social science, language arts, visual and performing arts—and develop projects as integral with the curriculum, embedded in, if not driving, curriculum scheduling.

For Roundtable teachers, who live in an environment of testing and scripted teaching, one that reflects an essential mistrust of teacher competence, this integration runs counter to the norm in other classrooms. For example, drive-by, drop-in, and add-on approaches to arts education in the schools—when it is available at all—marginalizes the arts and reflects their continued exile

from the core subjects where, even according to the federal education program No Child Left Behind, they are supposed to reside. The interdisciplinary learning that is essential to the Roundtable honors the central place of the arts and embodies what we know about multiple intelligences, different learning styles, and, perhaps most importantly, the ways that creativity can best be nurtured. These experiences may well provide applicable insights for the challenges faced by teachers and artists attempting to integrate arts into the classroom in other ways.

The Roundtable approach is one in which teaching artists and classroom teachers develop plans and curricula together, growing the classroom experience organically rather than cobbling it together on some ad hoc basis. The advantage of this collaborative development is obvious not only in the seamless integration of the arts and other content but also in the ways, as we have observed, that teachers, artists, and Museum staff think through ideas together, inspiring one another.

This organic process contrasts with the way arts education and other essential but devalued components of K–12 education are often slighted in the current scripted educational environment. It is no wonder that museums are experiencing both an overall reduction in the number of school visits and a shift of those visits to late in the spring, after standardized testing is completed. School administrators limit field trips and restrict them to these schedules because the importance of informal education and experiential education as an essential component of teaching and learning is paid lip service but not practiced. By the same token, arts education is once again being cut drastically as state and district budgets shrink, because, despite the commitments to integrate arts education in the core disciplines, it has remained on the margins, a perceived “enrichment” rather than an essential component of quality education.

In the current educational environment, the museum trip is pushed to the periphery of the school year and relegated to the equivalent of a trip to an amusement park. Indeed, teachers sometimes have their students vote about where to go for their one field trip of the year, and destinations like water parks are listed along with zoos, aquariums, and museums as possible destinations. What we have learned from the Roundtable goes beyond the marriage of the Museum and the classroom. We have explored a learning and teaching situation that has palpable benefits.

Documenting the learning that takes place is an important component of the Roundtable and provides compelling evidence of success and of the public value of the Museum. This process of documentation includes the use of standard rubrics for assessing student performance as well as the evidence visible in student work. Our interviews with students and teachers long after the projects have finished have been an important indicator of the persistent benefits of participation. We have developed, with the help of researcher Lauren Stevenson, a protocol that facilitates teacher collection, organization, and presentation of data. However, this is an area in which there is much left to do in order to satisfy the requirements for accountability that are almost exclusively dependent on test scores for students in grades 2–12.

### **Impact on NHM Education Practice**

Over the course of the Roundtable, the Museum has been an equal partner in the sense that we are learning and changing our practices based upon our shared experience. The strategic planning of the Education Division relies on the insights that we have



gained from the Roundtable in a number of ways. The most fundamental way is in the development of a philosophy of practice for the division that provides definition for what we do and how we evaluate success at what we do. Our staff developed this philosophy to define the division's mission and values in relation to the new mission of the Museum and to embody what we have learned from the Roundtable. This philosophy of practice is described in a policy document that serves both as a guide to Education Division staff and as a public definition of principles. The philosophy is rooted in experiential learning and the development of circumstances that encourage two-way conversations and interactions between participants and the Museum.

Newly developed education programs allow visitors to become creative participants in the Museum, not just observers or the passive recipients of the Museum's knowledge. Program activities encourage deep engagement with the collections and sequenced, audience-appropriate programming. All incorporate the arts as an important component. One new series of programs, Art and Science, for example, is offered six Saturdays each year and introduces nonschool visitors to Museum collections through interdisciplinary stations that connect the arts and scientific inquiry at the Museum. In February 2009, for instance, the program introduced visitors to the often hidden processes of the Museum that create public displays. Visitors created and displayed their own dioramas as they learned from the Museum's diorama artist and its taxidermist—who work with our curators to represent natural history through dioramas and exhibits—about the exhibit creation process and its relationship to scientific inquiry and discovery.

The Roundtable project on mapping inspired the development of an area that focuses on maps and community in our family gallery, the Discovery Center. Partners' engagement with the Page Museum has resulted in a complete overhaul of school visits to that venue in order to empower students to be more active, creative participants in their voyage to understanding. While it may well be that these innovations could have arisen from other drivers, for us at the Museum, the experience of the Roundtable program provided examples of successful projects and an exemplary model to stimulate these changes.

The Roundtable provides the intersection of the Museum with the local education community. Roundtable members are knowledgeable both about the Museum and their professions as teachers and artists. They have been invaluable in helping the Education Division develop more compelling school visit experiences and in the design of our programs and materials for school visitors. Their thorough knowledge of the Museum as well as their direct experience of the challenges facing teachers equip the Roundtable teachers to help the Museum better serve the community of nonpartner educators. We recently convened a panel of Roundtable elementary school teachers and a Roundtable administrator to advise us on the best ways to prepare teachers for field trips to the Museum, including strategies for teachers to tie the field trip into multiple grade-level content standards across several disciplines. We are implementing their suggestions, which we hope will not only improve the field trip experience for teachers and students but also lead to a better understanding of how to use the Museum as a resource to inspire deeper interdisciplinary learning with a rich experiential component.

Roundtable teachers are also ideally suited to mentor other teachers about the advantages in achieving their educational goals through inclusion of the Museum as a key resource. This March we instituted two programs to link Roundtable and non-Roundtable K–12 teachers. The first is a two-day teacher workshop to be conducted by a Roundtable teacher. This teacher is designing the workshop

based on her experiences and knowledge, and the Museum is providing logistical support, from promotion and registration to the venue, materials, and a stipend for the teacher. These workshops will become an ongoing offering of the Museum, supplementing the other teacher workshops we provide. In addition, we have embarked upon an even more ambitious program to link teachers in preparation programs to the Museum through partner teachers. UCLA Graduate School of Education first-year students will spend two days being introduced to the Natural History Museum and the Page Museum as well as to the three mobile classrooms that comprise an outreach program of the Museum. These workshops will include partner teachers who will introduce the partner program and remain available as resources for the education students. Over the course of the two-year teacher preparation program, these students will partner with the practicing teachers in our program to produce lesson plans and other materials related to the classroom-Museum connection. In the second year, UCLA students will be placed as student teachers with Roundtable teachers. The aim is to have the next wave of teachers be well prepared in the practices we develop together for integrating the Museum and the classroom and artists.

It is clear to me that our learning from the Roundtable has been of incalculable benefit to us and to the teachers and students with whom we have worked. Recognition by the Standing Professional Committee on Education (EdCom) of the American Association of Museums (through the 2009 Excellence in Programming Award) is gratifying and reflects the evaluation of the Roundtable partnership by the professional museum community. However, I believe the real message of the Roundtable is even broader and more significant. The Roundtable exemplifies an essential direction for education reform in the 21st century that integrates disciplines through deep connections between community learning resources—museums, community arts groups, and others—and the schools. At a time when the complexities of our world demand teaching and learning capable of growing minds with the creative capacity to meet contemporary challenges, the Roundtable provides a model program that goes beyond the inherent limits of a scripted environment and opens up new doors to innovation.

# REFERENCES

- Anderson, G. (Ed.). (2004). *Reinventing the museum: Historical and contemporary perspectives on the paradigm shift*. Walnut Creek, CA: AltaMira Press.
- Black, G. (2005). *The engaging museum: Developing museums for visitor involvement*. London: Routledge.
- Brown, C. K. (1992). The museum's role in a multicultural society. In G. Anderson (Ed.), *Reinventing the museum: Historical and contemporary perspectives on the paradigm shift* (pp. 143–149). (2004). Walnut Creek, CA: AltaMira Press.
- Callow, E. (2007). *Partnership program: Institutionalizing innovation*. Unpublished report, Natural History Museum of Los Angeles County.
- Catterall, J. S. (2002). The arts and the transfer of learning. In R. J. Deasy (Ed.), *Critical links: Learning in the arts and student academic and social development* (pp. 151–157). Washington, DC: Arts Education Partnership.
- Csikszentmihalyi, M., & Hermanson, K. (1994). Intrinsic motivation in museums: Why does one want to learn? In E. Hooper-Greenhill (Ed.), *The educational role of the museum* (pp. 146–160). London: Routledge.
- Deasy, R. J. (Ed.). (2002). *Critical links: Learning in the arts and student academic and social development*. Washington, DC: Arts Education Partnership.
- Diamond, J. (2004). *Collapse: How societies choose to fail or succeed*. New York: Viking.
- Falk, J. H., & Dierking, L. D. (2000a). *Learning from museums: Visitor experiences and the making of meaning*. Walnut Creek, CA: AltaMira Press.
- Falk, J. H., & Dierking, L. D. (2000b). The contextual model of learning. In G. Anderson (Ed.), *Reinventing the museum: Historical and contemporary perspectives on the paradigm shift* (pp. 139–142). (2004). Walnut Creek, CA: AltaMira Press.
- Heath, S. B., Paul-Boehncke, E., & Wolf, S. (2007). *Made for each other: Creative sciences and arts in the secondary school*. London: Creative Partnerships.

- Lang, C. (2006). The public access debate. In C. Lang, J. Reeve, & V. Woollard (Eds.), *The responsive museum: Working with audiences in the twenty-first century* (pp. 29–38). Aldershot, UK: Ashgate Publishing.
- McCarthy, C. (2008). *Thinking through museums: A short course in museum history, theory and practice for the Auckland War Memorial Museum*, presented September 2008.
- Munley, M. E. (1999). Is there method in our madness? Improvisation in the practice of museum education. In G. Anderson (Ed.), *Reinventing the museum: Historical and contemporary perspectives on the paradigm shift* (pp. 243–247). (2004). Walnut Creek, CA: AltaMira Press.
- Sandell, R. (2003). Social inclusion, the museum and the dynamics of sectoral change. *Museum and Society*, 1 (1), 45–62.
- Screven, C. G. (1993). United States: A science in the making. In G. Anderson (Ed.), *Reinventing the museum: Historical and contemporary perspectives on the paradigm shift* (pp. 160–166). (2004). Walnut Creek, CA: AltaMira Press.
- Stevenson, L. M., & Deasy, R. J. (2005). *Third space: When learning matters*. Washington, DC: Arts Education Partnership.
- Thompson, M. J., Barniskis, B., & Aronson, S. (2005). *ARTFUL teaching and learning*. Minneapolis: Minneapolis Public Schools and the Perpich Center for Arts Education.
- Watson, S. (Ed.). (2007). *Museums and their communities*. London: Routledge.
- Wootton, K. (2003). “Community this” and “community that.” In L. Smyth and L. Stevenson (Eds.), *“You want to be part of everything”: The arts, community, and learning* (pp. 16–25). Washington, DC: Arts Education Partnership.
- Yenawine, P. (1998). Visual art and student-centered discussions. *Theory into practice*, 37 (4), 314–321.



# ACKNOWLEDGMENTS

## Natural History Museum of Los Angeles County Staff

Jane G. Pisano, *Ph.D., President and Director*  
Carl Selkin, *Ph.D., Vice President, Education*  
Karen Himes, *Acting Director of Education, 2005–2008*  
Emi L. Yoshimura, *Director, School Programs*  
Adrienne Lee, *M.S. Ed., Manager, Education Initiatives & Partnerships*  
Molly Porter, *Program Coordinator, Education Initiatives & Partnerships*  
Erica Vasquez, *Program Assistant, Education Initiatives & Partnerships*  
Vanda Vitali, *Vice President of Public Programs, 2005–2007*  
Michael Wilson, *Education Technology Specialist*  
Christopher Winkler, *Manager, Education Collections & Resources, 2005–2009*  
Christy Evans, *Office Manager*

## Education and Arts Roundtable Staff

Elisa Callow, *Founding Director*  
Adrienne Lee, *Manager*  
Christopher Martinez, *Technical Coordinator*  
Emiko Ono, *Manager, 2005–2007*  
Molly Porter, *Program Coordinator*  
Erica Vasquez, *Program Assistant*

## Past and Present Education and Arts Roundtable Partners

### SCHOOLS

#### Cienega Elementary School

Rosa De Portilla  
Annie Lefkowitz  
Alita Pregizer

#### CityLife Downtown Charter School

Jacki Breger  
Annie Lefkowitz

#### The HeArt Project Schools

Amelia Earhart High School  
Boyle Heights Technology Academy  
Central High School/All Peoples Branch  
Central High School/Angelus Plaza College Preparatory High School  
Central High School/Beverly Small Learning Center  
Central High School/Cypress Park Branch  
Central High School/La Familia Branch  
Central High School/Northeast L.A. Branch  
Central High School/West Blvd. Branch  
Central High School/West Blvd., Silverlake Branch  
Cesar Chavez Community Day School  
Destiny Girls Academy  
Duke Ellington High School  
Metropolitan Continuation High School  
Mujeres y Hombres Nobles  
New Jefferson High School (new name: Frida Kahlo High School)  
Pueblo de Los Angeles High School  
Riviera Academy  
Sheriff's Leadership Academy  
Youth Fair Chance  
Youth Opportunities High School

#### James Monroe High School

Maura Draheim  
Kelly Hanock  
Lynnette Ryan

#### Kenneth L. Moffett Elementary School

Luisa Barba  
Patricia Cruz  
Margarita Fernandez  
Magdalena Garcia  
JoAnn Isken  
Jaime Stamper-Reichbach  
Jessica Sukov

#### Kranz Intermediate School

Bernadette Barajas Dincin  
Viviana Iaciovani  
Carrie Johnson

#### Northridge Middle School

Poppy Macias

#### Parras Middle School

Amy Beran  
Eloise Overton  
Diane Young

#### Pasadena High School, Visual Arts and Design Academy

Brook Kent  
Alex Shultz

#### Stella Middle Charter Academy

Jaime Hernandez  
Eliza Kim  
Cate Samson

### ORGANIZATIONS

#### 24th Street Theatre

Stacey Depalo Longo  
Deborah Devine  
Stephen Drucker  
Adrian Guzman  
Rodney Harding  
Dustin Johnson  
Jay McAdams  
Sarah Zinsser

#### 826LA

Ashley Atkinson  
Shelley Boyle  
Carol Feucht  
Reaux Flagg  
Darrell Gabonia  
Cindy Guidry  
Tiffany Kelly

Jessie Nagel  
Diana Olympia  
Julius Diaz Panoriñan  
Chris Schnick  
Jon Weinberg

#### Angels Gate Cultural Center

Nathan Birbaum  
Judith Blahnik  
Matthew Thomas  
Jessica Yang

#### Armory Center for the Arts

Denise Figueroa  
Doris Hausmann

#### California Dance Institute

Michelle Bitting  
Charles “Bubba” Carr  
Lee Munn-Arvinger  
Jodi Redmond  
Carole Valleskey  
Rebecca Wink

#### Child Educational Center

Lisa Cain-Chang  
Allegra Inganni

#### The HeArt Project

Sol Alvarez  
Cynthia Campoy Brophy  
Alejandro Cohen  
Margit Edwards  
Suzy Foster  
John Girgus  
Peter Harris  
Robert Hilton  
Joey Maramba  
Carlos Ramirez  
Maya Rodgers  
Christina Webb  
Joselyn Wilkinson  
Harry Um

#### LA Theatre Works

Maggie Bourque  
Susan Loewenberg  
Rick Nahmias  
Vicki Pearson

#### Los Angeles Public Library

Glen Creason

### **Metropolitan Water District of Southern California**

Russ Donnelly  
Benita Horn  
Christel Webb

### **(Out)Laws & Justice**

Lisa Citron  
Rodney Harding  
Peter Kors

### **Poets & Writers**

Elena Karina Byrne  
Eloise Klein Healy  
Cheryl Klein  
Anthony "A.K." Toney

### **Social and Public Art Resource Center (SPARC)**

Judy Baca  
Debra Padilla

### **ARTISTS**

Kim Abeles  
Edward Asner  
Ann Bray  
Adrienne Campbell-Holt  
Alejandro Cohen  
Jacqueline Dreager  
Don Farber  
Michelle Fennema  
John Girgus  
Sergio Lechuga  
Sean MacGillivray  
Judy Marcus  
Rick Nahmias  
Miya Osaki  
Meriel Stern

### **NHM and Page Museum Staff**

Tyieshia Armstrong  
Lilli Ayvazian  
Pat Bauer  
Margi Bertram  
Phillip Bouchard  
Helena Bowman  
Kristen Brown  
Cindy Busche  
Grace Cabrera  
Rebecca Chernack  
Luis Chiappe  
James Clark  
Rolando Cruz  
Jim Dines  
David Edwards  
William Estrada

Dorothy Ettensohn  
Christy Evans  
Karen Ewald  
Luis Fernandez  
Kate Fitzgerald  
Kirk Fitzhugh  
Bern Folkman  
Noriko Gamblin  
Kimball Garret  
Polly Garstka  
Doug Goodreau  
Connie Graham  
Cathy Groves  
Lindsey Groves  
Jeri Gutierrez  
John Harris  
Carolyn Hendricks  
Guillermo Hernandez  
Karen Himes  
Dan Hoffman  
Sophie Hunter  
Anne Jicha  
Brent Karner  
Kim Kessler  
Sojin Kim  
Doris King  
Dan Kroupa  
Mary Kuhl  
Adrienne Lee  
Gustavo Lopez  
Amanda Lyons  
Joel Martin  
Christopher Martinez  
Rosa Mazon  
Julie McAdam  
Megan McNally  
Deanna Miller  
Ralph Mitchell  
Don Motley  
Jessica Niven  
Annie O'Malley  
Wes Oakley  
Ania Onley  
Emiko Ono  
David Orme  
Doug Pearlstein  
Molly Porter  
Donald Quinine  
Jose Regalado  
Tony Robinson  
Marisol Rojas  
Omar Routhier  
Robert Saldivar  
Barbara Sanchez  
Carmen Santizo  
Heather Saunders

Teresa Savo  
Robin Savoian  
Herb Schiff  
Betty Sedor  
Jeff Seigel  
Carl Selkin  
Chris Shaw  
Beverly Shulman  
Traci Slacum  
Robert Spellman  
Judy Takeda  
Patrick Tanaka  
Carlos Tenorio  
Howell Thomas  
Sheron Thompson  
Angel Valdes  
Rick Valdez  
Trevor Valle  
Scott Van Keuren  
Erica Vasquez  
Jim Verhein  
Vanda Vitali  
Michael Wilson  
Christopher Winkler  
Karen Wise  
Emi Yoshimura

### **CONSULTANTS**

Elisa Callow  
Richard J. Deasy  
Hope Tschopik Schneider  
Steve Seidel  
Lauren Stevenson  
Mary Jo Thompson

### **THE MUSEUM IS GRATEFUL TO ALL PARTICIPATING STUDENTS**

# PHOTO CREDITS



PAGE 10: A James Monroe High School student paints the outside of an assemblage that he and his class are creating as part of their exploration of NHM's *Mysterious Bog People* exhibition.



PAGE 16: NHM staff and collaborating artists plan a *Conversations* exhibition. Photo by Peter Kirby.



PAGE 19: A HeArt Project student at Central High School/All Peoples Branch explores NHM's *Collapse?* exhibition in a bookmaking project.



PAGE 26: HeArt Project students at Central High School/La Familia Branch work with an artist to explore NHM's *Collapse?* exhibition.



PAGE 14: Museum visitors explore an NHM *Conversations* exhibition. Photo by Todd Sali.



PAGES 16–17: Guest speakers conduct a panel as part of the First Fridays series hosted by NHM's Public Programs Division. Copyright Ryan Miller/Capture Imaging.



PAGE 21: Students at the 24th Street Theatre's After Cool program reflect on their experience creating an original theater piece about the L.A. River, titled "El Rio." Photo by Lauren Stevenson.



PAGE 27: HeArt Project students at Central High School/La Familia Branch rehearse for their performance at NHM about the *Collapse?* exhibition.



PAGE 15: Ed Moses's installation in an NHM *Conversations* exhibition. Photo by Todd Sali.



PAGE 17: HeArt Project students at Amelia Earhart High School work on a digital media project.



PAGES 22–23: Student drawing from an interdisciplinary project exploring the *Collapse?* exhibition. Image by first-grade student at Kenneth L. Moffett Elementary School.



PAGE 28: HeArt Project students at Central High School/La Familia Branch create a collaborative work of art exploring the *Collapse?* exhibition.



PAGE 15: Ed Moses and Vanda Vitali, former vice president of Public Programs, prepare the artist's *Conversations* installation. Photo by Todd Sali.



PAGE 18: A map showing the locations of past and present Education and Arts Roundtable partners. Image by Kim Abeles.



PAGE 25: Museum visitors explore a gallery in NHM's *Collapse?* exhibition focused on modern Montana. Photo by Ben Rogers.



PAGE 28: HeArt Project students at Youth Opportunities High School create a collaborative work of art exploring the *Collapse?* exhibition.



PAGE 28: HeArt Project students at Central High School/La Familia Branch create a collaborative work of art exploring the *Collapse?* exhibition.



PAGE 33: Museum visitors explore a gallery in NHM's *Collapse?* exhibition focused on the Tokugawa era in Japan. *Photo by Ben Rogers.*



PAGE 35: A Kenneth L. Moffett Elementary School student depicts how a flower changes in a three-part sequence as part of a unit on choices and change with visual artist Meriel Stern. *Collage by Kenneth L. Moffett Elementary School first grader.*



PAGE 39: Student drawing showing the repercussions of the choice by a Japanese shogun to create a decree that a tree must be planted every time one is cut down. *Drawing by Kenneth L. Moffett Elementary School first grader.*



PAGE 29: HeArt Project students at Central High School/Angelus Plaza College Preparatory High School do trust exercises in preparation for their performance inspired by the *Collapse?* exhibition.



PAGE 33: Museum visitors explore a gallery in NHM's *Collapse?* exhibition focused on the Tokugawa era in Japan. *Photo by Ben Rogers.*



PAGE 36: A Kenneth L. Moffett Elementary School student writes about the connection between choice and change, a key concept in a unit exploring *Collapse?*



PAGES 40-41: A James Monroe High School student paints the outside of an assemblage as part of a class exploration of NHM's *Mysterious Bog People* exhibition.



PAGE 30: A sculpture created by HeArt Project students at Riviera Academy in an interdisciplinary project exploring *Collapse?*



PAGE 34: Student drawing, part of a class exploration of NHM's *Collapse?* exhibition, depicting the repercussions of the Lorax's decision to cut down trees. *Image by Kenneth L. Moffett Elementary School first grader.*



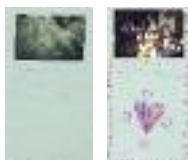
PAGE 37: Kenneth L. Moffett Elementary School first-grade students work with an Education and Arts Roundtable poet to prepare for their visit to NHM's *Sonic Scenery* exhibition.



PAGE 43: Artifacts from the *Mysterious Bog People* exhibition. *Copyright Ryan Miller/Capture Imaging.*



PAGE 30: HeArt Project students create codices as part of a unit on *Collapse?*



PAGE 35: Kenneth L. Moffett Elementary School students write about photos they took on their visit to NHM. *Photos by Kenneth L. Moffett Elementary School first graders.*



PAGE 38: Student drawing depicting the learning journey in a unit exploring *Collapse?* *Drawing by Kenneth L. Moffett Elementary School first grader.*



PAGE 43: A body found in the peat bogs and on display in the *Mysterious Bog People* exhibition. *Copyright Ryan Miller/Capture Imaging.*





PAGE 46: Outside and inside images of the door assemblages created by James Monroe High School students in their unit on the *Mysterious Bog People* exhibition.



PAGE 50: James Monroe High School students work with artist Miya Osaki to create a genocide awareness poster campaign.



PAGE 53: (3) Students work on the outside of their assemblages.



PAGE 53: (7) Student poses next to the assemblage made in his likeness as it hangs in the Inter/Act gallery at NHM. *Photo by Kelly Hanock.*



PAGE 47: Assemblages created by James Monroe High School students hang in the Inter/Act gallery at NHM.



PAGE 50: Poster from James Monroe High School students' genocide awareness campaign. *Image by James Monroe High School students.*



PAGE 53: (4) Students cut out the figures represented in their assemblages. *Photo by Kelly Hanock.*



PAGE 54: James Monroe High School students take a break from working on their *Mysterious Bog People* assemblages to take a photograph with their work in progress.



PAGE 48: Detail of the outside of a James Monroe High School assemblage depicting the archetype of a gang member.



PAGE 53: Photos from James Monroe High School *Mysterious Bog People* project. (1) Students make a collage out of their personal artifacts.



PAGE 53: (5) Students outline an assemblage figure.



PAGE 55: James Monroe High School students at graduation. *Photo by Kelly Hanock.*



PAGE 48: Detail of the inside of the assemblage depicting the "real" life of young people in the James Monroe High School community.



PAGE 53: (2) Students work on the outside of their assemblages.



PAGE 53: (6) Students shape their assemblages.



PAGE 55: James Monroe High School students on the NHM front steps after a visit to the *Mysterious Bog People* exhibition. *Photo by Kelly Hanock.*



PAGES 56–57: Close-up of a James Monroe High School door assemblage showing the archetype of a Goth teenager.



PAGE 65: Students at the 24th Street Theatre prepare for a performance of "The Bog People" based on the *Mysterious Bog People* exhibition at NHM.



PAGE 70: Kenneth L. Moffett Elementary School first-grade students write poetry in an interdisciplinary project exploring NHM's *Sonic Scenery* exhibition.



PAGE 76: The Inter/Act gallery.



PAGE 58: Triceratops featured in NHM's *Collapse?* exhibition. *Photo by Ben Rogers.*



PAGE 65: A Kenneth L. Moffett Elementary School student shares his poetry with poet-in-residence Judith Blahnik.



PAGE 72: James Monroe High School students point to their names on the wall in the Inter/Act gallery, where their artwork, inspired by the *Mysterious Bog People* exhibition, is on display. *Photo by Kelly Hanock.*



PAGE 77: The Inter/Act gallery.



PAGE 62: Student and artist work together at the Child Educational Center.



PAGE 66: A video documenting Kenneth L. Moffett Elementary School first graders' interdisciplinary exploration of NHM's Ancient Latin America Hall plays in the Inter/Act gallery. *Photo by Lauren Stevenson.*



PAGE 73: James Monroe High School students move their assemblages into NHM, where they will be exhibited in the Inter/Act gallery. *Photo by Kelly Hanock.*



PAGE 79: Stella Middle Charter Academy students build sculptures out of recyclables.



PAGE 64: Cienega Elementary School students work on a radio play with LA Theatre Works staff.



PAGE 69: HeArt Project students at Youth Opportunities High School work on a video project related to NHM's *Collapse?* exhibition.



PAGE 75: Students perform an original theater piece based on the *Mysterious Bog People* exhibition at NHM.



PAGE 80: Students do theater exercises at the 24th Street Theatre.



PAGE 85: Kenneth L. Moffett Elementary School teachers share their students' work at an Education and Arts Roundtable meeting at the Page Museum. *Photo by Lauren Stevenson.*



PAGE 89: HeArt Project students at Central High School/Angelus Plaza College Preparatory High School work on a video project related to NHM's *Collapse?* exhibition.



PAGE 95: Riviera Academy students pose after presenting their project about NHM's *Collapse?* exhibition.



PAGE 98: Students at Angels Gate Cultural Center create clay sculptures exploring NHM's Ancient Latin America Hall.



PAGE 86: Education and Arts Roundtable members create artwork together during a workshop with arts education consultant Mary Jo Thompson. *Photo by Lauren Stevenson.*



PAGE 90: A Kenneth L. Moffett Elementary School first-grade student presents her poetry to three first-grade classes.



PAGE 97: Kenneth L. Moffett Elementary School first-grade students prepare to write poetry in an interdisciplinary project exploring NHM's *Sonic Scenery* exhibition.



PAGE 102: A Cienega Elementary School student talks with artist Maggie Bourque at LA Theatre Works.



PAGES 86–87: HeArt Project students at Central High School/All Peoples Branch create artwork exploring NHM's *Collapse?* exhibition.



PAGE 91: Cienega Elementary School students study NHM artifacts on loan to their classroom.



PAGE 97: A HeArt Project student at Central High School/Northeast L.A. Branch creates a codex as part of a project exploring NHM's *Collapse?* exhibition.



PAGE 103: At Angels Gate Cultural Center, student artwork is displayed in the cases in which it will be presented in the Inter/Act gallery at NHM.



PAGE 87: HeArt Project students at Youth Opportunities High School work on a video project related to NHM's *Collapse?* exhibition.



PAGE 92: Museum visitors explore a re-creation of an ancient Maya temple in NHM's *Collapse?* exhibition. *Photo by Ben Rogers.*



PAGE 98: Cienega Elementary School students record a radio play at LA Theatre Works.



PAGE 103: A student works with clay at Angels Gate Cultural Center.



PAGES 104–105: Students warm up at the 24th Street Theatre.



PAGE 124: An NHM window frames a map marking the locations of Education and Arts Roundtable members. *Image by Kim Abeles.*





"Among the many contributions of this story, most compelling is the creation of a setting for true innovation in the conceptualization, design, and implementation of educational experiences for students and teachers in the museum and in their classrooms. To create and sustain a 'hothouse' of this capacity is fantastic and so rare in any realm of educational practice, but particularly extraordinary in museums. This book should be of real value to serious museum educators (and anyone in museums who may not see themselves as 'educators' but do feel committed to the quality of learning in museums)." —STEVE SEIDEL, *Patricia Bauman and John Landrum Bryant*

*Lecturer in Arts in Education, Harvard Graduate School of Education*

"By mindfully shifting its role from sole originator of ideas to facilitator of inquiry and discussion, the Museum fosters rich dialogue and activities, committed teachers and artists, and deeper learning experiences." —AMERICAN ASSOCIATION OF

*MUSEUMS, Committee on Education, 2009 Excellence in Programming Award*

"Though museums have been reaching out to communities for several decades, these institutions remain wary of opening up processes, especially those that might question curatorial decisions. Can curators and institutions share this power with their constituents? This book sheds light on positive answers to this question and invites us to remain critical of our own profession as museum practitioners in the 21st century. Work done by the Natural History Museum is proof that museums have stopped being places of privilege and can become democratic spaces." —CRISTINA LLERAS, *Art and History Curator, Museo Nacional de Colombia*

