

Topics and Facilitators for “Up The Learning Curve”

Friday, Sept 28, 2018 2 - 5:15 pm

Capital Room 3, Marriott Hotel, Hartford, CT

Session Coordinator: Charlie Trautmann, <cTrautmann@Sciencenter.org>

TOPIC	FACILITATOR	CONTACT INFO
Background of the science center movement (<i>plenary</i>)	Dave Ucko	Dave Ucko <DaveUcko@gmail.com>
ASTC's services & offerings (<i>plenary</i>)	Michelle Kenner	Michelle Kenner <MKenner@astc.org>
1 - Opportunities & challenges of the field	Gillian Thomas	Gillian Thomas <gThomas3470@gmail.com>
2 - Managing board relationships	Lesley Lewis	Lesley Lewis <lesley@lesleylewis.net>
3 - Relationships with communities & schools	Christian Greer Kristin Leigh	Christian Greer Christian.Greer@slsc.org Kristin Leigh <kleigh@explora.us>
4 - Inspiring and managing human resources	Chevy Humphrey	humphrey-Chevy <humphrey@AZScience.org>
5 - Strategic Planning	Pelle Persson	Professor Per-Edvin Persson <pelle@peredvinperssonconsulting.com>
6 - Financial matters (e.g., earned vs contributed income)	Debbie May	Deborah May <Debbie.May@lifeandscience.org>
7 - Fundraising 1	Lara Litchfield-Kimber	Lara Litchfield-Kimber <llkimber@mhcm.org>
8 - Grants & Fundraising 2	Dave Ucko	Dave Ucko <DaveUcko@gmail.com>

9 - Promoting innovation	Barry Van Deman	"Barry VanDeman (barry.vandeman@lifeandscience.org)" <barry.vandeman@lifeandscience.org>
10 - Large-scale collaborations involving museums	Dennis Schatz	Dennis Schatz <DSchatz@pacsci.org>

Gillian Thomas

Trends

Changing demographics

- Less primary age children, larger proportion of those from under-served communities
- Increasing 60+ group
- Increasing millennials, some of whom are now moving into the stage of being parents
- Increasing LGBTQ awareness
- Increasing numbers of people with disabilities, partly linked to 60+ increase
- None of these groups have traditionally been supporters or users of science centers

Wider field of competitors

Many activities which originated in science centers are now delivered by a wide range of potential competitors and target same disposable income.

- Makers groups in libraries and other spaces
- Citizen science programs need to permanent space
- Robotics and other workshops offered outside science centers
- Universities offering teacher training
- Aquariums, Zoos, other Museums and Children's Museums
- Theme Parks

Many of these are nimble, ie do not have or need a big institution to operate, or have substantial resources, eg Universities. Science centers are less endowed and have big real estate commitments.

No new product

- Shortage of good new interactive experiences
- Few good new traveling exhibitions – and they are expensive
- For the US, NSF no longer funding traveling exhibitions.
- IMAX numbers in science centers dropping and new commercial IMAX emerging as competitors

Media and new technology impact

- Social media, AI and VR may reduce need for real experiences
- Science centers lack unique moments that give media results
- Lack of novelty and celebrity backing a handicap

Changing funding models

- Necessity of impact measures
- Funders looking for community cohesion and collective impact
- Younger funders looking for new models, including for profit, not existing institutions
- Government agencies not showing interest in science centers to deliver programs
- Donor commitments can limit change

Opportunities

- Real experiences and meeting place for whole community, act as beacons of diversity
- Lead collective impact action, collaboration at local level, be the lead for informal science
- Broader collaboration to deliver new products
- Changing demographics bring new audiences
- Science policy issues and impact on major challenges provide an opportunity for science centers to act as community resource and focus: become a hub, a trusted location.

STEM/STEAM Focus v Innovation and creativity

- Science is the lens through which we encourage people to understand their world: teaching science is one aspect but not main focus, science centers not a replacement for schools
- If STEM/STEAM is the main focus, then science centers can never be more than very junior partner to schools.
- Innovation and the broader approach to encouraging innovation and creativity can offer a more valued approach.

Questions

- What helps new products emerge?
- Can different demographic sectors complement each other or require separation?
- How do we lead when we are small players locally?

ASTC 2018 New CEO Workshop

Community Engagement Strategies

Kristin Leigh and Christian Greer

"Up the Learning Curve" on **Friday, Sept 28, 2:00 - 5:00 pm at the Hartford Marriott.**

Prep time at 1:30 pm on Sept 28 at the Hartford Marriott (Charlie Trautmann (607) 227-1910).

Mini-Session on Community Engagement (45 minutes)

- **Kristin:** Quick introductions round the table (5 minutes)
- **Kristin and Christian:** Share a brief background history of their **experience** and **expertise** on the subject. This will provide **context** for why we were chosen to share thoughts and facilitate conversation. (7 minutes total, 3-4 minutes each)
- **Christian:** Defining terms. Operationally thinking about Community engagement as a **continuum of community involvement**. Using a broader frame for **community which includes schools**, social service organizations and other facilities that can be used as platforms for engagement. (1-2 minutes)
- **Kristin:** Ask people to start by sharing where their institution is in thinking about the question: 1. What's the difference between doing "*community service **for***" the community or "*community engagement **with***" the community?
2. Why is this an important question?
(10 minutes)
- **Kristin:** Then launch into a few **critical questions** and get the conversation started:
3. How can museums know if they are relevant in their communities and how might engaging more deeply with the community increase your institution's relevance (and, thus, both your impact and your sustainability)?
4. How can we be sure we're as relevant as we think we are?
(15 minutes)
- **Christian:** Include best practices for community engagement:
(what are some more we can include?)
Kristin--Harwood Institute Community Conversations Guide
(5 minutes)

ASTC 2018 New CEO Workshop

Community Engagement Strategies

Kristin Leigh and Christian Greer

Science Center / Museum

Work toward in
Collective impact

Community Organizations

Networked Approaches

Shared Vision

Collaborative Projects

https://groundworkusa.org/wp-content/uploads/2018/03/GWUSA_Best-Practices-for-Meaningful-Community-Engagement-Tip-Sheet.pdf

- **Christian: Summarize** and wrap up the conversation with a few **takeaways**. **Share**/offer our **contact info** if they further questions or ideas. (3 minutes)

COMMUNITY CONVERSATION GUIDE

1. What kind of a community do you want?

- Why is that important?
- How is that different from the way things are now?

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2. Given what we just said, what are the two to three most important issues or concerns when it comes to the community?

- Decide which issue is most important for the group and use it for the discussion.
- If you are going to test a specific issue introduce it here. Introduce the specific issue with follow-up questions like, "How does that fit with what we're talking about?" and "What concerns do you have about that?"

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3. What concerns do you have about this issue? Why?

- Does it seem like things are getting better? Worse? What makes you say that?
- How do you think the issue/concern came about?

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4. How do the issues we're talking about affect you personally?

- What personal experiences have you had?
- How about people around you – family, friends, coworkers, neighbors, others – what do you see them experiencing?
- Are some people affected more than others? Who? In what ways? Why?

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5. When you think about these things, how do you feel about what's going on?

- Why do you feel this way?
- How do you think other people (in different parts of town) feel about this?

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6. What do you think is keeping us from making the progress we want?

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7. When you think about what we've talked about, what are the kinds of things that could be done that would make a difference?

- What do you think these things might accomplish?
- In terms of individuals, what are the kinds of things that people like us could do to make a difference?
- What's important for us to keep in mind when we think about moving ahead?

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8. Thinking back over the conversation what groups or individuals would you trust to take action on these things?

- Why them and not others?

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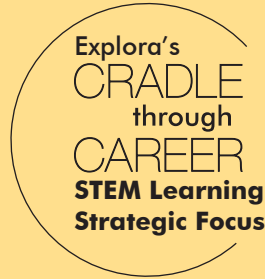
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Explora thanks the following groups for participating in this ongoing community engagement initiative and for helping us learn a process for moving forward strategically:

- Sawmill Community Land Trust
- Wells Park Neighborhood Association
- New Mexico Autism Society
- Partnership for Community Action
- Nurse Family Partnership
- Albuquerque Cyclists
- Explora Board and Founders Groups
- Explora Managers Group
- Heading Home Albuquerque
- International District Healthy Communities Council
- New Mexico Montessori Network
- Crossroads for Women
- New Mexico School for the Blind & Visually Impaired
- New Mexico Asian Family Center's Chinese Families Group
- New Mexico Asian Family Center's Vietnamese Families Group

Looking Forward



This community listening series, as part of a thorough and well-designed strategic planning process, has made Explora a stronger, more relevant community organization. We have identified community issues rooted in people's shared

aspirations, developed strategies that fit our community's context, forged relationships with the right partners, and are working systemically to create the community conditions that enable change to take hold.

We will continue to build networks for innovation and learning and adopt the right metrics to gauge progress. This work will continue over the next year as part of the implementation plan for a new Cradle through Career STEM Learning Strategic Focus. This focus builds on what we learned through community listening and reflects a shared commitment to engage, educate, and employ our state's students on their pathway to success.

FUTURE SCIENCE LEADERS
Ages 13–adult

YOUNG SCIENTISTS
Ages 5–12

EARLY EXPLORERS
Ages 0–4

ENGAGE

EDUCATE

EMPLOY

iexplora!

Shared Aspirations

Working together we can change our communities. At Explora we believe this requires open, honest conversations and active listening with the intent to learn and change. Between January 2014 and June 2016, Explora held a series of community listening sessions that provided data to help us better understand our community and its rhythms. The fifteen listening sessions, involving more than 150 people, taught us much about the aspirations, concerns, and challenges shared by members of the Albuquerque community and created a framework around which Explora can engage more deeply and serve as a relevant community anchor and change agent.

Seven shared aspirations were shared consistently among groups during Explora's listening sessions.

These included desires for:

- 1) an inclusive, accessible community;
- 2) a child-centered community;
- 3) a community with abundant educational opportunities;
- 4) a community with plentiful, high-quality early childhood education;
- 5) a safe community;
- 6) a community with less poverty and more jobs; and
- 7) a community with well-planned neighborhoods.



Listening to Connect with Community

For our listening series, Explora used the community conversation process developed by the Harwood Institute for Public Innovation as part of its Turning Outward approach. Turning Outward means using the community, not the conference room, as the main reference point for decisions—for the strategies pursued, the partners chosen, how efforts are begun and grown over time, and how the internal organization is structured and run. If an organization turns outward and makes intentional choices, it will produce greater impact and relevance in the community.

www.theharwoodinstitute.org



Aspiration: An inclusive, accessible community

Summary statement: We aspire to live in an inclusive community, where barriers to access have been eliminated. We dream of an aware and accepting community, full of accessible public spaces, conversations among different groups of people, integration of attitudes, and a sense of belonging.

Participant comments:

- We want people to accept us, not try to fix us.
- We need community anchors that provide flexible, responsive, affordable services.
- Young moms often feel isolated.
- It's hard for immigrants to learn about the resources available; more information in Spanish would be helpful.
- Transportation is an issue for our families and a barrier to opportunity.
- We aspire for acceptance of families dealing with autism. ””



Aspiration: A child-centered community

Summary statement: We aspire to have a fun, friendly, peaceful community for our children—one that understands and includes children and supports multi-generational families.

Participant comments:

- Families need more opportunities for shared activities in the neighborhood in the evenings.
- Parents are often distracted on their phones. We need more parenting workshops and resources.
- We want a community that understands 'kids will be kids' and still includes them.
- Supporting families and their values is very important to nurturing children.
- We want playmates and activities for our kids, like a bike park or affordable sports teams in our neighborhoods that our kids can join. ””

Aspiration: A community with abundant, lifelong educational opportunities

Summary statement: We aspire to live in a community where there are opportunities for lifelong learning, where active learning is encouraged, and where students are set up for success.

Participant comments:

- We need access to out-of-school enrichment programs.
- There needs to be more things for teens and young people to do.
- We need places to learn about computers and study for the GED.
- There should be more open-ended experiences that stimulate children's enthusiasm for learning.
- We could hold bike safety and repair workshops or home repair workshops, with tools and people to help.
- Educational opportunities are limited for people with autism.
- Our rural communities need more access to educational resources. ””

Aspiration: A community with plentiful, high-quality early childhood education

Summary statement: We aspire to live in a community that supports families with young children through high-quality early childhood education and gives our kids the best start.

Participant comments:

- We need better training for daycare teachers.
- We need affordable, accessible, flexible day care that matches parents' shifts.
- We need extended family settings that take advantage of the support and wisdom of elders—like a multigenerational center that is both a nursing home and an early childhood center.
- Starting young makes the biggest difference!
- I can't look for a job without childcare, but I can't afford childcare without a job. ””

Aspiration: A safe community

Summary statement: We aspire to live in a clean, safe community, where we are comfortable letting our children play outside and explore.

Participant comments:

- We need more places and times to have honest conversations.
- People should watch out for each other.
- We need fewer people in jail and more case workers, along with support when people get out of jail.
- I'm nervous about my kids playing at the park.
- We worry about our lives while cycling.
- Homelessness is a real problem that we can feel in our neighborhoods and see at the park. ””

Aspiration: A community with less poverty and more jobs

Summary statement: We aspire to live in a community with jobs for all, where we raise students to be our future entrepreneurs, engineers, policy makers, and scientists.

Participant comments:

- We need fair banking practices and a compassionate legal system to help end poverty.
- Better jobs in the neighborhood would make a difference.
- We need to be engaged in policy; we need to vote!
- We need to keep our kids here in New Mexico after they graduate.
- There aren't enough qualified candidates to fill the jobs open in our state, especially in the science, engineering, and medical fields.
- How can we attract new employers to Albuquerque in different ways? ””

Aspiration: A community with well-planned neighborhoods

Summary statement: We aspire to live in a community with well-planned neighborhoods that are walkable and allow us to get to know our neighbors—communities with parks, museums, grocery stores, clinics, gardens, and public transportation.



Participant comments:

- We need a healthy grocery store and clinic in the neighborhood.
- Wouldn't it be nice if there was an early learning center right across the street?
- We want our neighborhoods to be known for something!
- A more walkable neighborhood would be nice, with a community garden and more chances to get to know each other outside.
- We want beauty, art, and fun available to everyone. ””

Listen, Welcome, Co-create

Explora's listening sessions have led to new collaborations, resources, approaches, and programs that reach all corners of our community and help spark an interest in science, technology, engineering, art, and math learning for children and their families. They have taught us a new process for working with partners and have shaped Explora's three-part community engagement strategy: listen, welcome, and co-create.

Explora's work with the New Mexico Autism Society (NMAAS) and Partnership for Community Action (PCA) provide two examples of the listen, welcome, co-create strategy in action.

After hosting a listening session with families served by NMAAS, we better understood the challenges facing families affected by autism. This conversation initiated a partnership in which Explora welcomed families affected by autism with no-cost Community Partner Memberships and co-created a new set of resources, transforming how families affected by autism can visit Explora. Similarly, during a listening session with immigrant mothers served by PCA, we heard a deep commitment to providing children with educational opportunities, despite many barriers to access. Explora welcomed PCA's families with Community Partner Memberships, and staff from both organizations worked together to design a bilingual afterschool engineering club, providing the families of PCA with a dedicated resource available in their neighborhood.

15.09.2018

Professor Per-Edvin Persson, Oy Per Edvin Persson Consulting Ltd Ab

PARTICIPATORY STRATEGIC PLANNING

Preparations

Before launching a strategic process or a new cycle of an existing process, a benchmarking review or an organizational assessment may assist in defining the starting point and understanding the state of the organisation. In addition to understanding the world around us, an understanding of key elements of success is useful.

Vision, Mission, Values

To be successful, an organization needs to be clear about its goals. A transparent and clear planning structure is needed. Strategies need to be developed in a participatory fashion to ensure that the whole organization buys in. In the first stage, usually a two-day facilitated seminar, the extended management team or leadership group decides the vision, defines the mission and finds the core values through a participatory discussion process. The values are further defined through their signal behaviours. The results from the first stage are then taken through a consultative process with the entire team, collecting feedback and suggestions, especially asking what is missing and what needs to be changed. The core team then meets anew to finalize the core ideology statements (vision, mission, values).

A commonly accepted core ideology ensures that the entire organization views itself in the same way, and will present itself in identical terms to the outside world. It is the first step in a path to greatness. The encompassing vision will motivate and energize staff and visitors alike.

Strategic Objectives

In the next stage, usually another two-day seminar, the management team starts to work on the strategic objectives of the organization for the next 3-5 years. The discussions need to look at global megatrends as well as current museum trends. Usually the work includes a SWOT analysis. The state of the institution needs to be understood and relevance issues discussed. The core ideology has been determined in the first stage. The work will then move on to define the strategic objectives for the next five years. The strategic objectives typically consist of a number of strategies to be implemented in the forthcoming annual plans.

The strategic objectives need to be presented and discussed with the entire team, both to collect feedback and ideas, and to ensure that the goals are understood in the same way. Team members should reflect on how they can advance the goals in their daily work. Through the consultation processes the team is invited to become part of the process, and thus the typical fate of “strategies”, i.e. something dictated from above but with no relevance to the daily work, can be avoided, even if the final decision is taken by the Board.

My role in this process is to facilitate and advise. Typically, I will present the model and the structure, facilitate the discussions, provide guidance on the internal consultation processes and summarize the results.

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15.09.2018

Professor Per-Edvin Persson

ASTC ROUNDTABLE SESSION ON STRATEGIC PLANNING

Points to note when launching a strategic process

- working in 3-5 year strategic cycles
- strategic plan implemented through annual plans
- benchmarking review/organisational assessment at start
- participatory process
- Board/management team/key managers
- organized consultation of staff on the way
- understanding elements of success
- knowledge of global and professional trends
- clear core ideology (vision, mission, values)
- about five strategic objectives to define main achievements during the next strategic cycle
- strategic objectives defined by strategies, actions and tasks
- work through priorities
- goals aligned to resources
- communication and celebration

www.peredvinperssonconsulting.com

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Characteristics of Financially Healthy Nonprofits



Every director and board member of a nonprofit would like to have a large endowment, reserve cash in the bank, and a surplus at the end of every year. Unfortunately, most of us know that this might be a dream instead of reality. Without these tangible signs of financial strength, how can you know if your organization is financially healthy?

Financial health is about more than just reserves and endowment balances. Having a large budget or complex accounting system doesn't always result in good management and longterm success. Just as our personal health depends on our behavior, so the financial health of a nonprofit depends on management behavior – policies and practices.

Even though there may be occasional deficits, or periods of tight cash flow, the following characteristics are good signs that your organization will be financially healthy over the long-term.

1. Board of directors and management hold themselves responsible for long-term stability in both programs and financial performance.
2. Board members understand their roles and responsibilities in financial matters.
3. A realistic and well-considered budget is prepared and approved by the board.
4. Budgets are prepared in tandem with planning for programs and operating needs.
5. Management and board are committed to managing with the goal of an operating surplus each year.
6. Consistent, accurate, and timely financial reports are prepared and analyzed by qualified individuals.
7. Management and board monitor financial results as compared to the budget and modify programs and activities in response to variances.
8. Management realistically plans and monitors cash flow so as to be able to meet obligations.
9. Financial policies are in place that establish, or have specific plans to establish, an operating reserve to finance cash shortfalls and program growth.
10. Policies are established for major financial decisions and adequate and appropriate internal controls.
11. Management is committed to compliance with all required legal and funder reporting.
12. The board and management regularly review short-term and long-term plans and develop goals and strategies for the future.

Download Propel Nonprofits' Financial Management Self-Assessment to review how your organization is doing.

Our mission is to fuel the impact and effectiveness of nonprofits with guidance, expertise, and capital. Learn more about our services, training, and resources online.

 propelnonprofits.org

Additional Resources

Councilofnonprofits.org

Nonprofitrisk.org

Propelnonprofits.org

Linking Mission to Money by Allen J. Proctor.
CreateSpace Independent Publishing Platform, 2011

Feel free to contact me:

Debbie May, VP for Administration and CFO

Museum of Life and Science

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Fundraising 1: Focus on Individual Giving

Lara Litchfield-Kimber
Mid-Hudson Children's Museum (LLKimber@mhcm.org)

It's about relationships...

As CEO, embrace your role as chief relationship builder and storyteller for the organization

Be realistic about the time it takes for donor relationships to develop and mature

Approach individual giving strategically by prioritizing certain relationships over others

Leverage "CEO face time" strategically when building relationships

Build a "relationship web" for each top donor/prospect to ensure sustainability in the face of personnel changes within the organization

Take a portfolio approach to managing top donors/prospects

Reflections on board involvement in fundraising...

The CEO/Board President relationship is the most important there is when it comes to organizational fundraising

Board Presidents must set expectations by embracing and promoting the board's role in fundraising

Communicate fundraising expectations upfront and often

Encourage board members to make their own gifts before asking others for support

Provide fundraising training to board members to build confidence and capacity

Leverage board members' relationships with potential donors strategically

Introduce systems to monitor campaign giving and board member assignments (solicitation and/or stewardship)

Checklist for Effective Fundraising

David Ucko

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Federal (NSF AISL) Grants

- Are you starting to plan the project *~one year* in advance of submission?
- Have you really *studied* the solicitation/program announcement?
- Do you have an *innovative concept* that specifically addresses the guidelines?
- Will your project achieve a meaningful “*strategic impact*” on the field?
- Are you explicitly building on *prior work* and on *educational research*?
- Are you working with an *evaluator*? Working *backwards* from intended outcomes?
- Are you partnering with *learning sciences* faculty or other researchers?
- Are you partnering with *target audience* organizations? Involving them in planning?
- Did you recruit an *advisory group* of external experts? Will you use them effectively?
- Have you revised your draft proposal based on *external review* prior to submission?

Private Funds

- Are you developing *relationships* with donor prospects before making an ask? For example, have you requested their “counsel”?
- Have *all* your Board members demonstrated their commitment by giving?
- Are you continuing to *strengthen* and *diversify* the Board?
- Have you identified *Board member relationships* in your community? Are you using those relationships to set up *meetings*, accompanied by the trustee?
- Have you created (and nurtured) a “*friends*” *organization* with meaningful activities?
- Are you developing *credibility* through small successes? Balancing your budget?
- Are you developing strategic relationships with other *community NFPs*?
- Do you play a *visible, active role* in the community? Speak regularly to civic groups?
- Have you gotten to know your *elected officials* (local, state, national)?
- Have you *thanked* each donor multiple times after receiving a contribution?

INNOVATION IN SCIENCE CENTERS: ROLE OF THE LEADER

“Innovation distinguishes between a leader and a follower.” – Steve Jobs



3 LEVELS OF AMBITION

CORE

Enhancements to core offerings

ADJACENT

Expanding into new opportunities

TRANSFORMATIVE

Inventing things for markets that don't yet exist

IDEAS IN BRIEF

- The year-to-year viability of a science center depends on its ability to innovate. How prepared are you for the change ahead? Be future ready. “Innovate or die.” – Peter Drucker
- For many science centers, innovation will remain a collection of activities, energetic but uncoordinated—splitting the revenue pie into smaller slices but not actually growing the pie.
- Leadership drives culture; culture drives innovation. Innovation is the by-product of an effective culture.
- Be clear on levels of ambition and drive growth by managing innovation as an integrated system with portfolio goals.
- Leaders must communicate continuously and relentlessly about innovation goals and processes. Make it a cultural mindset. Break down silos. A clear plan that creates shared goals gets everyone moving in the same direction.
- Develop a tolerance for risk and the ability to learn from failure. Allow a little bit of chaos and discomfort.
- Transformational initiatives require different management approaches—different talent, budget, metrics.
- Effective leaders know that getting this right is harder than it looks.

NOTES



BOOKS

Next is Now: 5 Steps for Embracing Change by Lior Arussy. Simon & Schuster, 2018.

Change by Design by Tim Brown. HarperCollins, 2009.

Quick and Nimble by Adam Bryant. St. Martin's Press, 2014.

Innovation: The Five Disciplines for Creating What Customers Want by Curtis R. Carlson & William W. Wilmot. Crown Publishing, 2006.

Measure What Matters by John Doerr. Portfolio/Penguin, 2018.

The Innovator's Cookbook by Steven Johnson. Riverhead Books, 2011.

Ten Types of Innovation by Larry Keeley and Helen Walters. John Wiley & Sons, 2013.

The Art of Innovation by Tom Kelley. Doubleday, 2001.

The Ten Faces of Innovation by Tom Kelley. Doubleday, 2005.

Never Stop Learning by Bradley R. Staats. Harvard Business Review Press, 2018.

ARTICLES

Why Design Thinking Works, HBR September 2018 Reprint R1805D

The Business Case for Curiosity, HBR September 2018 Reprint R1805B

Why the Lean Start-Up Changes Everything by Steve Blank, HBR May 2013 Reprint R1305C

Managing Your Innovation Portfolio, HBR May 2012 Reprint R1205C

The Innovation Catalysts by Roger L. Martin, HBR June 2011 Reprint R1106E

How P&G Tripled Its Innovation Success Rate, HBR June 2011 Reprint R1106C

WANT TO CONTINUE THE CONVERSATION?

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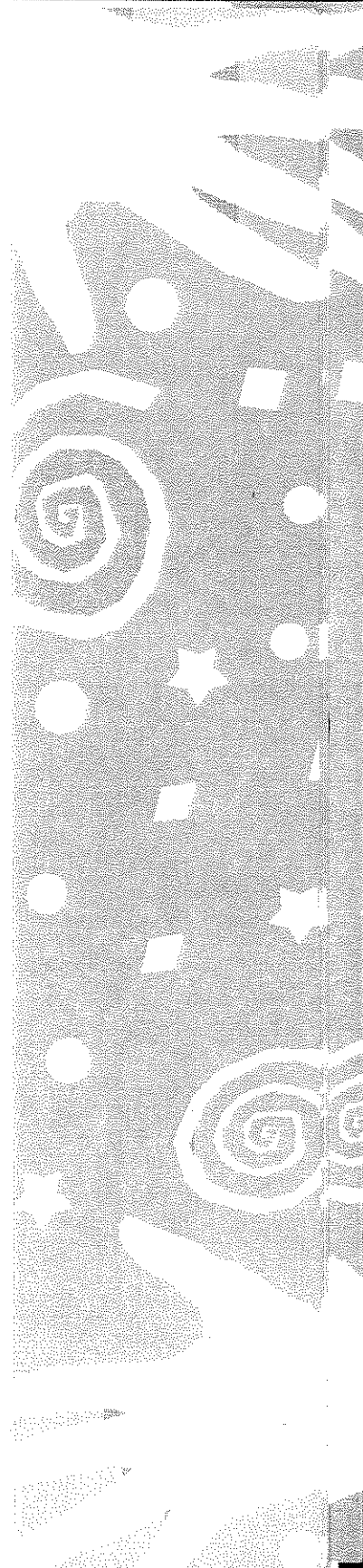
QUESTIONS



Collaboration: Critical Criteria for Success

**Lynn D. Dierking
John H. Falk
Dana G. Holland
Susan Fisher
*SLi***

**Dennis Schatz
Leila Wilke
*Pacific Science Center***



Chapter 3:

Learned Wisdom: Keys to Success and Obstacles to Success

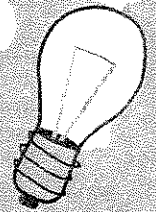
Keys to Successful Collaboration

The museum professionals who participated in this study described factors that they felt contributed to successful collaboration, based on their personal and institutional experiences. In addition, some people described factors that are obstacles to successful collaboration. Many of these factors are variously implicit in the examples featured in the previous chapter. Taken together the factors do not result in a magic formula for successful collaboration. They should however serve as useful points to consider, given the specifics of a particular collaborative undertaking.

Shared goals:

All partners in a collaboration should share in the benefits of the project. Many of the museum professionals interviewed stated that collaborative partners should have shared goals and mutual needs in order to make a project work. In these “win-win” arrangements, all partners derive benefits, which are ideally equally distributed. When partners’ respective goals in a collaboration are not the same, given different institutional needs, each partner’s respective goals should be complementary:

The most important thing is that both parties want the same thing,



or at least their respective goals are not in conflict.

We have learned that everybody in the collaborative must perceive what the value is. If the smaller institution sees that the larger ones are getting all the benefits [it is a problem]. We are in one collaborative with five other museums. We need to avoid possible jealousies among the five big institutions. To do this you need to ensure that all the participants get maximum benefits.

Keys to Successful Collaboration:

- 1) **Shared Goals**
- 2) **Be Realistic**
- 3) **Formalize & Plan**
- 4) **Control & Oversight**
- 5) **Time Commitment**
- 6) **Project Design**
- 7) **Partner Commitment**
- 8) **Funding**
- 9) **Organic Relationships**
- 10) **Mutual Respect**
- 11) **Receptive to Opportunity**
- 12) **Perseverance**

It is key that both parties have something they want, and that both benefit from the project. For instance, I work with multi-cultural programming in the city and we ask people to do things here at the facility. For example [we ask] Native American groups [to do things for us here, and] in return, for Native American groups, we have attended Elders dinners to show our commitment to them.

Several people felt that the benefits from a collaboration should be considered as those things that ultimately benefit the institution's audience. If what is gained through collaboration cannot logically be understood to benefit the audience, then it is not truly a benefit:

Collaborative partners need to have shared goals in which both partners gain. For example, with WEI (World Eskimo Indian) Olympics, the museum has a good, solid reputation in the community and with Native people as a place that cares. They wanted an appropriate venue and we wanted to be involved and to provide an event for our audience, and both of us wanted to make money.

Benefits are derived from collaboration when each partner contributes the part that they can best accomplish. Ideally, the effect is synergistic, and the group accomplishes more together, through their combined efforts than any one party could accomplish working alone:

Collaboratives work with an arrangement of "we can do this if you can do that."

Each player brings another part to it. Especially with exhibit collaborations. One person will know about how to get a bank to donate, and another person will know how to involve businesses so that a lot of services get donated.

Project tasks are thus best distributed according to the particular strengths of each partner:

We all contribute expertise in the area we are strongest. [We] do well with fundraising and community relations. Others [partners] focus on education, development skills, archival work, etc.

Be realistic:

Know what your institution can bring to a collaboration and what it cannot.

In embarking upon a collaboration or considering collaborative partnering, it is necessary to realistically assess and be able to articulate the strengths and capabilities of your own institution. As described, collaborations work best when each partner is contributing its strengths, but an institution must be aware of its strengths and abilities in order to make a realistic commitment to contribute. An example of an institutional representative with such awareness is:

We never give up. We have resiliency. We are accepting of peoples' styles and cultural backgrounds. We set reasonable goals. We are good leaders and know the community.

Regardless of size and experience, institutions have determined ways to contribute to a collaboration by focusing on what they can do. Several people mentioned that their position as a nonprofit organization is an asset since it attracts other organizations that want to use this status. Staff at small institutions articulate the strengths of their size, including organizational flexibility and close proximity to the community:

We were the leaders in putting the project together. We are small

“Successful collaborations are relationships, built upon familiarity, trust, and mutual commitment to a project.”

[and it was definitely to our advantage]. The Maritime Museum and Mystic Seaport are both very large, with 400,000 visitors a year. The grant probably had less significance to them than to us since we are growing. [They still] were interested [in the project], maybe because they wanted to work with us because our staff is very aggressive and creative.

It is easier for us to work with the school system directly. Small museums get to know people and the community intimately.

We want to mainline this institution and the university for the educational system of the state. It is a hard nut to crack because the professional schools of education do not reach out as far as we do. [The schools] are entrenched and bureaucratic, whereas we are flexible.

One staff person from a relatively newly-established museum has had concerns that her institution has inherently less to offer to a collaborating partner than the potential partner has to offer her institution. She felt that her institution, as well as other similarly situated institutions, need to “try to figure a way that those with which we collaborate win as much as other smaller institutions.” Although more secure about what their institutions had to offer in a collaboration, many interviewees nonetheless felt that research into this area could prove helpful:

There is a need to explore how to work with other organizations, how to create win-win situations where both organizations share the same goals I consider it a collaboration when both organizations get something out of it.

If the realistic assessment and awareness of your own institutional abilities is important, equally important is having the same awareness of one’s partners in collaboration. Successful collaborations are relationships, built upon familiarity, trust, and mutual commitment to a project:

All participants have to be equally committed, all have to recognize

the benefits and it must be a dedicated group of people.

Formalize and plan:

Formalize the collaborative relationship with a mission statement and a plan of action that anticipates both the expected and the unexpected.

Collaborative relationships are best consecrated through a formalized mission statement for the project. This reduces the possibility that personality and changing personnel at participating organizations will compromise the success of the collaboration. The creation of and adherence to a mission statement means that the actions of collaborating partners are informed by a mutually agreed upon plan and are less easily affected by the whim of personality:

Personality differences can compromise the success of a collaboration. Sometimes [in our experience] it has become evident that one partner or the other is not prepared or not committed. For example, our local historical society said they had an amount of money to do an exhibit. Our museum coordinated it, spent a lot of time on the script and at the eleventh hour the historical society had an internal squabble and told us the [script] was not what they had in mind. I should have insisted on a memorandum of understanding to lay out who had what responsibility.

Realistic planning prior to the commencement of a collaborative project can prevent disputes among partners and ensure that the project keeps on track. Planning should consider both best- and worst-case scenarios. The more thought that goes into anticipating how the project will proceed, including what hindrances could arise, the more able partners are to ensure the success of the project:

Particularly with collaborations, all the principals need to know and agree with what will be done, who will do it, when it will be done and at what cost. The CEO then tells staff this is what is happening. A lot of collaborations are well intentioned but . . . they deteriorate into personality instead of the plan. If I have any good advice it is

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that it cannot be casual. You have to make sure the resources [of your collaborative partners] are there. For us we are expecting more [budget] cuts so we would have to be clear about that.

We need to draw up a contract internally to make sure all participants meet their obligations. We wanted only partners who will come through and did not want to involve very new museums without a track record.

You need to clearly establish a mission statement for the project. If you do not do it beforehand you will need to do it later. You need to establish a purpose and structure beforehand.

Formal planning among partners is necessary for collaborative success; in addition, each institution should do its own internal planning, considering both the worst- and best-case scenarios for the collaborative project:

It is like Coach Bryant would say, ‘You have to play the game before the kick-off.’ [In other words] you have to anticipate problems, like what your reaction will be in response to the other partner’s actions.

Several people were planning collaborations at the time of the interview, grappling with various organizational issues, such as travel costs and budgetary oversight. Even prior to the commencement of the projects, the planning efforts themselves cost the institutions time and energy. However, over the long-run this initial investment in planning should be recouped, in the form of offsetting problems, disputes, and confusion with the project. One director explained:

I’m worried about how we will oversee our budget [for the planned exhibit collaboration]. I don’t think one museum should oversee it all. We may need more than one meeting to resolve everything. We need to think through these practical issues on how things will work. We may pay one museum to oversee it with a business manager who will account for hours spent and costs Distance can be a prob-

lem because if you are not physically there you cannot see what is going on. We may need to build site visits into the grant.

Control and oversight:

Optimizing the product and benefits of collaboration means maintaining control over the process.

Ensuring that one's institution benefits from collaboration requires active oversight, maintaining enough involvement to guarantee input into the collaborative process. The model for this oversight was described as more like a guide than a director, providing a consistent vision, rather than dictating directives:

An outside organization wanted us to do an exhibit on oil exploration. In the end we felt that the product, the exhibit, was not under our control and the project was a mistake When we are not in control of the final product it is a problem.

It is important that you know what you are after (i.e., what the institution wants out of the collaboration), but you do not want to tell people, "Do this, do that." You want them to be creative, but it has been very beneficial that I can understand the technical issues and have experience in the museum field. There are some high technology companies in town that have wanted to do things for us and we would work closely with them—otherwise what they produce is not useful in this setting. Generally we have been lucky with our collaborative efforts since we are on top of things.

Time commitment:

Involvement in a collaboration and maintenance of control over its development requires staff attention over a period of time.

Active oversight and involvement in collaboration requires valuable staff time. In essence, some of the production costs that are saved in a project through collaboration are spent in staff time. Some of those interviewed contend that collaboration on a project requires more time than simply

“. . . collaboration on a project requires more time than simply doing the project without partners.”

“More time is needed to organize a collaborative. If time is of the essence, do not collaborate.”

doing the project without partners. From a comparative viewpoint, collaborations are relatively more expensive and consumptive of available staff time for smaller institutions than for larger ones. It costs someone time to attend meetings, to work with interns and volunteers, to talk with partners on the phone, to review documents, etc. Collaborative projects requiring travel were particularly difficult for small institutions, since one person's absence from a total staff of five, for example, impacts an institution more than one person's absence from a total staff of twenty. The amount of time required for a collaboration should be anticipated realistically and planned for accordingly:

I sometimes advise students at the university. One student did a software development project for us which is now on exhibit. She was from Taiwan and her English was not very good. I met with her once every two weeks for a year. I knew what I was after—the result—but I wanted to leave the details of how to do it up to her. I gave the vision and guidance and she did the project. We got a nice product, but it was not just that we wrote the specifications and sent it out for production—I had to meet with her once every two weeks. It was a good experience for me. It would have been very expensive to pay to have it done and she used it as her Master's thesis. That is the way we do things; we give the vision and idea and let people create.

Take time into consideration. More time is needed to organize a collaborative. If time is of the essence, do not collaborate.

Time is an obstacle. We will benefit greatly from all the time and effort we have put into this collaborative and we are getting a lot of promotion because the community is so supportive, but it is much easier just to do one's own thing.

To minimize the time spent coordinating the efforts of volunteers, one director mentioned that his institution had devised guidelines for volunteers to follow during exhibit construction:

The university builds some [exhibits] for us. They donate the materi-

als, too. A hydraulic flume was constructed as a class project with materials that were assessed at \$15,000. I met with students every couple weeks. We have exhibit guidelines in a four-page write-up that we give to people.

Project design:

Collaboration should be designed into a project during conceptualization and partners should be involved early in the planning process.

Since effective collaboration requires much planning and foresight, collaboration is best designed into projects during initial conceptualization, rather than handled as an adjunct:

Sometimes collaborative projects develop nicely to allow one to do ongoing work more effectively, but this is unusual. Collaboration rarely fits well with ongoing activities and with ongoing programs [which are successful and to which people are already committed]. You cannot be sure whether it is worth redirecting resources to new collaborative projects. We have resolved this by designing collaboration into projects from the start; then we seek funding.

Regardless of who initially conceives of the collaboration, all partners are most effectively involved early in the planning stages. Early involvement of all partners means that the perspectives, needs, strengths and concerns of all participants can be considered and addressed at a point in which the collaboration's success is optimized:

We began the museum collaborative and invited participants here for a meeting. We brought them in very early—at the beginning—which is essential to success.

Partner Commitment:

Effective collaboration is contingent on a committed relationship between partners.

Once the collaboration is planned and after the project commences, part-

“Successful collaboration may mean that you have to counsel or discipline people in positions who are not your staff.”

ners should take their commitments seriously and strive to “give their fair share.” Partners may find that they need to give both friendly encouragement and more direct counseling to further the efforts of other partners:

All involved need to give their fair share. Responsibilities cannot fall through. Rules need to be set up, and everyone needs to get after each other when necessary.

People need to take responsibility for what has been allocated for them to do. A collaboration should not be a screen for people to hide behind. Sometimes collaborations result in more responsibility than if the project was done alone by one organization. Effective collaboration involves careful evaluation to see that the project is moving forward. Successful collaboration may mean that you have to counsel or discipline people in positions who are not your staff.

Funding:

Effective collaboration requires realistic financial planning and assessment.

After a collaboration begins, financial oversight and budgetary concerns are critical. Funds are perhaps the most important factor to consider when assessing one’s own ability and the institutional ability of others to conduct a collaborative project:

We look with great care at people who come to us and talk collaboration, but do not bring financial resources with them, and their indication for where they will acquire money does not lighten the load for other participants. The biggest sinner is the federal government, who talks big about collaborations, but there is no evidence that they understand the nature of the resources needed to implement collaborative projects.

It is important to have a good idea about money sources. Many institutions enter into collaborations with the idea of saving money, but they need to have an idea of the bottom line of finances.

Organic relationships:

The best collaborative partnerships grow out of real relationships between institutions.

A number of people interviewed had observed in their institution's own experiences that the best collaborations were "natural," emerging "organically" out of day-to-day institutional involvements. The particular shape of a given collaborative is grounded in the needs and interests of the partners and the goals of the project, rather than being a structure imposed on collaborative partners from the outside:

True collaboration comes organically out of the goals of projects. It's like the difference between wanting to do collaboration and initiating a project in order to collaborate versus wanting to do a project and initiating collaboration in terms of the project. Collaboratives should derive organically out of the project and they ought to be designed by the collaborators rather than the project being designed by one organization and other organizations being grafted on after funding has been secured.

For the software projects, we had an idea and were looking for a way to do it. We put an advertisement out over the computer to computer science students. The next time a student was just visiting, I asked if he would like to have a programming project—he really got into it. Often it works a different way where people come to us with ideas. It is a very organic process.

Effective collaborations often come about as natural extensions of staff networking in the local and professional community. Commitment to projects is enhanced when staff feel a sense of ownership toward them:

[We] place staff on committees in the community to find out community needs and to find out the direction other agencies are taking.

A key element is to have [vocal] staff who are networked with state and local organizations. Ideas for collaborations usually come from staff. For example, staff get an idea to put together a joint program

“... best collaborations were ‘natural,’ emerging ‘organically’ out of day-to-day institutional involvements.”

on life in a pond. My role is to be a facilitator for my staff and colleagues to marshal the resources and expertise.

“Effective collaboration necessitates the harmonizing of differences.”

Mutual respect:

Effective collaborative relationships build on mutual understanding and respect.

Effective collaboration necessitates the harmonizing of differences. The essence of collaboration is to find and act on some commonality. In order to succeed, the differences between organizations and between their perspectives need to be recognized and understood. All collaborative partners should strive to understand the respective situations of the other partners, to learn the culture of the other organizations:

You need to learn to deal with cultures different than your own. You need to learn to be respectful, patient and be willing to listen to the community and act on what you hear.

This may be obvious but my background is quite eclectic. I have background as a geologist, engineer and physicist, so I can talk to a lot of different people in their language. For many museum people, it can be intimidating to [work with] scientists and technical people. So it helps when you have museum people who know the technical side, but who also know the museum side. Like if you are collaborating on an exhibit or a video, the person who is the liaison between the museum and the group must know both languages and what works in the museum setting, so that you get a product that is useful.

We collaborated with [the local] Arts Council and there were very different cultures in the two organizations. Their goals and ours were different. They support local artists. I was constantly fighting with their executive director who was trying to pay artists or invite more local artists to openings which did not mesh with our goals.

This need for mutual respect and understanding is especially neces-

sary in relationships between institutions of disparate sizes and financial resources. A number of people interviewed who work in small science centers expressed dissatisfaction with the perspectives of those from "big" science centers, who, when planning a collaboration involving small science centers, were unaware of the limitations of small science centers. Small science centers are restricted in staff availability, funds, and the expenses of working in different local settings around the United States:

I have some frustration with the big museums. I would be interested in a training program that could help us receive information. [One large museum] sponsored something like this but we could not even raise the money they required for us to participate. Also, they required us to send two people, which is impossible for a center with such a small staff. They wanted us there for a full week which is very difficult. Big museums need to get input from smaller museums to see what is feasible for them and what would be interesting.

Big institutions just do not understand and it is frustrating. [For example] at Association of Science-Technology Centers conferences they talked of bringing an artist [to smaller institutions] to build exhibits, but the paradigm they were using was not applicable to us and they articulated an exhibit design concept that was not workable [for us].

Smaller museums do not like the big guys [telling them what to do]. You have to attend to the perception of the little guys because they have a lot of pride. We didn't want to create any resentments. It was the same when we marketed our exhibit to the other museums. [We were respectful of their perspective and tried to ensure] that they would benefit because the \$500 rent to them is a lot out of a \$25,000 budget. [It needs to be] a symbiotic relationship . . . We had to learn from the smaller institutions what the volunteer staff could do [some of them do not have permanent staff] and how our exhibit would be beneficial to them. They do not have the means or the organization level to secure exhibits from [large suppliers] due to insurance stipulations, etc.

"The more networked a museum is with other local organizations or other museums, the more likely that those relationships will develop into collaborations."

“Collaborations put you in contact with people that make things happen. ‘People contact’ is one of the most important results of collaboration.”

Receptive to opportunity:

Be receptive to what emerges out of networking and collaborating—big projects often grow out of smaller ones.

Often collaboration is a “natural spin-off” of ordinary institutional involvement in local and professional communities. The more networked a museum is with other local organizations or other museums, the more likely that those relationships will develop into collaborations. Networking results in mutual awareness and the understanding of areas of compatibility, and the means to achieve mutual benefits. Similarly, after small and informal collaborations are undertaken, larger projects appear more feasible:

Some collaborative projects start small but the network later turns into valuable large-scale resources. Small projects are useful in creating the network; organizations can then take on large-scale projects.

Collaborations put you in contact with people that make things happen. ‘People contact’ is one of the most important results of collaboration.

Perseverance:

Ultimate success may require more time, effort, and patience than initially thought.

If the collaboration plan does not work, flexible action and creative problem-solving can save the project:

It took a couple of years to pull the collaborative project off. Our first proposal to National Science Foundation was rejected, but with their feedback and suggestions, we resubmitted under the Teacher Training Initiative and were successful.

With collaboratives, you learn by doing. Some collaboratives at first are rocky, and have to be reassessed. One project we did at the museum left kids just too exhausted. We reassessed it to create its current form.

Challenges and Obstacles to Successful Collaboration

Some collaborations are relatively more successful than others. What factors are liabilities that potentially undermine successful collaborations? Much of what follows is essentially the reverse of what was described above. Obstacles to success include the absence of factors that contribute to success. Although most of those interviewed were able to describe attributes of unsuccessful projects, many were unwilling to fully discount these projects, believing instead that:

All the collaboratives we have been involved with have been learning experiences. None has been unsuccessful.

When a collaborative relationship does not “naturally” emerge out of prior institutional or organizational awareness and interaction, commitment to the project is not necessarily strong and therefore its chances of success are lessened. Collaborations that are “foisted” on institutions, mandated by a funding agent or conceived with short-term intentions can be problematic:

There are science museums in Michigan in the southeast area within one hour of each other. Some used to get money from the state but do not any longer. The collaboration was formed partially because the state asked. It fell apart because the funding from the state dried up. It was foisted on us; it was not a natural thing. We had some success. Although once the money stopped, so did the programs. We are all still friends, but it died. It is at a standstill now. None of us could afford to continue.

Organizations with a lot of staff turnover can be difficult to work with. Stability and consistency among participating institutions is important for success. Effective institutional relationships are built on positive personal relationships among participating staff:

Turnover is a big problem. We are constantly trying to get to know new people [and maintain] continuity.

“Organizations with a lot of staff turnover can be difficult to work with.”

“ . . . collaborations do not work well when partners continue to operate under an attitude of competition . . . ”

You must be aware of the personalities of who you are dealing with. Grassroots community organizations can have many personnel changes. One organization we dealt with went through three different directors and we had to re-establish a relationship with each.

The most effective collaborations are situations in which benefits to all partners take precedence over strict or exclusive self-interest:

There can be a tendency to want to 'feather your own nest.' You need to think less of your own needs and more of the overall objective of the collaboration.

Since a collaboration's success is contingent on mutual respect and a sense of common interest, collaborations do not work well when partners continue to operate under an attitude of competition (e.g., for the same audience or funding).

Effective communication is necessary to maintain involvement and thus control over a collaborative undertaking, and therefore distance can present real challenges to successful collaborations:

Distance can be a problem because if you are not physically there you cannot see what is going on. We may need to build site visits into the grant.

The [exhibit] production [undertaken by a local university department for the museum] is off-site so the communication is interesting and sometimes we do not really know what we are getting!

Different perspectives can also be problematic. When partners do not understand the issues affecting one another, collaboration can be difficult:

We are often misunderstood by big museums on the coasts Our financial resources are very minimal. What for the coast museums is a pittance given their resource base, is monumental for this museum.

Cost, time, and staff availability are factors prohibiting travel, attendance at conferences, and ultimately participation in collaborations:

We are limited by the time commitment required to negotiate and implement [a project] with volunteers. Also since we have limited paid staff, they must be on-site and therefore cannot do the extra things required of collaborative projects.

Local sensibility and sense of propriety vary. What is considered appropriate to one social or ethnic group can be bothersome to others; and, what is innocuous in one state or region can be controversial in others. Therefore lack of control over the product of collaboration is problematic for many institutions, particularly newly established institutions that are still forming their reputation and soliciting support and funding from the community:

We don't do controversial topics, we do straight science It is a very conservative state. In the long term we would like to do more controversial subjects, but until we are more established, well known and secure, it would probably kill us to do controversial exhibit topics. For example, there is trouble with water rights here right now—agricultural versus industrial uses. If we had a water exhibit on the floor, that would be controversial!