How Reflective Practice Can Change Institutional Culture, Inside-Out

Saturday, September 29, 2018: 4:30 PM-5:45 PM

Moderator: Chip Lindsey, Children’s Museum of Pittsburgh
Panelists

- **Lisa Brahms**
  Children’s Museum of Pittsburgh
- **Jenni Martin**
  Children’s Discovery Museum of San Jose
- **Sam Dean**
  Scott Family Amazeum
- **Satbir Multani**
  New York Hall of Science
- **Christian Greer**
  Saint Louis Science Center
Agenda

• Session Intro
  Introducing Reflective Practice

• Panelist Presentations
  Theory, Practice, and Case Studies

• Q&A/Break-out Session
  What am I learning, and how can I take back?
Session Intro
What is Reflective Practice in theory, in action, and in institutional culture?
Overview

Our five panelists will explore the nature of reflective practice in their institutions and speak to its impact on practice, institutional culture, and visitor experience.

• “Who benefits?”
• “What is the cost?”
• “What is the impact on institutional culture?”
Panelist Presentations
What I love most about reflective practice is it gives us the ability to say “we don’t know yet.”
Reflection is an imaginative, creative, nonlinear human activity in which people recapture their experiences, analyze them, and evaluate them.

(Campbell, 2016)

Reflective practice is the ability to reflect on one's actions so as to engage in a process of continuous learning. According to one definition it involves paying critical attention to the practical values and theories which inform everyday actions, by examining practice reflectively and reflexively (Reynolds, 2011).

reflectively + reflexively

THE SAME OLD THINKING

THE SAME OLD RESULTS

https://geovation.uk/radical-incrementalist-12-easy-lessons/
https://geovation.uk/radical-incrementalist-12-easy-lessons/
THE SAME OLD THINKING

THE SAME OLD RESULTS

https://geovation.uk/radical-incrementalist-12-easy-lessons/
Perhaps, “reflective practice” happens in every EVERY Science Center and Museum?
Rolfe's (2001) Reflective Model

What?

What next?

So what?

https://my.cumbria.ac.uk/media/MyCumbria/Documents/ReflectiveModelRolfe.pdf
Action Learning Model

Reginald Revans

A set of “comrades in adversity” is the foundation of action learning. (Revans, 2011).

Revans is probably best known for pioneering a new process for management development which he called “action learning”. Recreating his early experiences of the benefits of a scientific research laboratory where colleagues share and compare problems, ideas and solutions, he transferred these action learning techniques to management development programmes. To enabling managers to learn from each other’s best practices he put them into groups which he called action learning sets. Here they could gain support and confidence from peers and introduce new ways of working.

http://www.actionlearningassociates.co.uk/action-learning/reg-revans/
Action Learning Model

http://www.actionlearningassociates.co.uk/action-learning/reg-revans/
Satbhir Multani
New York Hall of Science
Satbir Multani
Manager of Design Lab
New York Hall Of Science
Reflection...the difficulty of doing it

DESIGN LAB

SQ. FT: 9,500 ft²

AUDIENCE: NYSCI serves 500,000 people a year, mix of school groups and general audience. Our audience is diverse culturally, economically, and educationally.

STAFF: 2-4 Explainers, 3.5 Staff
DEFICIT OF ACTIVITIES

- 2 years ago we needed to have new activities because we were running the same thing for years
- Prototyping activities that another department developed for groups
- Figuring out a process and who on the team could work on activities
TEAM DYNAMICS
Attempts at Reflection aka All the things we tried

- Group meetings
- Conversations
- Slack
- Writing with/without prompts
- Reflecting with floorstaff
Workshop on Reflection

- Reflecting on something not new, you re-examine what you’ve been looking at.
- Do I need to look more for more meaning?
- Situation: What’s the perspective from someone else? It affects (problem/attitude)
- Reflection is a creative act
- What’s actually going on here; what story are we telling; what’s the goal; what’s happening here
- How to classify problems
  - The problem to walk away - collect the problems
Amazing at Individual Reflection
Team Reflection = Iterative Design Process
Signage
Forts!
UPDATED TBT TREES.

**Plan View**
- **1** = Top Layer
- **2** = Bottom Layer

**How to Make Hoots**
- Bend rods (all 1") on vise using vise grips
- Use vise as bend point

**Attachment Guide**
- Red = Glue joint
- Blue = Pressure fit
- Green = Zip tie

**Notes**
- Screw to same black circle base
We need to work on...

- Decipher what’s a design problem verses reflecting
- Be okay with the act of reflection not being just writing
- Implementing and sticking with a plan but remembering to share out on it
Lisa Brahms, Ph.D

Director of Learning & Research
Children’s Museum of Pittsburgh

I love to empower staff through reflective practice
Research + Practice

• Collaborative research in service of practice

• Time set aside for joint work & sharing of expertise

• Rooted in the core values, questions and direct experiences of practitioners

• Collaborative & Empowering

• Learning Lens/Shared Language
A Practice-Based Approach to Learning

- Observable evidence of learner engagement
- Focused on the actions and interactions of learners as they engage in learning processes, rather than on the end results of their experience
- Fundamentally tied to the social and cultural contexts in which it occurs
- Common language identified and developed collaboratively between researchers and practitioners
- Articulates ways to conceptualize, support, evaluate and assess learning through design
Learning Practices - Mediating Outcomes

- Tinker
  - Persistence
  - Problem Solving

- Develop Fluency
  - STEM Content Knowledge
  - Career Readiness

- Seek & Share Resources
  - Collaboration
  - Communication
Our Process

**Personal Experience-Based Discussions**
- Content Analysis
- What do we value?
- How do we design to support our values?

**Establishing Shared Experience: Design Experiments**
- What does it look like for a learner to engage in this value?
- In what ways does our design support and/or problematize our values?

**Establishing Shared Understanding**
- Redefining our values in terms of behaviors ("learning practices")
- Aligning our values
- Creating Common Definitions & Language for Learning
## MAKESHOP®

**Learning Practices**

The Learning Practices of Making is an empirically identified framework that describes observable behaviors of learners in MAKESHOP, the makerspace at Children’s Museum of Pittsburgh. These practices capture the learning objectives that we value and design to support.

<table>
<thead>
<tr>
<th>LEARNING PRACTICE</th>
<th>PRACTICE DESCRIPTION</th>
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<tbody>
<tr>
<td><strong>Inquire</strong></td>
<td>Learners’ openness and curious approach to the possibilities of the context through exploration and questioning of its material properties.</td>
</tr>
<tr>
<td><strong>Tinker</strong></td>
<td>Learners’ purposeful play, testing, risk taking, and evaluation of the properties of materials, tools, and processes.</td>
</tr>
<tr>
<td><strong>Seek &amp; Share Resources</strong></td>
<td>Learners’ identification, pursuit, and sharing of expertise with others, includes collaboration and recognition of one’s own not-knowing and desire to learn.</td>
</tr>
<tr>
<td><strong>Hack &amp; Repurpose</strong></td>
<td>Learners’ harnessing and salvaging of materials, tools, and processes to modify, enhance, or create a new product or process. Includes dissociating object property from familiar use.</td>
</tr>
<tr>
<td><strong>Express Intention</strong></td>
<td>Learners’ discovery, evolution, and refinement of personal identity and interest through determination of short and long term goals; includes learners’ responsive choice, negotiation, and pursuit of goals alone and with others.</td>
</tr>
<tr>
<td><strong>Develop Fluency</strong></td>
<td>Learners’ development of comfort and competence with diverse tools, materials, and processes; developing craft.</td>
</tr>
<tr>
<td><strong>Simplify to Complexify</strong></td>
<td>Learners’ demonstration of understanding of materials and processes by connecting and combining component elements to make new meaning.</td>
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### ART STUDIO Learning Practices

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<th>LEARNING PRACTICE</th>
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<tr>
<td><strong>Material Play</strong></td>
<td>Learners experiment with the properties and perceived boundaries of a material, tool, or concept through sensory exploration.</td>
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<tr>
<td><strong>Develop Craft</strong></td>
<td>Learners develop comfort, confidence, and skillful use of materials, tools, and techniques.</td>
</tr>
<tr>
<td><strong>Notice</strong></td>
<td>Learners use their senses and personal experiences to observe and describe the world around them.</td>
</tr>
<tr>
<td><strong>Wonder</strong></td>
<td>Learners are inspired to ask questions, and discover new problems to solve by engaging in the art-making process.</td>
</tr>
<tr>
<td><strong>Revise</strong></td>
<td>Learners make intentional choices and changes to their artwork and/or art-making process.</td>
</tr>
<tr>
<td><strong>Contextualize</strong></td>
<td>Learners develop awareness of the local and global communities that surround and influence their own art-making.</td>
</tr>
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**KINDNESS:** A set of intentional, responsive, and altruistic behaviors, rooted in empathy for others and acceptance of self, that promote personal and social well-being

<table>
<thead>
<tr>
<th>Learning Practice (behaviors)</th>
<th>Working Definition</th>
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<tr>
<td>Observe</td>
<td>To actively notice the extent to which kindness is or isn't present in a situation</td>
</tr>
<tr>
<td>Reflect</td>
<td>To assess the contextual factors that influence the perceived presence or absence of kindness in a situation.</td>
</tr>
<tr>
<td>Enact</td>
<td>To choose to act in a way that cultivates kindness and/or counters unkindness that is relevant and respectful of contextual factors</td>
</tr>
<tr>
<td>Connect</td>
<td>To approach and enrich momentary or long-term relationships with kindness</td>
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Challenges & Opportunities

**Process:** longitudinal vs. bite-size

**Time:** big topics; little time

**Learner Focus:** personal questions vs. group project

**Innovation:** negotiating change while honoring our core values
Sam Dean
Scott Family Amazeum
Sam Dean

Founding Executive Director
Scott Family Amazeum
3 Years Old
55,000 ft²
250,000 visitors / year
Sam Dean
Scott Family Amazeum (For Real)
We hold to be true.

1. We are an organization dedicated to sparking curiosity and nurturing creativity.
2. We value our people, and the amazing interactions they facilitate, to the utmost.
3. We are always (**ALWAYS**) working to get better. Period.
To Begin...

1. Start from the start.

2. Reinforce the culture you want to see.

3. Be OK when you aren’t perfect, but never settle.
Onboarding

The time when we bring team onboard is CRITICAL to setting the right path. Hire right. Train right.

Start from the Start

- Mission, Core Values
- Educational Expectations, Anchors, and Touchpoints
- What makes something “Amazeum”
- Modeling, Mentoring, and Games
To engage the imagination of children and their families through interactive exhibitions, programs, and resources while creating an excitement for lifelong learning.

The Amazeum exists to spark and nurture the curious and creative spirit in all of us.

The Amazeum builds community around powerful learning experiences.

Core Values
- Active, messy, open-ended, and playful nature of learning
- Curiosity, Creativity, Innovation and Risk-Taking
- Trust and Authenticity
- Community-Building
- Passion for Powerful Guest Experience
Core Values

- Active, messy, open-ended, and playful nature of learning
- Curiosity, Creativity, Innovation and Risk-Taking
- Trust and Authenticity
- Community-Building
- Passion for Powerful Guest Experience
Live the words.

How do you make your work come alive?

Systems can be important. To a degree, it doesn’t matter WHAT the system is, rather (a) will your team do it (b) with all their heart and (c) do you find the results useful?

LIVE the culture.

Reinforce the Culture

- Systems, Templates, Habits.
  - Cycles
    - Daily / Weekly / Monthly
  - Make it VISIBLE.
  - Try consistency.

- Feedback and Rewards.
Tools DO Matter.

Part of the toolbelt.

1. Huddle time
2. Daily Reflections
3. PFAB Blog
   a. Mama Pig Says...
4. Visible
   a. Keep, Tweak, Toss
   b. Command Center
   c. Visible Values
A little paranoia is good.
A little paranoia is good.

We need to hold simultaneous views of our work -

1. We are doing good work, and need to celebrate our efforts and impact.
2. We can always do better. How can we be working to continually improve?
To Recap...

1. Start from the start.
   a. Onboarding.
   b. Expectations.

2. Reinforce the culture you want to see.
   a. Systems and tools matter.
   b. Reward and Feedback.
   c. Live the culture.

3. Be OK when you aren’t perfect, but never settle.
To Recap...
Jenni Martin
Children's Discovery Museum of San Jose
I’m all about helping people connect across difference. This often involves reflecting on assumptions.
Success for museums in the 21st century depends on embracing new, diverse audiences and changing organizational practice.
At the heart of a learning organization is a shift of mind—

A learning organization is a place where people are continually discovering how they create their reality. And how they can change it.

(Senge, 1990)
# Systems Approach to Change:
Ongoing interaction and feedback

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<tr>
<th>Model</th>
<th>Process</th>
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<tr>
<td>Lewin (1947)</td>
<td>Unfreezing</td>
<td>Moving</td>
<td>Refreezing</td>
</tr>
<tr>
<td>Backhard and Harris (1977)</td>
<td>Present state</td>
<td>Transition state</td>
<td>Future state</td>
</tr>
<tr>
<td></td>
<td>Departure from tradition and crises</td>
<td>Strategic decisions and prime movers</td>
<td>Action vehicles and institutionalization</td>
</tr>
<tr>
<td>Tichy and Devanna (1985)</td>
<td>Awakening</td>
<td>Mobilizing</td>
<td>Reinforcing</td>
</tr>
<tr>
<td>Nadler and Tushman (1990)</td>
<td>Energizing</td>
<td>Envisioning</td>
<td>Enabling</td>
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Resources and Tools for Reflective Practice

• Strategic Initiative--work toward a goal, shift along the way based on reflection

• Broaden participation--invite different voices to reflect with you

• Check your assumptions and broaden your perspective
Describe a strategic initiative that your institution will undertake over the course of the upcoming year

- Build from strengths
- Magnitude and impact
- Beyond the boundaries
- Boldness and risk
- Cooperative effort
- Measuring success
- Changing along the way
Consider Different Perspectives - Bennett Model

Ethnocentric Stages

Denial
- One’s culture is the only “real” culture
- Social/geographic isolation

Defense
- Us/Them thinking
- Negative stereotyping
- Devaluing one’s own culture and romanticizing another

Minimization
- Similarity outweighs differences
- Awareness of difference is enough
- Privilege is not challenged

Ethnorelativistic Stages

Integration
- Ability to move in and out of different worldviews
- Definition of self is multicultural

Adaptation
- Interest in expanding one’s own worldview
- Gain knowledge for behaving in culturally appropriate ways
- Effective use of empathy – “walk the talk”

Acceptance
- One’s culture is just one in a world of other worldviews
- Desire to be informed, not validate prejudices
- Eager questioning of others
Reflective Practice in Action

Cincinnati Museum Center

“CCLI provided the language and framework we needed to facilitate diversity and inclusion conversations with staff and volunteers. Using this framework for equity and inclusion, we have updated our performance evaluations, professional training options and leadership development.”

• Bring different people together for conversations--stakeholders, staff in different roles and from different departments.
• Executive Director Conversations
Reflective Practice in Action

Wild Center

“The CCLI program supported our efforts to construct a series of trainings and staff professional development activities to fundamentally change how we approach diversity broadly and the tools to move staff through an effective learning process. The CCLI curriculum gave us the new perspective to begin to rethink how we do our work.”

- Invest in reflection time at staff meetings.
- Identify common goals and then keep talking about how to get to them.
- Find allies to support you as you reflect.
Discussion

What are your reflective practice strategies?

Do you have moments or structures for reflection in your work practice? Team? Organization? Institutional partners?

Challenges?
How Reflective Practice Can Change Institutional Culture, Inside-Out

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