



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



Christian Greer
Saint Louis Science Center

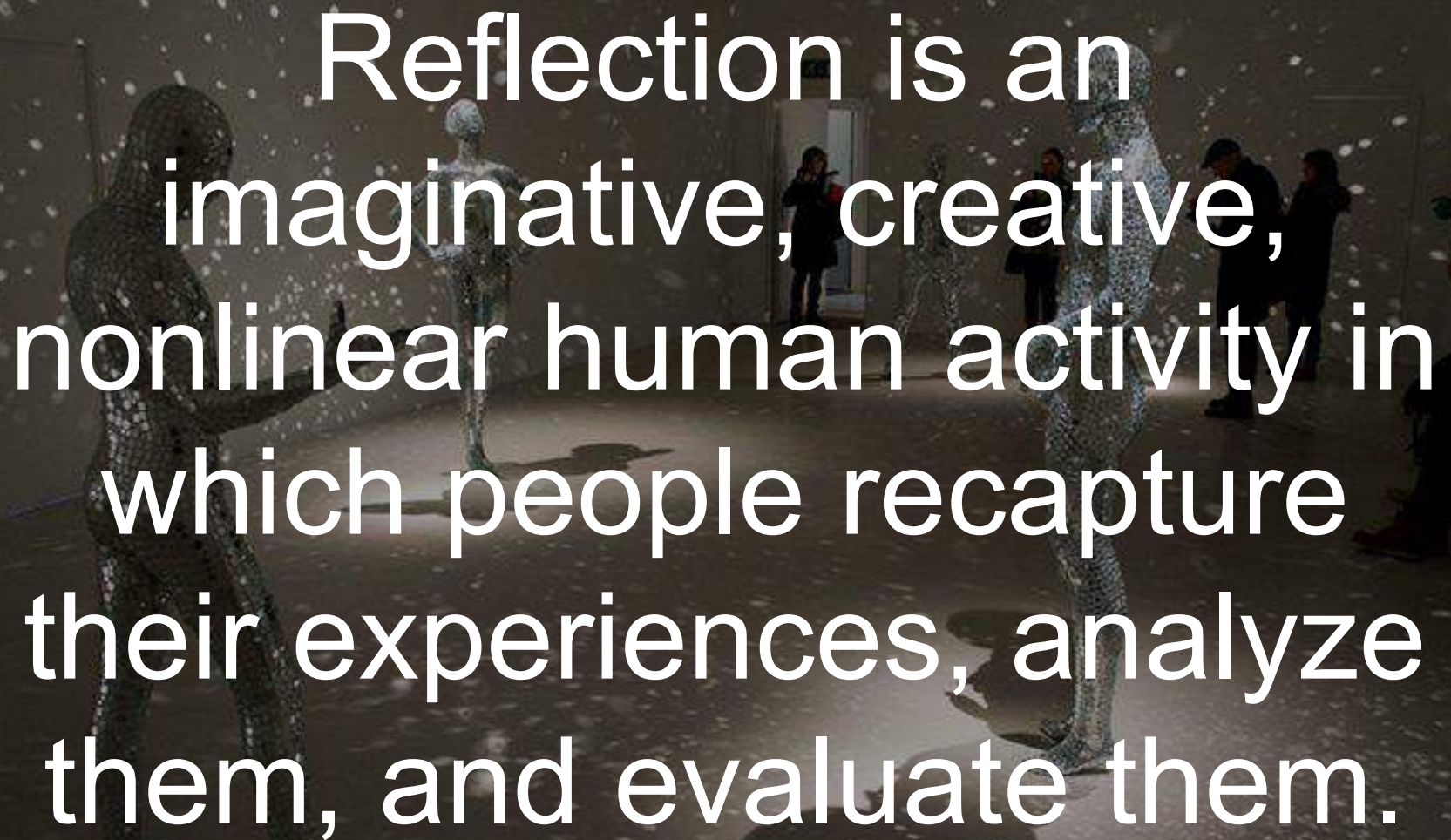


Christian Greer

What I love most about reflective practice is it gives us the ability to say “we don’t know yet.”



<https://www.wired.com/2013/07/50-disco-balls-fill-a-room-with-gorgeous-shimmering-light/>



Reflection is an
imaginative, creative,
nonlinear human activity in
which people recapture
their experiences, analyze
them, and evaluate them.

(Campbell, 2016)

<https://www.wired.com/2013/07/50-disco-balls-fill-a-room-with-gorgeous-shimmering-light/>

Reflective Practice

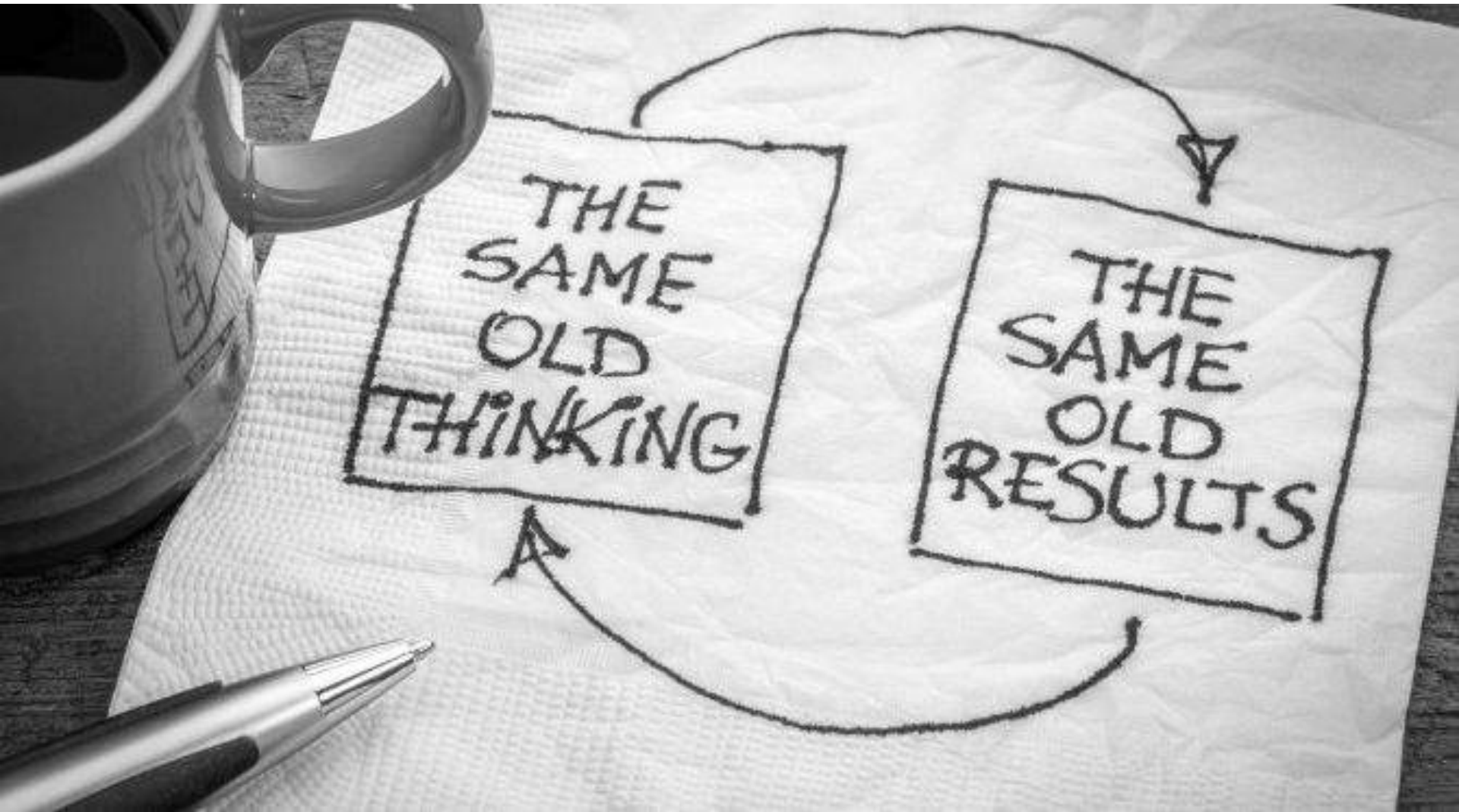
Reflective practice is the ability to reflect on one's actions so as to engage in a process of **continuous learning**. According to one definition it involves paying critical attention to the practical values and theories which inform everyday actions, by examining practice **reflectively** and **reflexively**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

Reynolds, M. (2011) "Reflective Practice: Origins and Interpretations." Action Learning: Research and Practice, 8(1), 5-13

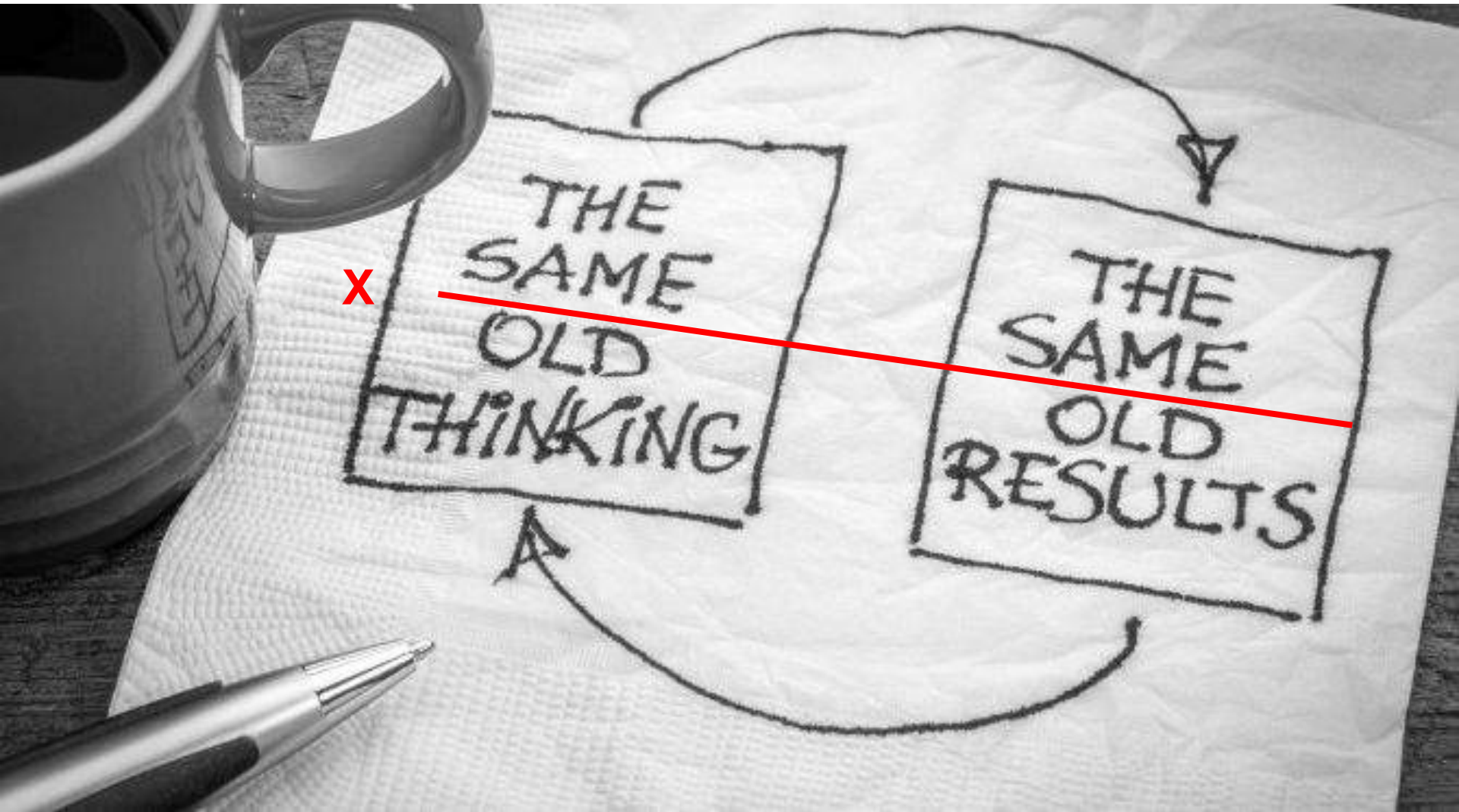


reflectively + reflexively

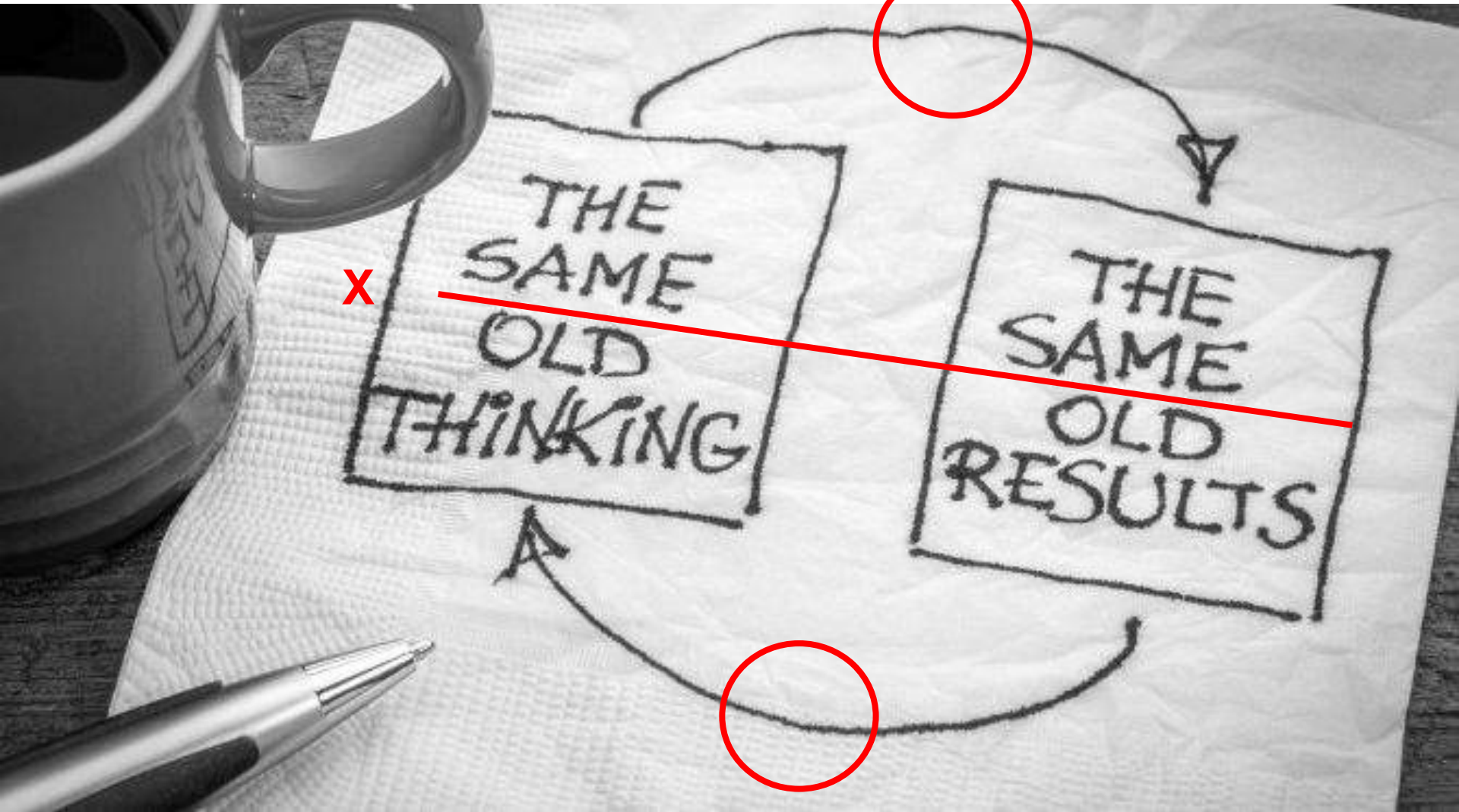
Reynolds, M. (2011) "Reflective Practice: Origins and Interpretations." *Action Learning: Research and Practice*, 8(1), 5-13



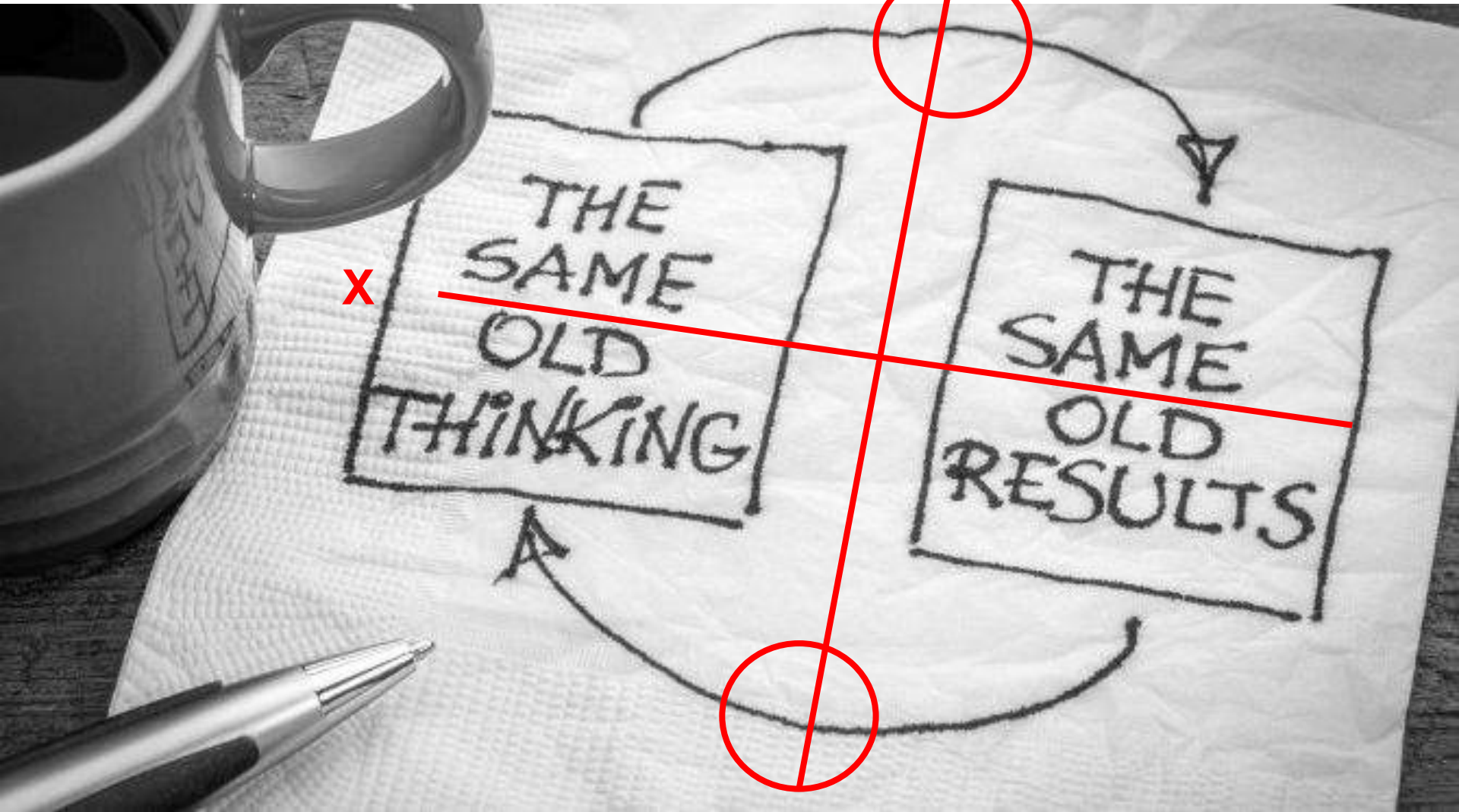
<https://geovation.uk/radical-incrementalist-12-easy-lessons/>



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Perhaps, “reflective practice” happens in every EVERY Science Center and Museum?



<http://scanerapp.com/office-break-room-ideas/#>



<http://scanerapp.com/office-break-room-ideas/#>



<http://scannerapp.com/office-break-room-ideas/#>



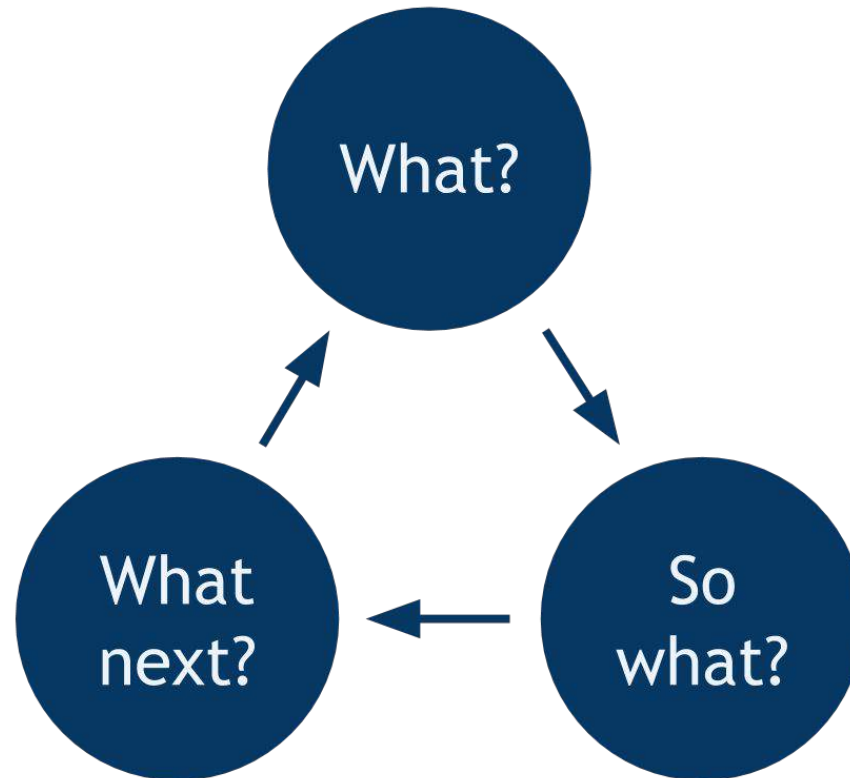
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<https://www.cisco.com/c/en/us/solutions/industries/smart-connected-communities/city-parking.html>

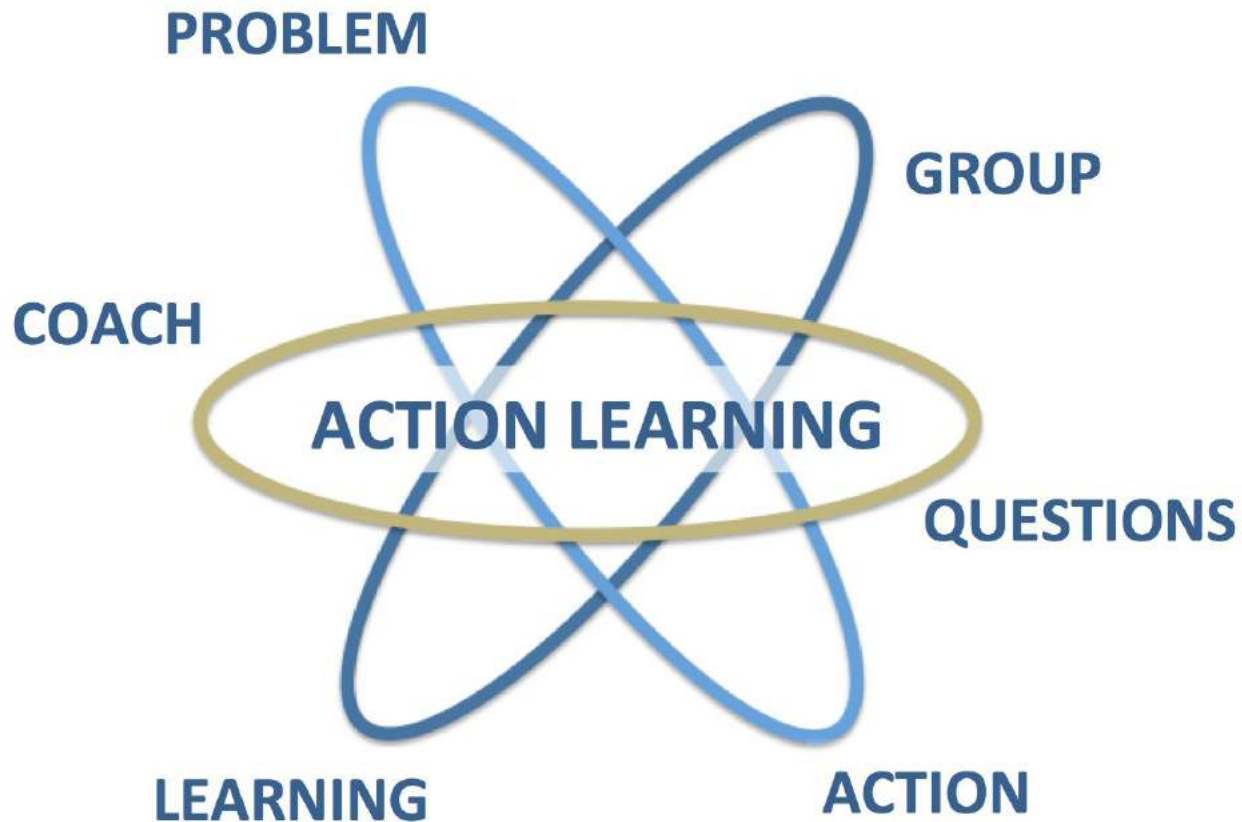


Rolfe's (2001) Reflective Model



<https://my.cumbria.ac.uk/media/MyCumbria/Documents/ReflectiveModelRolfe.pdf>

Action Learning Model



<https://extensionaus.com.au/extension-practice/action-learning/>

Reginald Revans



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

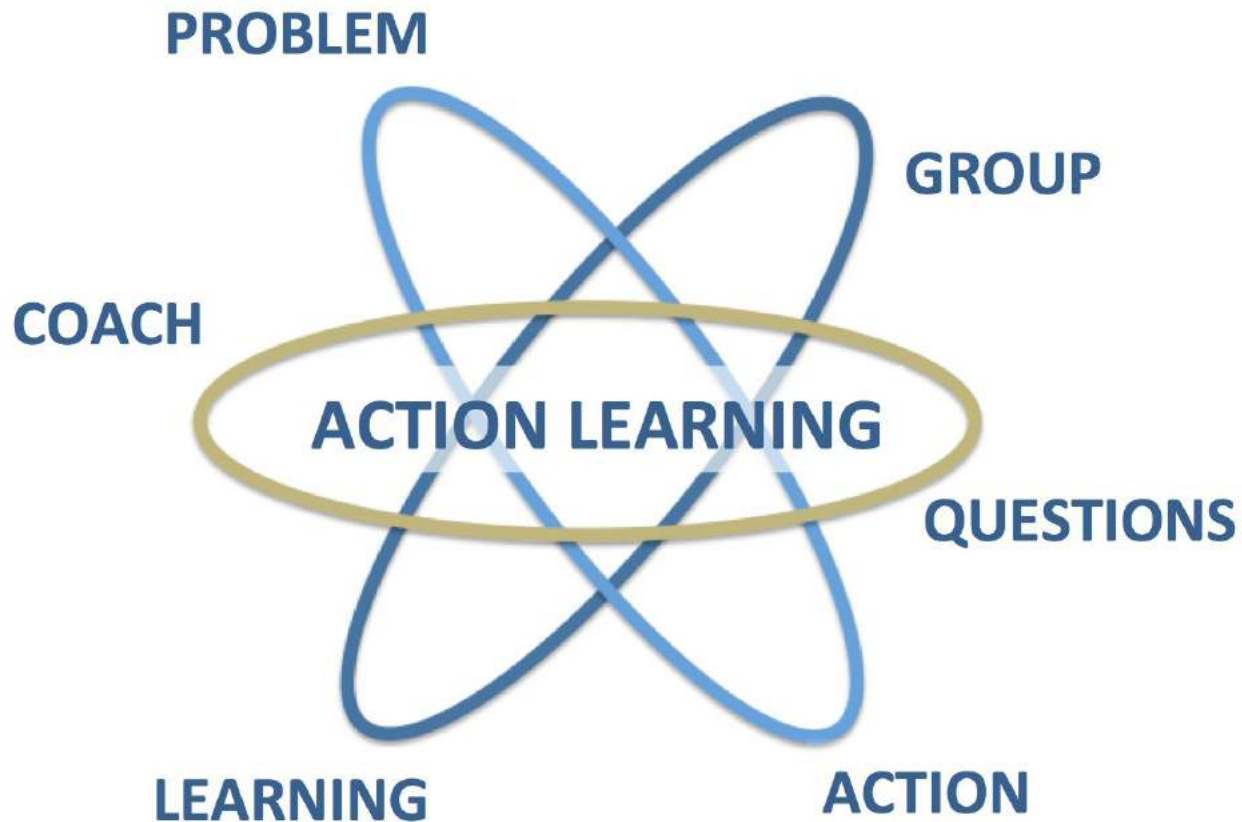
<https://extensionaus.com.au/extension-practice/action-learning/>

Action Learning Model

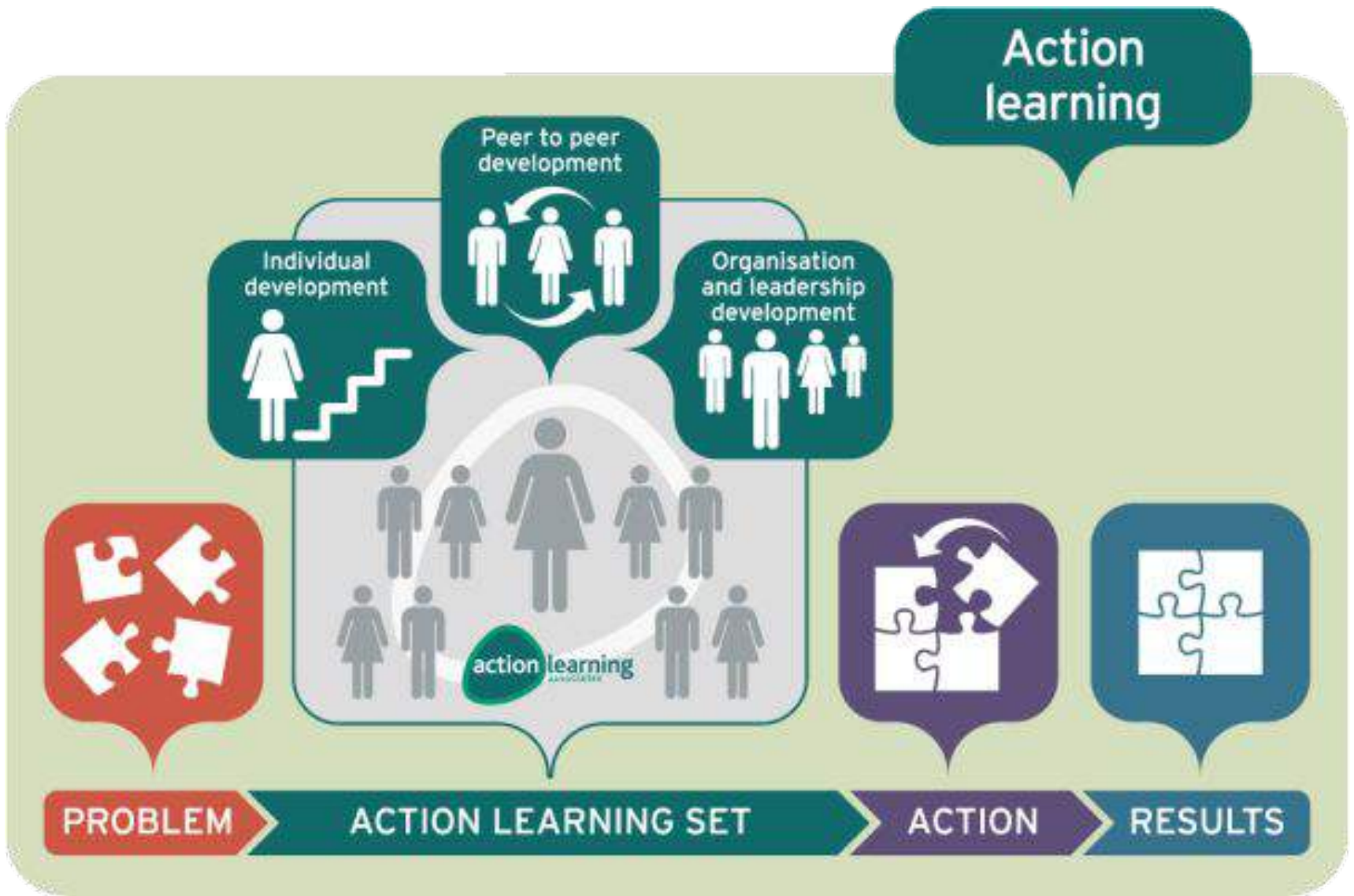
Revans is probably best known for pioneering a new process for management development which he called “action learning”. Recreating his early experiences of the benefits of a **scientific research laboratory** where colleagues **share** and **compare** problems, **ideas** and **solutions**, he transferred 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



<https://extensionaus.com.au/extension-practice/action-learning/>



<http://www.actionlearningassociates.co.uk/action-learning/reg-revans/>



Satbir 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

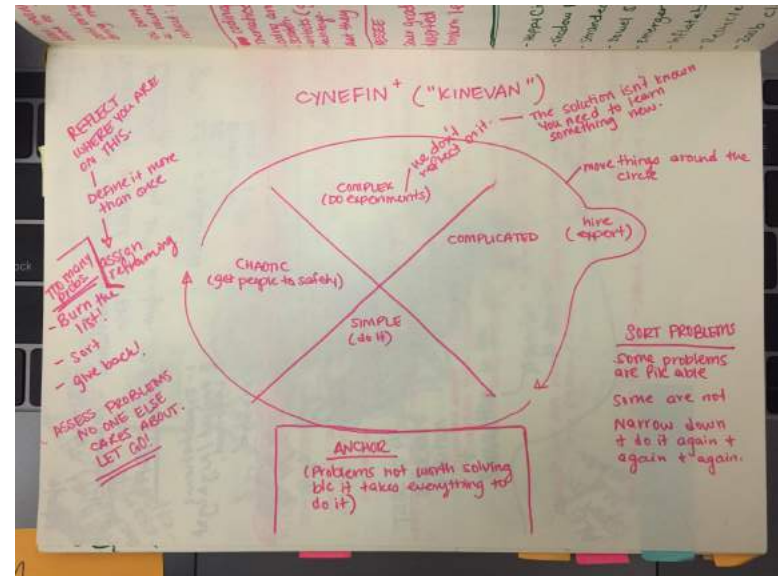
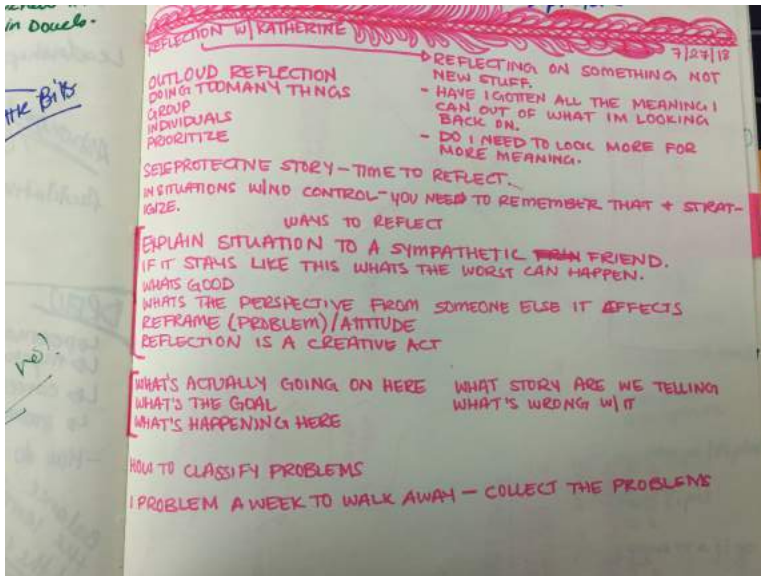
- 2 years ago we needed to have new activities because we were running the same thing for years
- Prototyping activities that another department developed for groups
- Figuring out a process and who on the team could work on activities

TEAM DYNAMICS

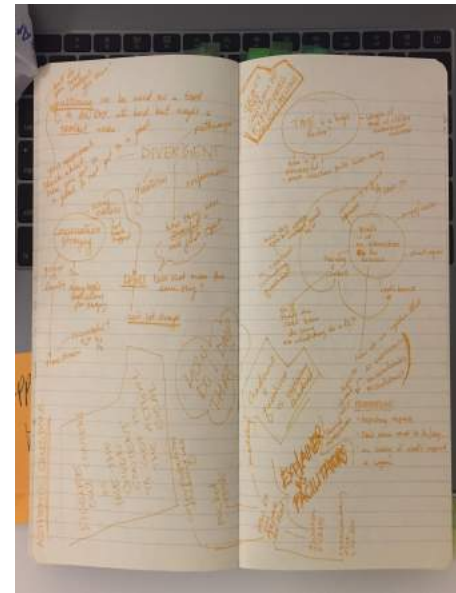
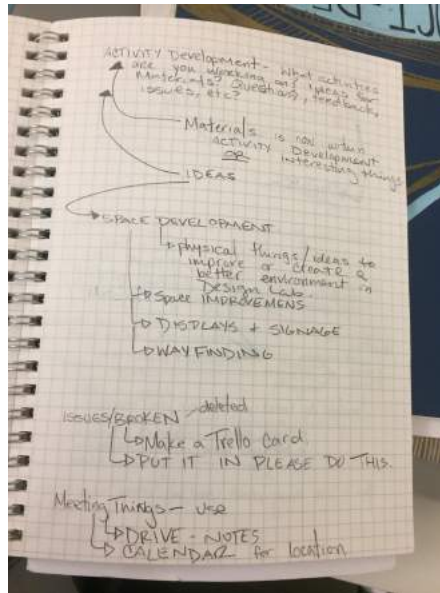
Attempts at Reflection aka All the things we tried

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

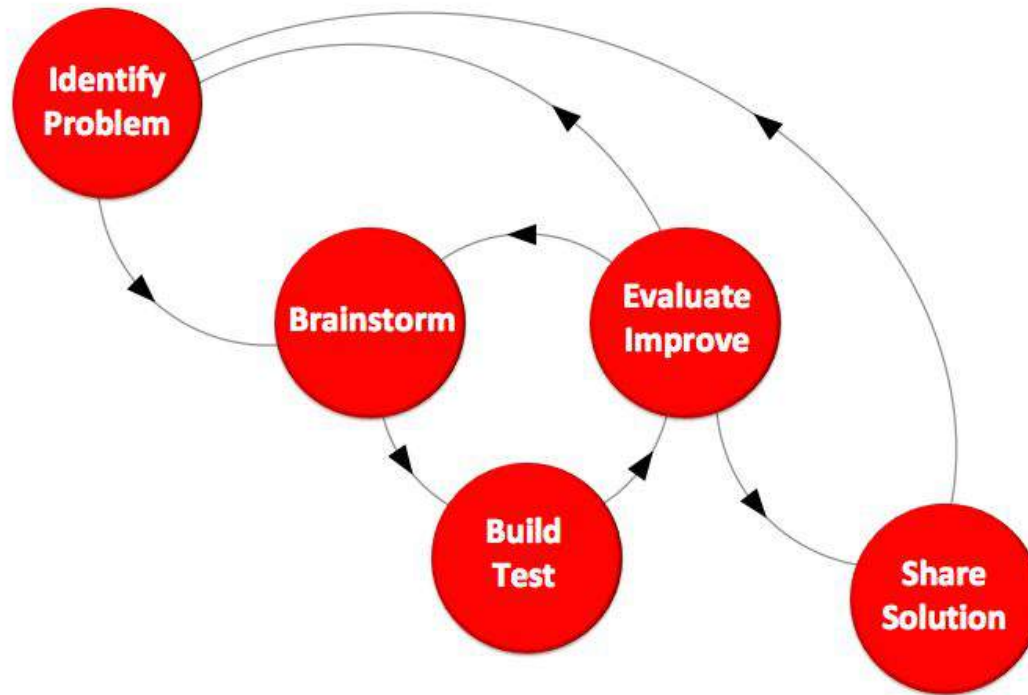
Workshop on Reflection



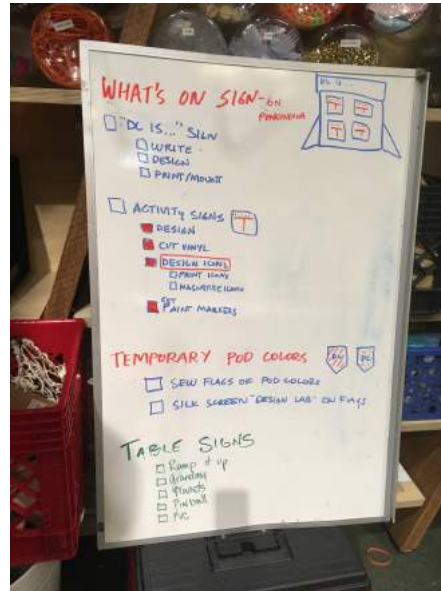
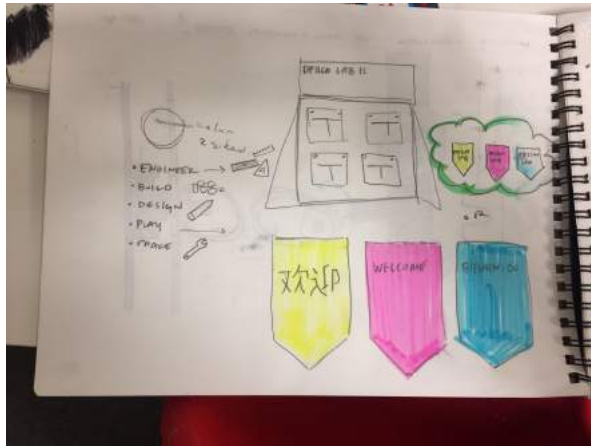
Amazing at Individual Reflection



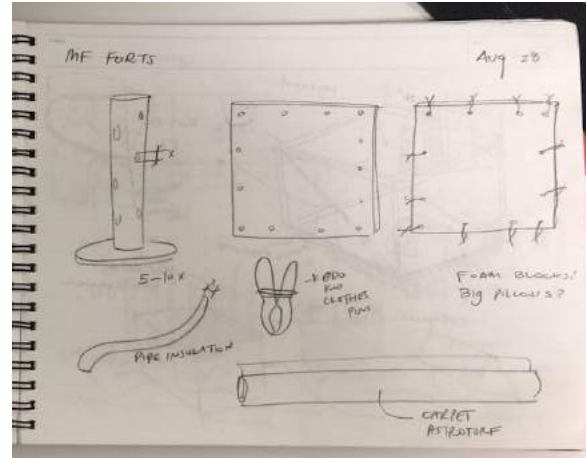
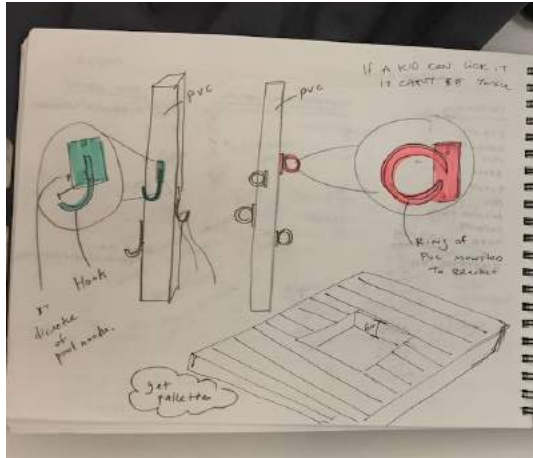
Team Reflection = Iterative Design Process

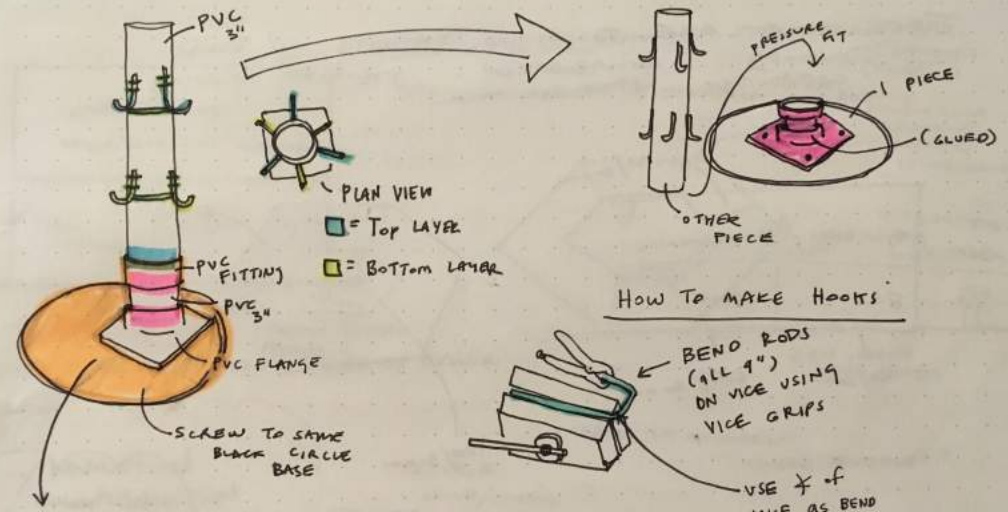


Signage



Forts!





- ATTACHMENT GUIDE
- = GLUE JOINT
 - = PRESSURE FIT
 - = ZIP TIE

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
Children's Museum of Pittsburgh



Lisa Brahms, Ph.D

Director of Learning & Research
Children's Museum of Pittsburgh

I love to *empower* staff through reflective practice

Research + Practice



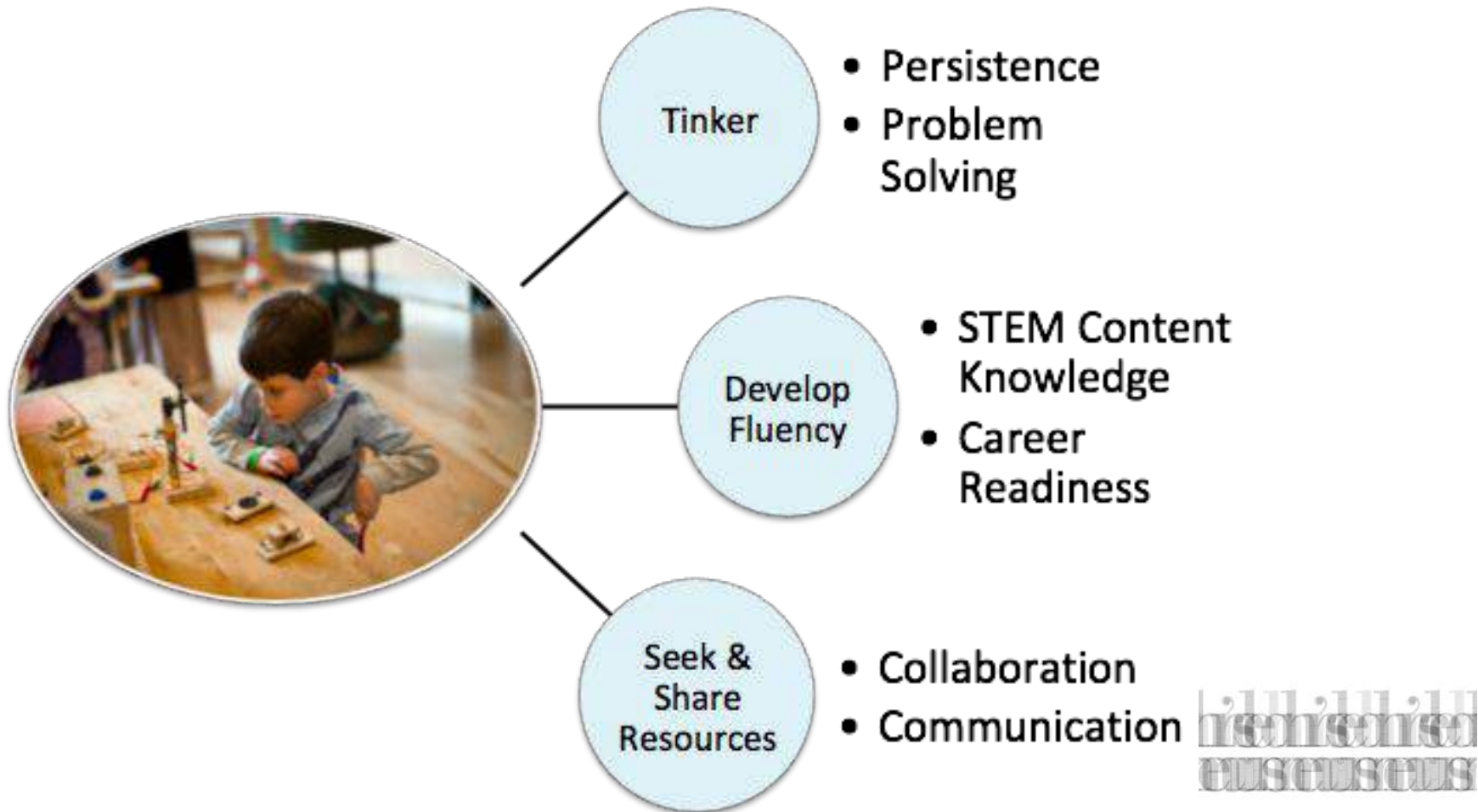
- Collaborative research *in service* of practice
- Time set aside for joint work & sharing of expertise
- Rooted in the core values, questions and direct experiences of practitioners
- Collaborative & Empowering
- Learning Lens/Shared Language

A Practice-Based Approach to Learning

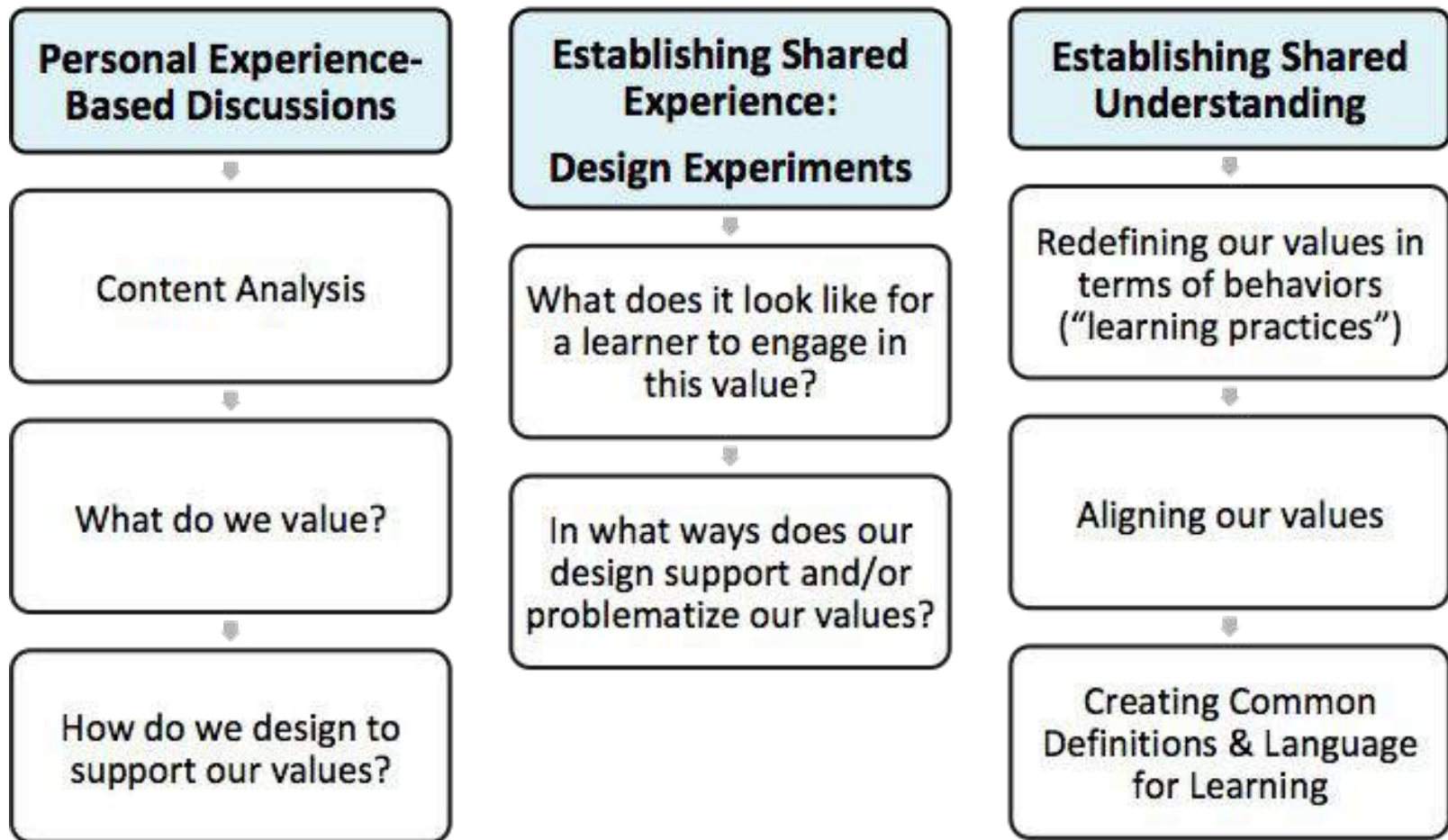
- ▶ **Observable evidence** of learner engagement
- ▶ Focused on the **actions and interactions** of learners as they engage in learning **processes**, rather than on the end results of their experience
- ▶ Fundamentally tied to the **social and cultural contexts** in which it occurs
- ▶ **Common language**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



Learning Practices - Mediating Outcomes



Our Process



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.

LEARNING PRACTICE	PRACTICE DESCRIPTION
INQUIRE	Learners' openness and curious approach to the possibilities of the context through exploration and questioning of its material properties.
tinker	Learners' purposeful play, testing, risk taking, and evaluation of the properties of materials, tools, and processes.
seek & share resources	Learners' identification, pursuit, and sharing of expertise with others; includes collaboration and recognition of one's own not-knowing and desire to learn.
hack & repurpose	Learners' harnessing and salvaging of materials, tools and processes to modify, enhance, or create a new product or process; includes disassociating object properly from familiar use.
express intention	Learners' discovery, evolution, and refinement of personal identity and interest areas through determination of short and long term goals; includes learners' responsive choice, negotiation, and pursuit of goals alone and with others.
DEVELOP FLUENCY	Learners' development of comfort and competence with diverse tools, materials, and processes; developing craft.
SIMPLIFY to complexify	Learners' demonstration of understanding of materials and processes by connecting and combining component elements to make new meaning.

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ART STUDIO

learning practices

LEARNING PRACTICE	DESCRIPTION
Material Play	Learners experiment with the properties and perceived boundaries of a material, tool, or concept through sensory exploration.
Develop Craft	Learners develop comfort, confidence, and skillful use of materials, tools, and techniques.
Notice	Learners use their senses and personal experience to observe and describe the world around them.
Wonder	Learners are inspired to ask questions and discover new problems to solve by engaging in the art-making process.
Revise	Learners make intentional choices and changes to their artwork and/or art-making process.
Contextualize	Learners develop awareness of the local and global communities that surround and influence their own art making.

© 2014 Children's Museum of Pittsburgh

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

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

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





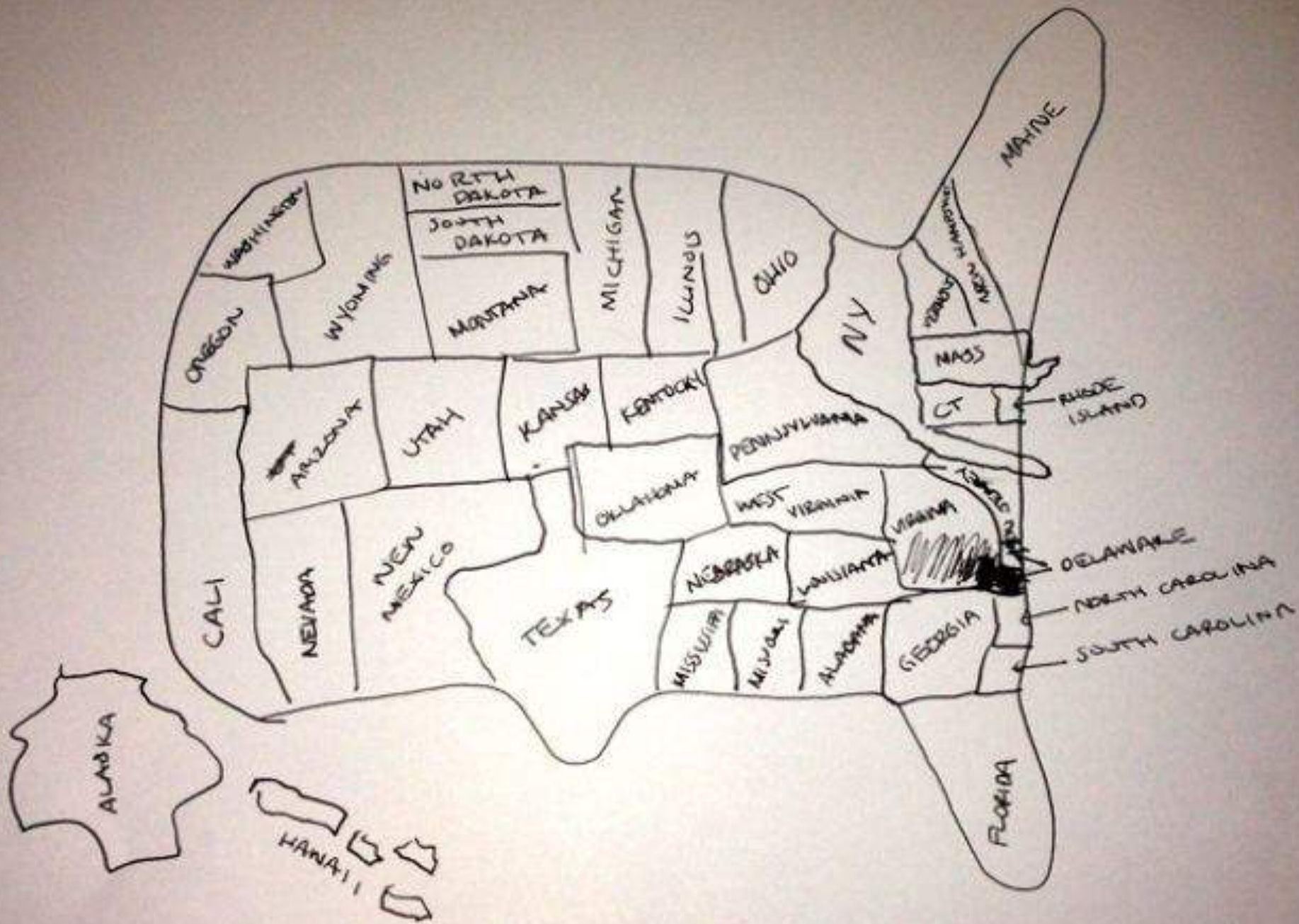
Sam Dean

Scott Family Amazeum



Sam Dean

Founding Executive Director
Scott Family Amazeum



CANADA
ALASKA



Hawaii

BATA

California



NO THINGS I HATE ABOUT YOU

THE MORSE WHISPERER

JESUS CAMP

ARGO

THAT 70'S SHOW

DIE SOUTH

DEAD POETS SOCIETY

THE PARENT TRAP

THE RULES OF ATTRACTION
THE DEPARTED

ME, MYSELF, RICHIE

THE CONDUKING

THE SOPRANOS

DELAWARE

THE WIRE

PORTLANDIA

NAPOLEON DYNAMITE

UNFORGIVEN

NORTH BY NORTHWEST

FIELD OF DREAMS

INDIAN JUNCTION

A HISTORY OF VIOLENCE

A NIGHT-MARE ON ELM STREET

PHILADELPHIA

GHOSTBUSTERS

THE CONDUKING

THE SOPRANOS

DELAWARE

THE WIRE

OCEAN'S ELEVEN

ARRESTED DEVELOPMENT

BROKEN ARROW

THE SHINING

SUPERMAN

ROAD HOUSE

GONE WITH THE WIND

ELIZABETHTOWN

ASCACONTAS

I KNOW WHAT YOU DID LAST SUMMER

PSYCHO

BREAKING DAD

TWISTER

SMOKEY AND THE BANDIT

THE SILENCE OF THE LAMBS

I KNOW WHAT YOU DID LAST SUMMER

SLITHER

O BROTHER, WHERE ART THOU?

TO KILL A MOCKINGBIRD

BIG MOMMA'S HOUSE

FRIDAY NIGHT LIGHTS

TRUE DETECTIVE

JAWS 30

NORTHERN EXPOSURE

HAWAII 5-0



3 Years Old

55,000 ft²

250,000 visitors / year



09 MUSEUM WAY

Scott Family
AMAZEUM



Sam Dean Scott Family Amazeum (For Real)



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.

Start from the Start

Onboarding

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

- Mission, Core Values
- Educational Expectations, Anchors, and Touchpoints
- What makes something “Amazeum”
- Modeling, Mentoring, and Games

Amazeum Mission

To engage the imagination of children and their families through interactive exhibitions, programs, and resources while creating an excitement for lifelong learning

Core Values

Core Purpose & Impact

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

- 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 Business

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



Reinforce the Culture

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.

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

Tools DO Matter.

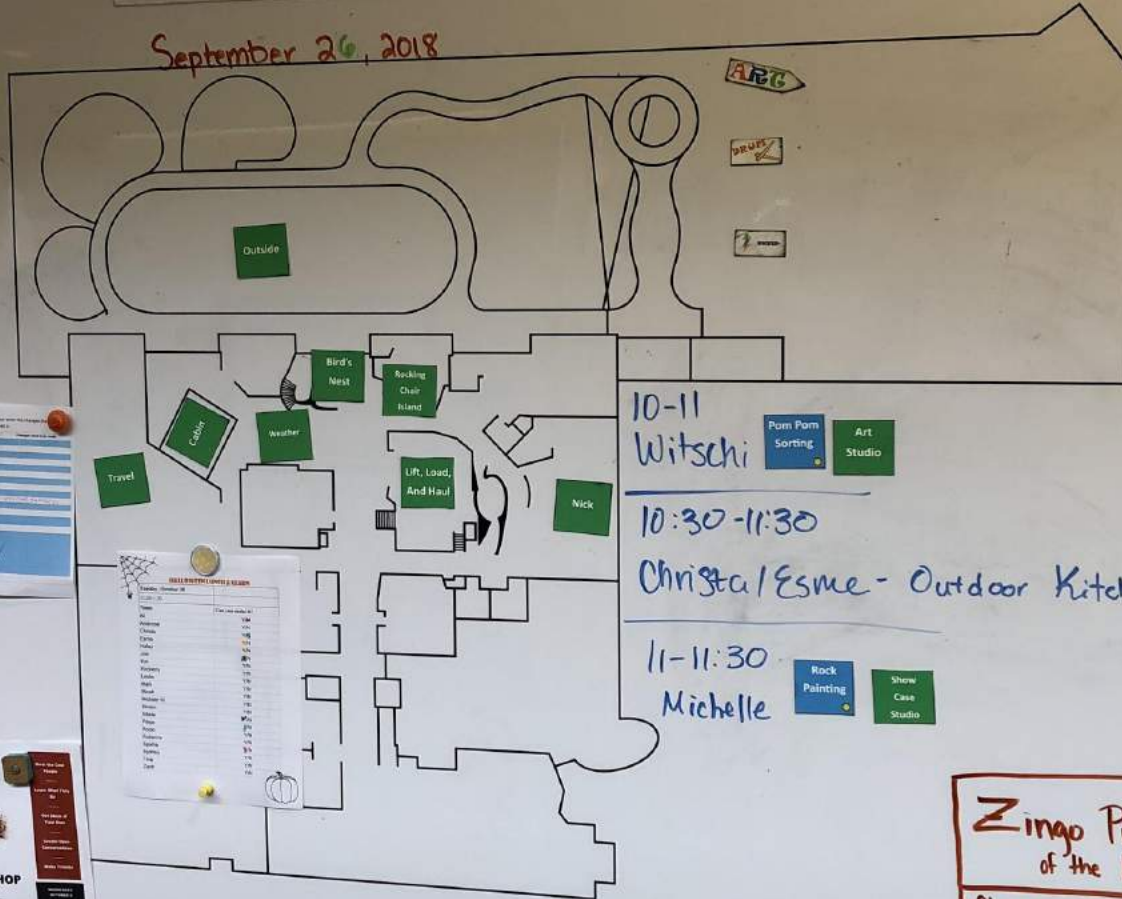
Part of the toolbelt.

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



curiosity

September 26, 2018



10-11
Witschi

Pom Pom
Sorting

Art
Studio

10:30-11:30

Christa/Esmé - Outdoor Kitchen

11-11:30

Michelle

Rock
Painting

Show
Case
Studio

Red circle
Table
Yellow circle
Table

Checked Out

Bernoulli

9/26-9/27

POP

- Ker-plunk
- Hula Hoops
- Twist Tossell
- Tiny Tools Bolts
- Tiny Tools Bolts
- Ozo-Bots
- Marble Mania
- Ice Balloons
- Scope on a Rope
- Pop Art
- Proto-Type

GUEST EXPERIENCE POINT

CUSTOMER

GUEST SERVICES POINT

Zingo Prompts of the Week:

- Share a way you enhanced or encouraged family play.
- Share a way you facilitated with an adult.

ancements

er 3rd - Coffee Shop
go, let Leslie know

ber 15th - Fun Night
Kimberly's - 6:30-9:00 pm

October 30th - Lunch and Learn
1:30-1:30

our Facebook group
- Play Facilitator blog

heck your info

the CHIP?

OCT. 3 COFFEE SHOP

Specialty Coffee
Pastries
Beverages

A little paranoia is good.



We are works in progress.

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





Jenni Martin

I'm all about helping people connect across difference. This often involves reflecting on assumptions.

Latino Audience



2000

Vietnamese Audience



2007

Diwali Festival



2010

Autism Initiative



2012

2013



Breaking Ground
Immigrant Dinners

2014



Cultural Competence
Learning Institute

2016

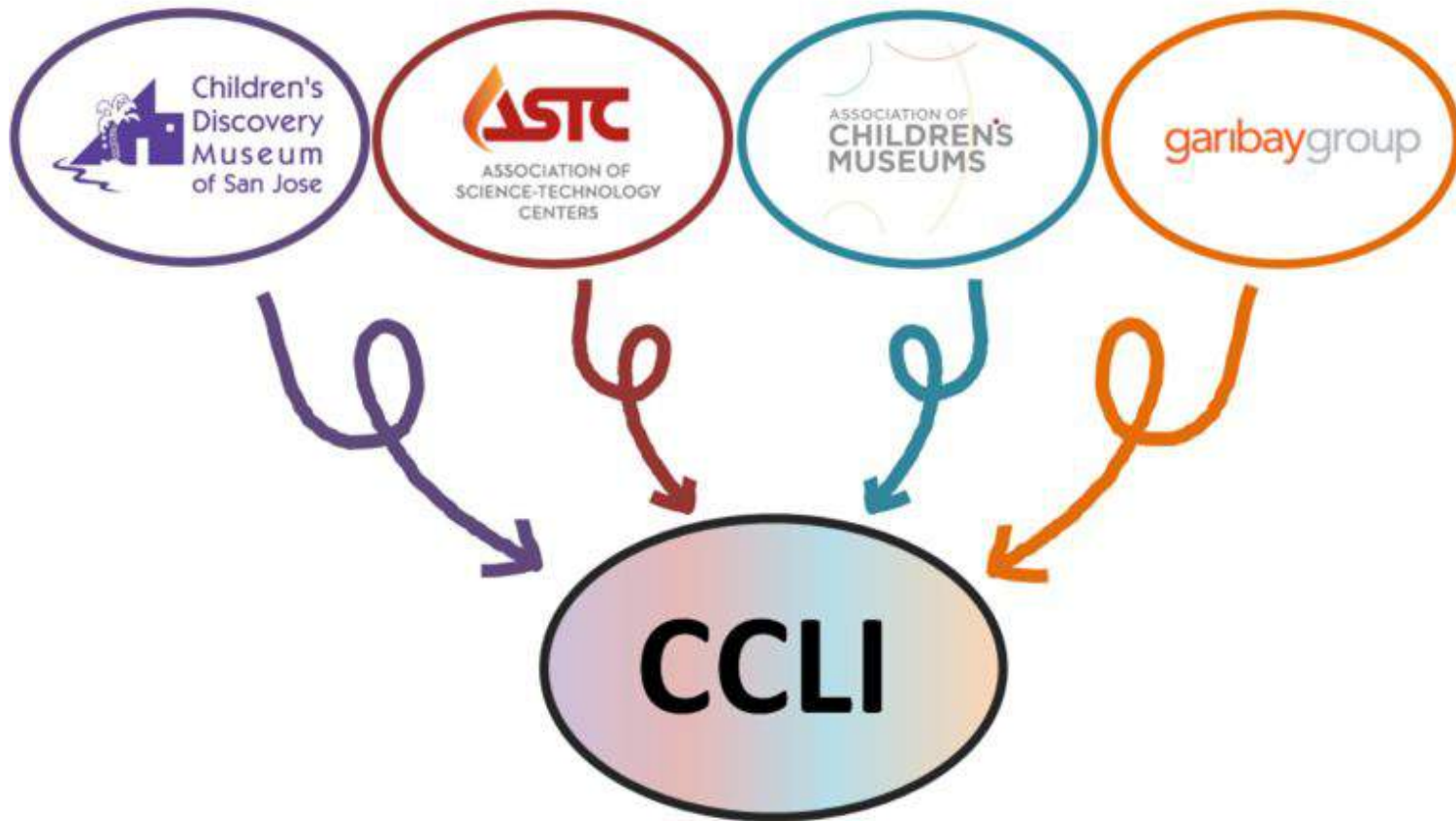


LGBTQ
Advisory Group

2017



Common Ground
Dinners and Installation



Success for museums in the 21st century depends on embracing new, diverse audiences and changing organizational practice.

Becoming a Learning Institution--It's a Journey

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

Model	Process		
Lewin (1947)	Unfreezing	Moving	Refreezing
Backhard and Harris (1977)	Present state	Transition state	Future state
Beer (1980)	Dissatisfaction	Process	Model
	Departure from tradition and crises	Strategic decisions and prime movers	Action vehicles and institutionalization
Tichy and Devanna (1985)	Awakening	Mobilizing	Reinforcing
Nadler and Tushman (1990)	Energizing	Envisioning	Enabling

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

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

Ethnorelativistic Stages

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?



Q&A



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