

# Prototyping to Build Capacity

Using iteration processes to facilitate  
cross-departmental collaborations and change

#ASTC2018

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# Session Panelists

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# A Primer on Change Management

# Change management model (Kotter)



# A Summer of Prototyping @ Providence Children's Museum



## PCM's Creativity Initiative

A three-year multifaceted venture designed to build creative confidence in children.

Working in collaboration with the arts and design communities of Rhode Island, the *Creativity Initiative* will present immersive, design-rich exhibits, educational programs and maker workshops, both in the Museum and in settings across the state.



# Summer of Prototyping

- Six weeks of **intensive**, rapid prototyping
- 100 **little experiments**
- **Invitation** across every department, role and function
- **Facilitation training** and practice for Experience Coordinators, AmeriCorps Members, Researchers, and Volunteer Play Guides





# Summer of Prototyping

- Developing new approaches to **collaboration** between Exhibits, Education, Research, and Visitor Experience
- Practicing new methods of research, evaluation, **documentation**, and **reflection**
- Building new social media presence and developing **new institutional voice**





# Key Insights

- Change is **exhausting**, challenging and takes time, intention and **resilience**
- **Practice** new ways of being our creative selves, building capacity, and sharing ownership
- **Small experiments**, incremental changes, and **healthy risks** are necessary ingredients to institutional change
- Continued work to translate what we learned into **sustained processes**, practices and ways of working together

# Iteration Zine 2.0

# ITERATION ZINE (2.0)

astc 2018. hartford, ct

What's bothering you?

# What's bothering you?

**Gripes**, or what do you repeatedly complain about to your friends & family?

Whether its parents paying attention to their cell phones (when you'd rather they play with their kids) or a school group running and screaming through a gallery – any behavior that more than 5 people do repeatedly – visitors, co-workers, whomever – it can probably be defined as a design problem & remedied.



A spiral-bound notebook with a white page. The page contains three empty square checkboxes arranged vertically on the left side. The spiral binding is visible at the top of the page.

Try to come up with a few examples before choosing one to focus on.

WHY WHY WHY WHY WHY  
(or the 5 Whys)

# 5 Whys: Helping You Get to the Root Cause

- Sometimes it isn't obvious what the underlying problem is behind the issue that is bothering you
- You're seeing the **symptoms** rather than the **cause**.
- In order to prevent the issue from happening again, you'll want to use counter-measures to address the underlying problem, rather than putting a bandaid on it
- Talking it out with someone and asking a series of whys helps you dig further into the issue

# How to get started

My hands are always sticky after eating ice cream



The ice cream keeps dripping out of the bottom of the cone.



I'm not eating it fast enough?



Eat faster



Brain freeze



What did you try?

What happened?

The cone design sucks.

Why? & What can you do about it?



# How to get started

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Bra  
fre



What did you try?

What happened?

The cone design sucks.

Why? & What can you do about it?



Booking individual  
areas in Design Lab is  
confusing for  
teachers.

(A more relevant example)

# Your turn!

Form a small group of 2-3 people

Take turns doing the 5 Whys exercise, about **6-7 minutes per person** (20 minutes total for this portion)

Write down your ideas about what your underlying issues are.

EXPLORE THE ESSENTIAL PROBLEM BEHIND YOUR OBSERVATION.

WHAT DO YOU THINK THE UNDERLYING ISSUES ARE?

The worksheet is divided into two main sections. The left section, titled "EXPLORE THE ESSENTIAL PROBLEM BEHIND YOUR OBSERVATION.", contains six hand-drawn speech bubbles, each containing the word "why?". The right section, titled "WHAT DO YOU THINK THE UNDERLYING ISSUES ARE?", contains two large, empty hand-drawn thought bubbles for writing.

# Influence & the Science of Persuasion

From: Secrets from the Science of Persuasion by Robert Cialdini and Steve Martin  
All fabulous bird images ©Julie Bowen. Follow her @julie\_nkwali on Instagram for more!



# Reciprocity

Obligation to give when you receive



# Scarcity

People want more of those things they can get less of

In a business context – what's unique about your proposal



# Authority

People will follow the lead of credible, knowledgeable experts





# Consistency

People like to be consistent with the things they have said or done.

Voluntary, active, small, public commitments that can be built upon



# Liking

People who have things in common with us, who compliment us or who cooperate with us toward mutual goals



# Consensus

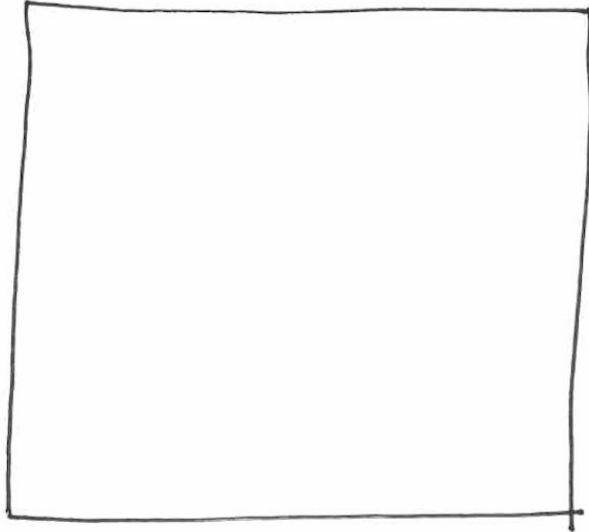
When people are uncertain they will look to the actions of others to determine their own



# Control vs Influence

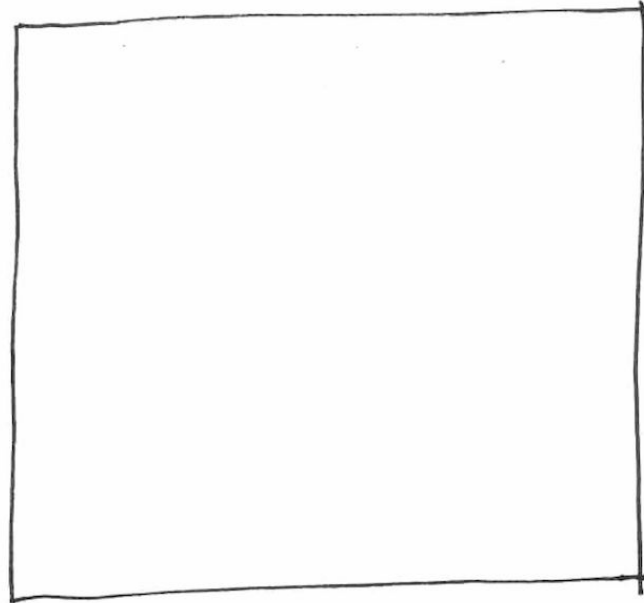
WHAT DO YOU HAVE  
CONTROL OVER  
IN THIS SITUATION?

DRAW OR LIST FIVE THINGS:



WHAT DO YOU HAVE  
INFLUENCE OVER?

DRAW OR LIST FIVE THINGS:



# Your Turn

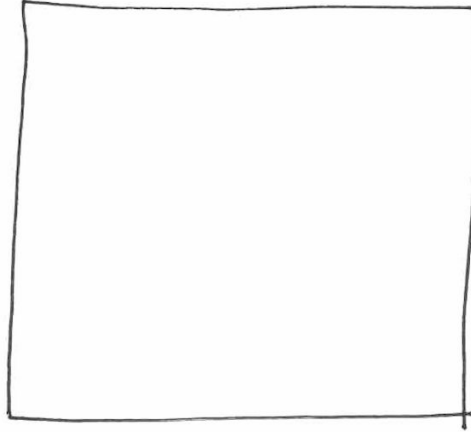
What do you have CONTROL OVER in this situation? Draw or list five things.

What do you have INFLUENCE OVER in this situation? Draw or list five things.

AND...

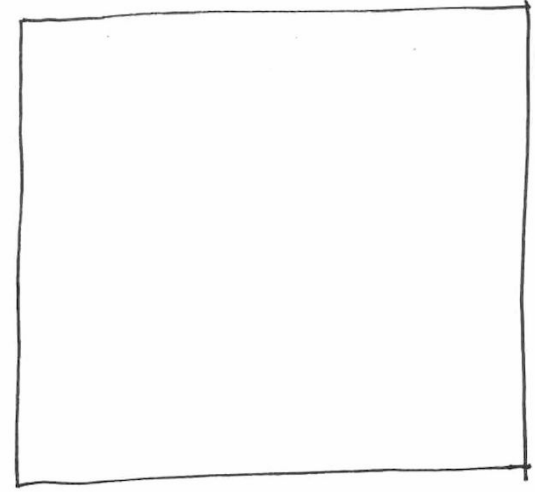
WHAT DO YOU HAVE  
CONTROL OVER  
IN THIS SITUATION?

DRAW OR LIST FIVE THINGS:



WHAT DO YOU HAVE  
INFLUENCE OVER?

DRAW OR LIST FIVE THINGS:

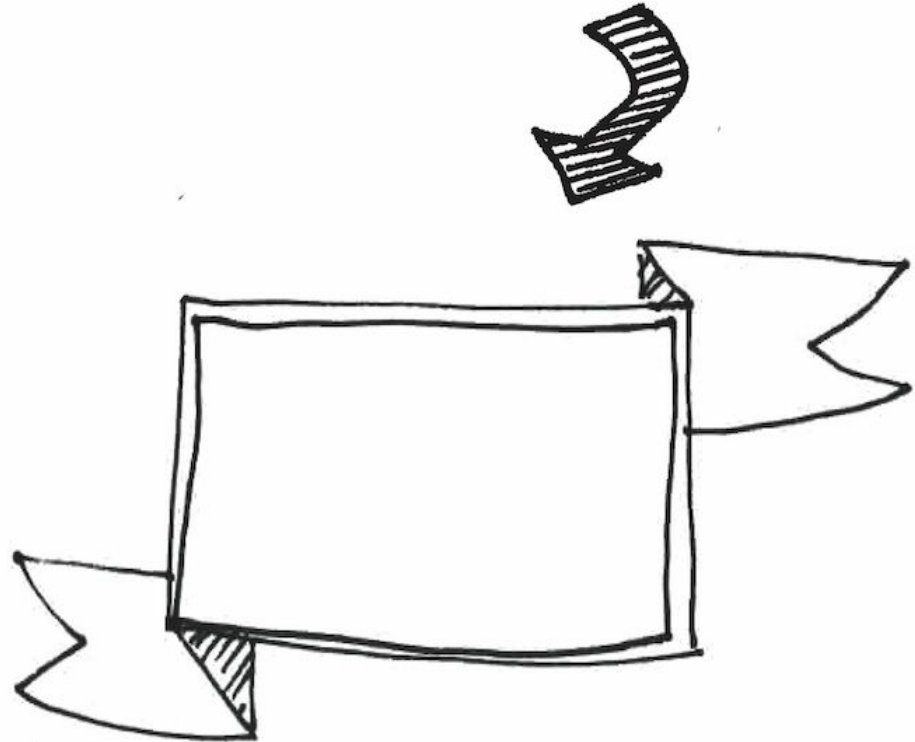


# What are you going to try?

Discuss in your small groups (2-3) to get some feedback and to help clarify what you might do.

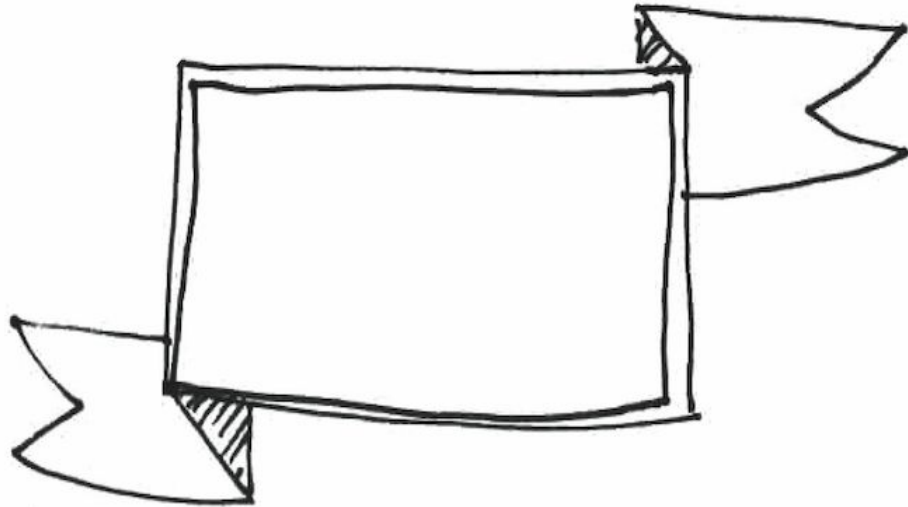
15 min total

WHAT ARE YOU GOING  
TO TRY?





WHAT ARE YOU GOING  
TO TRY?



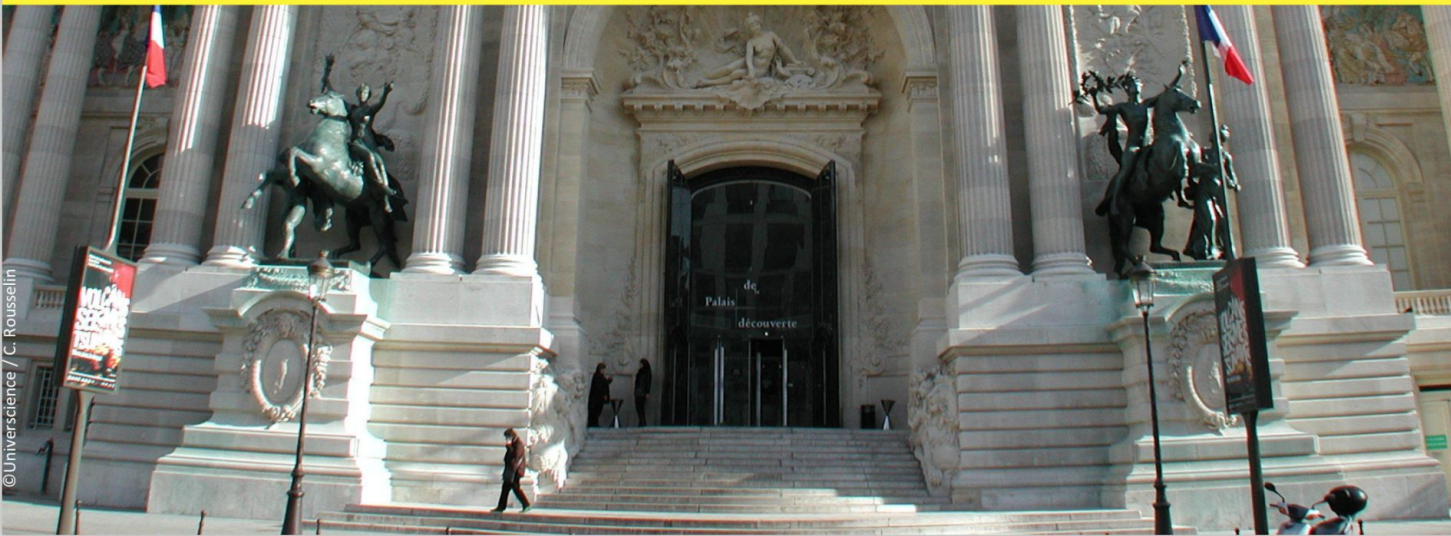




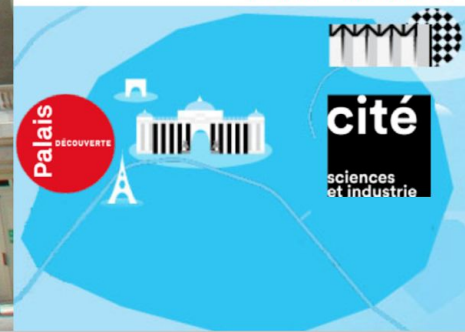
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## Prototyping to prepare renovation in Palais de la découverte



**universcience**  
Paris - France



# Prototyping with the community at the Palais de la découverte (Paris)

Nathalie wasn't able to join us in Hartford, but she's got an amazing story to tell about some experiments they've conducted (and are conducting). Download her slide deck here:

<https://drive.google.com/file/d/0B--6USNpniKUTzFxU0w2a2pWeTgyWU83X2otV2g5a1dqNGFv/view?usp=sharing>

And contact her at [nathalie.puzenat@universcience.fr](mailto:nathalie.puzenat@universcience.fr)

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