Theme and brainstorming
Children’s Museum Visit!

Meet at the Boston’s Children Museum at 6:30 PM Friday

Optional introduction to the children’s museum

Red line to South Station

Explore!

2.00b will cover your ticket!
“When you tell them you're from England”
- Alex Paul-Ajuwape
“It's getting a little muggy in here (sorry).”
- Anna Weinstein
“It's getting a little muggy in here.”
- Anna Weinstein
Association Mapping

- **Heats**
- **Burns**
- **Smokes**
- **Counts down**
- **Pops!**

**Function**
- **Fire**
- **Bulb**
- **Wood burning tool**

**Environment**

**Name**

**Materials**

- **Association Mapping**
- **Used With**
Invention and Innovation

“Invention is often developing something from the ground up (zero to one) while innovation more directly utilizes existing technologies in rather novel ways”

- Tobi Mustapha
Theme

2012 — imagination
2013 — “in the dark”
2015 — surprise
2016 — intrigue
2017 — animate
2018 — dream

2019 — taxidermy!
rainbow
Rainbows are about myths
Rainbows are about beauty

Rainbows are about beauty
Rainbows are about inclusion
Rainbows are playful
rainbow!
Idea generation strategies
Why?
Quantity of Ideas vs. Overall Creativity Score per Subject

$R^2 = 0.81952$
Idea generation strategies
Brainstorming!

Generate
LOTS of ideas....

Quickly!
Brainstorming

Problem statement
Brainstorming

Problem statement

20 minutes
Brainstorming

Problem statement

20 minutes

5-6 people
(in 3-370)
Brainstorming

Problem statement

20 minutes

5-6 people (in 3-370)

One facilitator and lots of paper
Brainstorming Rules?
Brainstorming Rules

Defer judgement
NO EVALUATION

Switch left brain to silent mode

Encourage wild ideas

Build on ideas

Challenge all assumptions
Brainstorm Sketching

- Quick and clear
- Draw big
- Name
- Brief pitch
- Record
- Repeat

Sketch: SFX NERF DART

Drawing of a hand holding a dart with the sound effect "PFFT..."
I/M/P

Ideas Per Minute
(Per Person)

Quantity not quality

>1.0 IPM (PP)

5 people,
20 min = 100 ideas
but really, more!
Brainstorming Assistance
Dopamine
Brainstorming

Toys inspired by "rainbow"
Idea Classification

Not selecting ideas yet!

Silent sort

Name the categories

Choose appropriate names

funny ideas

big toys

good ones

starts with “R”
7,363,474 is quite an original answer to the problem ‘How much is 12+12?’

It is only when conditions are such that this answer is useful that we can also call it creative.

- Sarnoff Mednick

Idea Selecting
Idea Selecting, first pass
Brainstorm Assignment

- fantasy
- construction
- sensory
- challenge

a. ideate as many as you can in each category

b. research + choose one favorite idea from each of 4 categories

c. 4 legible, full page sketches with idea name in your design notebook

d. redraw these 4 ideas on printer paper with your name
Brainstorm Assignment

- fantasy
- construction
- sensory
- challenge

these ideas are the starting point for your final toy!

don’t do it right before lab

this assignment is important

it is graded
Brainstorm Assignment

- fantasy
- construction
- sensory
- challenge

How is it graded?

- a. did you complete the assignment?
- b. are the sketches large and legible?
- c. are the ideas thoughtful (don’t exist already and are within theme)?
Selecting again, Pugh Charts

Assessment criteria

Pick one idea as a benchmark

Rate each criteria with +, S, or - as compared to the benchmark
Fidget spinners

Base of comparison should be one you fully understand

<table>
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<th></th>
<th>Spin Time</th>
<th>Cost</th>
<th>Ergonomics</th>
<th>Coolness</th>
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<tr>
<td>Base</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
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<tr>
<td>Dragon</td>
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<td>++</td>
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<td>Additional</td>
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<td>-1</td>
<td>-1</td>
<td>+1</td>
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Toy Criteria

- Play value
- Enthusiasm
- Appropriateness
  (PLAYsentation friendly, safety, PDL fit)
Pull Toy Hours Tonight

7-10pm in PDL
Lecture Tomorrow

Sketching!
Rainbow and brainstorming!