

# **COMPOSING TO PROTOTYPING**

**MAKING THE LEAP FROM COLLABORATIVE  
IDEATION TO BUILDING A PROTOTYPE**

**JUDETH ODEN CHOI,** PhD student, HCII  
**JESSICA HAMMER,** Assistant Professor, HCII  
**JODI FORLIZZI,** Professor HCII  
**MIKE CHRISTEL,** Professor ETC  
**MACKENZIE BATES,** Research Assistant



Carnegie Mellon University  
Entertainment Technology Center

Carnegie Mellon  
Human-Computer Interaction Institute



# THE RIGHT PLAYTEST AT THE RIGHT TIME



Explore



Refine



Prove



***PLAYTESTINGWORKSHOPS.COM***

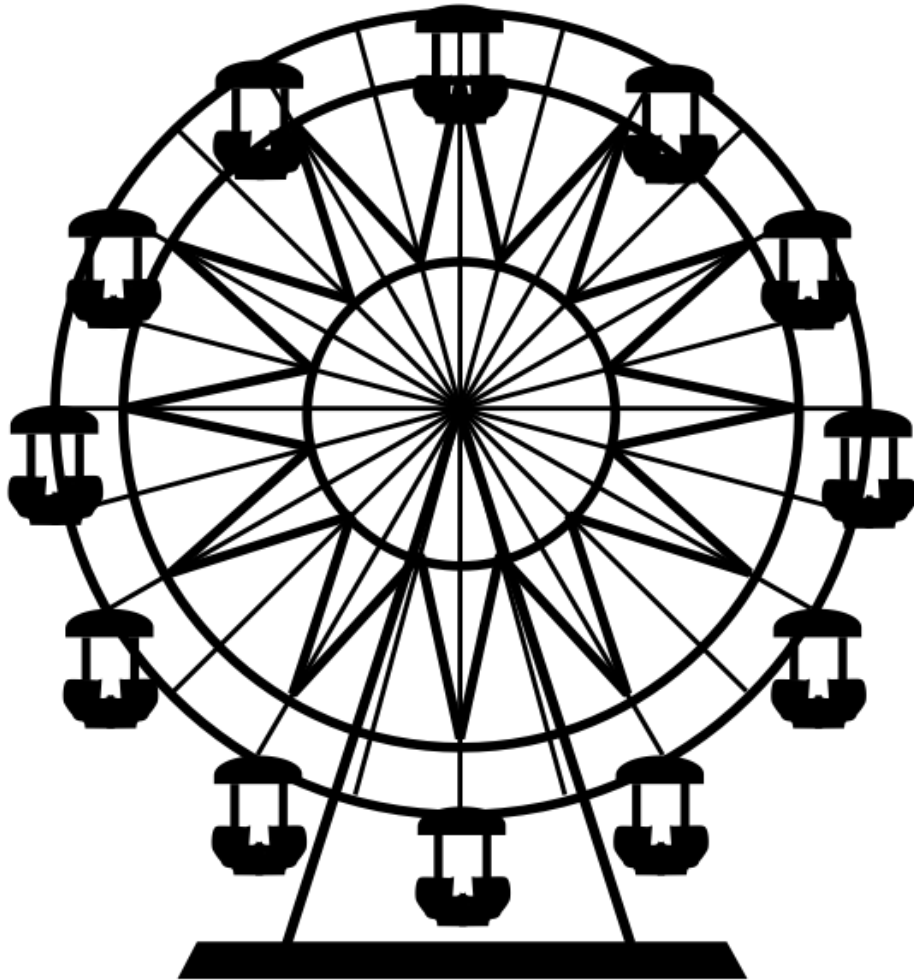
# THE PLAYTESTING PRACTICES OF GAME DESIGN STUDENTS

<b>Successful Teams</b>	<b>Less Successful Teams</b>
<ul style="list-style-type: none"><li>• Referred back to design goal to make decisions.</li><li>• Asked focused questions in playtesting.</li><li>• Listened to their players</li><li>• Not afraid to pivot within parameters of their goal</li></ul>	<ul style="list-style-type: none"><li>• Looked for outside advice to make decisions</li><li>• Asked playtesting questions that were too narrow or broad (usability/impact)</li><li>• Respond defensively to player feedback.</li></ul>

## I. THE MERRY-GO-ROUND

**IF THERE'S  
A PROBLEM  
WITH ACT  
III...**

# THE IDEATION MERRY-GO-ROUND



# **HOW TO PLANT YOURSELF ON SOLID GROUND**

- **Articulate clear design goal**
- **Think holistically about how narrative and mechanics serve your design goals**
- **Gain buy-in from collaborators in pursuit of these goals**

# STOP ALL THE TALK AND GET UP ON YOUR FEET

- Multidisciplinary teams
- Denying the primacy of the text
- Finding a way into collaboration through movement.

## *Ensemble & Movement Practices*

Bogart, A., & Landau, T. (2004). *The viewpoints book: a practical guide to viewpoints and composition*. Theatre Communications Group.

Bartenieff, I., & Lewis, D. (1980). *Body movement: Coping with the environment*. Psychology Press.

Rohd, M. (1998). *Theatre for community, conflict & dialogue: The hope is vital training manual*. Heinemann Drama.

Will Power to Youth Training Manual, 2006.

## *Critical Feedback*

Lerman, L., & Borstel, J. (2003). *Liz Lerman's Critical Response Process: A method for getting useful feedback on anything you make, from dance to dessert*. Liz Lerman Dance Exchange.

## *Embodied Design*

Schleicher, Dennis, Peter Jones, O. K.. *Bodystorming as Embodied Designing*.



# AGENDA

## ~~I. Intro: The Merry Go Round~~

### I. Movement Vocabulary

- Establish a movement vocabulary
- Warm-up with movement exercises

### III. Compositions

- Example game design scenario
- Create compositions to explore a game design question.

## II. MOVEMENT VOCABULARY

**LET'S GET  
PHYSICAL**

# WHY MOVEMENT?

## 1. **It's fast.**

Nothing to build. Nothing to program.

## 2. **Every action on stage tells a story.**

Forces the marriage of narrative and mechanic.

## 3. **Act First. Think Last.**

Get out of your head.

Welcome the unexpected action or response.

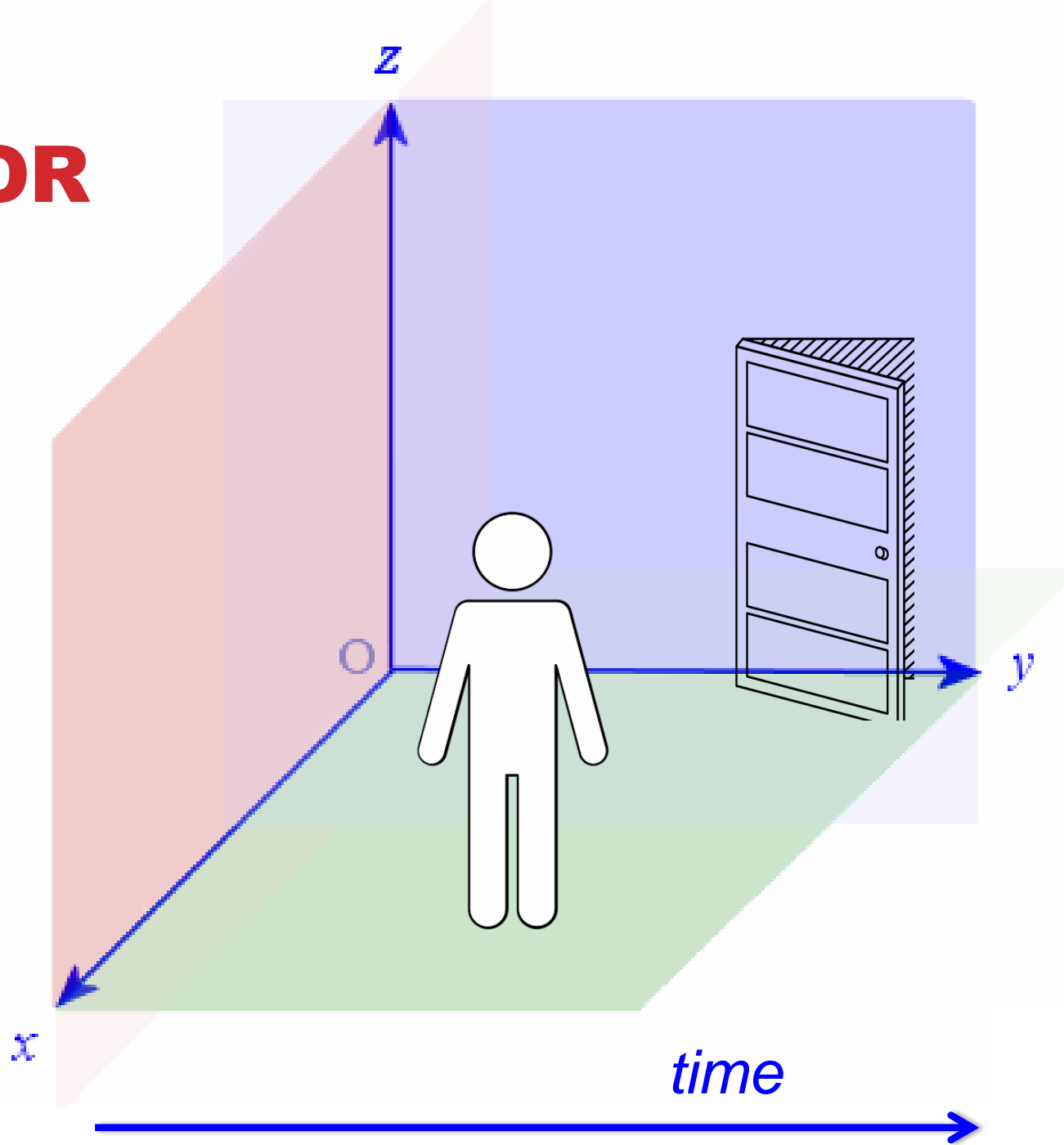
## 4. **Play as a team.**

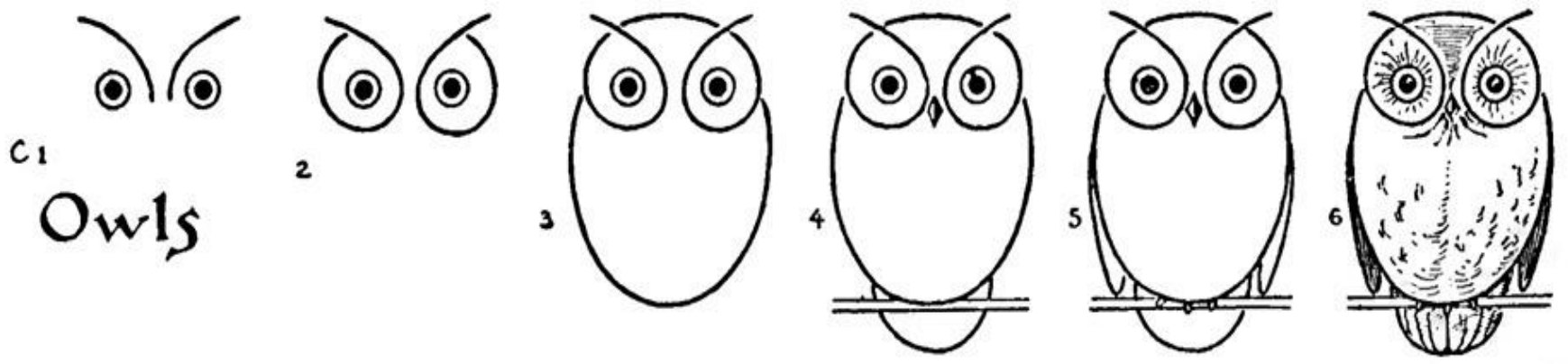
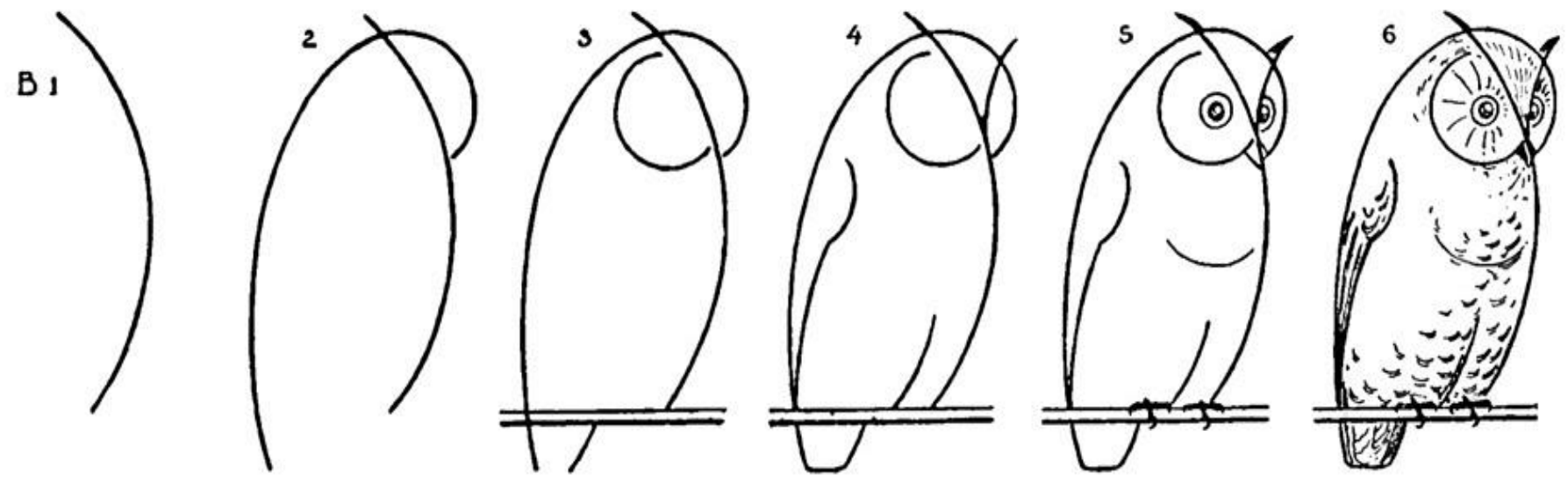
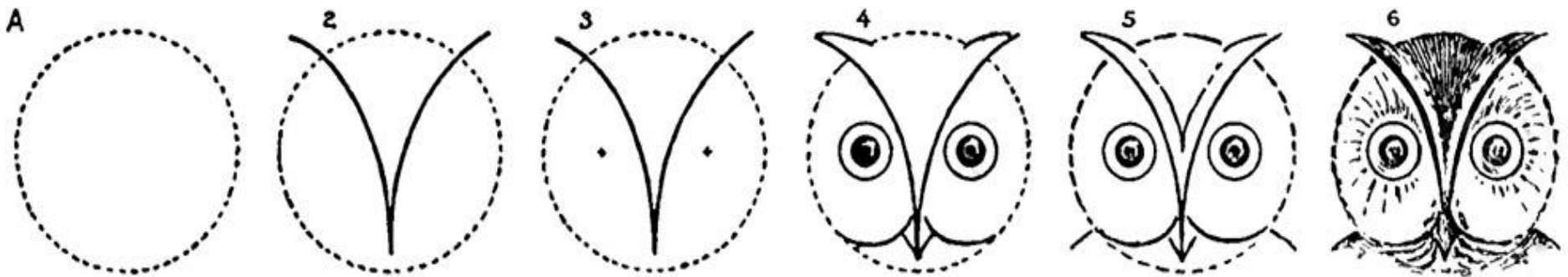
Fun, low-pressure collaboration.

# ACTOR AS CO-CREATOR

**your choices  
create a  
composition...**

- **In 3-D space**
- **Over time**
- **In relation to:  
People  
Objects  
Architecture**





# ACTIONS: SUMMARY

**Advancing/Retreating** – movement in x-plane

**Rising/Falling** – movement in y-plane

**Growing/Shrinking** – movement in z-plane

**Tempo and Duration** – sets tone, mood and emotional state (*urgency, tension*)

**Spatial Relationship** –

- The position in space of 2 people communicates their relationship.
- Movement communicates a shift in relationship (power dynamic, change of status, change of feeling).

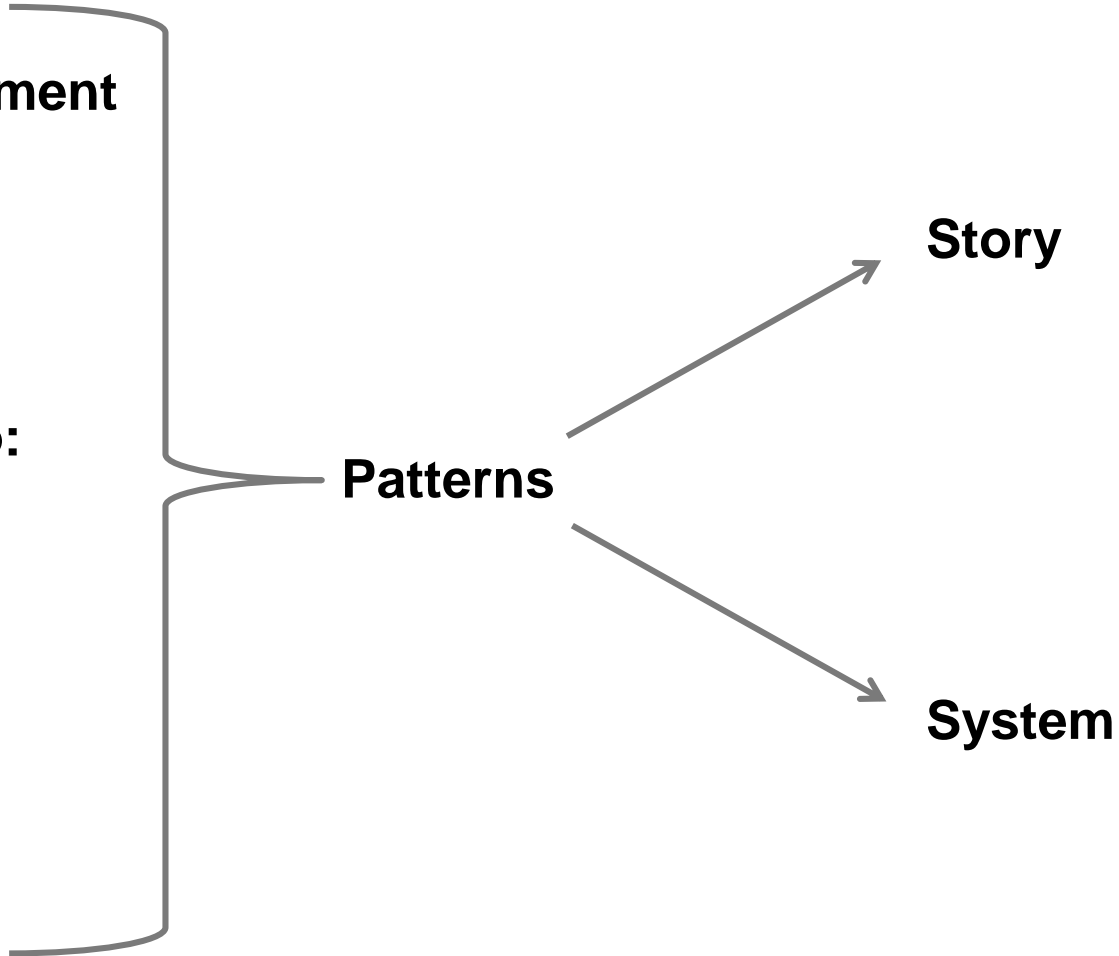
# STRINGING TOGETHER THE ACTIONS

The arrangement  
Of actions  
In 3-D space  
Over time  
In relation to:  
Characters  
Objects  
Architecture  
+  
Repetition

Patterns

Story

System



### III. COMPOSITION

# A UNIVERSE FROM SCRATCH



# WHAT'S IN YOUR FRIDGE?

## Needs

- Players
- Clients/Partners
- Co-designers

## Experience

- Design team's past
- Your players' past
- Desired gameplay

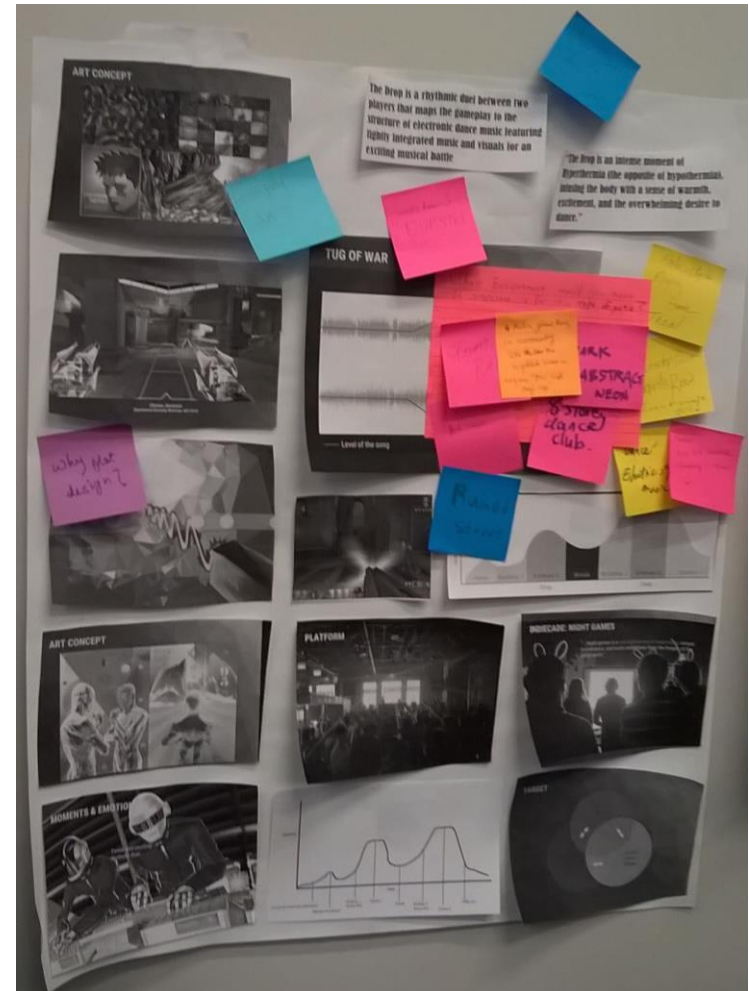
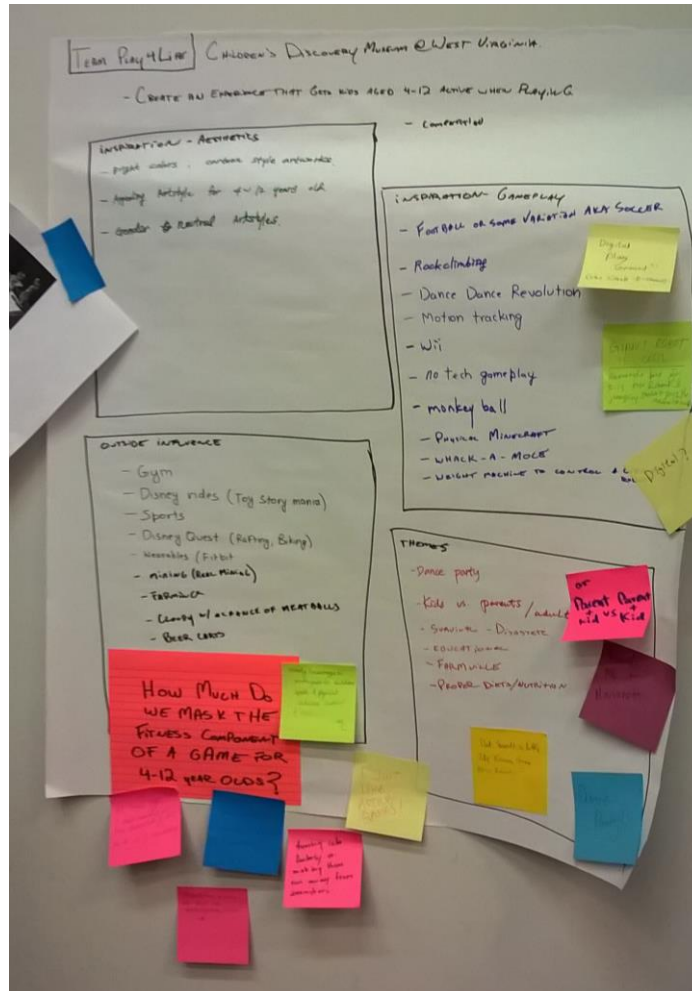
## Inspiration

- Gameplay
- Art
- Story/Ideas

**Can you describe your game in one sentence?**

**Can you articulate your design goals?**

# CHOOSING YOUR INGREDIENTS



# LET'S MAKE A GAME TOGETHER!

A web app game for 8<sup>th</sup> graders that encourages “grit”

## Needs:

**Client:** a diverse city school district with a high HS drop out rate. Wants to prepare students for the challenges of HS, so that they graduate.

**Players:** need to be prepared for the challenges of HS. Students need to be able to connect the gameplay to their real life.

## Experience:

**Designers:** we all attended HS; our experience with grit.

**Players:** statistics (high drop out rate, poverty); Interviews with students.

**Gameplay:** rewards for persistence, resilience, practicing reframing the problem.

## Inspiration:

- Candyland: race to the finish
- Workout mix tapes help us stick to it when we want to quit!
- Grit research and curricula

# QUESTIONS TO EXPLORE

- **Is the game set in a HS?**
- **How hard is HS? How challenging or easy is the game?**
- **What is the tone?**
- **In Candy Land all players race each other. Is HS a competition? Are there opportunities for cooperation in the game?**

## **PRIMARY RESEARCH QUESTION:**

- **Chance vs. Choice? How much chance is involved in the journey?**

# THE RECIPE

## YOUR COMPOSITION

Create and perform a 1-2 minute simulation of gameplay with the below plot.

**Plot:**

*Player A is ahead of Player B.*

*Player A faces an obstacle.*

*Player A falls back.*

*Player B moves ahead.*

In your composition try to incorporate...

# **THE RECIPE (CONTD)**

- **At least 1 action and 1 response from your personal stories of grit.**
- **Represent an architectural feature of the game world—move through it**
- **Use one moment of slow motion**
- **Repeat an action 3 time**
- **An excerpt from the source text**
- **A shift in power**
- **A choice OR chance**

**“THE LEAP, NOT  
THE STEP, IS  
WHAT MAKES  
THE EXPERIENCE  
POSSIBLE.”**

**--HEINER MEÜLER**

# LET IT MARINATE

## CRITICAL RESPONSE PROCESS

- 1. Ask a meaning-making question.**

Ex. “What stood out to you?”

- 2. Ask focused questions.**

You direct the conversation

- 3. Allow the audience to ask you questions.**

Reveals surprise, interest and confusion

*“Why did you choose...”*

- 4. Discussion and suggestions**

You decide how much or how little.



# **RUN THIS WORKSHOP WITH YOUR TEAM!**

**Full workshop  $\approx$  2 hours**

**Materials available at:**

**[Playtestingworkshops.com](http://Playtestingworkshops.com)**

**Contact me:**

**[jochoi@cs.cmu.edu](mailto:jochoi@cs.cmu.edu)**