



GDC EDUCATION
SUMMIT

Teaching Analog Game Design

Stone Librande
Jesse Schell
Naomi Clark
Ira Fay
Mary Flanagan

GDC GAME DEVELOPERS CONFERENCE March 14–18, 2016 · Expo: March 16–18, 2016 #GDC16




GDC EDUCATION
SUMMIT

Teaching Analog Game Design

Stone Librande
Lead Designer, Riot Games

GDC GAME DEVELOPERS CONFERENCE March 14–18, 2016 · Expo: March 16–18, 2016 #GDC16



Genre



Strategy
Sports Coach

Design Jam

A game design exercise

Audience



Gender: Male
Age Range: 20-30
Interests: ESPN

Budget



Time: 1 year
Money: \$250,000
Team: 10 average

Platform



PC
Web Browser

Stone Librande

Lead Designer, Riot Games



Budget



Time: 3 years
Money: \$25 million
Team: 50 pros

Budget



Time: 2 years
Money: \$1 million
Team: 5 super-stars

Budget



Time: 1 weekend
Money: None
Team: 4 high school

Budget



Time: 5 years
Money: \$100 million
Team: 200 experienced

Budget



Time: 1 year
Money: \$250,000
Team: 10 average

Budget



Time: 1 month
Money: \$100,000
Team: 10 veterans

Budget



Time: 2 years
Money: \$10 million
Team: 100 varied

Budget



Time: 2 months
Money: \$20,000
Team: 6 college grads







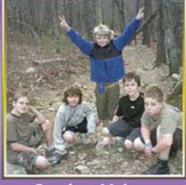

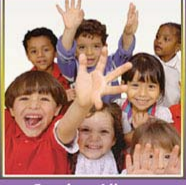
Budget



Time: 6 months
Money: \$2 million
Team: 20 veterans

Teaching Analog Game Design: Design Jam



Audience				
				
Gender: Male Age Range: 40 + Interests: Gadgets	Gender: Female Age Range: 30-40 Interests: Cuisine	Gender: All Age Range: College Interests: Travel	Gender: Male Age Range: 20-30 Interests: ESPN	
Audience				
				
Gender: Female Age Range: 15-20 Interests: Science	Gender: All Age Range: Elementary Interests: Animals	Gender: Male Age Range: 10-15 Interests: Outdoors	Gender: Female Age Range: 5-10 Interests: Dance	Gender: All Age Range: Pre-School Interests: Noise

Teaching Analog Game Design: Design Jam

GDC 16

Platform				
				
PC Low-end	Console Xbox One, PS4	Console Wii U	Virtual Reality Oculus	Wearable Apple Watch
Platform				
				
Tablet Google Nexus	PC High-end	PC Web Browser	Smart Phone iPhone 6	

Teaching Analog Game Design: Design Jam

GDC 16



Overview

Split up into small teams

- 2-3 people per team

Brainstorm

- Get “assignment”
- Discuss the situation for 5-10 minutes

Create design documents

Presentation

- 4 minute “pitch”





Budget
 Time: 1 year
 Money: \$10,000
 Team: 10 average

Audience
 Gender: Female
 Age Range: 30-40
 Interests: Cuisine

Platform
 Virtual Reality
 Creative

Genre
 Adventure
 Dinosaurs

Teaching Analog Game Design: Design Jam

GDC 16



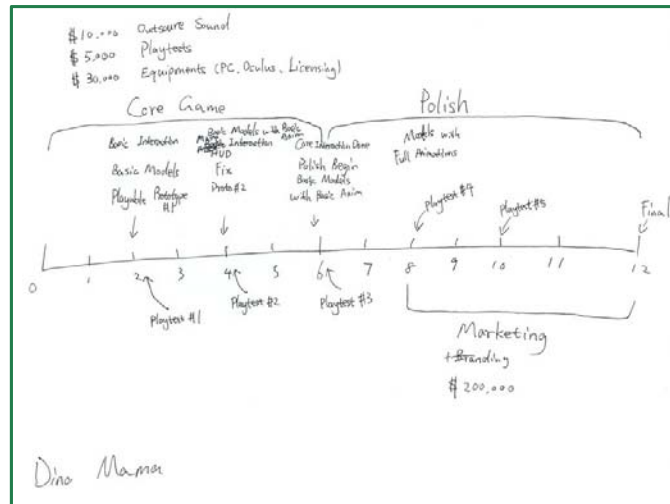
Teaching Analog Game Design: Design Jam

GDC 16

Design Documents

Executive Producer

- Timeline from beginning to end of production



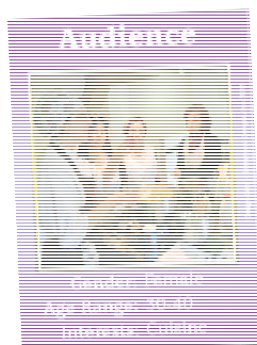
Teaching Analog Game Design: Design Jam



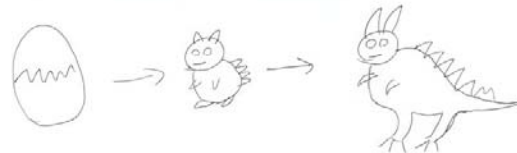
Design Documents

Head of Marketing

- Bullet points showing unique attributes



- Unique combination of PARENTING and ADVENTURE
- VR Tamagotchi! raising a dino pet see the dino!!!
- Cooking in VR (crafting)
- Watch your dinosaur grow and evolve!



Dino Mama

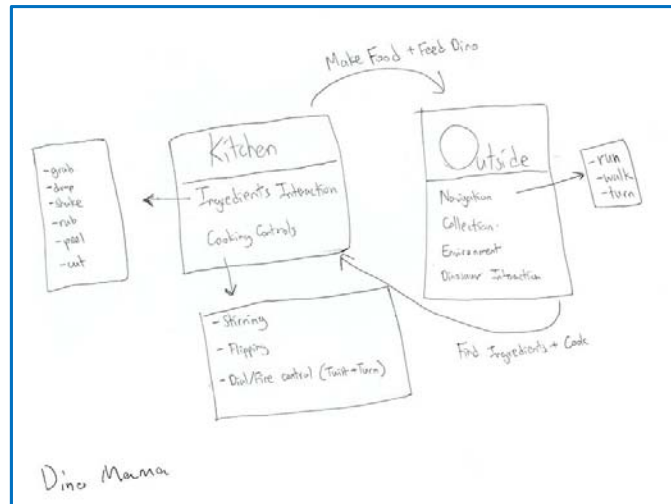
Teaching Analog Game Design: Design Jam



Design Documents

Lead Engineer

- Schematic showing main systems and relationships



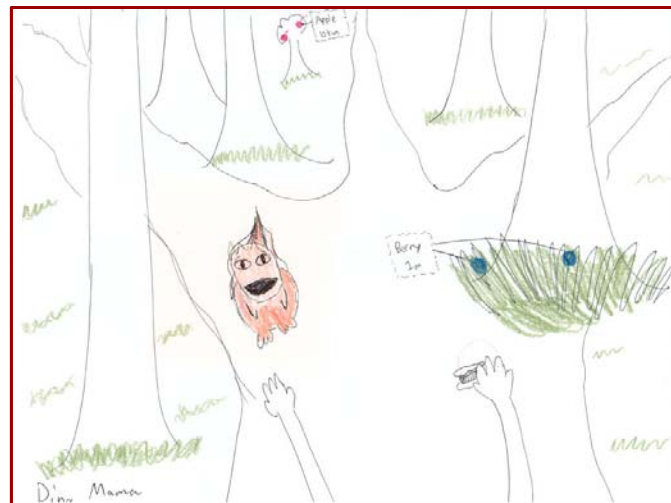
Teaching Analog Game Design: Design Jam

GDC 16

Design Documents

Creative Director

- Screen layout examples



Teaching Analog Game Design: Design Jam

GDC 16

Wrapping Up

Pitches

- 4 minutes per team
~1 minute per document
- Question & Answer period
- Shhh...
(Pitches aren't that important.)



Homework

Project Document

- Analyze your current project
- Create a one-page design that describes a key feature
- Present it to your team
- Incorporate their feedback

Design Jam cards and rules are available for download at:

www.stonetrnix.com

@StoneLibrande

Teaching Analog Game Design: Design Jam



GDC EDUCATION
SUMMIT

Teaching Analog Game Design

Jesse Schell

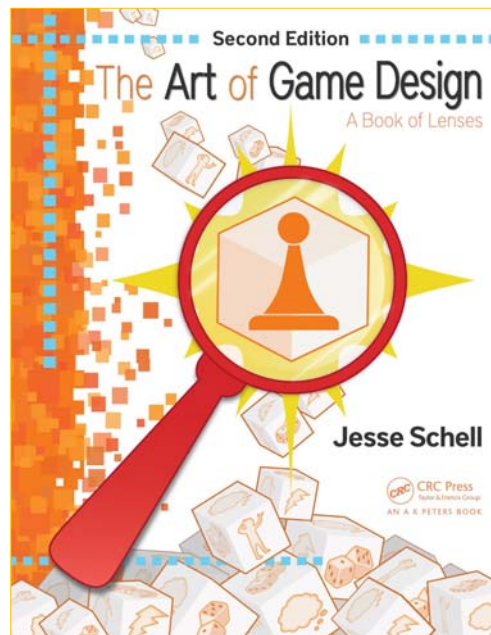
CEO, Schell Games

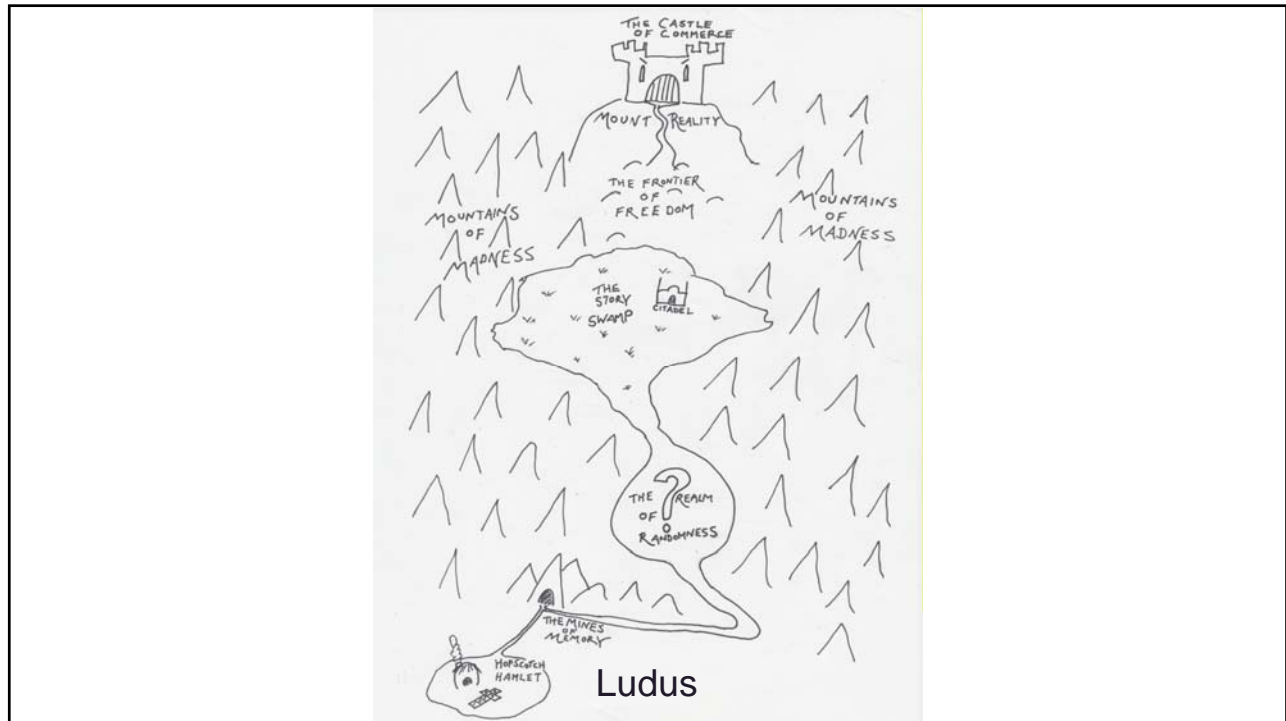
Distinguished Professor of Entertainment
Technology, Carnegie Mellon University



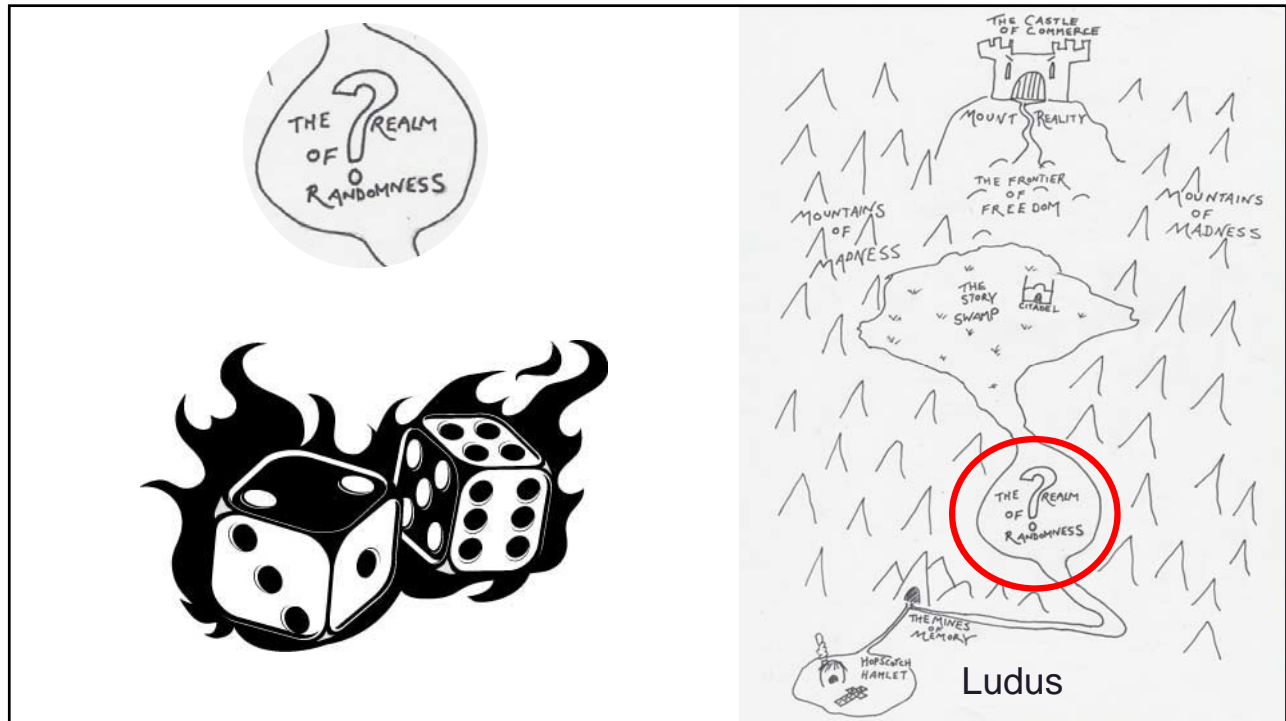
GAME DEVELOPERS CONFERENCE March 14–18, 2016 · Expo: March 16–18, 2016 #GDC16

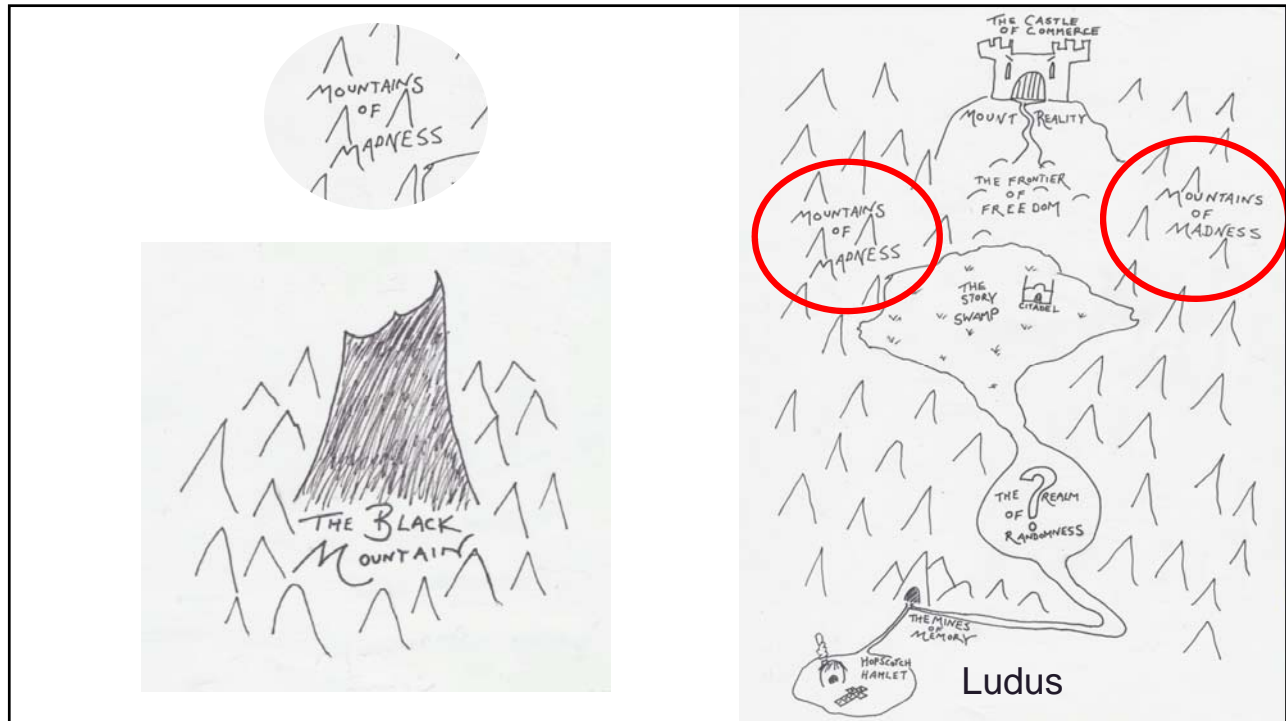


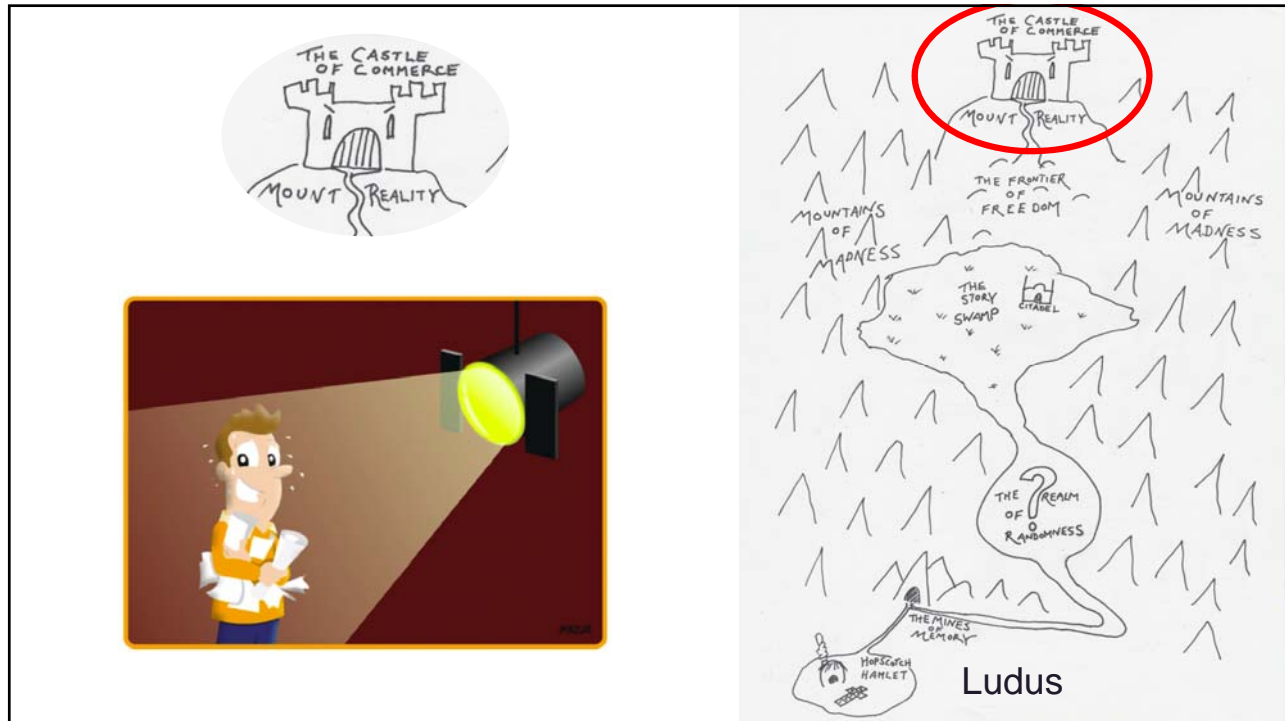














GDC EDUCATION
SUMMIT

Thanks!

Slides: slideshare.net/jesseschell

Twitter: @jesseschell

Email: jschell@cmu.edu



SHELL GAMES



ETC
Carnegie Mellon University





GDC

GAME DEVELOPERS CONFERENCE March 14-18, 2016 Expo: March 16-18, 2016 #GDC16




GDC EDUCATION
SUMMIT

Teaching Analog Game Design

Naomi Clark
Assistant Arts Professor, NYU Game Center


GDC GAME DEVELOPERS CONFERENCE March 14-18, 2016 · Expo: March 16-18, 2016 #GDC16



GDC EDUCATION
SUMMIT

Multiplayer Analog to Multiplayer Digital

- **The Ecosystem Game:** practicing with massively multiplayer player economies
- **The Paper Carnival:** simulated competition for players' time and money

 **NYU** GAME CENTER

GDC GAME DEVELOPERS CONFERENCE March 14-18, 2016 · Expo: March 16-18, 2016 #GDC16



GDC EDUCATION
SUMMIT

The Ecosystem Game

- Function & interplay of varied actors in an economic system
- Rapid evolution of optimizing behavior and (oft-degenerate!) strategies among players
- Real-time balancing for this kind of situation
- As a designer, avoid "ecosystem collapse"



GAME DEVELOPERS CONFERENCE March 14-18, 2016 Expo: March 16-18, 2016 #GDC16



GDC EDUCATION
SUMMIT



you are a prickly pod

4 ♥



special ability: NIGHT FEEDING
at nighttime, come
to the game HQ for ⚡



you are a grass grazer






special ability: DEFENSE
touch this card to the card of
another grazer: no other player
can interact with you
and you cannot move

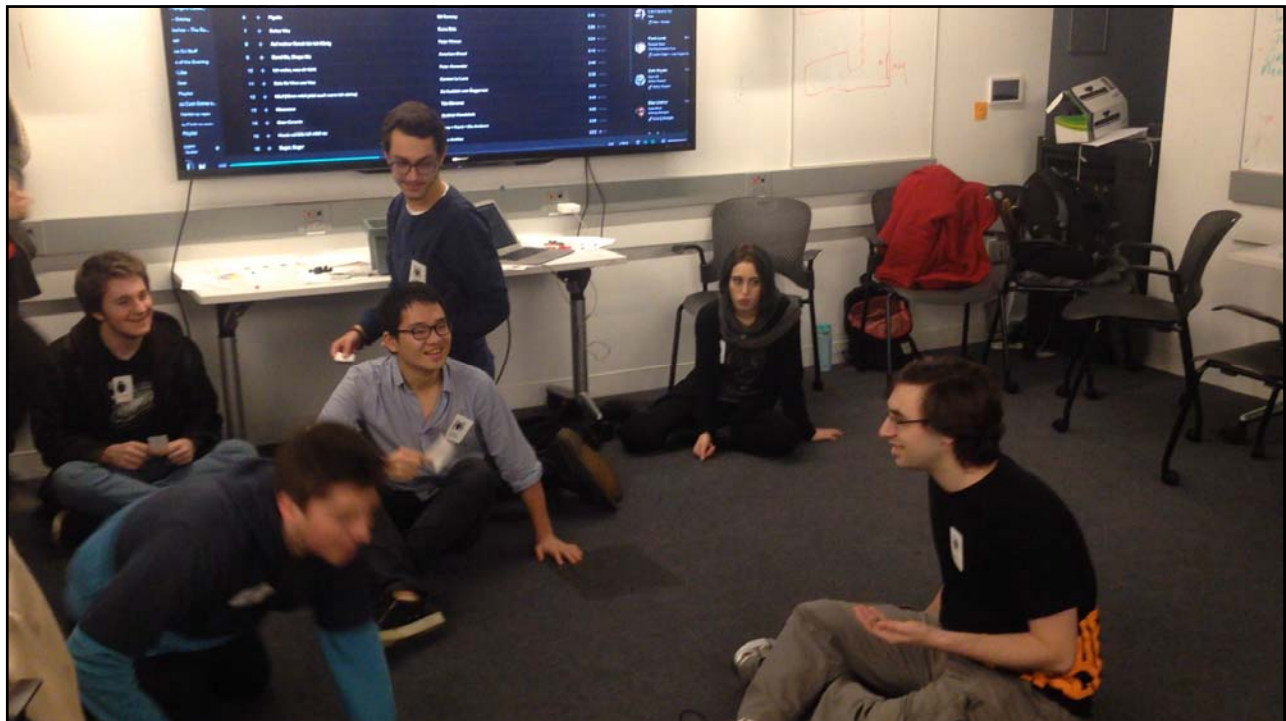


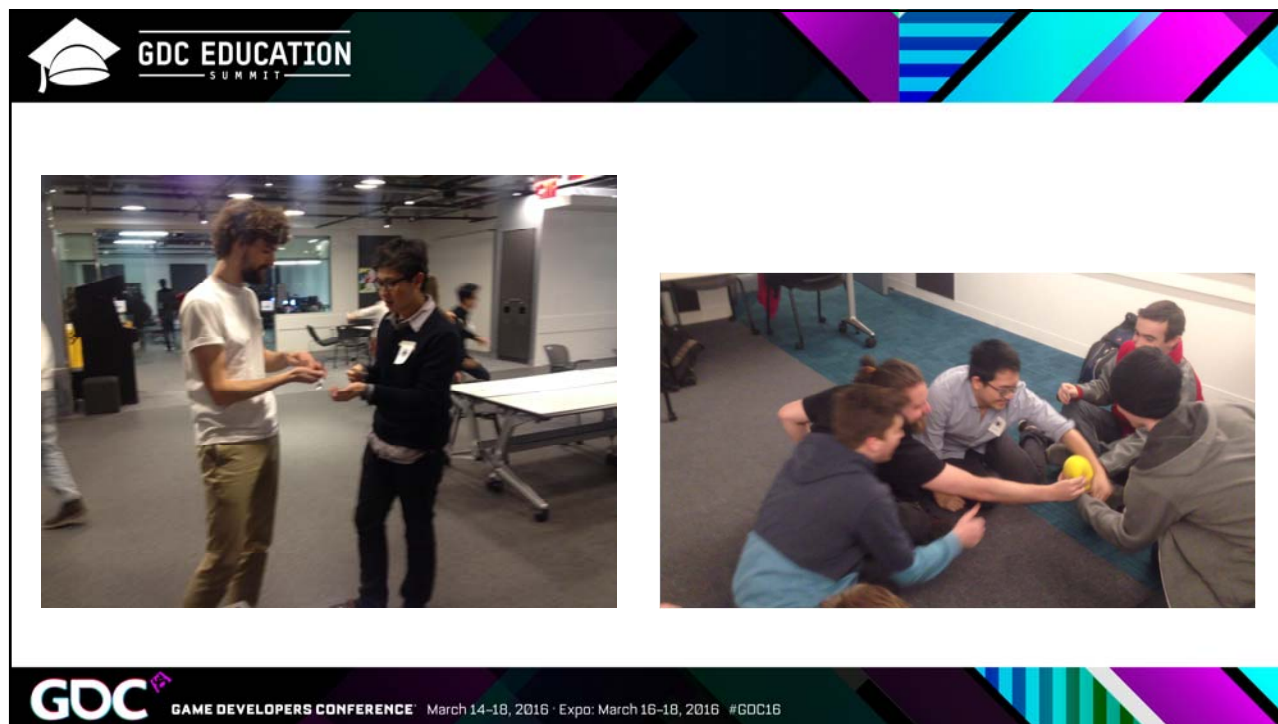
you are a spidery scavenger



GAME DEVELOPERS CONFERENCE March 14-18, 2016 Expo: March 16-18, 2016 #GDC16

GDC EDUCATION SUMMIT				
starting stats	YOU are a	when you encounter a:		
	prickly pod	prickly pod	grass grazer	spidery scavenger
4 ♥ 4 ⚡	 prickly pod	nothing	lose 2 ♥ lose 1 ⚡	add 1 ♥ lose 1 ⚡
4 ♥ 4 ⚡	 grass grazer	take 1 ⚡	nothing	lose 1 ♥ lose 1 ⚡
3 ♥ 3 ⚡	 spidery scavenger	take 1 ⚡	take 1 ⚡	lose 1 ♥





GDC EDUCATION SUMMIT

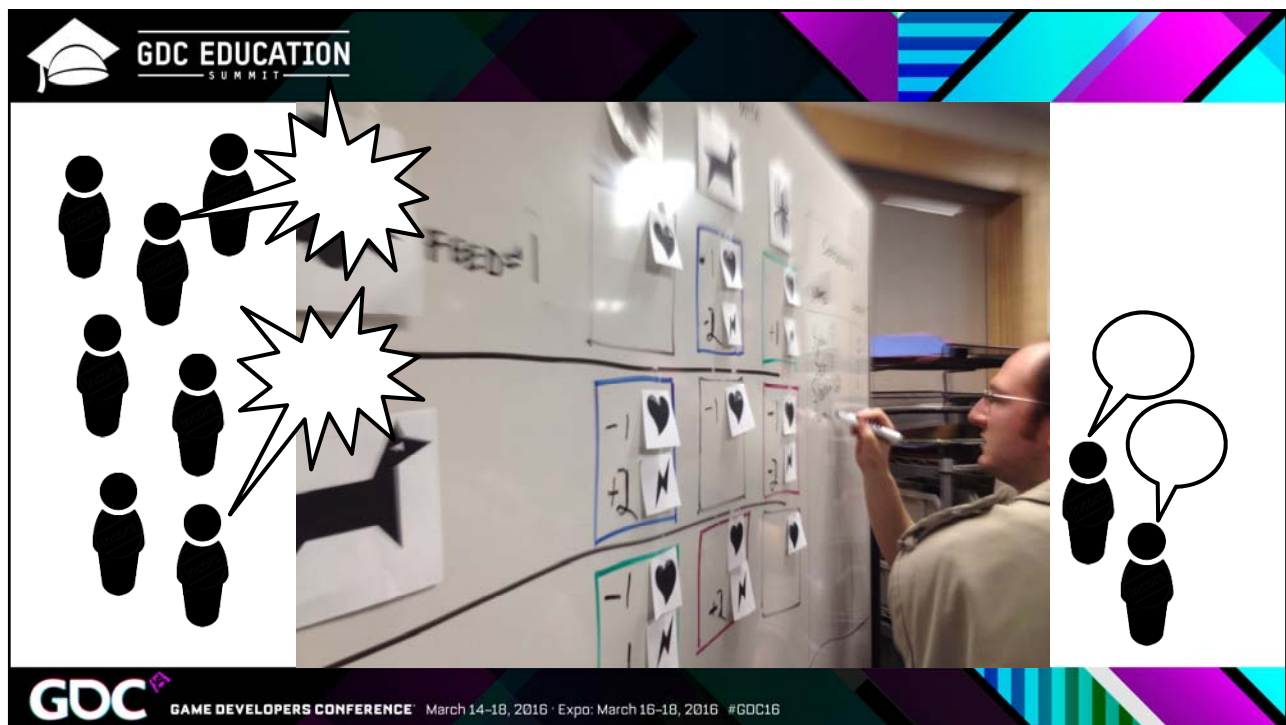
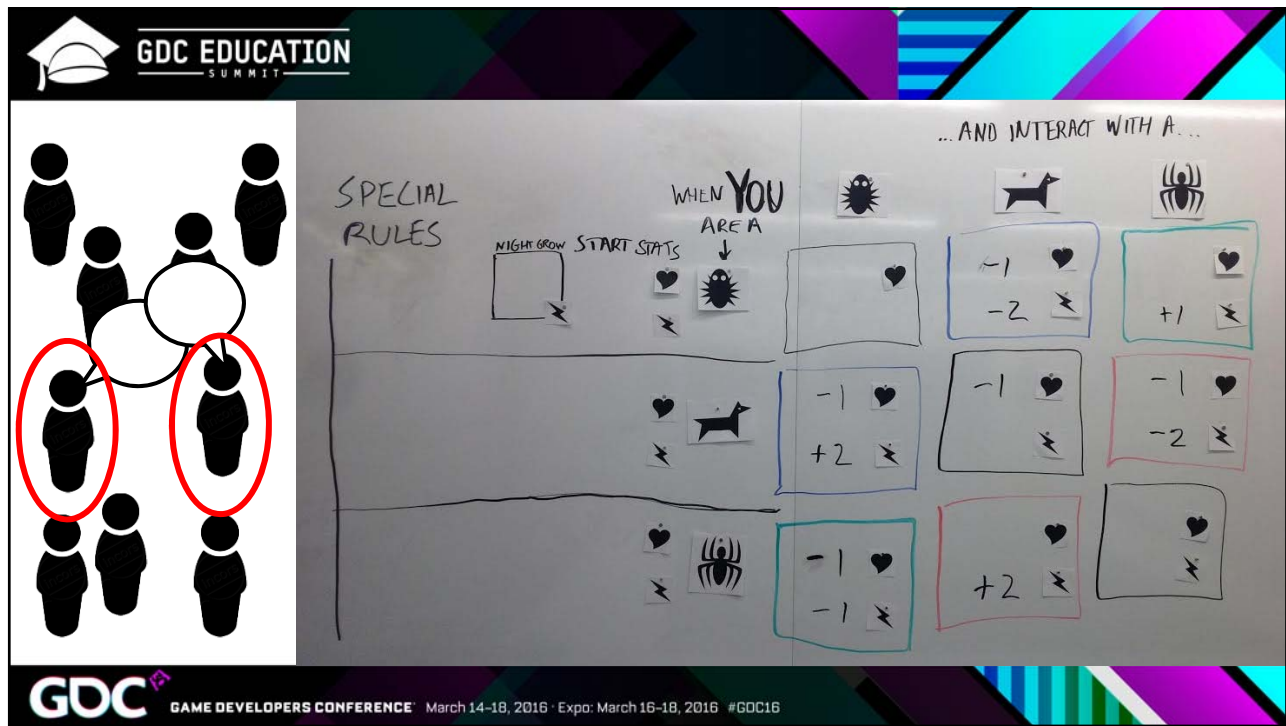
YOU are a ↓

starting stats

when you encounter a:

	prickly pod	grass grazer	spidery scavenger
4 ♥ 4 ⚡ prickly pod	nothing	lose 2 ♥ lose 1 ⚡	add 1 ♥ lose 1 ⚡
4 ♥ 4 ⚡ grass grazer	take 1 ⚡	nothing	lose 1 ♥ lose 1 ⚡
3 ♥ 3 ⚡ spidery scavenger	take 1 ⚡	take 1 ⚡	lose 1 ♥

GDC GAME DEVELOPERS CONFERENCE March 14-18, 2016 Expo: March 16-18, 2016 #GDC16





GDC EDUCATION
SUMMIT

The Paper Carnival

- Focusing on player psychology
- Creating incentives for repeated or prolonged engagement with a game
- Types of “addictive behavior” and ethical issues
- Competing with other games for attention & retention



GAME DEVELOPERS CONFERENCE March 14–18, 2016 Expo: March 16–18, 2016 #GDC16



GDC EDUCATION
SUMMIT



Carnival
(games of “skill”)




Casino
(gambling)




F2P
(play over time,
etc)




GAME DEVELOPERS CONFERENCE March 14–18, 2016 Expo: March 16–18, 2016 #GDC16




GDC EDUCATION
SUMMIT



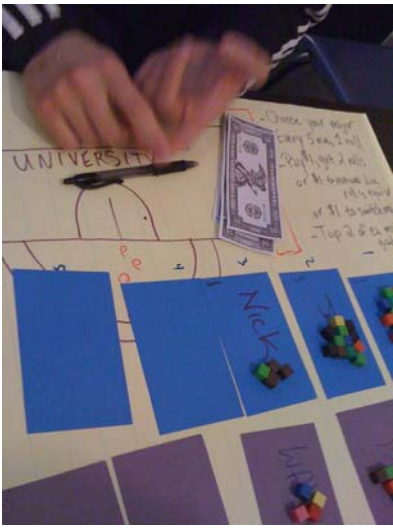
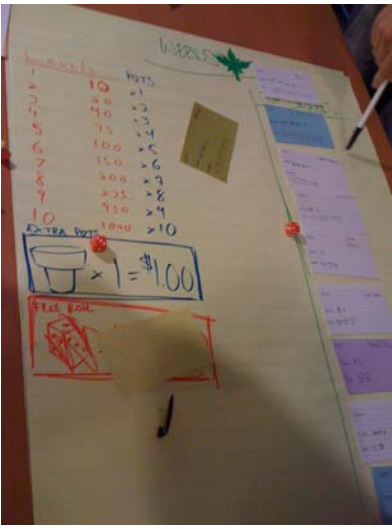
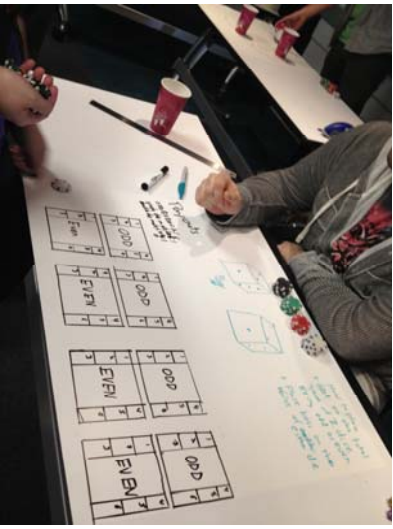
- Design in teams
- Play as individuals (taking turns running "team booth")
- Competition for profitability at both scales




GAME DEVELOPERS CONFERENCE March 14-18, 2016 Expo: March 16-18, 2016 #GDC16

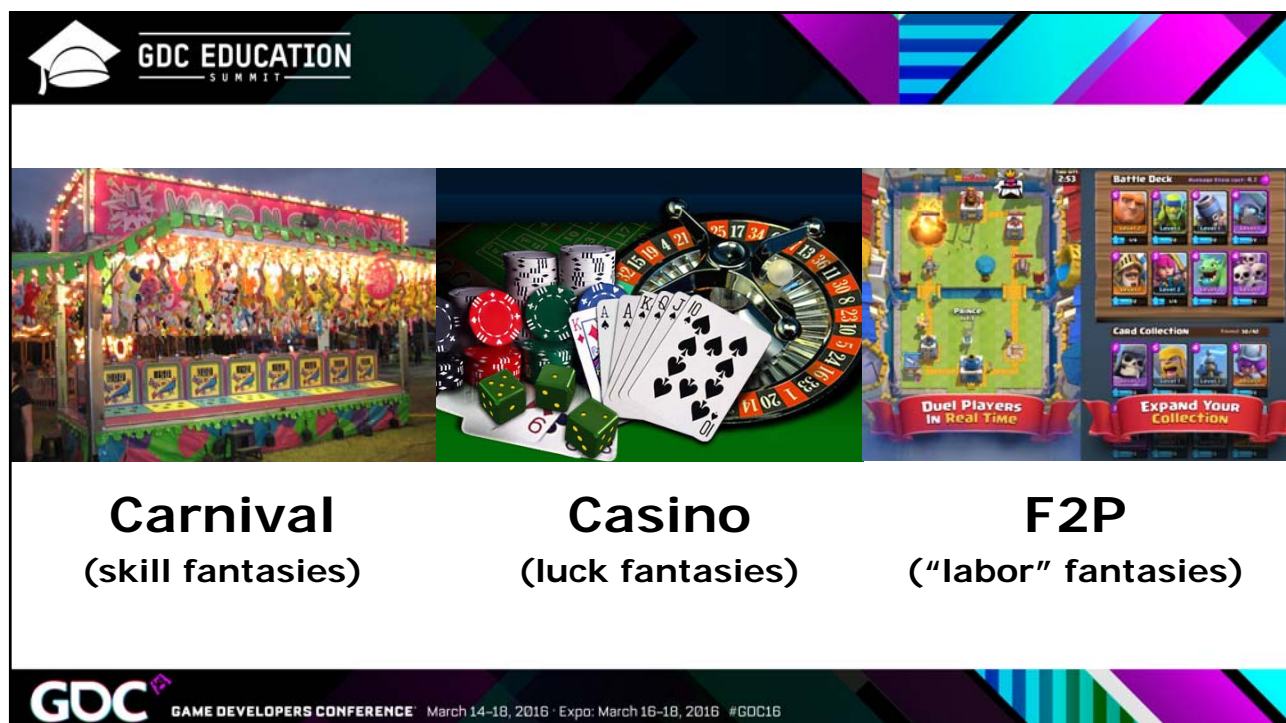
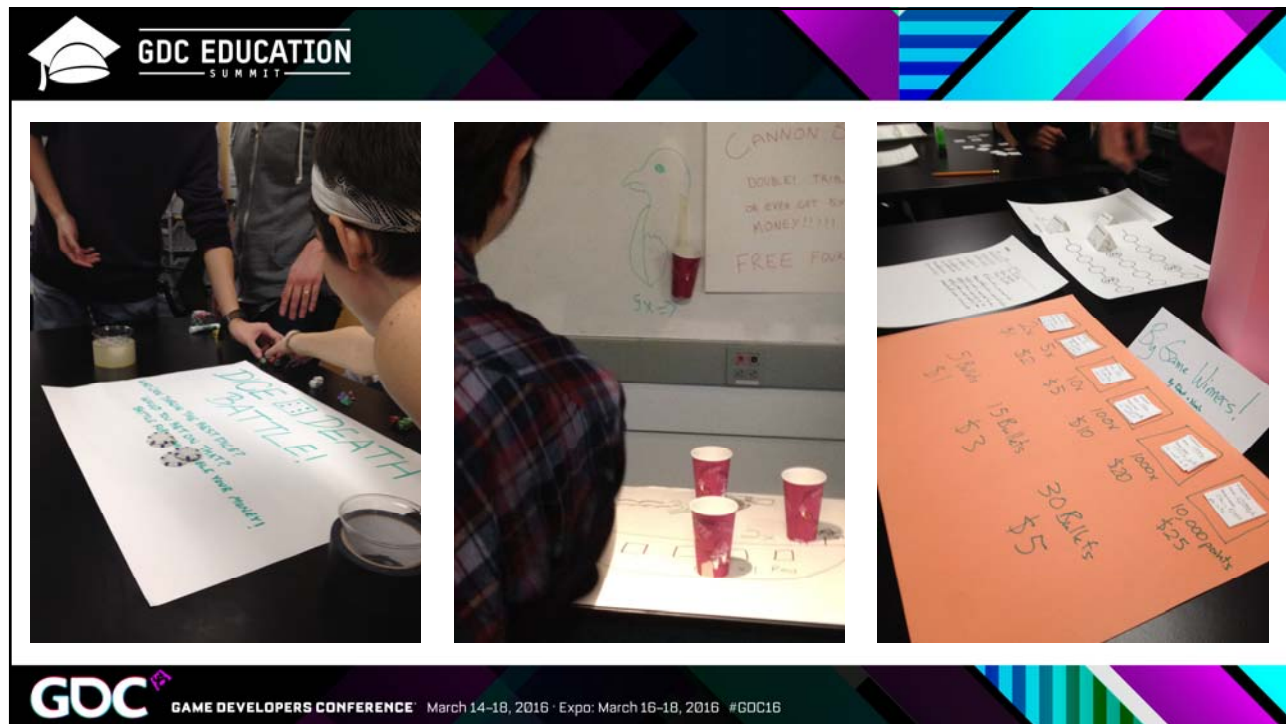



GDC EDUCATION
SUMMIT




GAME DEVELOPERS CONFERENCE March 14-18, 2016 Expo: March 16-18, 2016 #GDC16









Thanks!

You can find Naomi Clark at:

 @metasynthie



 gamecenter.nyu.edu

 leadpixel.co



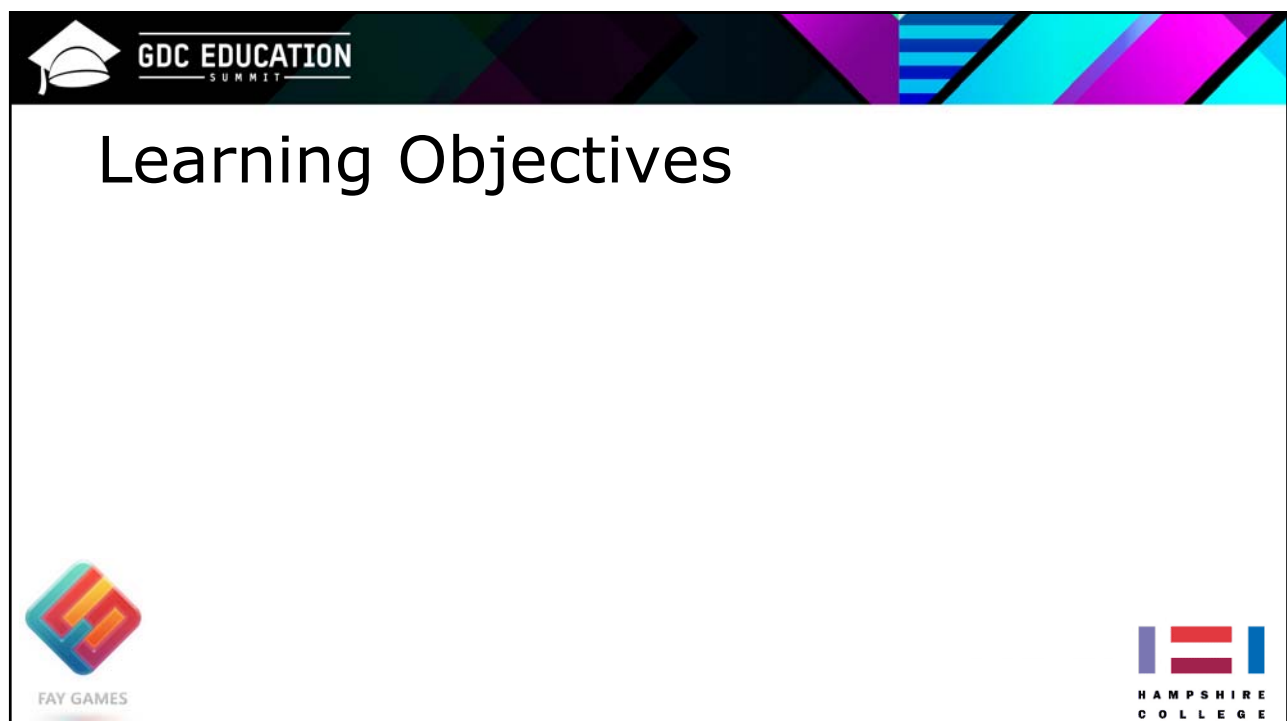
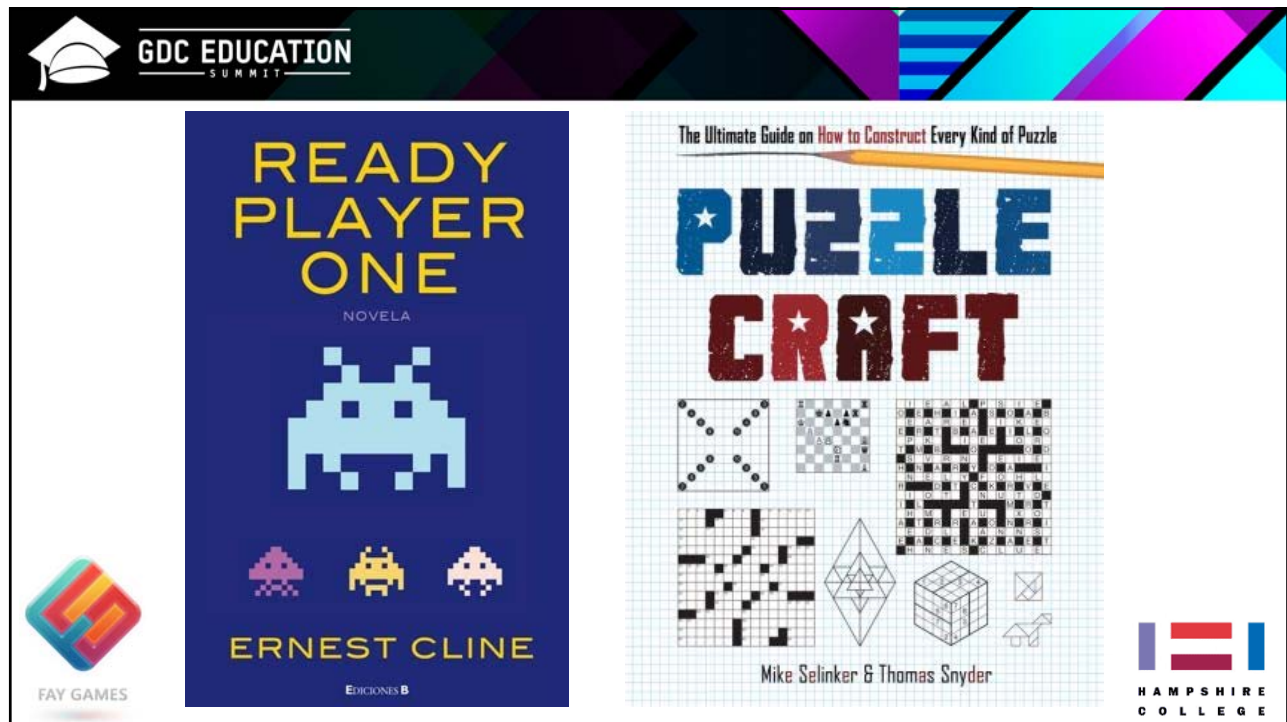
Teaching Analog Game Design

Ira Fay
Assistant Professor of Computer Science
and Game Design, Hampshire College
CEO, Fay Games





Design, develop, and implement a campus-wide treasure hunt





GDC EDUCATION
SUMMIT

Learning Objectives

- Puzzle design



FAY GAMES



HAMPSHIRE
COLLEGE



GDC EDUCATION
SUMMIT

Puzzle 1

- 1-10 minutes to solve
- Answer is someone's name
- No internet



FAY GAMES



HAMPSHIRE
COLLEGE

GDC EDUCATION
SUMMIT

Puzzle 2

42.321934 -72.533287

If you don't understand what you need to do for this assignment, hints will be posted on the course website over the next several days.



FAY GAMES

HAMPSHIRE
COLLEGEGDC EDUCATION
SUMMIT


Real Puzzle 2

- 3-15 minutes to solve
- Answer is location on Hampshire campus
- No internet




FAY GAMES


HAMPSHIRE
COLLEGE


 **GDC EDUCATION**
SUMMIT

Learning Objectives

- Puzzle design
- Giving good feedback
- Receiving feedback


 **FAY GAMES**


 **HAMPSHIRE**
COLLEGE

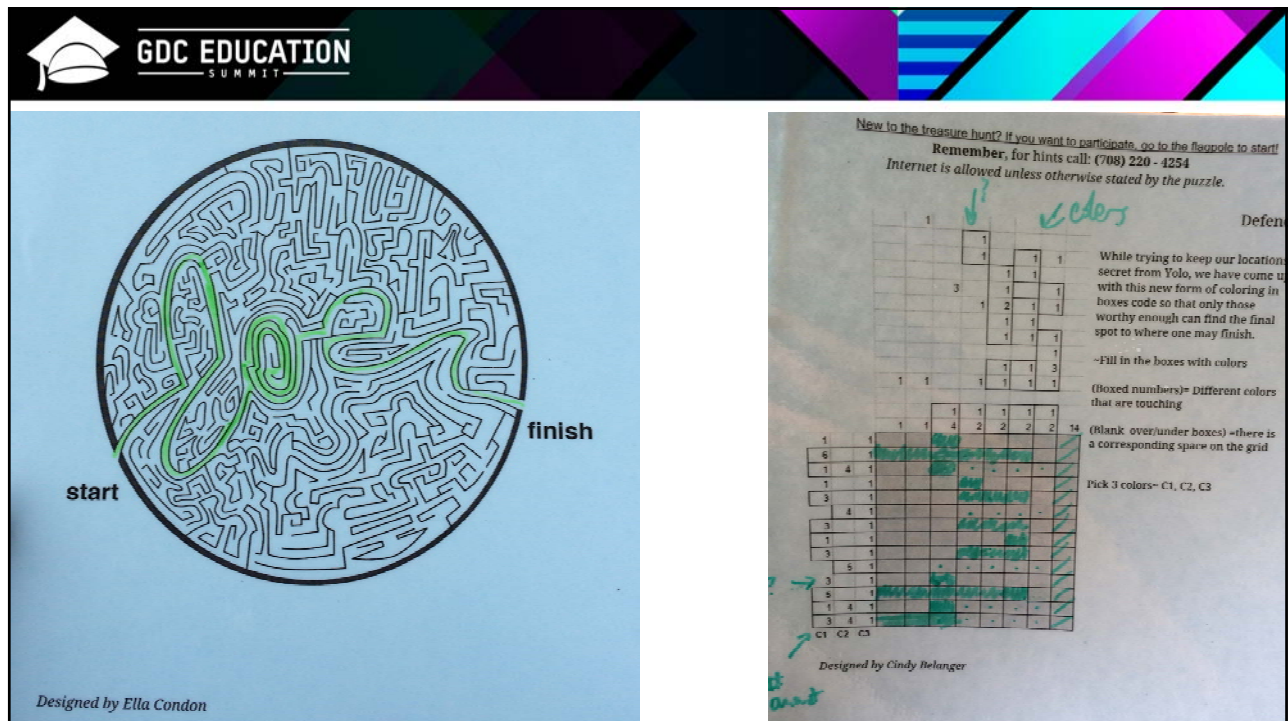
 **GDC EDUCATION**
SUMMIT

Learning Objectives

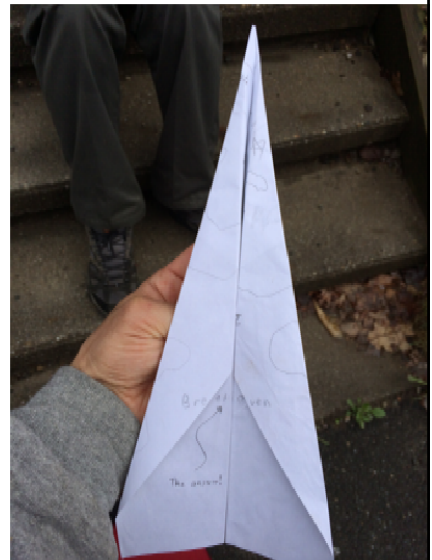
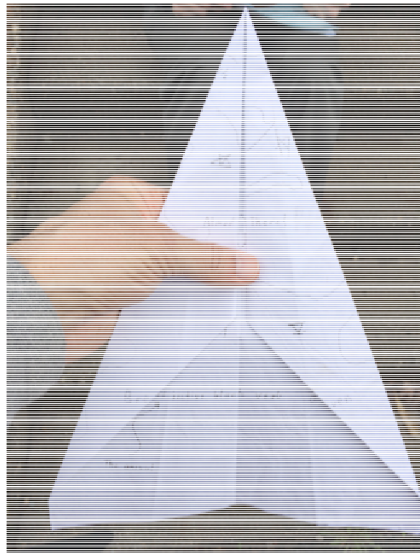
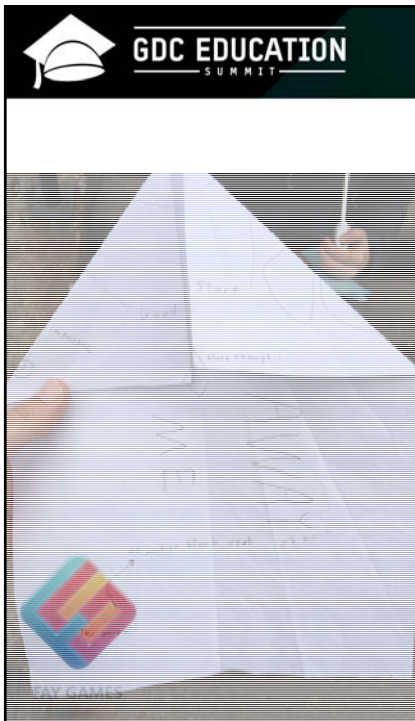
- Puzzle design
- Giving good feedback
- Receiving feedback
- Teamwork
- Communication

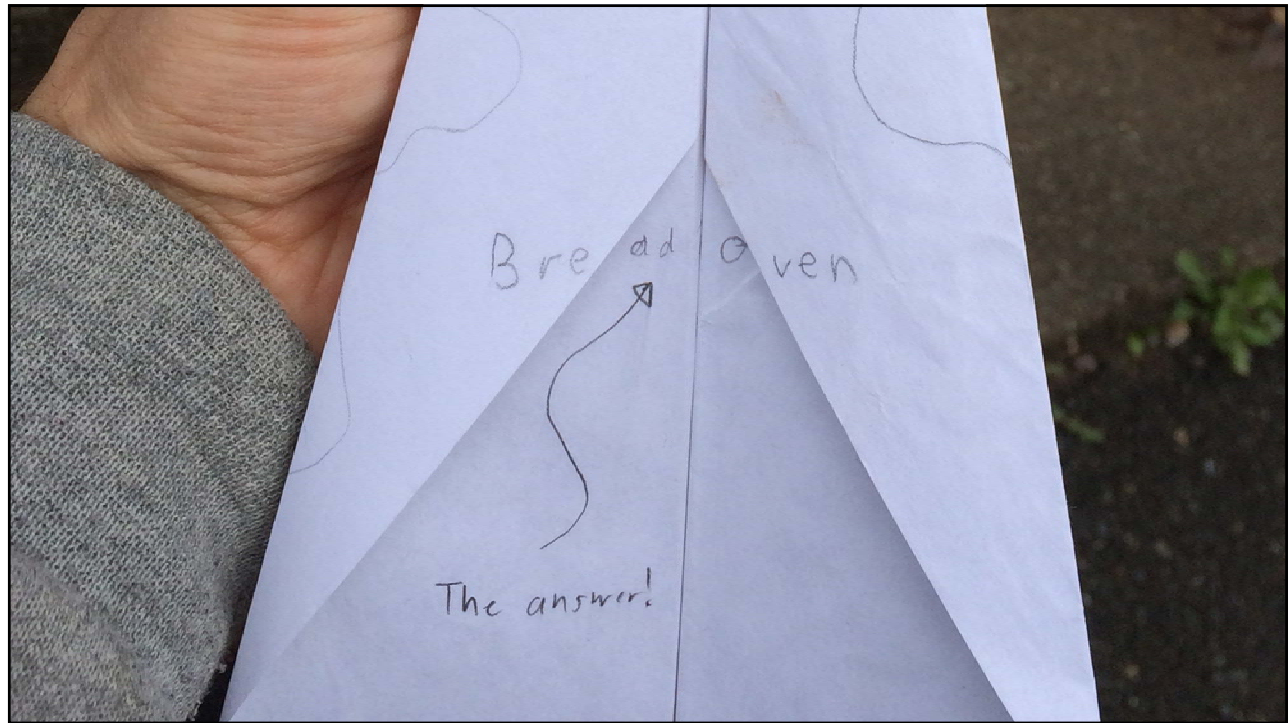
 **FAY GAMES**

 **HAMPSHIRE**
COLLEGE



A person with green face paint and a brown vest is sitting outdoors, holding a red card with a small heart and text. The background features a large, colorful mural with abstract shapes and patterns.






GDC EDUCATION
SUMMIT

Conclusion

- Teamwork
 - Some freeloaders
- Puzzle design skills








Thank you!


<http://irafay.com>
ifay@hampshire.edu

Ba zl svany fyvqr
n terng bccbeghavgl:
n pvcure unvxh




Teaching Analog Game Design

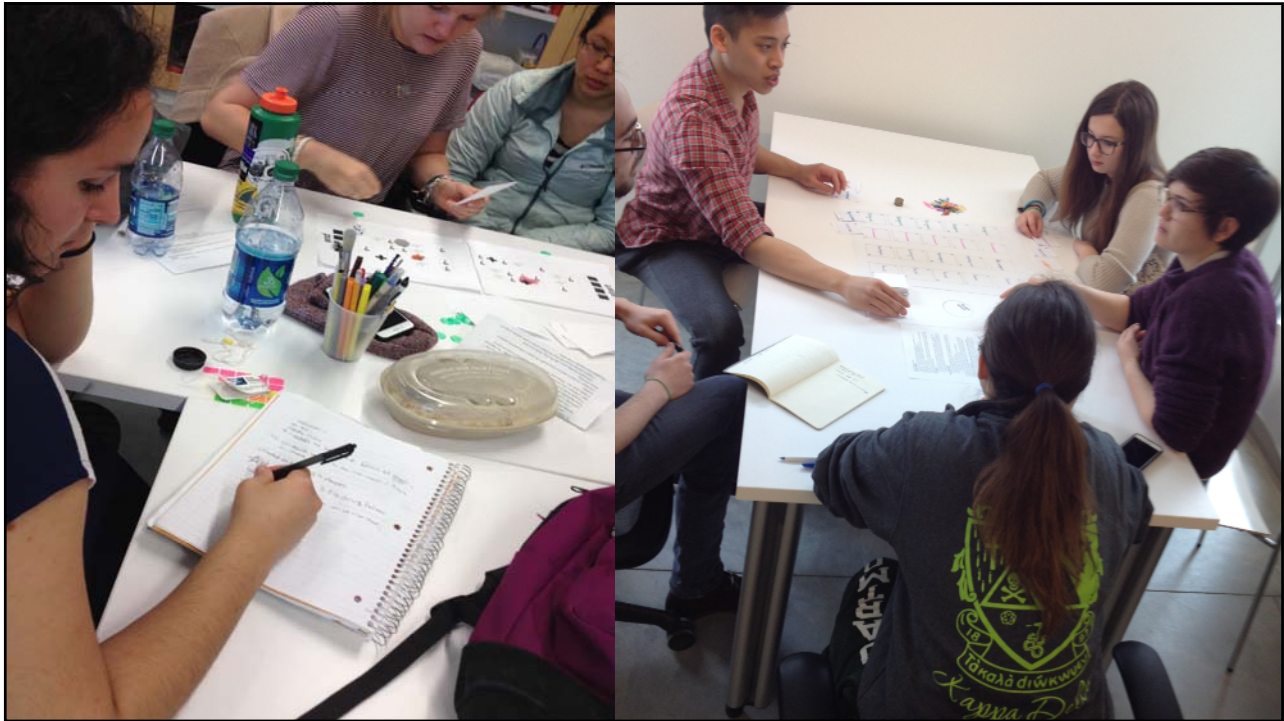
Mary Flanagan
Sherman Fairchild Distinguished Professor
in the Emerging Field of Digital Humanities
Dartmouth College



GAME DEVELOPERS CONFERENCE March 14–18, 2016 · Expo: March 16–18, 2016 #GDC16







Professor Flanagan's Game Design Studio:
Assignment 1: Card game to help prevent Malaria

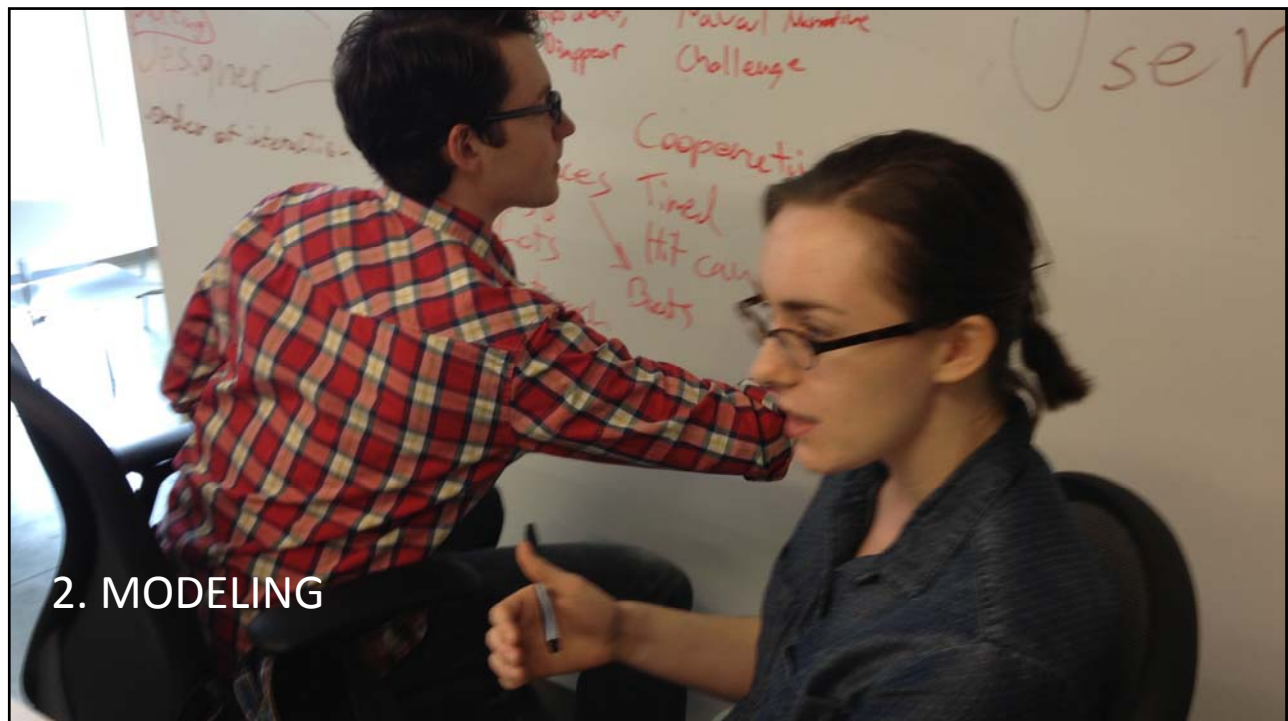
Overview

Malaria is a disease transmitted to people by the bites of *Anopheles* mosquitoes. The disease is still prevalent in tropical and subtropical places around the globe. Most of the people who die from malaria are children and other vulnerable populations such as pregnant women. According to a 2011 report, 216 million cases of malaria emerged during the year and resulted in approximately 655,000 deaths. Malaria is one of the top five preventable diseases in the world. Mosquitoes are most active at twilight and at night.

Your task is to design a card game that helps prevent the spread of malaria by teaching interventions. The game should help change behaviors regarding the spread of malaria and should try to teach prevention for the at-risk populations. The game should also use images to convey the message; use English at a minimum or not at all, for likely the game would be played by people in many parts of the world who do not speak or read English.

To control malaria and prevent new infections, bednets, insecticides, medications, and other

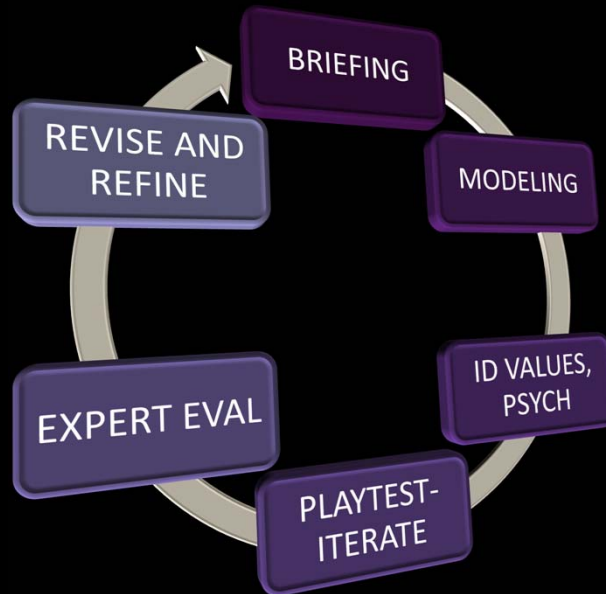
that would likely be







THE ASSIGNMENT EXPERIENCE

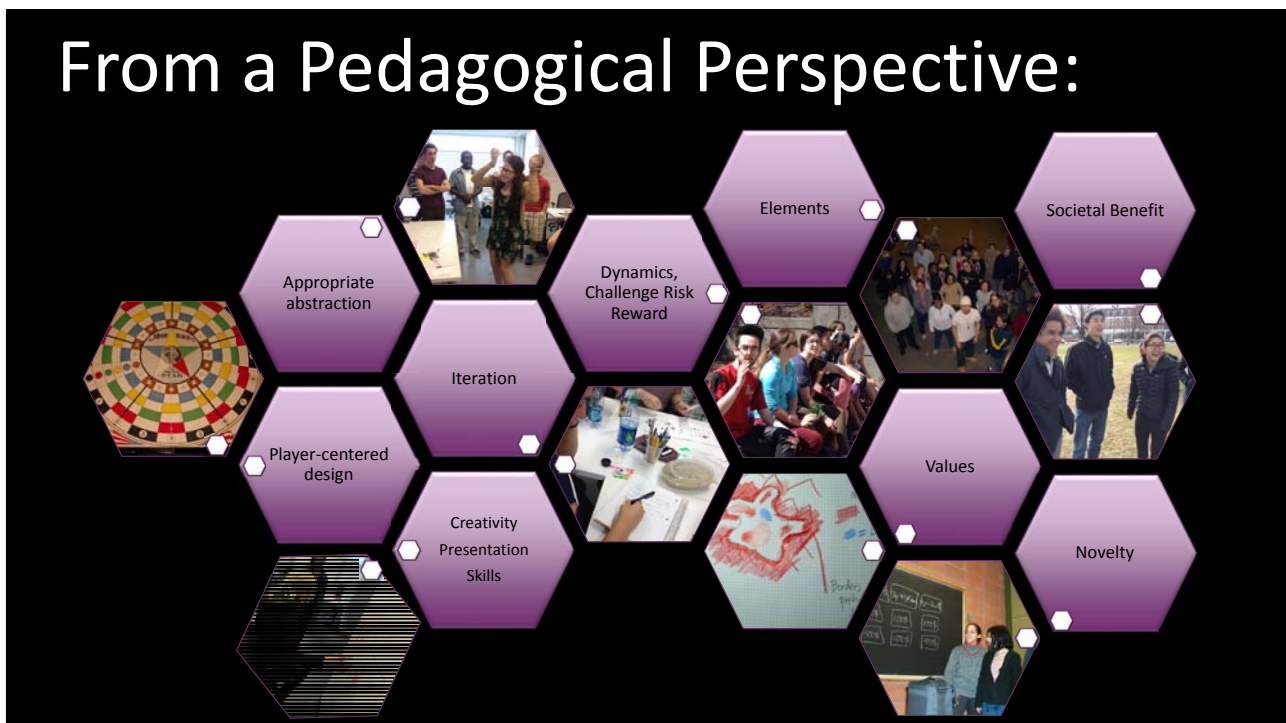


One exemplar project





From a Pedagogical Perspective:



Mary.Flanagan@Dartmouth.Edu @criticalplay

Sherman Fairchild Distinguished Professor in the
Emerging Field of Digital Humanities Dartmouth College USA
Professor II, Linguistic, Literary and Aesthetic Studies, University of Bergen
EDUCATION SUMMIT GDC 2016

