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GAMES AS TEACHERS



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Games as Teachers: Lindsay Grace



Introduction-The Claim

Overview

- Games introduce **specific approaches to problem solving and conflict resolution**.
- Serving as a kind of **prescription** which may be translated into **philosophical approach**.

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Introduction

Purpose and Agenda

- Outline a set of fundamental observations about the instructive nature of video games.
- Create a perspective from which to consider new sets of instructive content for games through gameplay (new philosophies)
 - Introduce **"Critical Gameplay" Design**








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Introduction – Why?

- Percentage of American households that play computer or video games

68 %

*According to the Entertainment Software Association 2009

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Introduction – Why?

- Average number of years adult gamers have been playing computer or video games?

12 years

*According to the Entertainment Software Association 2009




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Introduction – Why?



Games sold

54.2%

Strategy and Role Playing

- What Strategies are they teaching?
- What Roles are they playing and learning?
- Consider how role playing is used in education.

*According to the Entertainment Software Association 2009





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Introduction-How?

- Analyze via an educational lens
 - What must be learned to succeed in the environment


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1. Learning from Necessity for Efficacy

- the video game industry is full of educational titles
- Most games require players to learn in order to play – **we learn to play**
 - In game environments a student must **learn to stay in the classroom**
 - The motivation is social and practical

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1. Learning from Necessity for Efficacy




- Employs a competency based system of objective matriculation
 - graduate through race car ranks by proving mastery of:
 - acceleration
 - breaking
 - holding a racing line
 - other fundamentals of Drivers Education

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1. Learning from Necessity for Efficacy



- Not merely an exercise in turning when appropriate, it is a world that requires engineering knowledge and skill to navigate


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1. Learning from Necessity for Efficacy

- necessity is directly tied to the success (relevancy)
- Students of Gran Turismo will be “left behind” if they do not succeed
- Like a good instructor, evaluation in the game world is consistent, perpetual, and objective

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1. Learning from Necessity for Efficacy



- A quick glance at the game mechanics and game objectives of Gran Turismo indicate some clear learning outcomes:
 - Understanding the mechanical use of specific items on the car
 - Understanding the physical properties of drag, weight, and raw materials as they relate to high speed vehicle performance
 - An overview of the international models and makes of a leading car manufacturers
 - An introduction to racing classes, licensure, and track locations
 - Increased understanding of driving control and strategy
 - Introduction to the components used to modify vehicles, including acceleration, stopping distance, ride control, and top speed

The syllabus

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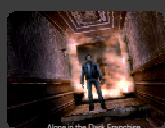
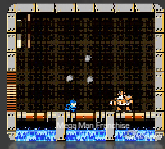
2. Understanding Versus Reporting



- Common dilemma in education
- Most good games require understanding, not simply recitation
- If you are to best someone in a first-person shooter, you must understand:
 - How the weapons work
 - Where the weapons are most effective
 - The geography of the space, objectives, et al.

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3. Analysis for Understanding

- The accomplished game player: **the game becomes a fiction to be analyzed** in much the way a literature student examines a text
- Understand intention by referencing the **cannon of previous experiences** to achieve successes

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3. Analysis for Understanding



I Wanna Be the Guy

- Frustrating the experience
- Responding to the cannon
- I Wanna be the Guy:
 - Represents a new game genre

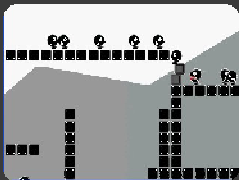
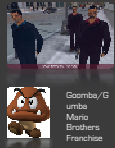
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Game Design Lessons in Practice

- Review the lessons incorporated in games
 - What do common game mechanics teach us?
 - Goal: Create **“Critical Gameplay”**
 - Game mechanics that highlight alternate solutions, assumptions about interaction, or short fallings in conventional game behaviors

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Game Mechanic: Stereotype

- What if judging by appearance fails?


Black and White

A game in which stereotype fails: Instead of being able to identify a threat by appearance, the player must examine the threat by another means, behavior.

Goomba/Gompa
Mario Brothers Franchise

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Game Mechanic: Non-Competitive Play




- What if cooperation was the only way to perpetuate gameplay?
- What if **competition** thwarts continued play?

Give

2 Player cooperative play. The player must give the ball to the other player to continue play. Every time the player receives the ball, the paddle grows. Play ends when the player's paddle disappears.

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Game Mechanic: Absent Ramifications




Knights of the Old Republic

- While character fictions are important, they are often one sided
- We employ and exploit the fiction of the world outside of player experience
 - NPC's seem to have lives outside the direct game experience

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Game Mechanic: Absent Ramifications




Bang! You're Dead


Kill, and you are interrupted with the fictive history of the character

- What is the educational and emotional effect of removing "absent ramifications"?
- What if ramifications of the act were made immediately apparent?

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Game Mechanic: Reaction




Wait: a game where the player is encouraged to refrain from acting on the world. As the player moves the world disappears, but when the player waits, the world becomes more rich.

Players are awarded points when the little things in life reveal themselves (butterflies, animals, flowers, etc).

- Many games encourage "run and gun"
- What if a Game rewarded you for slow concentrated examination?

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- More information:
 - CriticalGameplay.com / LGrace.com




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