

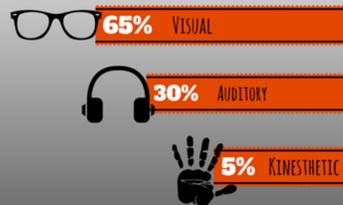
Video Games: A Driving Force for Learning New Media Compositions

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LEARNING

PROBLEM

Learning Style STATISTICS



(Adaptbar, 27 Jan. 2015, <https://blog.adaptbar.com/study-tips-for-your-learning-style/>)

- As interactive stories, video games present unique perspectives to storytelling.
- Research is lacking in how to effectively incorporate video games into the classroom in a meaningful way.
- In order to better meet the needs of diverse learners, multi-modal differentiated instruction is vital.

GOALS

In an effort to increase engagement and student success, while incorporating new media literacies, the use of video games can have a significant impact on:

- Allowing students to become part of the story and directly impact the outcome
- Creating a co-author relationship in which they, too, become designers
- Allowing agency and student-directed exploration of alternative, multi-modal texts



THEORETICAL FRAMEWORK

ICAP Framework

Taxonomy of four modes, their definitions, and assumptions <i>Interactive, Constructive, Active, Passive</i>
Knowledge-change processes & resulting changes in knowledge <i>Storing, Integrating, Inferring, Co-Inferring</i>
Cognitive outcomes <i>Recall, Apply, Transfer, Co-create</i>
ICAP hypothesis <i>Interactive > Constructive > Active > Passive</i>

FIGURE 1 The ICAP framework consists of a taxonomy of four modes of activities, their definitions and assumptions; hypothesized knowledge-change processes and the resulting changes in knowledge; projected cognitive outcomes; and the ICAP hypothesis of learning outcomes.

Figure 1. (Chi & Wylie, 2014)

- Students are more actively engaged in learning tasks when in the *Interactive* mode.
- Students, when in the *interactive* mode, go beyond inferring and recall and become active participants in co-creation.
- In video games, players are co-creators of the story, as each action and choice alters the narrative outcome.
- Curricular materials will be designed with the intent of engaging students and encouraging *interactive* mode behaviors.
- Constructivist teaching will allow student-directed learning opportunities that encourage collaboration and student-based projects.

Chi and Wylie (2014) determined that student behaviors of engagement could be categorized into four modes:

- Interactive*
- Constructive*
- Active*
- Passive*

RESEARCH QUESTIONS

- How can we use video games as educational tools and alternative texts in the secondary English classroom to teach the composition of narratives (stories)?
- What would the most effective instructional process look like?
- How can we, then, develop a curriculum that promotes increased student motivation and engagement that also enhances the learning of digital and media literacies through the use of video games?

METHODS

- Using genre analysis, I will determine how genres are represented and classified in video games
- Using literary, narrative analysis, I will determine how video games function as narratives so that I can more effectively incorporate them into my classroom
- Logs will be collected during gameplay that record observations and interactions
- Coding scheme developed based on the three-levels of interactivity identified in Eseryel et al. (2014)

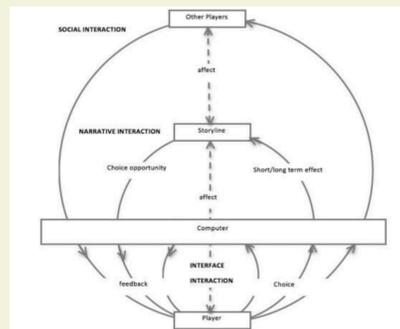


Figure 2. Three-levels of interactivity design for educational games
Figure 2. (Eseryel et al., 2014)



The main character, Maxine, in *Life is Strange*, an episodic adventure game, contemplates images in a crucial story moment. (Baghadoust, L. (Producer). (2015). *Life is Strange*. Tokyo, Japan: Square Enix)

Observation logs will be analyzed to determine how interaction, choice, and opportunities are presented and form the story. Essentially, I will determine which aspects of game play are functioning as a literary element, leading to character development, advancing the narrative, and building tension to a resolution.

Sample observation analysis of the introductory cut-scene from *Uncharted 2: Among Thieves* (part of *Uncharted: The Nathan Drake Collection*):

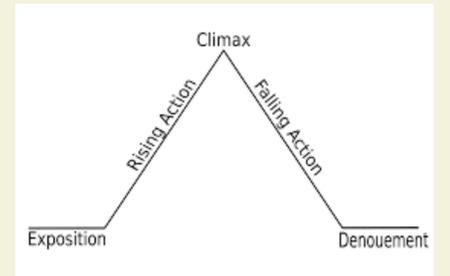
- Beginning starts with a quote from Marco Polo, "I did not tell half of what I saw/for I knew I would not be believed"
- Black screen shifts to reveal a flickering light, showing a damaged interior, viewed from the perspective of the main character
- Shift to third person, where main character wakes up alone on what is left of a luxury passenger train, clearly disoriented and unsure of his surroundings
- Though he's already injured and bleeding heavily, Nathan Drake makes a harrowing escape to a snowy, mountain cliff-side and surviving the collapse and fall of the train

From the cut-scene discussed above, Nathan Drake, the main character in the third person action adventure game *Uncharted 2: Among Thieves*, begins his adventure with a thrilling escape. (Hennig, A. (Director). (2015). *Uncharted: The Nathan Drake Collection*. Austin, TX: Blueprint Games.)



FINDINGS

- Plot structures are similar to traditional linear stories
- Character development and archetypes are apparent across games analyzed, though this occurs through various interactions and choices of player during game play
- There are multiple levels of interactivity that add to narrative structure development



Characters interact in *Elder Scrolls V: Skyrim*, and offer various replies, resulting in different outcomes to the conversation and story. (Lafferty, C. & Cheng, A. (Producers). (2011). *Elder Scrolls V: Skyrim*. Rockville, MD: Bethesda Softworks.)

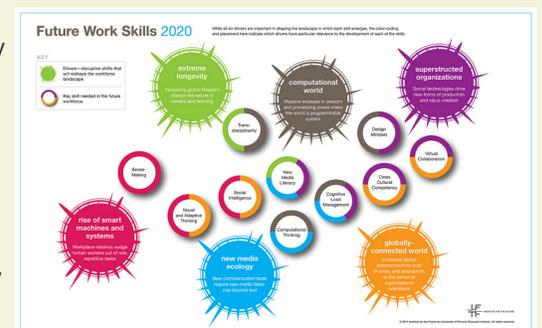
Perspective

Genre analysis indicates that perspective (POV) and game mechanics are essential in determining classification of video games, differing slightly from written texts. Most common perspectives include:

- First person
- Third Person

EDUCATIONAL IMPLICATIONS

- Increased opportunities for collaboration, a highly desired 21st century skill (Collins & Halverson, 2009)
- New Media Composition and the creation of collaborative, non-linear stories
- Supports visual, auditory, and kinesthetic learning styles



(Institute for the Future for University of Phoenix, 2015)

- Video games can be used as alternate texts to teach literary elements, such as plot, theme, conflict, character development and archetypes, and narrative style

Sample assignments could include:

- Developing a storyboard that visually outlines the main conflict of the story
- Using evidence from the text, determining how the theme is developed throughout the game
- Using the authoring tool, begin creating new elements to the existing map that increase interactivity with setting and environment of the game

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