

Team 2 Student-Facilitated Case Study: Paul Lindley

AWESOME TEAM 2 ROLES:

- 1) Team manager and discussion summarizer - Tammy Macek
- 2) Lead for completing the Rubric Details Form - Jamie Walker
- 3) Lead for defining objectives, writing the case overview, and selecting readings,- Ginger Ciuperca
- 4) Lead for creating discussion questions and facilitating the discussion. – Akela Silkman

CASE STUDY: PAUL LINDLEY

READINGS:

Watson, W.R., Mong, C.J., Harris, C.A. (2011, February). A case study of the in-class use of a video game for teaching high school history. *Computers & Education*. 56 (2). pp. 466-474. Retrieved from <http://www.sciencedirect.com/science/article/pii/S0360131510002599>

Hwang, G-J., Chiu, L-Y., Chen, C-H.,(2015, February). A contextual game-based learning approach to improving students' inquiry-based learning performance in social studies courses. *Computers & Education* 81, pp. 13-25. Retrieved from: <http://www.sciencedirect.com/science/article/pii/S0360131514002061>

OPTIONAL (FOR FURTHER RESEARCH OR EXPLORATION)

Haydel, E., Farr, R., Munroe, K., (2010, November). *Conspiracy Code™: Intensive Reading Research Base*. Educational Research Institute of America: Bloomington, IN and Florida Virtual Schools: Orlando, FL. Retrieved from <http://www.flvs.net/areas/aboutus/Documents/CCIR%20Efficacy%20Studies.pdf>

Link to *The Conspiracy Code American History* game trailer on YouTube:
<http://youtu.be/h96ZcxcHbd8>

Team 2 Student-Facilitated Case Study: Paul Lindley

DEFINING OBJECTIVES, WRITING THE CASE OVERVIEW, AND SELECTED READINGS. (GINGER)

OVERVIEW: PAUL LINDLEY

Paul Lindley and a team of graduate students from Walker University are working with a local high school to develop a video game based on a learning model that examines the internment of Japanese Americans during WWII. Paul had been approached by Bob Reckowsky, the local principal who had created the model. Bob has asked Paul to design a game to better engage students based on their interest in video games.

Paul and his team are developing this game from a model Bob uses for his high school, however Paul is interested in trying to find further funding. This would allow him to develop the game, the story and characters in more detail. Paul and Bob are struggling because they have a disjointed team with little or no experience in video game development. They are targeting the game for a local alternative school with limited resources. They know they need interesting choices to produce various outcomes. They would like to try to teach the students to connect history and make “big decisions”. They are encountering many challenges such as ethical issues relating to the time period (racial slurs, gambling and violence), limited resources and time to play game and identifying their learning objectives due to no national standards for social studies.

LEARNING OBJECTIVES

This case study has two objectives. First, participants will be answer a series of questions that will guide them through the analysis process and identify the factors involved in the development of educational video games. Second, participants will be asked to formulate key

Team 2 Student-Facilitated Case Study: Paul Lindley

decision points in the case study from its challenges and make recommendations or offer solutions; this may lead those involved in the case to make different choices leading to different outcomes. The topics and questions covered in this case study analysis have been chosen to allow participants to analyze the instructional design context, both to aid understanding and to provide an improved basis for action. In this process, participants will be able to:

- Demonstrate and apply personal knowledge to the case study
- Differentiate the case study challenges and offer solutions
- Develop multimodal recommendations

STUDENT LEARNING OUTCOMES

After analyzing and discussing the case study, *Designing a Video Game for History Education*, instructional design students will be able to:

1. Analyze and discuss the complexity of educational video game development.
2. Integrate multiple points of view into the design of educational video games.
3. Achieve new insights and refine their skills of interpretation.
4. Prepare a list of key decision points from the case study.
5. Articulate the key challenges in the case study and make recommendations for addressing those challenges.

DISCUSSION QUESTIONS (AKELA)

PART I) THE PAUL LINDLEY CASE: INTEGRATING MULTIPLE POINTS OF VIEW

Learning Objectives:

- Understand the complexity of educational video game development.
- Understand how to integrate multiple points of view.

Paul Lindley and his design team are asked to present their social studies game to a district advisory board made up of school board members, school administration, teachers, and parents. The presentation leads to a charged debate about the use of educational gaming software in the classroom.

Monday-Wednesday

- Consider the perspective of your assigned role.
- Make your case for or against the use of the social studies game in the classroom within the context of your given role.

Committee Members: What questions and concerns might you have within this role? What evidence do you have to support your argument?

Design Team: Respond to the advisory committee with a justification of your design.

- **Paul Lindley and the Design Team:** Andria

Advisory Committee:

- **Board Members:** Natalie
- **School Principal:** Brad
- **Supportive Teacher:** Mike
- **Disgruntled Teacher:** Charity
- **Concerned Parents:** Connie

PART II) THE PAUL LINDLEY CASE: IDENTIFYING CASE CONSTRAINTS AND RESOURCES

Learning Objectives:

- Achieve new insights and refine skills of interpretation.
- Prepare a list of key decision points from the case study.
- Understand case challenges to make recommendations for effective instructional design.

The Paul Lindley's case is a complex case with many design constraints. The design team encounters many challenges while designing an educational social studies gaming software. One of the greatest challenges of instructional design is identifying effective strategies that utilize the available resources to resolve instructional design problems and constraints.

Thursday-Friday

- Reflect on the case challenges versus the existing resources in this case.
- Discuss the following:
 1. What are the major constraints in this case? What resources are available to support the design team in overcoming these constraints?
 2. What specific strategies can the design team implement to design a game that is relevant, engaging, addresses the concerns and viewpoints of all stakeholders, and meets the outlined learning outcomes? Be sure to address the case constraints and incorporate the available resources in your response.
 3. Locate and provide an example of an existing effective educational game (social studies or other) that reflects the format or style that you recommend. What makes this game exemplary? Discuss the game's strengths and weaknesses.

Team 2 Student-Facilitated Case Study: Paul Lindley

RUBRIC DETAILS FORM (JAMIE)

RUBRIC DETAILS FORM FOR STUDENT-FACILITATED CASE STUDY

Rubric Details Form for Student-Facilitated Case Study

Team Members: Ginger Ciuperca, Tamara Macek, Akela Silkman, Jamie Walker

Name of Case: Paul Lindley Case Analysis

For each case, describe/address the following:	Details for the Paul Lindley Case Study
Who are the key stakeholders?	Designer: Paul Lindley and Design Team Client: Bob Reckowsky SME: Paul Lindley, Graduate –Student Design Team and Bob Reckowsky Audience: Social Studies teachers and high school students
What are the primary concerns of each stakeholder?	Designer: <ul style="list-style-type: none">• Game play must reflect learning goals determined by state standards.• There must be a teacher guide with lesson plans to make implementation easy; lesson plans should make out-of-game connections with current events.• The narrative must be a large part of the game to make it engaging, to make learners relate to main character and see their POV, to make up for the lack of interesting environment, and to foster understanding of life in camps.• The game should have a sandbox environment with quests, mini-games, and puzzles that possibly provide backstory or enable player to gain items.• The game should have big choices that are interesting and make the player feel like they're in control.• He needs to balance the low to high levels of gaming

Team 2 Student-Facilitated Case Study: Paul Lindley

	<p>expertise of individuals on his design team.</p> <p>Client:</p> <ul style="list-style-type: none"> • The game must highlight the role of baseball in fostering the morale of Japanese Americans in internment camps during WWII. <p>SME's:</p> <ul style="list-style-type: none"> • Most have similar concerns as the designer. • The Principal, who is an SME and teacher, wants to use content he developed about the camps and baseball. <p>Audience:</p> <ul style="list-style-type: none"> • Students want to: <ul style="list-style-type: none"> ○ Develop and level-up characters; ○ Relate history to their lives. • Teachers want: <ul style="list-style-type: none"> ○ A game that is short enough to fit in 30-45 minute class periods and flexible for times when they have limited access to computers. ○ A correlation of the standards to the gaming content; ○ The ability to track a student's progress through email alerts; ○ A game that meets parent approval. <p>Other stakeholders: Parents, school administration and school board, and community. Also, perhaps a foundation or museum would be potential stakeholders in this.</p>
<p>What are the key (1-2) <i>ID design challenges</i>? (Hint: Label these as Analysis, Design, Development, Implementation or Evaluation.)</p>	<p>1. Analysis – The team must use statewide and national social studies standards to define learning/game objectives that will determine the focus of the game.</p> <p>2. Design – The team is trying to design gameplay within constraints and resources while still maintaining the game's structure and focus and while keeping students engaged.</p>
<p>What <i>case-specific constraints</i> impact the designer's ability to address design challenges?</p>	<p>1. Alignment of game with state standards is difficult because standards vary in length and specificity, and there are not any national social studies standards.</p> <p>2. The design team does not have experience with educational game design and most team members do not have experience with a wide range of game types.</p>

Team 2 Student-Facilitated Case Study: Paul Lindley

	<p>3. The team needs to create interesting and engaging gameplay that can be completed in a short amount of time due to limited computer access at home and school and short class times.</p> <p>4. The game needs to accurately portray the time and circumstances but they include racist elements and gambling which parents may not welcome.</p> <p>5. The team needs to develop engaging and entertaining gameplay and narrative and reflect historical accuracy without the monetary and artistic resources game makers have.</p>
<p>How would you <i>prioritize</i> these design challenges and case-specific constraints? Why this order?</p>	<p>1ST PRIORITY AND WHY:</p> <ul style="list-style-type: none">• Analysis – The team must use statewide and national social studies standards to define learning/game objectives that will determine the focus of the game.• Alignment of game with state standards is difficult because standards vary in length and specificity and because there are not any national social studies standards. <p>Why:</p> <ul style="list-style-type: none">• This is the most important priority because high stakes testing necessitates educational software that meets state standards. A school district will not select educational materials that do not address these standards.• The lack of uniform standards does present a problem in that it makes determining the focus of the game slightly more difficult, but there are other more general social studies standards such as analysis of historical sources that the game can also address. While it isn't the most prominent aspect of meeting standards, it is still about standards, so it comes in second. <p>2ND PRIORITY AND WHY:</p> <ul style="list-style-type: none">• Design – The team is trying to design gameplay within constraints and resources while still maintaining the game's structure and focus and while keeping students engaged.• The team needs to develop engaging and entertaining gameplay and narrative while reflecting historical accuracy without the monetary and artistic resources gamemakers

Team 2 Student-Facilitated Case Study: Paul Lindley

	<p>have.</p> <ul style="list-style-type: none"> The team needs to create interesting and engaging gameplay that can be completed in a short amount of time due to limited computer access at home and school and short class times. <p>Why:</p> <ul style="list-style-type: none"> The design aspect of the case is still extremely important in the alternative high school environment, although it will not make or break the adoption of the game as a lack of alignment to standards would. It follows, that this constraint will come in second place for priorities. We chose monetary and artistic resources to take a slight precedence over time because artistic elements and narrative elements are one of the most important aspects of getting the attention of the high school age group and keeping them engaged. Designing the right narrative and gameplay can create engagement even in a limited amount of time. <p><u>LESSER PRIORITY CHALLENGES AND WHY LESS IMPORTANT:</u></p> <ul style="list-style-type: none"> The design team does not have experience with educational game design and most team members do not have experience with a wide range of game types. The game needs to accurately portray the time and circumstances but they include racist elements and gambling which parents may not welcome. <p>Why:</p> <ul style="list-style-type: none"> Inexperience with different game types can be remedied easily by research; the design team may simply play or watch video of games being played on YouTube. Accurate portrayal of time and circumstances featured in the game can be still be very well expressed even if these aspects are left out or – in the case of gambling – if the issue is briefly mentioned or does not take a prominent role in the game.
<p>Outline two <i>reasonable</i> solutions your classmates might suggest.</p>	<p><u>OPTION 1.</u></p> <ul style="list-style-type: none"> Design team reads the varying state standards and the national standards for social studies and WWII and synthesizes these into overarching standards that determine

the focus of the game and teachers guide. The team formulates the game to also fit general social studies standards such as analysis of historical documents.

- Develop the game as a Role Playing Game (RPG) that narrates the story of a Japanese American family from the West Coast that is forced to move to an internment camp.
- The main character is a high school student whose gender can be chosen by the player.
- Elements of the game such as the historical context can be addressed with real historical audio/video elements while the details of being forced to leave their homes, arriving at the camp, and the day of their release from camp will be detailed with animated scenes.
- The main focus of the game is baseball and winning the camp championship. Players can “level-up” – gain baseball skills that help them win games – by playing and winning games in camp. Players can gain items for their main character such as clothing, food rations, and other pertinent items for their family this way as well.
- “Mini-games” allow the player to gain a feel of life in the camps and explore their surroundings and consist of building the camp, walking to the shower house, chasing after a runaway little brother, going to school, etc.
- The mini-games offer the player choices that seem to affect the outcome of the game.
- The teachers’ guide plays the key role of imparting social studies standards through lesson plans.
- The game should be 2 – 4 hours in length, should be an online platform so that students can access it at home, and should send teachers email alerts about student’s progress in the game

OPTION 2.

- Design team reads the varying state standards and the national standards for social studies and WWII and synthesizes these into overarching standards that determine the focus of the game and teachers guide.
- The team can use the National Council of Social Studies overall standards at

Team 2 Student-Facilitated Case Study: Paul Lindley

	<p>http://www.socialstudies.org/standards/strands For example, content from the game could be aligned to Standard 6: POWER, AUTHORITY AND GOVERNMENT.</p> <ul style="list-style-type: none"> • The designers use an online Role Play Game (RPG) developer program that costs a monthly fee. • The lead characters of the game are a high school aged boy and girl. They stumble into a wormhole that sends them back in time to a Japanese internment camp in the desert of Arizona. • The students have no idea where they are, have no knowledge of the historical context, and do not know what year it is. • They students explore the camp which gives them clues about where they are and why. • The students meet people and perform tasks for them that are historically accurate and that a camper would have had to do. Whenever they succeed in a mission they get a piece of the story. • The students have to participate in the baseball games at the camp. This helps them get to know the players and how baseball affects their lives in the camp. Whenever they win a baseball game, they earn points. When they accumulate enough points they get to “go back to the future.” • The teacher gets an email when the student has reached various mini-games that are checkpoints. The checkpoint is an assignment for the student that is standards-based.
<p>Describe how each solution addresses the design challenges and case-specific constraints listed above.</p>	<p>OPTION 1 -></p> <hr/> <p>DESIGN CHALLENGES IT ADDRESSES</p> <ul style="list-style-type: none"> • Analysis –the teacher’s guide will be filled with lesson plans that have been developed based on the alignment of learning/game objectives to various state standards and the general national standards of social studies. • Design – game content align with learning objectives and national social studies standards. • Game design – gameplay engages students by providing a sandbox RPG that has mini-games, interesting narrative, a

	<p>main character that is the same age as students so that they can relate, and gameplay that gives the perception that they have choices that change the game.</p> <p>HOW IT ADDRESSES/MANAGES CASE CONSTRAINTS:</p> <ul style="list-style-type: none">• Developing a game that has interesting and eye-catching narrative is not as expensive and difficult as it would seem. Also, the money they are saving by cutting the game to 2-4 hours will give them some room in the budget for a game developer and graphic artist.• Limited computer access – Because the game would be available online students can access it from anywhere to play. Also the team will try to limit gameplay to 2 to 4 hours.• <i>Where?</i> Addresses the analysis of statewide and national social studies standards to define game objectives that will determine the focus of the game. Also addresses the design of gameplay within constraints and resources while still maintaining the game’s structure and focus and while keeping students engaged.• Addresses the alignment of social studies standards to game objectives by synthesizing common threads in state and national standards for WWII. <p>OPTION 2 -></p> <ul style="list-style-type: none">• DESIGN CHALLENGES IT ADDRESSES <p>Analysis - the team uses a synthesis of national and states social studies standards to design the game</p> <p>Design – The solution works within the design constraints of standards, time, and budget and yet provides an engaging game with the motivating aspects of commercial games.</p> <ul style="list-style-type: none">• HOW IT ADDRESSES/MANAGES CASE CONSTRAINTS <p>Artistic and monetary resources – the designers use a low-cost RPG development program.</p> <p>Time – the game is made available online so that students can</p>
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Team 2 Student-Facilitated Case Study: Paul Lindley

	<p>access it anywhere there is an internet connection.</p> <p>Team inexperience – the team employs the use of a user friendly software program to develop the game.</p> <p>Parental Approval – the team will design content that stays away from gambling and racial slurs while still depicting life in the camps.</p>
<p>Discuss the <i>pros</i> for each solution.</p>	<p>OPTION 1</p> <hr/> <ol style="list-style-type: none"> 1. Provides an engaging game that has the traditional elements of commercial games that keep students interested. 2. The online platform makes the game easily accessible. 3. Having all the standards-based lesson plans in the teacher’s guide puts much of the control of the teachable moments of the game in the hands of the teacher. <p>OPTION 2</p> <hr/> <ol style="list-style-type: none"> 1. Social studies standards are embedded in the game. 2. The players are acting like historians; piecing together clues that enable them to make hypotheses about the past. 3. The story within the story. The time machine aspect of the game will gain the interest of the students as well as the historical content of the game.
<p>Discuss the <i>cons</i> for each solution.</p>	<p>OPTION 1</p> <hr/> <ol style="list-style-type: none"> 1. There is little standards-based content in the gameplay itself aside from setting the historical context. 2. Giving the control of learning to the teacher through the lesson plans in the teacher’s guide might deter learners because it takes away the independent learning feature that many

Team 2 Student-Facilitated Case Study: Paul Lindley

educational games have.

OPTION 2

1. Out of class game play may be necessary if the story duration cannot stay within 2 – 4 hours.

2. There may not be funds to design and develop this game idea.