Week 2: Completing the Case Analysis Process

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**Who are the key stakeholders in the case and what are their primary interests and/or concerns?**

There are three key stakeholders in the case. These stakeholders include:

* Designer: Paul Lindley – a professor at Walker University who is sourced to help a teacher develop an educational video game.
* Client/SME: Bob Reckowsky – The principal and one of two full-time middle school teachers. He’s reached out to Paul to design an educational video game for his students on a historical event.
* Audience: Middle-school students who will be leveraging the educational video game to learn about an historical event.
* Audience: The teachers who will be receive the game and will be responsible for implementing it.

**Describe important details regarding each stakeholder regarding the context of the project.**

The important detail regarding each stakeholder is as follows:

* Designer: Paul Lindley – a professor at Walker University that specialized in educational technology and hoped to secure funding for game development. He was approached by a principal of a local alternative high school about potentially developing a historical educational video game for the school. Additionally, his team of four graduate students – Kevin Elkin, Sun-Young Lim, Linda Grimes, and Bo Chen work with him to develop the game. While none of the students had worked on educational game design before, two students (Sun-Young and Bo) had some experience with a range of game types.
* Client: Bob Reckowsky – The principal of a school, also one of two full-time teachers at the school. He developed an instructional module that examined the internment of Japanese Americans during World War 2 and the role baseball played in fostering morale in the camps. While his original instruction went well, he felt there was more that could have been done with the content. So, he reaches out to Paul to design an educational video game because his students enjoyed video games.
* Audience: Students at school who had a track record of failing in the district’s high school.

**Instructional design challenges and case-specific constraints:**

**What are the key (1-2) instructional design challenges in the case?**

One instructional design challenge in the case is that the teachers and students are using different technologies/devices to teach. For example, some may use ipads, while others use laptops. In addition to that, there is lack of knowledge around if all students have reliable devices, proper internet connection etc., to even access the game. Another potential challenge is that there is awareness around a possible lack of interest in the topic / content from a knowledge and learning standpoint.

**Describe the ID challenge(s)**

If teachers are using different devices to instruct or learners are using varying devices to learn then the designers need to ensure that the game is available and accessible on all types of devices. They should ensure that the user experience, navigation, and overall look and feel are not compromised depending on what device one uses. As for the second challenge - Designers need to know that the solution they’re creating is going to impact or change behavior in some way. How will this be measured?

**What has the designer been tasked to do?**

The designer has been tasked to develop an instruction in the format of an educational video game that teaches students about the internment of Japanese Americans during World War 2 and the role baseball played in fostering morale in the camps.

**Where in the ID process does the main design challenge fall?**

From an ADDIE perspective, this challenge falls under the both the analysis and design/development buckets of the ADDIE model. First, the designers need to complete their analysis to assess what the current challenges are and what the learner/audience needs are. This includes an assessment of the students who will be learning about the camps from the game but also to participate in conversations with the teachers to understand their challenges and needs in the classroom. Next, comes the design phase where they will design the storyboard of the experience, develop a prototype and then test it. Then they can head into the development processes where they will develop the game, do additional testing as needed. Next, comes the implementation phase where the game will need to be “launched” and implemented into educational courses by the teachers. Finally, the game will be evaluated, and feedback will need to be collected from the students and teachers to make further enhancements and improvements to the instructional game.

**How might other case-specific challenges impact the ability of the designer to address the design challenges?**

Other case-specific challenges can impact the design process if there is a lack of understanding or clarity in communication within the design team. For it to be a successful project, there must be cohesiveness within the team. Project management can be a challenge as well if the project delivery timelines are not met, which also delays the timeframe in which the learners can receive access to the learning. It is important for the designers to develop a strong project plan and adhere to the timeline they set out. Right now, it seems as though the designers are focused on finding an appropriate solution, but they don’t seem to have discussed putting together a plan for how they’re going to achieve this.

**Think of the constraints in the case that make it hard for the designer to complete his/her ID tasks.**

A constraint in the case would be if the SMEs that the designers are interviewing/speaking with or getting information from, are not cooperative and sharing information about theirs and the learner needs. Ultimately, these are the SMEs so if they’re not sharing information with the designers or sharing it on time, that could stall the process. Similarly, in any project setting, designers will be responsible for certain tasks. The completion of one’s tasks may be dependent on the previous person’s completion etc., so it’s very important to keep this in mind and again why a project plan and clear timeline are essential.

**How would you prioritize the design challenges and case-specific challenges you identified and explain why would you choose this order?**

The order in which I would choose is the following:

1. Develop a project plan – This is the basis for any project, and it provides overall direction and clarity. If there is no project plan, there are no guardrails.
2. Manage communications – Communication guidelines within the design team should be discussed so that if there are concerns or conflicts, they are addressed appropriately and immediately.
3. Instruction effectiveness – It is important for designers to know the learning objectives or overall goals of the instruction so they can design accordingly. How can or will it change behavior?
4. Identify a solution or workaround for use of varying devices in the classroom – Once the first two are in place, this challenge needs to be solutioned. However, I put this at three because the first two are essential requirements that if in place will help resolve this challenge as well.

**Describe how the week’s assigned readings and your previous experiences contributed to your understanding of the case problem.**

This week’s readings both Kello, Ke, and the case discuss how educational learning environments can be or should be designed to facilitate impactful learning experiences. All readings discuss the overall design of learning experiences through interactive games or learning strategies while encouraging active engagement within the learning process.

**Readings:**

**For each reading, provide a concise reflection on how it helped you with the case.**

This week’s readings offered different perspectives. The Ke reading focused on game design and suggests that games can be designed to foster critical thinking, engagement and collaboration within learners. This helped me with the case when thinking about the overall design and how to incorporate the game elements into the instruction, ensuring that it is effective. While on the other hand, Kello’s reading focused on how sensitive topics require to be supported by carefully structured and well-thought-out learning strategies. This reading helped me in understanding the case because well planned and thought-out learning strategies are necessary for the overall delivery of the instruction. In the case the designers discussed how the students might not be interested in learning history as much they may be in playing the game – a clear vision and strategy will lead to the right results.

**Previous Experiences:**

**Provide a concise reflection on how previous experiences have attributed to your understanding of the case.**

I have never developed an educational video game before; however, I have developed quizzing games using externally developed and easily accessible platforms like Kahoot.it or Canva. This case was a bit different for me just because I have not developed a game as such before so understanding all the different bits of conversation between the designers is not something I would have realized on my own.

**Many potential solutions exist for a given ill-structured problem. Outline two different, reasonable solutions/recommendations for the designer in the case.**

My first recommendation for the designer is to solidify the plan using a project plan. There is no mention of timelines or roles and responsibilities – the designers are immediately solutioning while they don’t have answers to a lot of questions.

My second recommendation is to leverage and use the SMEs. Additionally, the designers need to set clear roles and responsibilities with the SMEs, so everyone knows what they’re responsible for and when. The designers need to understand that they’re not the experts in everything and they can and should leverage the SMEs at hand.

**How do these solutions/recommendations address the challenges described in #2 above?**

If I specifically look at my second recommendation, this is also identified to some extent in question seven. The contribution and clear identification of roles and responsibilities between the SME and the designers is very important. These partnership guidelines need to be addressed and communicated at the start of the partnership.

**What is your final recommendation?**

My final recommendation is for the design team to put together a clear project plan and strategy for how they’re going to divide the project tasks amongst themselves and where and when they will engage the SMEs (e.g., needs assessment, review etc.) to create a solution. While there is no con for this recommendation, the pro is that the team will have clarity at the onset. The ADDIE model can

Analysis: A project plan helps establish the learning needs, learning outcomes and target audience of the learning. It ensures all necessary parts of the project at the analysis and assessment stage are collected and analyzed.

Design: With a clear project plan, the ID can outline the learning objectives, overall course structure (e.g., tasks, owners, contributors, completion status, deadline etc.), and identify what the assessment methods will be. It helps with developing a “strawman” or basis for the instructional materials.

Development: A project plan ensures that the development of the instructional product or materials stays on track.

Implementation: A project plan guides the rollout of the instructional project and/or materials. It ensures that the delivery methods are effective and that all stakeholders are informed and prepared.

Evaluation: A project plan outlines the methods for assessing the effectiveness of the instructional materials. It helps in gathering feedback, analyzing results, and making necessary adjustments.

A project plan provides structure, clarity, and accountability. It ensures that all aspects of the ADDIE method are covered systematically, leading to the successful completion of the instructional design project.

**References**

Ertmer, P. A., Quinn, J. A., & Glazewski, K. D. (2019). The ID CaseBook: Case studies in instructional design (5th ed.). New York, NY: Routledge.