Jason Boursier EDCI 672 11/1/2024

Case Analysis: Developing a Role-Playing Simulation on Aging

Stakeholders and Their Interests

1. Dr. Lorena Colombo (Subject Matter Expert and Co-Manager)

Role: She is the co-manager of the simulation project and Subject Matter Expert (SME) in developmental psychology. Her specialty is the aging process.

Interests/Concerns: Dr. Colombo's goal is to have the audience of the simulation allow them to take on the perspective of the elderly and promote empathy towards others in the undergraduate classes she teaches. Lorena has high expectations because she wants a product that reflects her vision and lifts her reputation within the department. She has a deep understanding of her subject matter but not the design process though she was able to secure a small amount of grant money, so she wants to keep the project under budget. Her concern is that the simulation will be authentic so students can take the perspective of the elderly and gain more empathy towards them. Students typically read about aging, then interact with elderly individuals, but she wants to create a simulation that adds to the curriculum.

2. Dr. Adam McSweeny (Instructional Designer, Co-Manager, and Lead Project Manager)

Role: Co-manager of the project, instructional designer (ID) with a doctoral degree, and technology expert specializing in modeling and simulation. "Fake it til you make it," is his slogan

when things get challenging or complicated. He has big ideas but lacks inclusion of specific details on how the simulation will be developed.

Interests/Concerns: Adam is focused on designing an effective instructional simulation and managing the content creation which includes the hiring process. He emphasizes the inclusion of adding extra content beyond Lorena's suggestions including instructional objectives within the simulation, simulation manipulation instructions, and help resources and feedback. Lorena thinks these additional items will distract from the student's natural interaction within the roleplay. Adam also wants to ensure the project is completed successfully within the given timeline and budget.

3. Suzie Beckett (Graduate Student and Project Assistant)

Role: Project assistant who has the role of using an unfamiliar program to create the animations, while building the characters, audio recordings, and full rendering of the simulation.

Interests/Concerns: Suzie is eager to apply her ID skills, learn new software, and contribute to a meaningful project so she can get practicum credit and include the project on her resume. She is balancing this project with her final semester coursework and an existing internship. Suzie is concerned about managing her workload, meeting project deadlines, and producing high-quality animations despite her inexperience with the specific software, and its limitations in developing feedback mechanisms as Lorena expects for the students' perspective-taking.

4. Johanna Duncan (Psychology Student and Project Assistant)

Role: Psychology student assisting with content development. She makes sure the role-playing activities are relevant and effective.

Interests/Concerns: Johanna seeks to earn independent study credit while gaining experience, and to contribute positively to the project. She is enthusiastic about being part of the team and is willing to assist in any capacity, including voice acting for the characters (with no apparent voice acting experience).

5. Undergraduate Psychology Students (End-Users/Audience)

Role: The intended users of the simulation in Lorena's "Aging and the Elderly Service Learning" course.

Interests/Concerns: Students expect to be engaged with the learning experience and get a better perspective in the psychology classes aside from simply reading textbooks or having to talk face-to-face with elderly people.

6. Bianchi Institute of Technology (Institution and Grant Provider)

Role: The institution supporting the project through an internal grant.

Interests/Concerns: The institute expects the project to be completed successfully to potentially benefit other courses and to expand on course offerings. They are interested in the project's potential impact on teaching and learning.

Instructional Design Challenges and Case-Specific Constraints

Challenge 1: Aligning Lorena's Vision with Adam's Lax Project Culture and Practical Development Constraints

Description: Lorena has a very specific vision to create a highly authentic simulation that fosters empathy towards the elderly, and Adam from the start is overpromising and underdelivering by not setting clear expectations as to his vision for the project. His leadership is not authoritarian enough to form a more rigid structure that uses his limited resources and timeframe. For one, he doesn't establish his role as lead project manager taking into account his experience. Another questionable decision is he rushes past an extensive task analysis and goes right into design and development and hires the support of a low-skilled and busy student (Suzie) as opposed to someone with experience. He avoids talking about the specific limitation of the development phase of the project with his co-manager Lorena. Adam prematurely commits to using a development software tool that cannot produce the desired quality and realistic animations for Lorena's vision and does not communicate this message until it's too late. Even with Suzie's lack of expertise, Adam still gives her full authority on design decisions and the ability to hire out unskilled voice-actors, thus perpetuating an unproductive lax culture.

ID Process Stage: This challenge falls within the Analysis phase because there is no clear vision and commitment to a mutually agreed upon solution after a thorough task analysis.

Challenge 2: Lack of Consensus and Conflicting Design Decisions

Description: Lorena and Adam have conflicting perspectives regarding the design elements they both deem essential. Lorena needs to see immersion of the role-playing activities to enhance

empathy so the learner can grow using more of a constructivist framework. Adam desires the course to include instructional objectives, instructions, prompts, feedback, and help resources in more of a cognitivist framework where knowledge is scaffolded. Once again, Adam overpromises by changing from text-based descriptions of elderly activities to animated characters talking about the activities and even accepts the harder-to-execute idea from Lorena of having these characters showing signs of sensory deterioration. Adam doesn't even plant a seed of doubt to curb expectations and bring ideals into reality. Lorena is concerned that added elements like incorporating the learning objectives might detract from the natural flow and immersion of the role-playing activities. In turn, they both create separate storyboards and cannot make decisions swiftly without delaying the project.

ID Process Stage: These are Analysis and Design phases that were not covered and finalized initially. This also impacts the Development phase due to the lack of a unified plan.

Case-Specific Constraints Impacting Design Challenges

- 1. Communication Gaps and Mismatched Expectations
 - a. Lorena's desire for authenticity and Adam's informal approach creates a gap in communication. Lorena's delayed feedback and lack of familiarity with the instructional design process create frustrations for Adam and Suzie. Adam is reluctant to manage expectations in a transparent manner due to his "fake it til you make it" approach. Adam fails to disclose software limitations and realistic development timelines.
- 2. Team Dynamics and Lack of Authoritative Leadership

a. Adam perpetuates a lax project culture and drops the ball in setting clear guidelines for the team and a more structured development process. His leadership style is non-authoritative and instead of a skilled professional, enlists the help of a busy, low-skilled student. The lack of decisive leadership when addressing Lorena's vision and software/tool constraints is making his small meeting windows (every two weeks) even less productive.

3. Software Limitations Versus Vision Expectations

a. Adam prematurely committed to using a development software tool that does not align with Lorena's expectations for realism and has not owned up to this fact! Lorena expects the animations to have sensory deterioration and high-quality animations, which are beyond the software's capability. Adam is reluctant to address these limitations early on, thus resulting in misalignment.

4. Conflicting Design Philosophies Between Lorena and Adam

- a. Lorena prioritizes an immersive experience using role-playing to foster empathy. Adam, meanwhile, wants structured instructional elements like prompts and feedback. Lorena's view is that these elements will distract from the role-playing aspect and her goal of fostering empathy towards the elderly in undergraduate classrooms. The lack of alignment between comanagers results in separate storyboards and confusion about the instructional strategy, causing delays and inefficient development.
- 5. Practical Development Constraints and Resource Issues

a. Adam's strength is ID work, but he is struggling in the project management aspect because he is not allocating resources effectively. He gives Suzie too much authority, despite her lack of expertise and heavy workload, and is not taking ownership of the project fully. Additionally, there are practical limitations such as a fixed budget and tight timeframe, and this exacerbates the development constraints, without any mitigation plans in place.

Prioritization of Challenges

1. Establishing Effective Communication and Team Alignment

a. Clear communication of project goals and timelines while incorporating a mutual understanding of everyone's roles are fundamental for team dynamics. Everyone needs to be on the same page about project objectives with clear strategies for overcoming constraints. Without this, the other challenges will be harder to address.

2. Reconciling Conflicting Design Philosophies and Creating a Unified Plan

a. Agreement on the core design elements is crucial for creating a cohesive simulation, and this needs to be based on considering not just the comanager's perspectives but the audience of the game and institution and grant provider. The team must align on whether the focus is constructivist immersion like Lorena suggests or scaffolded cognitive instruction like Adam suggests. Asking questions like, "What strategy will best produce the desired outcome?" is needed. A clear consensus will help streamline the design and development phases and make every meeting more productive!

3. Managing Software Capabilities and Setting Realistic Expectations

a. Managing Lorena's expectations regarding what the software can deliver is necessary to prevent frustration and wasted effort. He needs to look the objection square in the eye, grab the bull by the horns, and "fall on his sword." Don't be afraid to say, "Hell no we can't do it!" Adam needs to affect early, honest communication about the limitations and capabilities of the tools and resources he has at his disposal.

4. Providing Stronger Leadership and Clear Project Management

a. Adam needs to take a more active role in managing the project as he has overpromised Lorena. He needs to provide clear guidance to Suzie and mitigate her tasks to fall along an expected guideline. He is too democratic! Establishing defined timelines, with secondary options and a more authoritative management approach will ensure the project stays on track.

5. Supporting Team Members and Managing Their Workloads

 Ensuring Suzie is not overburdened and receives the guidance she needs is critical for productivity and the quality of the simulation. Adam should balance responsibilities and ensure each member is equipped for their role, and not be afraid to make uncomfortable decisions using his project management hat over his instructional design hat.

Reflection on Readings and Previous Experiences

1. Leadership, Negotiation and Conflict Resolution in Instructional Design Teams

Adam is not effectively taking ownership as project manager and team leader. According to Wiley (2008), effective communication is crucial for solving design problems, and confusion about roles often arises from poor organization, especially in complex projects. Rather than negotiating with Lorena to reach an agreement, Adam remains rigid in his stance. Wiley (2008) outlines four principles of negotiation: separating people from the problem, focusing on common interests, generating options that advance shared goals, and developing results based on standard criteria (Verma, as cited in Wiley, 2008, p. 112). Additionally, instead of addressing the limitations of the design tool to meet Lorena's expectations—whether through forcing, collaborating, compromising, or accommodating—Adam chose to avoid dealing with the problem. Roles were never clearly defined, preventing Adam from effectively stepping into his role as manager and exercising his authority.

Contribution to Understanding: This analysis highlights that improving communication is a foundational step in resolving the team's issues. It helps me understand that facilitating better communication could address several of the identified challenges, such as role confusion, differing perspectives, and ineffective negotiation. Establishing clear communication channels and ensuring all team members understand their roles could create a more cohesive development process with more project goals being accomplished!

2. Using Project Culture to Manage Stakeholder Expectations and Project Scope

The project with two "co-managers" instead of one dedicated project manager reflects the old saying, "Too many leaders, not enough team members." Wiley (2008) defines project culture as the shared norms, beliefs, values, and assumptions of the team, which are developed by communicating priorities, project status, and the alignment of official and operational rules. With equal influence from both managers, there is no single leader effectively communicating what is important to the team through symbols, storytelling, rituals, rewards or punishments, and taboos. The team entered the design and development phase without fully resolving all items from the analysis phase of the ADDIE model. Without clearly established ground rules, there is a lack of accountability and effective communication. Wiley (2008) suggests that "the culture of integrity is stronger than the cultural aspects of the power of management" (p. 130). Without integrity, there can be no real authority or power for anyone.

Contribution to Understanding: This reading underscores the importance of establishing clear leadership roles to avoid confusion and inefficiencies. It helps me understand that having a single, accountable leader is crucial for maintaining integrity, effective communication, and cohesive decision-making. Aligning team members under a unified project vision is essential, particularly when working within practical constraints, to ensure a well-managed scope and clear, shared priorities.

3. Utilizing Testing During the Development Phase, and Prioritizing the Analysis Phase

The project's Gantt chart reveals a flaw in overlapping the task analysis and scenario design phases within the same months during the early stages. Romero-Hall et al. (2014) emphasized, in their simulation design case, the importance of using critical incident and critical decision methods during the task analysis phase to organize and arrange competency statements from subject matter experts (SMEs). These methods helped them learn from "non-routine events" to understand the distinctions between novice and expert practices in nursing. This foundational work then informed the design phase, where they drafted how procedures would translate into clickable simulation elements, structured pain assessment protocols, and created visual representations connected to the web portal. In Romero-Hall et al.'s (2014) study, the unpaid instructional design team dedicated six months to meetings and document preparation for the analysis phase, while Adam and Lorena allotted only one month to this phase jumping right into development, despite their project being funded.

Contribution to Understanding: This analysis highlights the critical need for dedicating sufficient time to the analysis phase to ensure a solid foundation for subsequent design and development. It helps me recognize that a systematic process, with clearly defined phases, is essential for creating an effective learning experience. Adequate task analysis ensures that project elements are informed by expert input and aligned with project goals, avoiding rushed decisions that could compromise quality later on.

Previous Experiences

1. Collaborative Projects with Conflicting Visions

In my role as a Sales Manager at Green Well, I frequently encountered differing visions between stakeholders and distribution partners regarding sales strategies and market positioning. Navigating these conflicts required facilitation skills to foster discussion, align objectives, and create a unified approach. Without consensus, sales campaigns risked losing momentum and resulting in poor outcomes for the grower, the chemists, and the outside investors.

Influence on Analysis: This experience makes me appreciate the necessity of ensuring that the entire project team has a shared vision from the start, as well as the importance of open communication in resolving conflicts. In the case study, Adam and Lorena lacked alignment, which hindered the design process.

2. Balancing Idealism with Practical Constraints

During my role as a *Member Training Coordinator at Island Sailing Club*, I often had to navigate the gap between members' expectations for sailing experiences and practical realities. Effectively managing these expectations required educating members about the constraints and collaborating on feasible solutions. Additionally, in my master's program, I worked on a group project that required interviewing a professional, and I recognized the need to take charge to meet the project objectives within a tight timeframe. I facilitated structured meetings, using Microsoft Teams and Canva to coordinate efforts and ensure we could complete the analysis and design phases before developing the slide deck to ensure alignment within the group and help meet our project timeline.

Influence on Analysis: These experiences are relevant to the case study challenges, particularly regarding the need for effective leadership, expectation management, and proactive planning. The need to lead and coordinate efforts in my group project mirrors the importance of having a

strong project manager like Adam, who could have better aligned the team and moved the project forward efficiently.

3. Learning New Technologies Under Pressure

My friends have a startup called Sapient Clinician where I am designing learning modules for where they have an AI "patients" become integrated into a learning lab situation and my goal is to train the teachers how to use the assessment tool in their doctoral classes. I needed to learn how to use the tool to become an SME before I created the modules. I also am setting up a new CRM tool at my job at Island Sailing and am using the Zoho One support team daily to overcome challenges in this change of technologies.

Influence on Analysis: Like Suzie's position in the case study, my experience in providing team members sufficient resources and support helps avoid being overwhelmed, especially when learning new tools under tight deadlines.

Possible Solutions

Solution 1: Be Communicative and Commit to a Constructivist Teaching Method

Description: Focus the simulation on immersive role-playing activities aimed at fostering empathy for elderly individuals. Minimize structured instructional elements to prioritize exploration, experiential learning, and perspective-taking, aligning with the constructivist framework. Organize a meeting with all team members to openly discuss the project's goals, individual expectations, and constraints. Use this opportunity to educate Lorena about the software limitations and development process. Dive deep into task analysis methods before developing a unified storyboard or simulation scenarios.

Addresses Challenges:

- **Conflicting Design Philosophies**: Establishes a clear instructional direction aligned with Lorena's vision.
- **Team Alignment**: Provides a unified understanding of the simulation's primary learning goals.
- Managing Software Expectations: Set clear limitations for the role-playing experience to ensure the software can deliver on immersion elements.
- **Ensuring Empathy Development**: Prioritizes emotional engagement and perspective-taking to meet the project's ultimate goal of empathy.
- Communication and Team Dynamics: Facilitates open dialogue, improving communication and understanding among team members.

Pros:

- **Student Engagement**: The immersive experience could lead to greater empathy, achieving Lorena's instructional goals.
- Focus on Experience: Reducing structured feedback and instructional elements helps
 maintain immersion.
- **Clear Alignment with Lorena's Vision**: By committing to constructivism, the design choices are focused, and team alignment is easier.

Cons:

- Lack of Guidance for Students: Without structured prompts and feedback, students might miss key insights or struggle to fully understand the learning objectives.
- **Development Challenges**: Creating an immersive experience within software limitations might prove challenging.
- **Potential for Unclear Learning Outcomes**: Without structured instructional support, some students may not achieve consistent learning outcomes.

Solution 2: Commit to a Cognitivist Teaching Method and Implement Iterative Development with Regular Feedback Loops

Description: Develop the simulation with structured instructional elements, such as prompts, learning objectives, and feedback, to guide students through the learning process. This approach focuses on information processing, helping students retain knowledge effectively through scaffolded support, in line with the cognitivist framework. Adopt an iterative development approach where Suzie develops small portions of the simulation, and the team provides feedback promptly. Establish clear timelines for feedback and set boundaries on the extent of changes that can be made at each stage. This process continues in cycles until the simulation is complete.

Addresses Challenges:

- Conflicting Design Philosophies: Establishes a clear instructional direction aligned with Adam's preference for structured learning. He can assert himself and create a positive project culture!
- Providing Clear Guidance: After a more thorough task analysis students will receive proper feedback and guidance through the simulation so the knowledge gained can be assessed properly.
- **Supporting Suzie with Structure**: A defined framework for instructional prompts will help Suzie organize the simulation's development process.
- Ensuring Consistent Learning Outcomes: Structured elements help maintain consistency in what students learn and achieve.
- Limiting Last-Minute Changes: By agreeing on feedback timelines, the team can minimize disruptive, late-stage changes.
- Supporting Team Members: Provides Suzie with timely feedback, reducing rework and frustration.

Pros:

- **Scaffolded Learning**: Clear instructions and feedback support cognitive development, ensuring students understand the learning material.
- Structured Development: Provides a well-defined approach for Suzie, reducing ambiguity in the design process.
- Consistency: Ensures all students receive the same support, leading to consistent learning outcomes.

- Creates a Solid Project Culture: Enhances understanding of what is feasible, adjusting expectations early.
- Avoids Redundancies: Reduces the risk of significant rework late in the project and keeps the project moving forward with incremental progress.

Cons:

- **Reduced Immersion**: Including structured prompts and feedback might detract from the immersive, empathy-building experience Lorena aims for.
- **Conflict with Lorena's Vision**: The focus on instructional elements might clash with Lorena's desire for minimal interference, potentially reducing her satisfaction.
- Less Emphasis on Empathy: Structured learning may lead to more cognitive engagement but could fall short of fostering the desired empathy.
- Additional time Requirements: May increase the workload on Suzie due to frequent updates and requires disciplined adherence to feedback schedules with a potential for feedback overload if not managed properly.

Final Recommendation

Chosen Solution: Commit to the Constructivist Teaching Method with Supportive Feedback Loops

Justification:

Combining the preferred teaching method of Lorena, while acting as solo project manager to implement feedback loops, Adam can make all parties happy and complete the work to satisfy

the grant provider and institution as well. Committing to the constructivist teaching method is more aligned with the core project goals of that Lorena has for fostering empathy in students, and Adam can create a culture that gets the team on the same page. The more immersive approach provides the unique, perspective-building experience that Lorena desires for the course, and is likely to make the learning more memorable and impactful for the target audience. By extending the analysis phase to include critical incident and critical decision methods in the task analysis and fully utilizing the SMEs, there will be more uniform expectations in the design and development phases. To balance the constructivist approach with practical development needs, it is essential to establish supportive feedback loops throughout the development phase to maintain progress and ensure the desired learning outcomes are met.

Addressing Cons:

- Guidance Balance: Incorporate periodic reflective prompts that don't interfere with immersion but help students connect their experiences to the intended learning objectives.
- Supporting Development: Use a mix of early prototypes and iterative feedback to address technical limitations, ensuring that immersive elements are developed realistically and within constraints.
- Establish Clear Feedback Mechanisms: Develop clear criteria for Lorena and Adam to provide input on iterations, focusing on preserving immersion while ensuring learning objectives are not lost.

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