Michaela Mabe	Challenge #5	2/27/23	EDCI 60002b	Spring '23

SUPRA-BADGE:	Evaluation and Implementation
SUB-BADGE:	Implement, Disseminate, and Diffuse Instructional and Non-Instructional Interventions
CHALLENGE:	Create a vision of change that aligns with learning goals, performance goals, and/or organizational goals
ARTIFACT:	Case Study in EDCI 672
CRITERIA:	**Criteria for successful completion of this challenge:** Evidence of a vision change/creation that aligns with learning goals, performance goals, and/or organizational goals (e.g., big picture, company standards, etc.). **Reflection must address:** How did you arrive at your redesign (i.e., new vision and interventions) and how it aligns with learning goals, performance goals and/or organizational goals–consider the dialogue and negotiation needs that were considered in the planning process during this vision of change?

Competency and artifact identification

My **Lynn Dixon Case Study and Sample Kiosk Interface** from EDCI 672 provides the evidence for the sub-badge, Implement, Disseminate, and Diffuse Instructional and Non-Instructional Interventions, and the challenge, "Create a vision of change that aligns with learning goals, performance goals, and organizational goals". This artifact provides evidence that I am able to create a design plan that aligns with the learning and stakeholders' goals from a case study.

Description of how the artifact supports the competency

I decided to choose one of my case study assignments from EDCI 672 because they are given in the class to analyze, synthesize, and suggest possible solutions that the stakeholders are facing in the case. Specifically, in this case, I was looking at the project, stakeholders, and constraints to plan a solution that considers all of those factors. I took the goal of the stakeholders which was to, "focus on the connections between the great barrier reef, the wetlands, and catchment areas in Queensland. The goal is for the software of the kiosk to be used at the main aquarium and in regional information centers with a medium interactivity level which translates to 20 minutes of time interacting with the kiosk". From this, I was able to create solutions that address those goals, such as having a meeting with all of the stakeholders about the lack of appropriate resources for the current design plan and expectations. This follows the organizational goals of the expectations they set for the project and the resources they need to provide to make the project successful for the organizational and learning goals. The other solution I made was to discuss with Ben and Laura (two stakeholders) about partnering with departments at the local university for the resources that they're missing or could use more support with. This also would allow the final product to follow the organizational goals and learning goals set out for the final project. From this case study, I also made a sample kiosk to align with the organizational and learning goals.

Competency alignment with prior knowledge and experience

I have had some prior knowledge in aligning a vision with learning and organizational goals in other experiences in the learning and design program, my bachelor's program for education, and my current experience in the classroom. For this graduate program, there have been other case studies that I have analyzed and created products to align with the goals. For my bachelor's program in education, I created a lot of products that aligned with the organizational goals of the program and the learning goals of the population I was creating the sample product. In my current job experience in middle school education, I create a vision and products for my students based on the needs of the district, the needs of the school, and the learning needs of the state of Ohio. From all of those factors, I create unit and lesson plans to make sure all of the necessary components are added. I also create learning materials and even a classroom website based on the goals of all of the stakeholders in my learning environment.

Reflection on experiences

Overall, this challenge has been a great way to reflect on the ways that I create a vision and products based on organizational and learning goals. I didn't realize that I did these activities so much until I started thinking about and going over this challenge and the prompts. I will continue to create a vision and products from my organization and learning goals in this graduate program and in my day-to-day job. For this graduate program, I will continue to use organizational, performance, and learning goals to create a vision and product for those components.

Lynn Dixon Case Study Analysis

Project and Stakeholders

The project analyzed for this case study is for The Aquarium in Cairns to celebrate World Wetlands Day. The project's focus is on the connections between the great barrier reef, the wetlands, and catchment areas in Queensland. The goal is for the software of the kiosk to be used at the main aquarium and in regional information centers with a medium interactivity level which translates to 20 minutes of time interacting with the kiosk. The general public that attend The Aquarium is the audience for the kiosk software. This includes but isn't limited to; school aged children, international visitors, and senior citizens. Their main concern is to have a way of gaining information about the wetlands in a fun and engaging way that is differentiated to engage and inform all of the types of learners that come to The Aquarium.

The stakeholders working from The Aquarium are Laura Barton and Ben Williams. Laura works with the government department that is responsible for projects at The Aquarium and is the project sponsor who contacted Telopea Learning about developing the software for the kiosk. She also reached out to another company to develop the hardware for the project. While she is invested in how the project turns out, she isn't interested in being a part of the day to day decision making. She specified to the team that she only wants to be contacted for major reviews and sign offs. Ben is the educational manager at the aquarium and the team's subject matter expert (SME). While Ben has expressed a lot of excitement around the project, his expectations are not realistic for the scope and contract for the project. He is very excited to provide help and

ideas for how he wants the kiosk software to look. He is in charge of the day to day responsibilities, the project timeline, and communication with the instructional designer at Telopea Learning.

Telopea Learning is a small e-learning company in Sydney, Australia. They specifically provide online training for clients such as banks, insurance companies, government departments, and retail. The main stakeholders in this company for the project are Lynn Dixon and Janette Parks. Janette is the head of the sales team at Telopea Learning and is a project coordinator for the software kiosk at The Aquarium. She is the one who secured this project and others for the company but she can accidentally cause disconnects between the company and potential clients on realistic timeframes and budgets. The way this happened for this project because Janette encouraged Ben to think big about his scope for the project and is encouraging the instructional designer to add in some short and fancy details and that the medium interactivity level was just an average. Lynn is the instructional designer for the software design of the kiosk. She has been working for Telopea Learning for almost a year and is one of the instructional designers with the most experience and education in instructional design. Because of this, she is given a lot of responsibilities and is asked to take the lead on a lot of the projects at the company. She expressed excitement for this software project at The Aquarium and to use her knowledge and expertise to create software that will be used in multiple educational environments. By the end of meeting with all of the stakeholders on the team, she is worried about the high expectations from Ben, issues with the timeline, and issues with not having a background in creating software for a kiosk. She wants to keep everyone happy and provide quality software, but will need support from different employees at Telopea Learning and from The Aquarium.

Main Challenges/Issues

The main goal of the project is to create a software for kiosks at The Aquarium to show the connection between the great barrier reef, the wetlands, and catchment areas in Queensland. Currently, the project is in the Design stage of ADDIE. Lynn developed design documents and had a meeting with Ben and Laura discussing the current design ideas and so they could give feedback on the design document. While they liked the design of the kiosk software, they have higher expectations and want more of everything added to the design. This is one of the main issues of this case study which is unrealistic expectations. To begin, Ben and Laura don't understand the scope of the contract from Telopea Learning. While Janette has tried to explain this to them at the beginning of the design process, they still expect too much from the software. In the meeting to go over the design documents, both stakeholders from The Aquarium added more ideas that they wanted to add to the software even though it isn't included in the original contract and budget. While Lynn is an accomplished instructional designer, she can't possibly expect to meet all of the expectations placed on her from the client.

A case specific issue for this case study is the lack of appropriate resources and personnel. For this case, specific time and budgeting parameters were discussed to create the contract with The Aquarium. This issue is that the stakeholders from The Aquarium are requesting other components to be added to the kiosk that will add more strain to the timeline and the budget that make it impossible to complete the project with all of their requests. They requested more complicated animations at the beginning and throughout the kiosk, increased storytelling components for the historical information presented in the kiosk, someone of Aboriginal descent voicing certain components of the kiosk, and an interactive game added to the software.

Another case specific issue is the amount of knowledge that Lynn has about creating software for a kiosk and not having a sufficient amount of time in her schedule to create a quality product. She only has direct experience with designing instruction with a computer screen and the team at The Aquarium is requesting software for the kiosk and interactive elements added in. This requires more time and budget than Lynn has access to and that the company is willing to add to the project. There is also not enough definitive research to determine if the components that Ben and Laura want to add will even make the kiosk more informative. It could just make the audience confused and overwhelmed.

Prioritization of Issues

#1: Unrealistic Expectations/Communication Issues

This is the biggest issue in this case study because the expectations of the contract and all of the stakeholders doesn't match up. This has already caused some issues in the design phase of ADDIE and will continue to cause and reveal more issues throughout the development and implementation of the kiosk software. The lack of communication of the appropriate expectations and active listening from the employees from both sides is causing an issue creating a quality product within the parameters.

#2: Lack of Appropriate Resources

This issue would come next because time and money are the biggest components in creating the product that Ben and Laura expect from Lynn with their expectations. While she is able to create a solid software for the kiosk with the time and money she has, it won't meet the expectations that The Aquarium has for the final product. If these components are considered and Lynn can get more time and a bigger budget, they can continue with the project with their expectations.

#3: Components Being Effective For Learning

This issue would be next in the list of priorities because even if the appropriate resources were allocated to the project, there isn't enough research to identify whether adding all of these components will make the kiosk more effective as a learning tool. While some visuals add to a learning module, others will overstimulate the learners and cause the whole objective of the kiosk to be lost.

#4: Lack of Knowledge About Different Components

This issue would be next in the list of priorities because The Aquarium is requesting more detailed components than just a software for the kiosk. They are requesting more complicated animations at the beginning and throughout the kiosk, increased storytelling components for the historical information presented in the kiosk, someone of Aboriginal descent voicing certain components of the kiosk, and an interactive game added to the software. These are all components that Lynn doesn't have direct experience or even access to include.

#5: No Direct Experience Creating A Kiosk

This is the last on the list of priorities because even though Lynn doesn't have direct experience creating a kiosk, it is something that she can use her prior knowledge and experience and complete research to create. The issue with this leads back into time aspect. She would need more time to research how a software for a kiosk is set up and how to create it so that it is the most efficient for the learner.

Information From Other Sources

Looking at the information from Hoffler & Leutner (2007), it explains how different visuals affect a learner and the effect that those visuals have on a learners cognitive load. The authors explain that sometimes when including animations in learning experiences, they aren't better than just including stagnant pictures. In the article, they explain that, "By reducing

extraneous cognitive load and increasing germane cognitive load-the third type of cognitive load, referring to the effort involved in the processing, construction and automation of schemas-more efficient learning may be possible" (p. 723). For the case study, this suggests that Lynn should talk to Ben and give him this information to help dissuade him from including all of the over the top animations.

Looking at the information from Sung & Mayer (2012), it explains the three different types of graphics used in learning modules. These include "instructional graphics", "seductive graphics", and "decorative graphics" and how effective they are in promoting learning and retention (p. 1618). Instructional graphics are intentional and revelant to the instructional objective and can help the learner understand the information being conveyed. Seductive graphics are usually just used as a hook for the learner but isn't very relevant to the content. Decorative graphics are just used for the design of the learning materials but don't promote a better understanding of the content. As Sung & Mayer stated, "the educational effectiveness of e-lessons can be improved by inserting graphics that are relevant rather than irrelevant to the instructional goal" (p. 1624). This can help Lynn because her goal would be to find and include instructional graphics that are intentional to the learning objectives of the kiosk instead of wasting her time and focus on seductive or decorative graphics.

I don't have a whole lot of prior experience with software creation or creating animations, but I have used graphics in my lessons before. I include graphics and find videos for my lessons that are relevant to the learning objectives and to engage my students in the content. I also realize now looking at the research, that I use a lot of decorative graphics as well that may overload my learners. My prior experience making lesson plans for learners with special needs also helps because I understand the use of graphics as a form of accessibility.

Solution #1

One of the solutions is to have a meeting with all of the stakeholders about the lack of appropriate resources for the current design plan and expectations. This will include either renegotiating the contract to either allocate more time, budget, and manpower into the creation of the kiosk software or downsizing the expectations to just what was discussed first and all agree on that with the expectation that it can't be exactly what Ben or Laura want. This type of solution will depend on if The Aquarium is able to allocate more resources or if they need to keep the contract the same as it was in the beginning.

The pro of this solution is the unrealistic expectations will be cleared up and any miscommunications can be addressed as a team. This will also help Lynn create a product that everyone can be happy with because there will be a clear objective and expectations for the design of the software.

The con of this solution is it could cause tension between Lynn and the stakeholders at The Aquarium because up to this point Lynn hasn't expressed or communicated any issues with the expectations and ideas that Ben and Laura have suggested. If escalated enough, this has a small chance of having the project be shifted to another instructional designer at the company or for The Aquarium to choose a new company to work with all together.

Solution #2

A different solution that Lynn could do is to discuss with Ben and Laura about partnering with departments at the local university for the resources that they're missing or could use more support with. These include finding a student or professor of Aboriginal descent and a professor that has knowledge about Aboriginal history, someone who has background in game design that can help create an interactive component, someone who has a background in designing software

for a kiosk, and anyone else that can help with the creation of the components that The Aquarium would like to include in the kiosk software.

The pros for this solution is working with a local university could be cost effective while also helping the people at the university gain experience in their respective fields. This would also be a good opportunity to build community with the development and implementation of the kiosk software. Lastly, this would help Lynn create a software that would make The Aquarium happy and meet more of their expectations.

A con of this solution is The Aquarium may not want to include that many more people into the project contract and scope. They may think that Lynn won't be able to complete the project by herself because she doesn't know how to complete the components they are requesting.

Final Recommendation

The final recommendation for this project is to go with Solution #1. Meeting with all of the stakeholders about the lack of appropriate resources for the current design plan and expectations and either renegotiating the contract to either allocate more time, budget, and manpower in the kiosk or downsizing the expectations to just what was discussed first. Either way the stakeholders choose, this solution will help make the project more clear and improve the design and implementation of the kiosk software.

The possible cons of this solution is tension or a small chance of having the project be shifted to another instructional designer at the company or for The Aquarium to choose a new company to work with all together. This will be addressed by having an open and honest conversation among all of the stakeholders to address the issues with the design of the project, the unrealistic expectations, and the best way to move forward so that everyone is satisfied.

References

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Australia's Wetlands

The Aquarium at Cairns

Hi!
嗨
Hola!
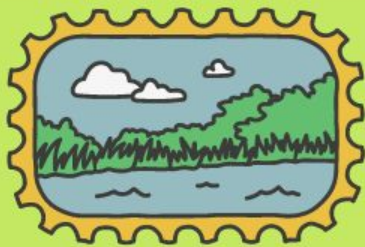
Wetland Connection

START

Local History

START

Conservation

START

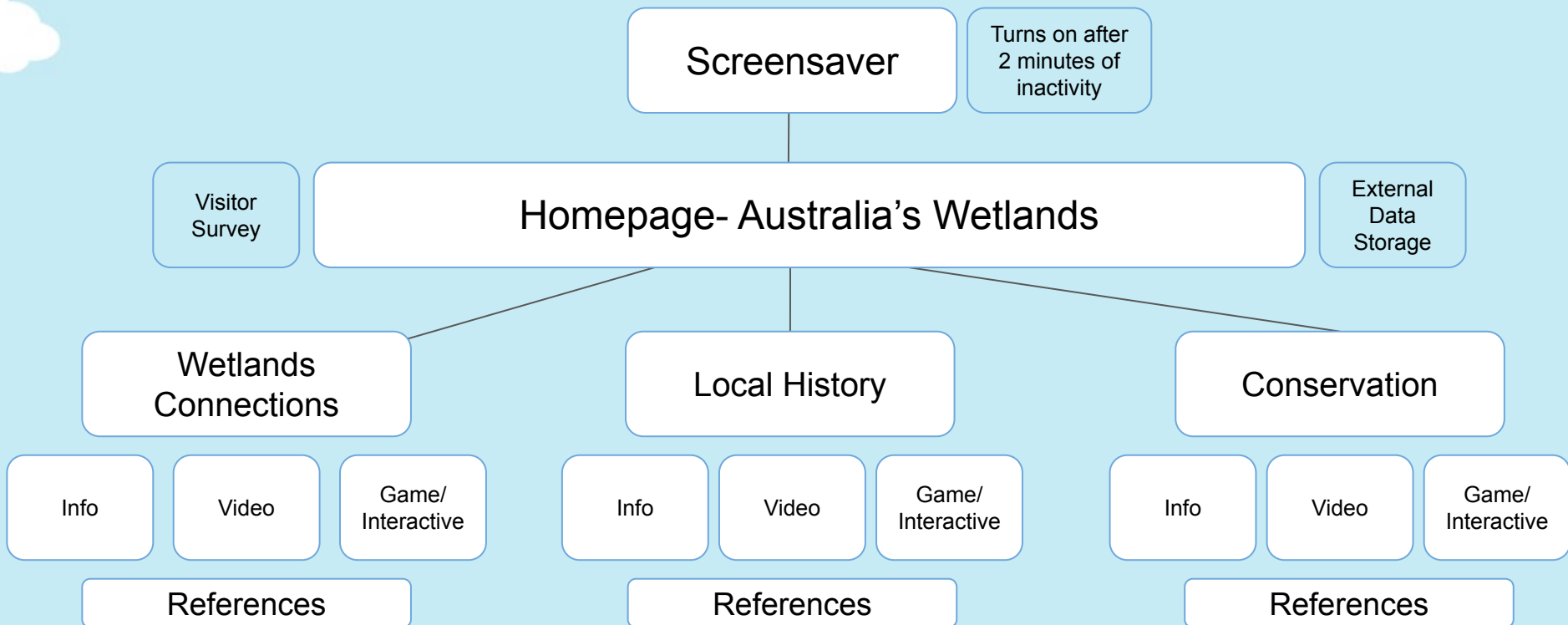Wetlands are areas of land where water covers the soil — all year or just at certain times of the year.

Wetlands may be natural or artificial and the water within a wetland may be static or flowing, fresh, brackish or saline. There are even underground wetlands.

LEARN MORE

Kiosk Layout/Navigation

The Aquarium at Cairns

Screensaver — Turns on after 2 minutes of inactivity

Visitor Survey

Homepage- Australia's Wetlands

External Data Storage

Wetlands Connections
- Info
- Video
- Game/Interactive
- References

Local History
- Info
- Video
- Game/Interactive
- References

Conservation
- Info
- Video
- Game/Interactive
- References

References

The Aquarium at Cairns

https://www.dcceew.gov.au/water/wetlands/about

https://www.cairnsaquarium.com.au/