



Leveling the Playing Field: Empowering First-Generation Students through a Community-Inspired Game

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Problem Statement

Students from underserved groups face additional challenges during the college admission process, particularly with the lack of agency and support.



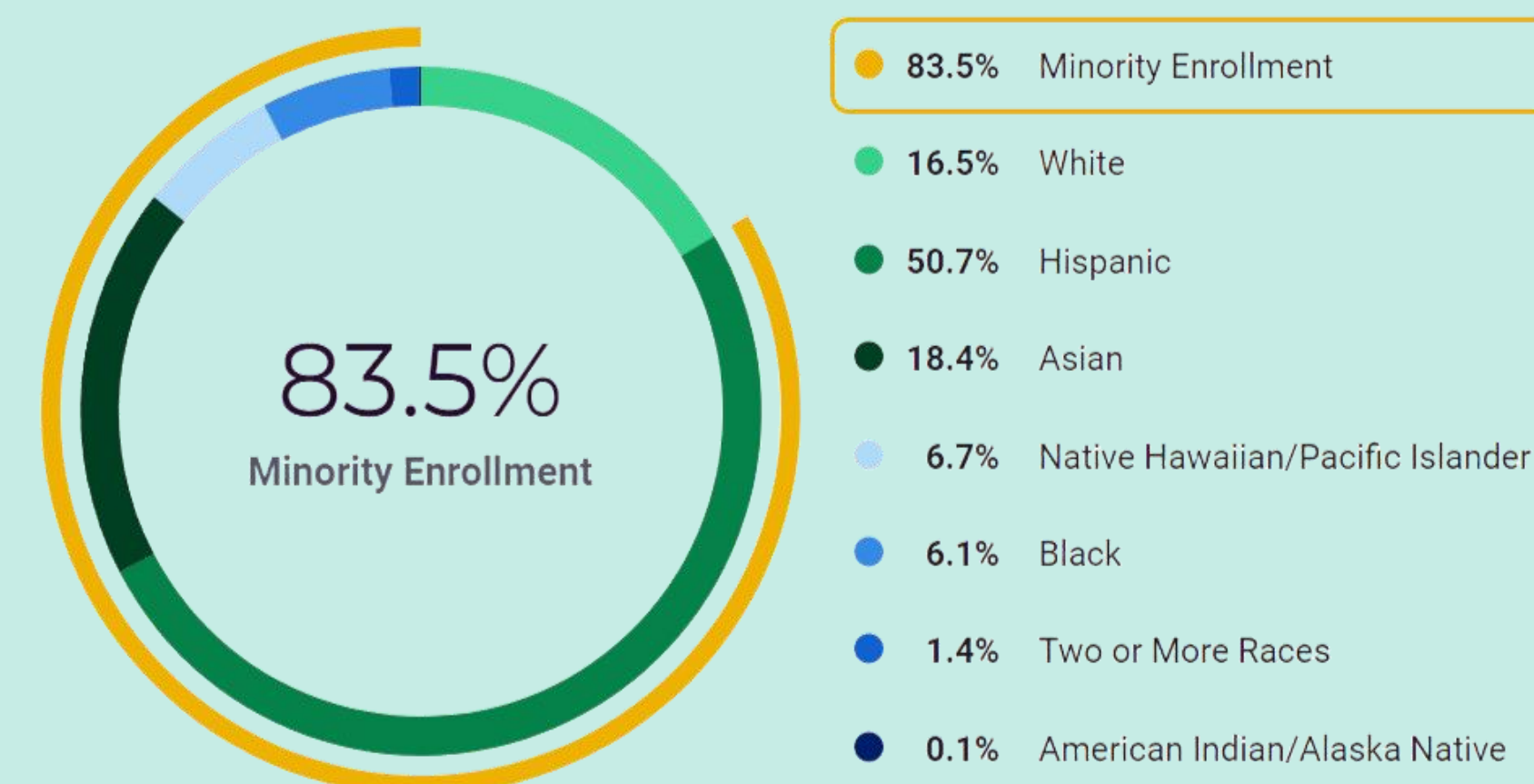
Youth need learning experiences to assist in the transition from secondary education to college.

Gaming serves as a potential avenue to facilitate discussion due to its engaging nature.

Guiding question:

How might we develop a game that uses storytelling to foster critical conversations about post-secondary plans?

Student Body Composition



Storm Lake High School student body is made up of primarily underrepresented students. ¹

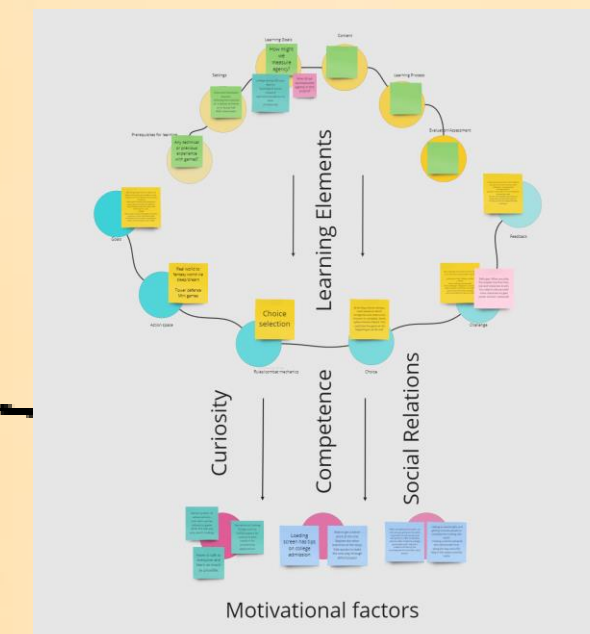
Literature Review



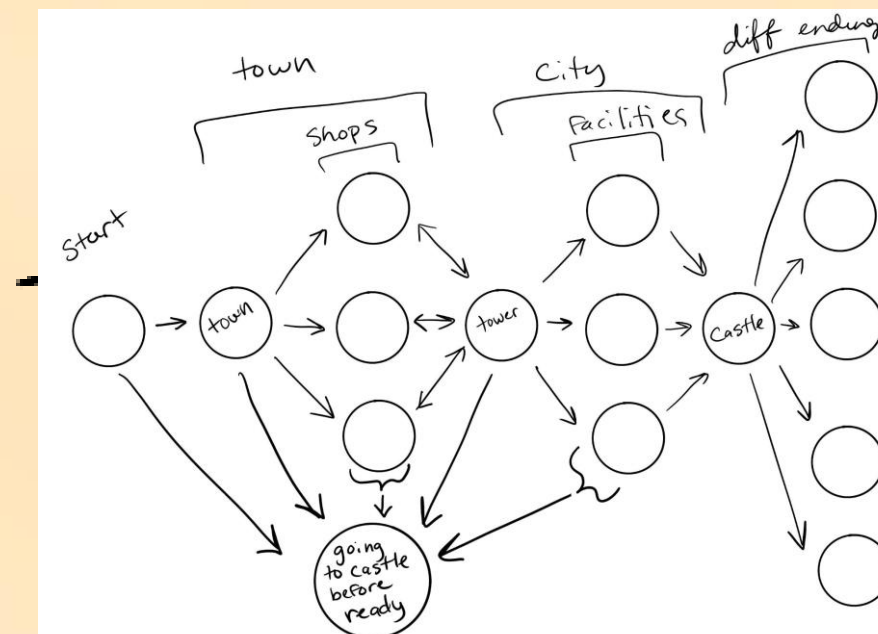
- One's ability to learn or respond to opportunities is influenced by their **social network**. ²
- The connection between a community and academia can be nurtured through the acknowledgement of their **cultural strengths**. ³
- Incorporating **design research** is beneficial for developing a game that is not only educational but motivating to use. ⁴

Game Design Journey Map

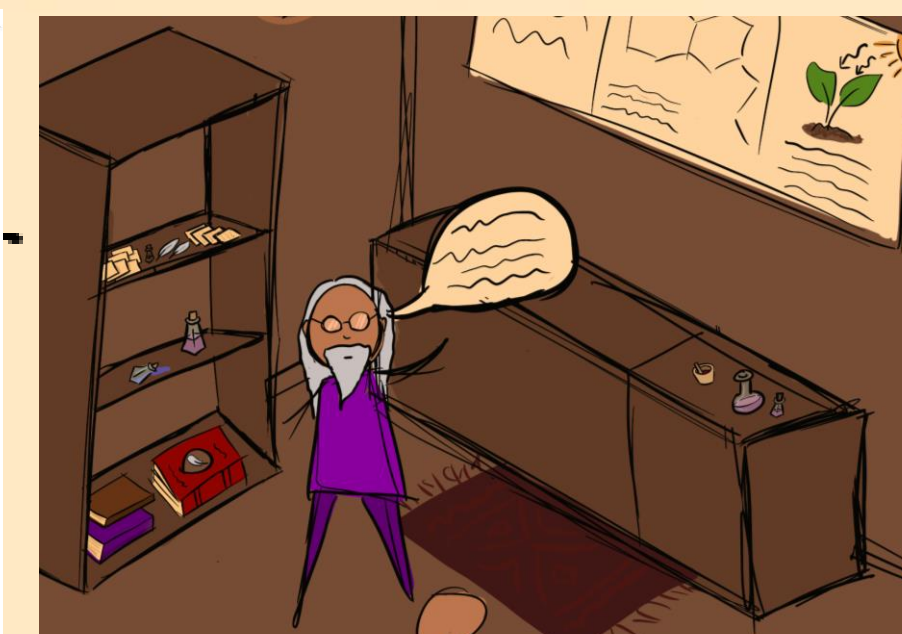
1. Concept Development
2. Game Wireframe and Storyboarding
3. Co-design with Storm Lake students



Game development exercise using Smiley-Model ⁴



Wireframe for prototype



One frame from the storyboard



Collaborative narrative design with prospective first-generation college students

4. Prototype Creation



Allegorical narrative with cybersecurity mini-games and action sequences

5. Pilot Testing



Storm Lake students playing through the prototype and storyboard activity

Results

In open-ended responses, participants appraised action scenes positively and noted curiosity about unraveling the storyline, suggesting engagement with these elements in the prototype.

Fears can serve as tools to motivate the narrative:

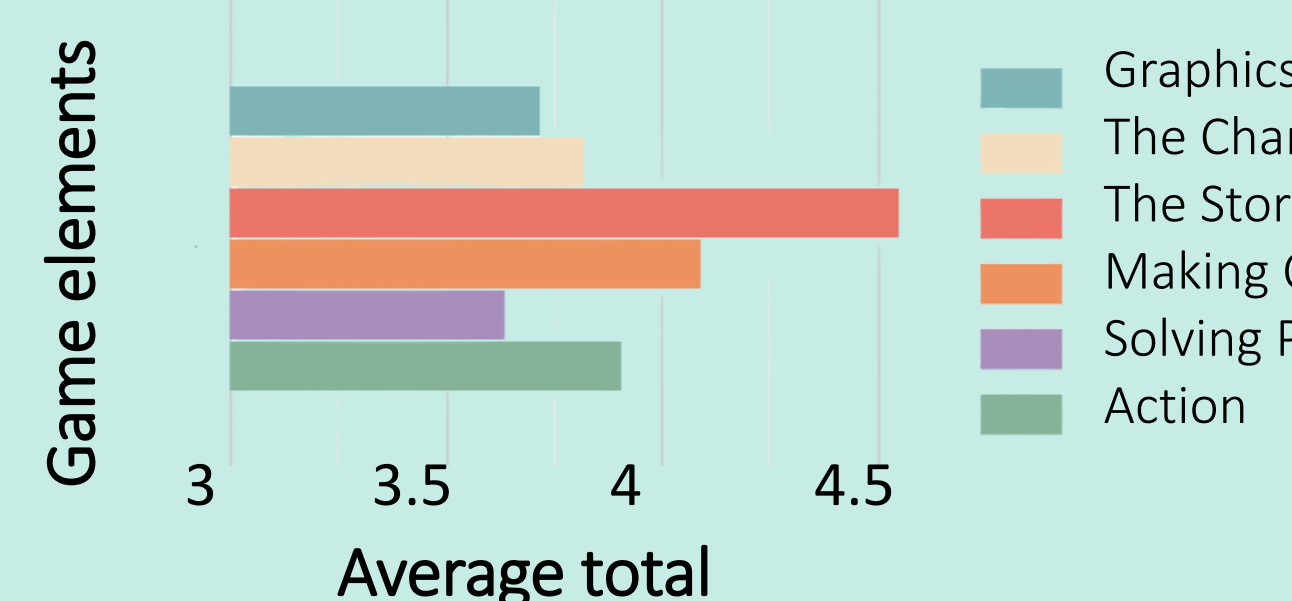
1. Financial Concerns
2. Guilt over Leaving Family
3. Fear of the Unknown
4. Internalization of External Fears

Conclusion

Utilizing storytelling, action, and fear-based elements in the game shows potential for fostering critical conversations about post-secondary plans through positive engagement and reflective experiences.

Data Analysis

How would you rank the importance of specific game elements?



Game elements were ranked on a scale of 1-5 and the answers were averaged.

"I'm just gonna get scared because... what if I'm not successful?"

"loved the choices for dialogue"

"I was really focused on the fighting sequences"

"I really like fighting and looking for things that could have helped me"

Fear of failure

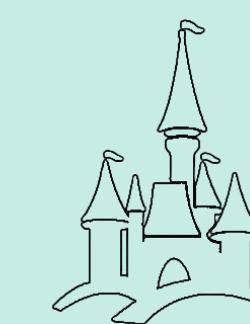
Storyline

Actions sequences

Fear as narrative tool

Engaging game elements

Data from focus groups and the survey were **open coded** based on similarity and then categorized into **themes**.



Future Work

- Further study implementing fear elements into the game narrative
- Designing a curriculum to incorporate teachable moments from the allegorical narrative
- Implement combat system into a 3D environment
- Develop a bilingual interface in English and Spanish

References:

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4. Weitze, c. & Orngreen, R. (2012). Concept Model For Designing Engaging And Motivating Games For Learning - The Smiley-Model.



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