



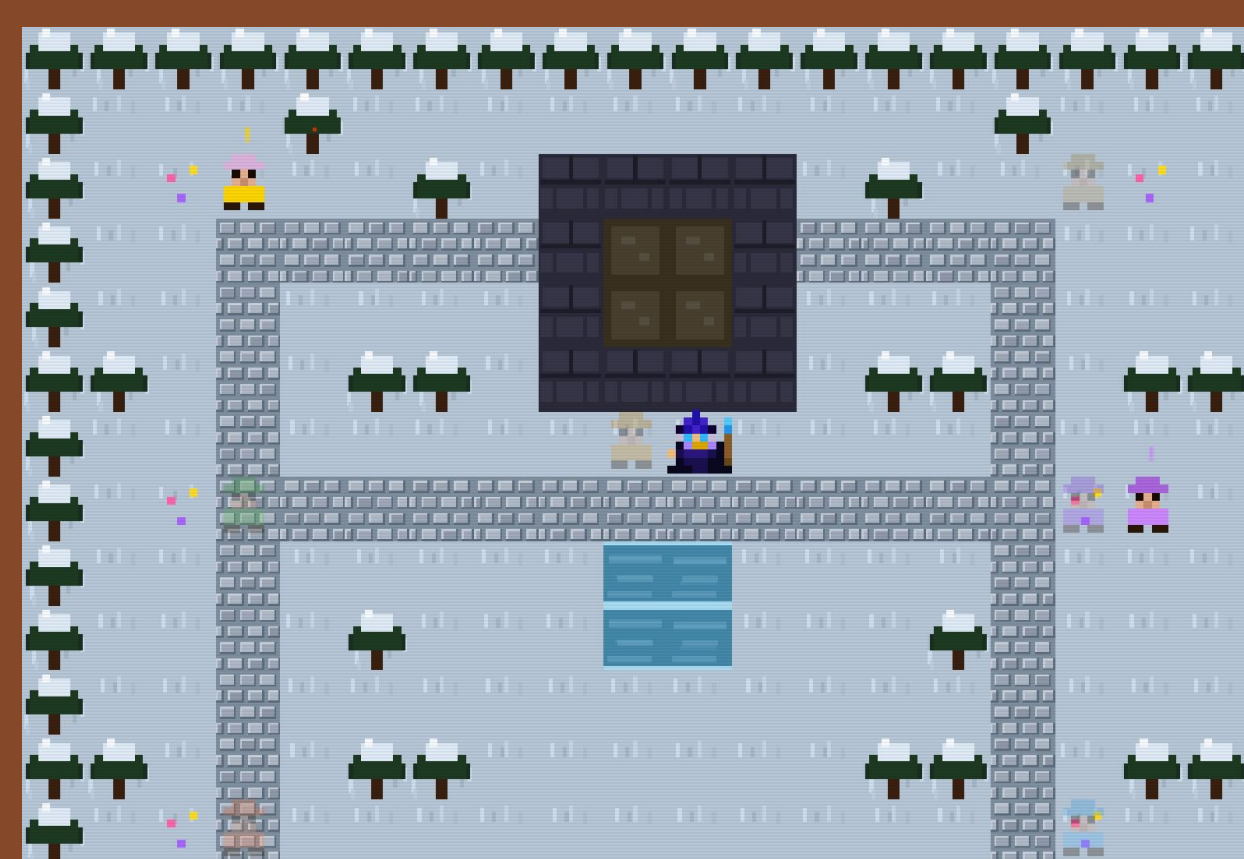
Can An Educational Game be Developed to Improve on Creative Writing Skills?

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INTRODUCTION

This Poster will show the steps in developing the game and the data collected from 4th and 5th grade playtesters. The game is RPG style similar to the original Mario brothers or Zelda Games. The students or players must design their world and complete writing challenges to develop their story. Their goal in this game is to design their novels while also developing their descriptive language and storytelling skills. This game is being developed because currently in the K-12 system is very dependent on teaching students only basic essay format of Intro-Body-Conclusion, and the developer wishes to add creative writing into the curriculum. The hope is that this game will improve on the skills of the students.



RESEARCH METHODOLOGY

Before being able to begin data collection permission slips needed to be sent out to the parents of the students to allow them to partake in the testing. The permission slip was sent out to the teachers and they graciously helped with distribution of them.

The data has been gathered in Three, one hour periods with 65 playtesters all within either fourth or fifth grade at my local elementary school. The students were tasked with completing a Pre-Gameplay survey, Completing as much of the game as they could, and completing a Post-Gameplay survey.

Some examples of questions that the students were asked are:

- "What changes would you make to the game?"
- "How many days a week do you play video games?"

DATA AND FINDINGS

100% Satisfaction Rate!

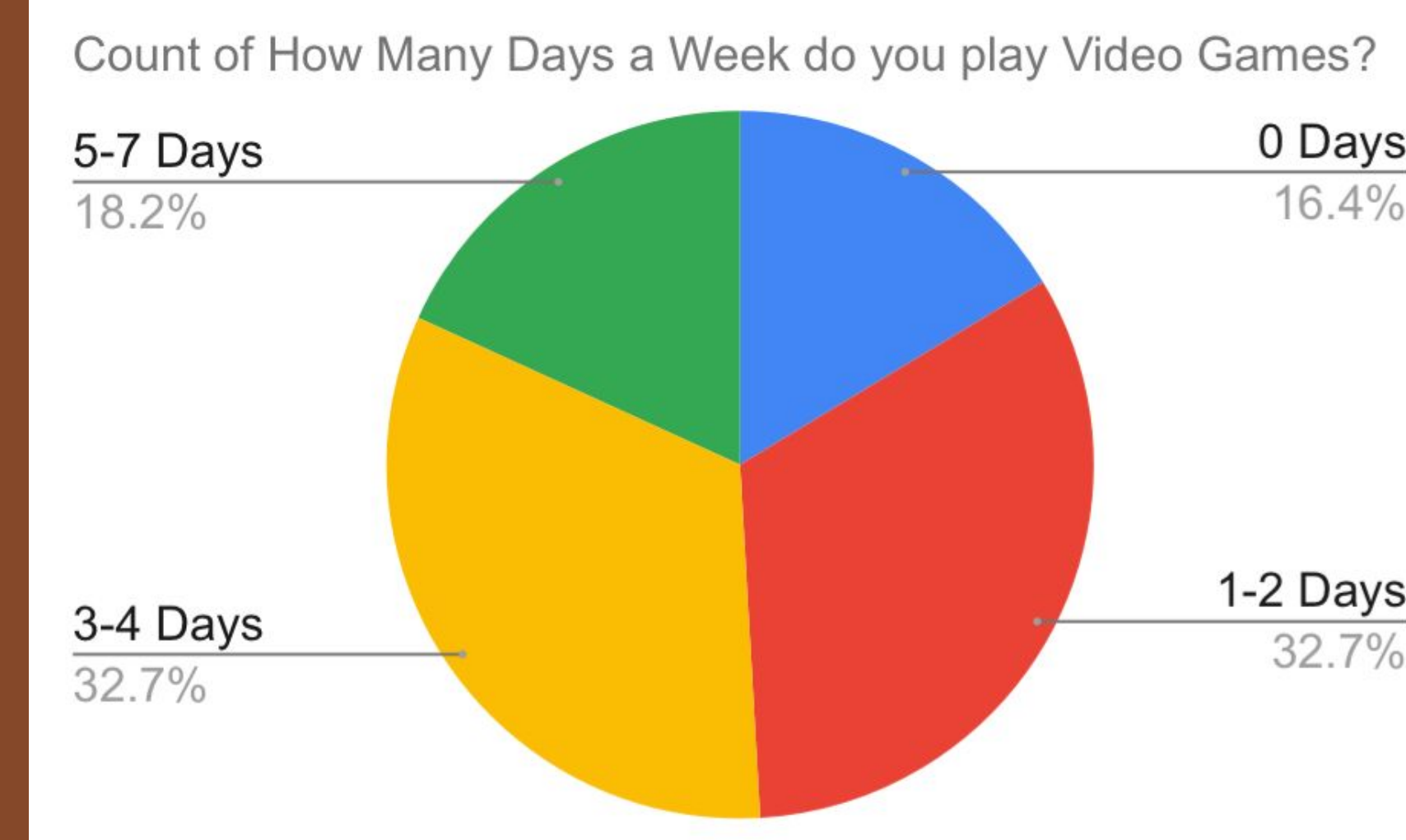


Figure 1 shows how many days a week each student spends playing video games providing some context for how they responded to the playtest.

ACKNOWLEDGEMENTS / REFERENCES

Special Thanks to Mr. Shen for guiding me through this project and special thanks to Lisi Harrison for being my mentor in the creative writing section of this project.

Thank you to all of the teachers; Mrs. Bynum, Mrs. Witt, and Mrs. Bammer, for taking time out of their busy schedules to allow their students to participate in these playtests.

PROJECT EXECUTION

This game was not coded in a conventional way. This game was Vibe coded meaning it was developed using AI bots to develop most of the code. Even though AI is developing the code itself, The developer has designed all of the writing aspects and gameplay concepts. Over the span of one month with about one and one half hours used per day, Claude Code was used to develop and create every aspect of the game including the graphics.

The graphics are being run through PixiJS, which Claude is connected to. Currently they are graphics that Claude generated, but in the future they will be more sophisticated with either free templates from the internet or will be drawn and animated by hand.

QR-code to Game Design Document



Responses vs. Suggestions

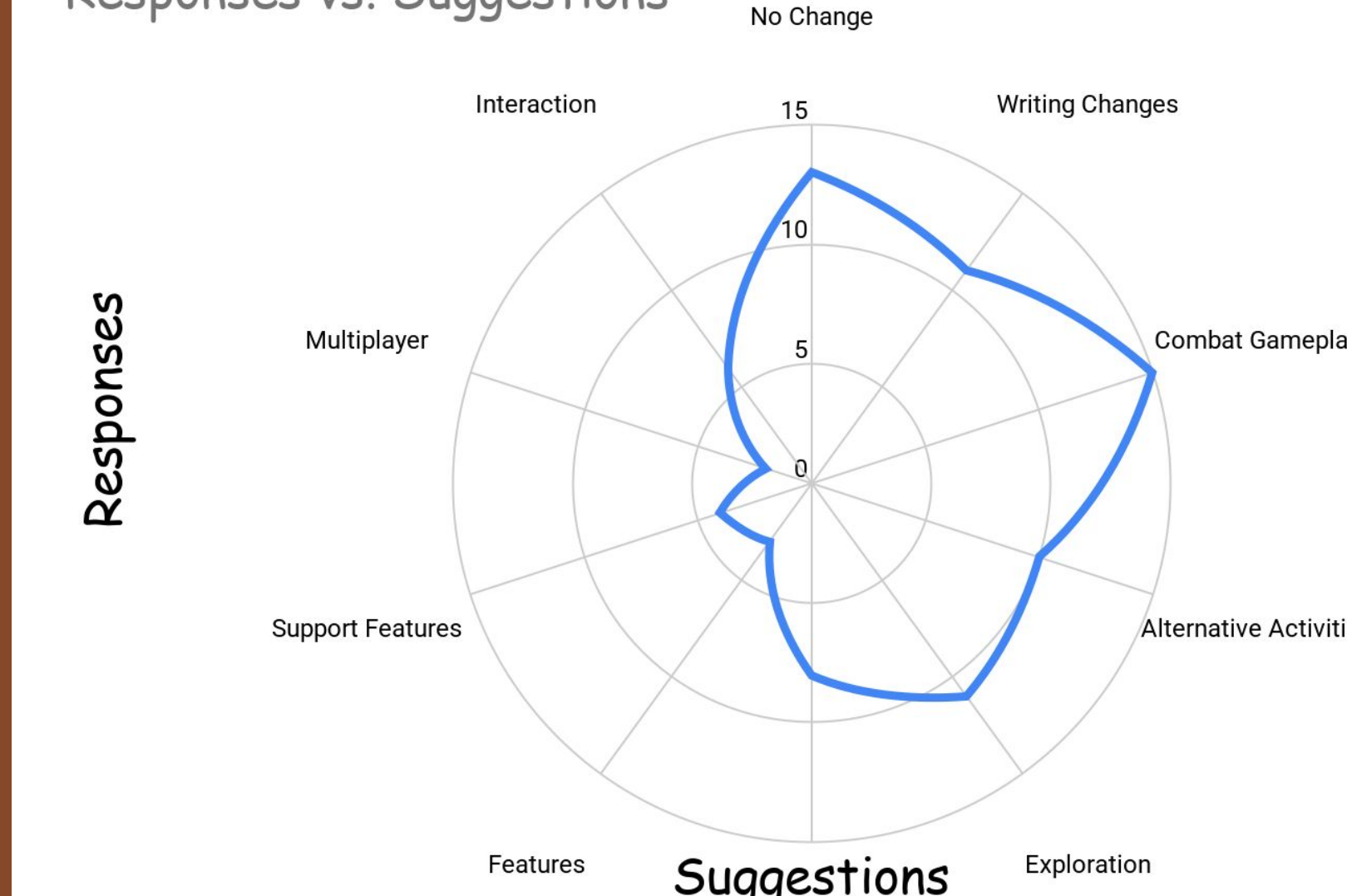


Figure 2 counts the suggestions that each student had about changes that could be made to the game in order to make it more enjoyable or if they liked it as is and did not want anymore changes.

A change that many students requested either in person or on the survey was the addition of voice to text to the writing challenges.

CONCLUSIONS, IMPLICATIONS, AND NEXT STEPS

The collected Data supports the research question in the fact that an educational game can be developed to improve creative writing skills.

The main drawback of this experiment and project is mostly the timeline. It cannot be fully gathered if the game works because it would take more than one year of consistent testing to see if student's writing skills truly do improve.

The next steps in this project are to continue development of Storyscape and turn it into a profitable business later in the future, as well as, testing it more and more.

QR-Code to Full Paper:

