Elpy's Day

2nd Grade

Elpy is turning off the light.

Background / Overview:

I have a favorite stuffed animal that goes with me almost everywhere. She's a 3-inch tall panda named Elpy (L.P., which stands for Little Panda). My brother and I make up all kinds of stories about her adventures. I've even made clothes for her (most of them are Barbie clothes that have been cut to fit!). For science fair this year, I did a project that involves Elpy. I made scenes about Elpy's day using Scratch, Jr.

Asking Questions & Defining Problems:

In this project, I am trying to make a coding program of Elpy's day. This will help me learn more about coding and programming since I'm interested in it. I could use what I learn in this project to help my classmates the next time we use Scratch Jr. and to explore other coding programs.

I need to use a program that lets me make my own character, because it has to be based on Elpy. Scratch Jr. is perfect because it lets you draw your own character. But, Scratch Jr. may not have all of the tools and options I need to do what's in my head for Elpy's day. In that case, I'll have to be creative and adjust.

My goal is to make at least 5 scenes in the program that show the parts of Elpy's day.

Research:

Earlier this school year, my class learned a little bit about Scratch Jr. That's what got me interested in coding. When science fair came up, I knew I wanted to do a project on coding. And since Elpy is my favorite, it was easy to decide what to do a coding project on!

Before I started this project, I met with my technology teacher so he could show me some ideas about how to build your own character, choose a background, and create directions for your character.

Coding is really important. The more I learn about coding, I could one day make a game or program that nobody has ever thought of. It could be just for fun or it could be a serious program. This project is helping me know more about coding.
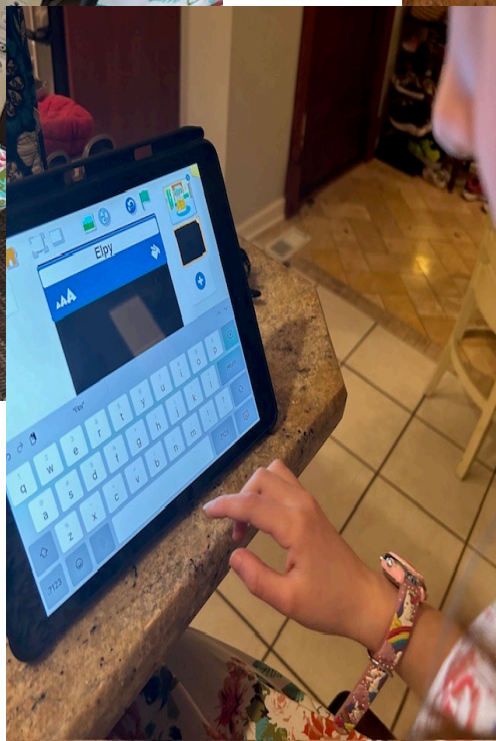
Imagine:

When I first had the idea for science fair this year, I knew I wanted to do coding and to make something about Elpy. At first I wanted to make a program that would choose an outfit for her. I talked with my technology teacher about it, and he showed me a coding program to use for my project. I knew a little bit about it when I first started and learned a lot more by the end of the project. I changed my project to be about Elpy's day when I realized you could make different scenes in the program. There are probably other programs I could use to do something like this, and maybe one day I'll try some of the other ones too.

Plan:

1. Use the tools in Scratch Jr. to create an Elpy character
2. Use the tools in Scratch Jr. to create backgrounds for different parts of Elpy's day
3. Use the tools in Scratch Jr. to animate Elpy and make her do certain sets of movements for her day
4. Explore tools in Scratch Jr. that I haven't been shown before to stretch my learning of the app and of coding

Create:

Here are some pictures of me making the Elpy's Day scenes. It didn't take me as long to create the ideas I had in my head for her day, because I got faster the more I used Scratch Jr. I got used to how all the buttons worked and knew them better than when I first started. It was really hard to stop working each day, I wanted to keep coding forever!
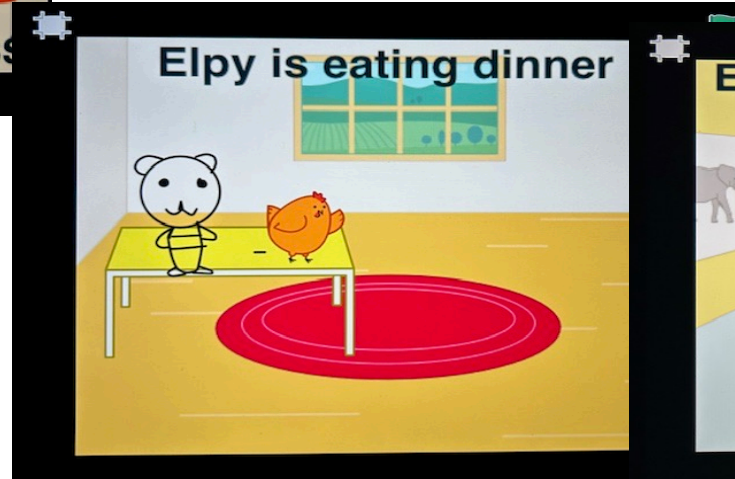
Create (continued):

Here are the scenes from Elpy's Day

Create (continued):

Elpy is going to play class

Elpy is at play class.

Elpy is eating dinner

Elpy is turning off the light.

Testing, Evaluating & Redesigning:

When I was trying to draw Elpy, I had to keep drawing her over and over again before I got it to look right. The first time I didn't even know where the erase button was and learned that there was an "undo" button instead. I used this a lot!

My process for each scene was to create the whole animation for Elpy, run it from the beginning, and then see where she was doing the wrong move. Then I had to go back and fix the command that wasn't right.

I created the scenes out of order. If I had more time to work on this project, I would put the scenes in order. I'm not sure how to do that and would need to play around in Scratch Jr. a little more to figure it out.

Safety Plan:

To stay safe during this project:
- My mom and dad supervised me while I worked on this project.
- I was not allowed to use the iPad for anything other than Scratch Jr. unless my mom and dad helped (for example, using the Internet to research how to use the tools in Scratch Jr.)

My signed safety form is in the logbook.