

Your Name: Annie Dean

Class Level: EDUC 240

Date: January 18, 2019

Grade Level/Subject: 3rd grade Technology

List of Materials/Resources: Code Hopper, Code Mouse (and batteries), Computers/iPad.

Central Focus:

The purpose of this lesson is for students to leave with a better understanding of the basics of coding. The students will learn coding is a step-by-step process. This lesson will also prompt students to ask higher level questions about technology.

Measurable Learning Objectives/Goals:

Students will demonstrate coding with 90% accuracy. The Students will answer questions through collaborative conversation with 85% accuracy.

Ohio Learning Standards:

SL.3.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacherled) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly.

1. Creativity and innovation

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.

Instructional Activities/Methods:

Start off by greeting the students. We will reintroduce ourselves and then begin the lesson. Start by reviewing what coding is and what they did yesterday. "Can anyone tell me what coding is?" *wait for responses and correct as needed* can anyone tell me what Code Mouse is? *wait for responses* Can anyone tell me what Dance Party is? So today if you did Code Mouse yesterday you will be doing Dance party today. If you did dance party yesterday today you will be doing Code Mouse. But first I wanna show you guys something. Ask students step-by-step how to toast bread. Write their steps up on the board. Then explain how toasting bread seems pretty easy but it is actually really complex if you look closer at it. *pull up the slide about with the algorithm and steps. Then explain how coding is just like a piece of bread. But by the time the coding is finished you have a yummy piece of toast. Then ask in what ways the directions are similar and are different. *wait for student responses* then transition to the activities. If you are doing Code Mouse today please go to the back of the classroom. If you are doing dance party stay where you are. Once you know what group you are in you can move to your group leaders quietly and walking for further instruction. *students leave to go to their group* *Rikki and Liegha will explain to their group what dance party is and how it works. Dance party is a game where you can choose your character, song, and how long they will dance. This has step-by-step instructions on how to do so.* *I will address my group on this next activity.* Okay, are you all are you reading to have some fun? *wait for some form of response* Great! Today

we are doing an activity called Code Mouse. Has anyone ever played with this game before? *wait for responses* We are just going to go over how everything works before you guys get started. I will be explaining and Mrs. Hensee will be demonstrating for you all. On the mouse, Colby, he has buttons for him to move forward, rotate right, reverse, rotate left, action and clear. *Deanna demonstrates*. There are activity cards that have a picture of different mazes for Colby to go through. *Deanna holds them up*. Once you pick a maze you will build it. You will be in small groups so it is important to work together as a team. You then will use the coding cards to create a step-by-step path for Colby to find the cheese *Deanna holds up the coding cards*. Once you finish with the coding cards, turn Colby on. Once he is on, remember yellow is your clear button and green is your start button. The cards are color coated to match the buttons on the mouse. You will click the buttons that match the coding sequence you previously made. After you finish programming Colby, place him on the start of your track, press the green button and watch him go. Anyone have any questions? *wait for responses* Mrs. Hensee and I will come and pair you up with a partner and as soon as we give you your Code Mouse you can begin. *begin to hand out the Code Mouse to the students* *as the students begin working ask questions on what they are doing and how they are doing it. This will help assess their knowledge.* The students will play the game how ever long time will allow. When there is roughly 7 minutes left in the class have the students pack up their Code Mouse. "Okay everyone, great job on this activity! Wasn't it fun?! wait for responses* Now what I would like for you all to do is pack up your Code Mouse and once you pack it back up, me and Mrs. Hensee will split you guys up and discuss this activity". " *Listen for what they discuss. Ask "do you think you have a better understanding of what coding is? Tell me one thing you learned? *This should take them to the end of the period." Once the bell rings say, "You all did so well! Have a great rest of your day!"

Connection to Prior Knowledge:

Students understand that technology has some form of coding.

Vocabulary/Academic Language:

Vocabulary:

Coding
Technology
Code Hopper
Code Mouse
The Foos

Academic Language:

Applying
Understanding
Remember

Assessments: Formative

Before: Questioning. What is coding? Have you heard of/ played Code Hopper? Have you heard of/ played code mouse? Have you heard of/played The foos?

During: Questioning. How did you do that? What does these buttons do? Can you explain to me what you are doing?

After: Questioning. What's one thing you learned? Do you have a better understanding of coding? What is coding? How could you use this outside of this room?

Special Needs of Students: Differentiation

Enrichment: Harder challenge cards for code mouse.

Intervention: Additional one-on-one help as needed.

Reflection:

- 1.) The students were very eager and stayed engaged the whole time throughout this lessons and activities. By the end of this lesson their language grew and they used words such as, "coding" and "algorithm". This lesson was appropriate because they were able to play and learn at the same time.
- 2.) This lesson went well. This time for Code Mouse there were more boys who wanted to play with the set by themselves and struggled sharing at first. But after I explained they will each get a turn they began to work together and everything went smoothly. Everyone else seemed to work well together and stayed engaged and interested the whole time.
- 3.) If I could teach this lesson again, I think I may have made the introduction a little shorter to allow them more time to play with the activities. Some students mentioned how they wanted more time to work with their activity.
- 4.) The students learned what I wanted them to learn because, at the end of the lesson, I asked each student what was one thing they learned, and if they could tell me a definition of coding. Every student was able to do so.