Your Name: Annie Dean   **Class Level:** EDUC 240
Date: January 18, 2019
Grade Level/Subject: 2nd 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.2.3 Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.
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 students. We will introduce ourselves again and maybe a quick fun fact. Then begin reviewing what we learned yesterday and ask the students questions. "Who can tell me what code mouse does? *wait for responses* "who can tell me what the foos is?" "do you guys know what? I forgot to brush my teeth this morning. I am going to grab my toothbrush and toothpaste and i may need your help with some of the steps. Will you guys help me?" *wait for response* They should tell you to take the lid off the toothpaste, squeeze the toothpaste onto the brush bristles, then wet the toothbrush and brush your teeth. Be very specific and as the students tell you what steps be very literal. If they say put toothpaste on the toothbrush then put the whole tube on the brush. And repeat steps like that until they give you the correct directions. Then explain how they were coding me with directions on how to brush my teeth."now we are going to split up into two groups to do more fun activities with coding!" If you did not play with Code Mouse yesterday you will be today. So if you are going to be with Code Mouse please go to the back of the classroom. *meet them in the back of the classroom* Okay, are you all are you ready 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 maize 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 5 minutes left in the class have the students pack up their Code Mouse. 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.