matatalab

Matatalab Edu Activity/Lesson Plan:

Contributor: Sarah Pryor

Classroom Key Information

Content-Related:

Computer Science ☐ Math ☑ Art ☐ Music ☐ Science ☐

ELA ☐ Social Study ☐ Other: French As A Second Language (=French Immersion)

Time: 2 x 60 minutes Student Age: K-2nd Grades

Complexity: ⭐☐ ⭐⭐☑ ⭐⭐⭐☐ ⭐⭐⭐⭐☐ ⭐⭐⭐⭐⭐☐

(⭐ stands for the easiest)

Activity/Lesson Key Information

Project Name: Code a story: Le monde de Vert Ver

Big Idea: Students will learn how to write a story then plan how to code their story and recite it simultaneoulsy as their program runs.

Concepts: To create an authentic interaction with the Matatabot, students will write a simple story in French. Then, by adding a costume to the Matatabot and a few details (name of the setting in the story, for example) to the playing board, students create the code for the character to follow as they recite their story while the code runs.

Main Objectives:

- Students will understand what needs to be included when writing a story. Students will plan how to match their writing to a string of code. Students will run the code while reciting their story.

Learning Outcomes:

- Students will be able to recite a story in their second language. Students will be able to design the code for the Matatabot and have their recitation coincide with the movement.

Key Vocabulary:

- All directional instructions like: droite ('right'), gauche ('left'), en haut ('up'), en bas ('down'), and tourne ('turn').

Prior Knowledge:

- All directional instructions like: droite ('right'), gauche ('left'), en haut ('up'), en bas ('down'), and tourne ('turn').

Standards(ISTE, CSTA, CCSS, NGSS, etc.):

ISTE: 1c Students use technology to demonstrate their learning; 1d Students understand the fundamental use of technology and are able to transfer their understanding to emerging technologies; 6d Students publish or present content that customizes the medium for their intended audiences.

Matatalab Products & Supplementary Materials

Coding Set ☑   Music Add-On☐   Artist Add-On☐   Pro Set☐
Animation Add-On☐   Sensor Add-On☐   Lite☐   MATATA Map☐

Supplementary Materials

Students will need somewhere to write their story (we used a notebook and a pencil), some sticky notes for the students to write the title of their story when they are presenting, a whiteboard marker to write on the gameboard, construction paper, scissors and tape to create any costume/props.

Detailed Activity/Lesson Plans

Matatalab Edu classic lesson

	Instructions step by step	Time
Lead in & Guided Activity	What needs be included when writing a story? As a class, teachers can say and write this question for all to see. Teacher writes down student ideas like: a title, one or more characters, one or more settings and a story needs a beginning, middle and end. Suggest to students that spending a few minutes to plan a story is a good idea. Say that some people like to start with writing the title of the story and others prefer to start with the character or the plotline. For this activity, the story is very short, as in, one to four sentences (if we can learn more complex coding later, we can create longer stories then). We agreed to all use the same character for our stories.	10 minutes
Independent Activity	Students will work independently to come up with a title and begin to write their story. Remind them that the story can be very short, like 1-4 sentences. Teacher will circulate to provide feedback and ask the students to practice reading their story out loud once it has taken shape. Every student will then come to the gameboard to place their title on the bottom right corner then decide where the Matatabot (for our example we all used Vert Ver -- which is French for the Green Worm) will start and finish. Then the student can start to place coding blocks in a sequence that will work. Many students realized at this point that they needed to go back to their chair and work again at their plan for making the coding work while they recite their story. The teacher will remind the students that the learning process involves practice, communicating and debugging/fixing what is not working right initially.The teacher will record each story and this takes a lot of patience and time for everyone; students need to use a big clear voice when speaking so the audience will understand what they are seeing in the recording.	80 minutes
Feedback & Extension	Students were, overall, very proud of their results: one student said, "I have never written a story in French and I have never coded before either." Others needed a lot of encourage-ment and reminders to use a growth mindset where making mistakes (like the Matatabot rolling off the gameboard!) goes hand in hand with finding solutions and making a working final product. Feedback, therefore, was ongoing at every step of this project.	30 minutes

Essential Questions:

- Given the limited number of coding pieces that we know and understand, how can you write just the right amount of a story so that it matches the movement of the Matatabot?