LESSON PLAN

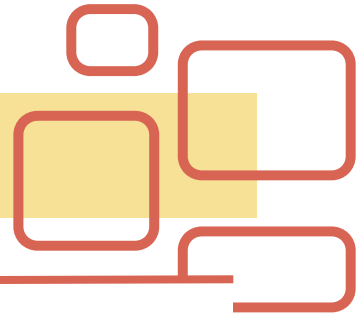**STEAMERs**

Let's create the story of the seasons
How to design our first graphic adventure with the App ScratchJr?

Summary

Date	xxx	Total duration	3-4 heures
Subject	ScratchJr is a programming language for children ages from five. The kids will create their own interactive animated story. The story will describe the seasons.		
Year Group or Grade Level	From 5 years old		
Main topic	Students will make their first graphic story of the seasons of the year. They will use the free application "Scratch Jr".		
Subtopics or Key concepts	• Definition of graphic animated story • Develop an algorithmic using ScratchJr blocks	• Learning to use Scratch Jr.	

Learning Objectives

- Customize the characters
- Record sounds and add them to projects
- Implement different backgrounds

- Combine different motion blocks into programmed sequences
- To think creatively.
- To work collaboratively.

Material needed

- One tablet per group. With the Scratch Jr. application downloaded and installed.

- ScratchJr Interface Guide

Lesson Outline

	Duration	Guide	Remarks
warm-up	15 minutes	We begin the activity by asking the students "How many ways are there to tell a story?" The idea is that students can detect that there are many ways to tell a story, some more traditional and others more modern.	For example, the teacher provide several examples. A theater, an animated movie, a video game, an audiobook, mime etc.".
	15-20 minutes	Remind the students that we need a "Program" to create the history. We will use a special language based on function blocks.	The teacher can encourage the class by asking: Can we communicate with the tablet using the same language as we talk to each other? Why not? How can we communicate with machines? How is it called this " way of communicating" with machines?
	10 minutes	Review the seasons of the year. Their evolution and the characteristics of each one.	
main activity	10 minutes	Explain the students that we are going to tell the story of the seasons of the year in an interactive way. Using the "Scratch Jr" application	Point out to the students that we are going to see an example of a story. Each group can create their own story using their imagination and the tools provided by the application.

Lesson Outline

	Duration	Guide	Remarks
main activity	10 minutes	Guided Activities: 1. Divide the class into groups of two to three students and give them one tablet per team. 2. Getting Started with ScratchJr. The teacher show them how to begin a new project in ScratchJr.	Scratch Jr application cannot be installed on computers
	15-20 minutes	Guided Activities: 3. Introduction to movement blocks. Everyone in the class should watch the teacher as she/he moves a motion block (right, left, up, down) to the scripting area and presses the block to make the Scratch cat move. The children should duplicate the shown task.	Let the students make their own example using the four movement blocks. Review the project once finished.
	10-15 minutes	Guided Activities: 4. Introduction to Start/End block. Add the blocks Start and End to the sequence. The story will begin when the green flag is pressed	Let the students add the new blocks to their program.
	10-15 minutes	Guided Activities: 5. Demonstrate to children how to choose a new character from the character library.	It is recommended that each student insert, and program his or her own character.

	Duration	Guide	Remarks
main activity	10-20 minutes	Guided Activities: 6. Show how to customize a character by adding a photo of our face.	Encourage each member of the group to personalize their character with their own photo
	10-15 minutes	Guided Activities: 7. Explain how to chose/change the backgrounds, to give the story more dynamism.	The idea is to use the backgrounds to simulate the seasons of the year. The teacher can introduce the theme asking : Which of the backgrounds can represent the Winter? and the Spring? ....
	20-30 minutes	Guided Activities: 8. Encourage each group to program their own story using the tools learned Present the project to the rest of the class, explaining which blocks they had used to create their collage, and what is shown on the screen.	It is recommended to take advantage of this exercise to reinforce the concepts to the students who need more support .
	10-15 minutes	Guided Activities: 9.Explain to students how to record their own voice and add it to the story. Implement this new function in their project.	Students will need the new function to create the "Story of the Seasons".

Lesson Outline

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	Duration	**Guide**	**Remarks**
main activity	5-10 minutes	<u>Guided Activities:</u> **10a**. Explain to the students that we are going to make a new project from scratch applying all the learned functions: "The History of the Seasons".(1) It is a free project (each group can tell the story as they wish). The following topics have to be included in the story: - The project must start with the green flag. - There must be at least one character (there can be more) that moves and talks (voice recorder). - There must be at least four backgrounds representing the four seasons of the year (2).	(1) If the teacher considers it convenient, he/she can take advantage of the opportunity to review the functions. (2) The teacher can propose the followings optional backgrounds: Winter Spring Autumn Sumer
	20-30 minutes	<u>Guided Activities:</u> **10b**. The teacher can give suggestions to those groups that are blocked.	For example: A character with the face of one of the students can introduce the seasons(voice-over) while changing the 4 backgrounds.
	20-30 minutes	<u>Guided Activities:</u> **10c**. Each group has to present the project to the rest of the class, explaining which functions they had used to create their collage, and what is shown on the screen.	The teacher should encourage the participation of all members of the group. To assess whether all students have participated and achieved the proposed objectives.

Assessment exercise

This assessment exercise can be carried out in groups, taking into account that all members must participate.

1. The student has been able to <u>work cooperatively in a group</u> to tell a history
- He/she has respected each other's opinion and suggestion
- He/she has took responsibility for their tasks
- He/she has actively participated during the lesson

2. All students should come up with <u>creative ideas</u> to create the story.

3. The story meets the established requirements. To do so, the students have had to use the <u>following functions</u>:
- Combine different motion blocks into programmed sequences
- Customize the characters
- Record sounds and add them to projects
- Implement different backgrounds

Conclusions and recommendations

- Before performing this lesson, it would be recommended to complete the previous lesson plan (Our first Computer Program)
- The idea of this lesson is to introduce students to the concept of programming through a funny application. So that they can program their own interactive stories and games

- The lesson can be extended by repeating the previous exercises and introducing more complex blocks.