Lesson 1: Instructions, Sequencing, and an Introduction to ScratchJr

Summary
In this lesson, children will be introduced to two concepts that will create a foundation for understanding programming: instructions and sequencing. Through various interactive activities, students will acquire a basic understanding of these two concepts. The lesson will conclude with an introduction to the ScratchJr interface.

Objectives *Students will learn...*	*Objectives* *Students will be able to...*
• Appropriate iPad use • The concept of programming • The concept of instructions • The concept of sequencing • The basic features of the ScratchJr interface	General • Give specific instructions • Sequence instructions to achieve simple objectives ScratchJr • Move blocks into the scripting area • Use blocks in scripting area as buttons • Select a block category • Save a project

Programming Blocks Introduced in this Lesson
• Right • Left • Up • Down • Bigger • Smaller • Visible • Invisible

Additional Materials: Rule board

Schedule

Introduction (2.5 minutes): The lesson should begin with the teacher introducing him/herself to the class. The teacher should explain why s/he would like to teach the students about programming. S/he should briefly ask students what they know about programming.

Simon Says (10 minutes): The teacher should play Simon Says with the class. S/he should discuss how this activity is dependent on properly being able to give and follow instructions. S/he should then explain how providing clear instructions is critical to computer programming.

Program the Teacher (15 minutes): In this activity, students will be responsible for verbally directing their teacher to special destinations in the classroom (e.g. to a bookcase or a closet). The instructions the students give to the teacher must be specific. For example, students should

not simply say, "Move forward." They should instead say, "Move forward _____ steps." When sequences of instructions do not work (perhaps because the number of steps taken were incorrect), students should alter their instructions. After the activity is over, the teacher should discuss how important it is to be specific and how important order is in programming.
2nd grade: Small groups determine a sequence of instructions
Kindergarten and 1st grade: As a class

Classroom Rules (5 minutes): The teacher should explain to students how important it is to respect each other and the equipment used in the classroom. With the students, s/he should create a list of classroom rules governing iPad use. The teacher should write these rules down on the rule board, and hang these rules in the classroom every time the class is working with ScratchJr.
Materials: Rule board

Getting Started with ScratchJr (2.5 minutes): The teacher should **hand out the iPads** to the children, and show them how to begin a new project in ScratchJr.

Using ScratchJr Blocks (10 minutes): Everyone in the class should watch the teacher as s/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 this task. The teacher should request that students raise their hands when they are finished with this task. Do this for each motion block. Do the same for the resize blocks (bigger and smaller) and visibility blocks.

ScratchJr Exploration (10 minutes): The teacher should encourage students to explore the application by placing blocks in the scripting area and seeing where the cat moves.

Wrap Up (5 minutes): The teacher should demonstrate how to save a project. Every child should save his project. The teacher should provide students with a brief explanation of what will occur during the next lesson. Collect iPads.