Kindergarten, Lesson 14 of 24

Coding as Another Language - ScratchJr (CAL-ScratchJr)

Tufts University | DEVTECH Research Group

Lesson 14: Find That Bug!

Lesson 14 Overview: In Lesson 14 children are introduced to the concept of debugging.

Powerful Ideas from Computer Science: Debugging, Design Process
Powerful Ideas from Literacy: Writing Process, Editing and Audience Awareness, Phonological Awareness, Alphabet and Letter-Sound Correspondence

I. Warm Up: Design Process Song

- Remind the children of the Design Process song and sing it again as a class!

II. Opening Tech Circle: Test & Improve, Debugging

- Show the design process chart again and remind children of the steps for making a ScratchJr Project: Ask, Imagine, Plan, Create, Test and Improve, Share! Today we will be learning about how to Test and Improve! Tell children that we need to test our programs to see if they follow our plan, and if they don't, we need to improve! • When programs don't follow the plan, we call that a BUG, and improving is called debugging.

III. Unplugged Time: Debug the Teacher

- Children give instructions to "program" the teacher to have the teacher do something. When children give instructions, they'll need to be very specific for the teacher to complete the program. If instructions are not clear, do it "wrong" based on instructions. Children will have to fix/edit/debug their instructions when they are wrong.

IV. ScratchJr Time: ScratchJr Problems

- Pull up your buggy project and explain to students what your plan was. Then show the students the project and point out a few things that aren't working like you wanted them to. Have children take turns raising their hand and debugging things in your projects.

V. Closing Tech Circle: Group Reflection

- Have children think about a time that they made something that didn't turn out like they planned! Have each child share their story and one thing they did, or would do, to improve/debug what they made!

Vocabulary:

Debugging

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