

Professional Development Discussion Topics (TPACK)

Technological Knowledge	Pedagogical Knowledge	Content Knowledge
ScratchJr (Grades K-2): <ul style="list-style-type: none"> Block types Adding sprites and backdrops Paint editor Record and trigger sounds Remixing the randomized synthesis project Creating new sprites Sharing and downloading projects Removing backdrop objects Color shading Remixing project files Negative parameters Transition overlay Switching costumes (simulating) Scratch (Grades 3+): <ul style="list-style-type: none"> Block types Adding Sprites and Backdrops Commenting Image editing Remixing Scratch studios Custom sounds Video overlay User controls Creating a variable Creating custom sprites and backdrops Pen Tools Block extensions Toggle Buttons Functions & modularity Variables (revisited) Duplicating Costumes Animating Sprites 	<ul style="list-style-type: none"> Lesson pacing Facilitating Questioning techniques Project extensions Vocabulary Resources Interdisciplinary connections Assessment Commenting Reflecting Remixing as differentiation (easy) Reverse engineering as differentiation (advanced) Sharing Reflection (ipsative) Feedback Collaborating around computing Storyboarding Synthesis projects Collaborating around computing Storyboarding Synthesis projects Learning through comments Predicting code -Reverse engineering (continued) Project choice Teacher as Facilitator (continued) 	<ul style="list-style-type: none"> Understanding block concepts Algorithmic sequences Loops/repeats Events/triggers Simulating sprite motion Debugging Parallelism Reverse Engineering Parameters Remixing Digital citizenship Computational thinking Messaging (functions) Conditionals Variables Storyboarding CSTA Standards CSK12 Framework Practices CSK12 Framework Concepts Learning through Comments Modularity (functions) Variables CSK12 Practices & Concepts

Themes	
Why teach coding? What does elementary coding look like? Project-based learning Assessment (e.g., formative, summative, and ipsative) Fostering an inclusive culture Communities of practice Integration examples Differentiation	Collaborating around computing Communicating about computing Reflection practices Concepts and practices from the K12 CS Framework State and local standards CSTA national CS standards Rhizomatic learning Applications of affinity space characteristics