

ScratchJr Curricula and Activities

Key: All Skill Levels, Beginner, Intermediate, Advanced

Title (with Link)	Skill Level*	Grade Level	Hours of Instruction	Goals/Aims	Final Project	Learning Domains	Frameworks and Standards Addressed
ScratchJr Activities	All	K-2nd	9 activities, 15 mins each	Step-by-step tutorials on various ScratchJr blocks and features	Open-ended prompts for future exploration	Computational Thinking/ Computer Science	K-12 Computer Science Framework (K-12 CS); Positive Technological Development (PTD)
Animated Genres	All	K-2nd	12 lessons, 1 hour each	The curriculum is divided into three modules based on three interactive genres of ScratchJr projects.	1 final project at the end of each of the 3 modules (Collage, Story, Game)	Language Arts; Communication and Media; Computational Thinking/ Computer Science Engineering	Common Core English Language Arts / Literacy Framework (Common Core ELA); National Core Arts Standards; PTD
Playground Games	All	K-2nd	8 lessons, 45 mins each	In this curriculum, students learn to design classic playground games in ScratchJr.	Create and program your own playground game	Physical Education; Computational Thinking/ Computer Science Engineering	PTD
Limudei Code-sh Project	All	K-3rd	3 curriculum units, 20 hours each	The units integrate coding, robotics, and computational thinking with Judaic Studies.	Open-ended projects that are connected to the Jewish holidays of Tu B'shevat, Chanukkah, and Pesach	Judaic Studies; Computational Thinking/ Computer Science	ISTE; K-12 CS; MA Digital Literacy in Computer Science Framework (MA DLCS); Common Core ELA; PTD
ScratchJr	Beginner	K-1st	3 lessons,	These lessons support	A digital	Visual and Media	National Core Arts

*Levels correspond with coding stages laid out in Bers, M. U. (2019). [Coding as another language: a pedagogical approach for teaching computer science in early childhood](#). *Journal of Computers in Education*, 6(4), 499-528.

Art Curriculum			30 mins each	students to create a traditional and a ScratchJr self-portrait.	self-portrait project with programmed story elements	Arts; Computational Thinking/ Computer Science	Standards; PTD
ScratchJr for Emergent Readers	Beginner	K	12 lessons, 1 hour each	This curriculum highlights connections between computer science and literacy using the well-known children's book <i>Knuffle Bunny</i> , by Mo Willems.	Create and program a story about yourself and your favorite stuffed animal	Literacy; Computational Thinking/ Computer Science	Common Core ELA; VA Computer Science Standards of Learning (VA SOL); PTD
Coding as Another Language- Kindergarten	Beginner	K	24 lessons, 45 min each	This curriculum highlights connections between computer science and literacy with mathematics integrated using two well-known children's books <i>Knuffle Bunny</i> , by Mo Willems, and <i>A Computer Called Katherine</i> , by Suzanne Slade.	Recreating the story from <i>Knuffle Bunny</i> , by Mo Willems and adding an alternative middle section of the story	Literacy; Mathematics; Computational Thinking/ Computer Science	K-12 CS; MA DLCS; Common Core ELA; PTD
Reinforcing Literacy & Math	Intermediate	1st	3 activities, 1 hour each	These projects reinforce foundational literacy and math awareness.	Animations of uppercase and lowercase letters and numbers	Literacy; Mathematics; Computational Thinking/ Computer Science	Common Core ELA; PTD
ScratchJr Scavenger Hunt	Intermediate	1st-2nd	1 activity, 2 hours	This activity encourages children to include off-screen elements in their ScratchJr games.	Create and program your own scavenger hunt	Socioemotional Learning; Computational Thinking/ Computer Science	PTD

ScratchJr for Readers	Intermediate	1st-2nd	12 lessons, 1 hour each	This curriculum highlights connections between computer science and literacy using the well-known children's book <i>Giraffes Can't Dance</i> , by Giles Andreae and Guy Parker-Rees.	Create a story and program a jungle dance party	Literacy; Computational Thinking/ Computer Science	Common Core ELA; VA SOL; PTD
Coding as Another Language- First Grade	Intermediate	1st	24 lessons, 45 minutes each	This curriculum highlights connections between computer science and literacy with mathematics integrated using two well-known children's books <i>Where the Wild Things Are</i> , by Maurice Sendak and <i>Ada Lovelace: Poet of Science</i> , by Diane Stanley.	Recreating the story from <i>Where the Wild Things Are</i> , by Maurice Sendak and adding an alternative ending to the story as well as a mystery character	Literacy; Mathematics; Computational Thinking/ Computer Science	K-12 CS; MA DLCS; Common Core; PTD
From ScratchJr to Scratch	Advanced	2nd+	2 activities, 1 hour each	These activities are for students who have mastered ScratchJr or are feeling restricted by it and wish to move on to learning Scratch.	Two original matching projects made in ScratchJr and Scratch	Computational Thinking/ Computer Science Engineering	K-12 CS; PTD
Multi-Tablet Project Guide	Advanced	2nd+	1 activity, 2 hours	This activity guide supports students who are ready to move on from individual projects to complex collaborative ones.	A single, cohesive project where elements of the project are spread across multiple tablets running	Socioemotional Learning; Computational Thinking/ Computer Science	PTD

					synchronously.		
Coding as Another Language - Second Grade	Advanced	2nd+	24 lessons, designed for a total of 18 hours	This curriculum highlights connections between computer science and literacy with mathematics integrated using two well-known children's books <i>Grace Hopper: Queen of Computer Code</i> by Laurie Wallmark and <i>Stellaluna</i> by Janell Cannon.	Recreating the story from <i>Stellaluna</i> by Janell Cannon and adding an alternative ending to the story as well as a mystery character	Literacy; Mathematics; Computational Thinking/ Computer Science	K-12 CS; MA DLCS; Common Core; PTD