

Constructing Modern Knowledge Construction Materials

Software	Grades	O/S	Function
Tech4Learning Suite www.tech4learning.com			
Frames 4	1-12	Win/Mac/ Linux	Object-based animation, stop-motion, claymation with many features and export options.
ImageBlender	1-12	Win/Mac	Image creation and editing tool with many special effects, layers, and tutorials.
Pixie	PK-6	Win/Mac/ Linux	Paint, text and audio tools allow young students to create multimedia.
Share	All	Win/Mac/ Linux	Create & collaborate with interactive projects with animations, graphics, videos and more. Make web pages, PDFs, Flash animations or a presentation
Twist	6-12	Win/Mac	Vector illustration - vector graphics scale to any size.
Fablevision - Animationish www.fablevision.com	4-8	Win/Mac	Paint-based animation tools with multiple exporting formats. Three levels of animation tutorials. Lessons are online.
Generation YES - TechYES Mini-kit www.genyes.com	6-9	Online	Project-based student technology literacy certification program. Curriculum, classroom resources, project tools, and assessment tools.
LCSI - Microworlds EX Robotics www.microworlds.com	4-12	Win/Mac	Multimedia authoring environment and Logo-based programming language for robotics, animation, simulations, interactive stories, games. Viewed on web via browser plugin.
LCSI - Transform www.microworlds.com	Teachers	Win/Mac/ Linux	Create educational activities and games for students online or off. A version of Logo similar to MicroWorlds may be used underneath Java-based projects.
Inspiration - InspireData www.inspiration.com	4-12	Win/Mac	Visual data tools. Explore, organize, analyze data with graphics and multiple representations. Conduct surveys on computer or via the Web.
Inspiration - Inspiration www.inspiration.com	6-12	Win/Mac	Mind-mapping & outlining tool for brainstorming projects. Create outlines, concept maps, diagrams, or presentations.
Scratch scratch.mit.edu	4-8	Win/Mac/ Linux	Free block-based/iconic programming language. Great online space for sharing projects. Good for animating stories. Robotics is controlled via Picoboard.
Turtle Art www.turtleart.org	4-8	Win/Mac	Graphic programming language based on Logo turtle graphics. Good for art/geometry exploration. (free with permission from its creator, Brian Silverman)
Starlogo education.mit.edu/starlogo/	8+	Win/Mac	Free block-based/iconic programming language with parallel processing focused on modeling. Good for simulations and math explorations.

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Construction Sets	Grades	O/S	Function
Playful Invention Company www.picocricket.com Pico Crickets	K-12	Mac/Win	A playful robotics instruction kit that may use found materials or LEGO along with very clever sensors, sound blocks and display bricks. The software is proprietary, but quite similar to Scratch. Brian Silverman and Mitchel Resnick, two of the people behind the design of LEGO robotics technology since the beginning head this company.
Picoboard www.sparkfun.com	5-12	Win/Mac	A low-cost USB-interface for controlling homemade robots with sensors communicating with Scratch.
LEGO Education www.legoeducation.us Mindstorms RCX (Yellow Brick)	K-12 with teacher scaffolding	Mac/Win	The first untethered LEGO robotics set runs great with MicroWorlds EX Robotics and although missing some new sensors and functionality, affords maximum flexibility across the curriculum. We have the most RCX material for robotics projects.
WeDo	K-3	Win/Mac	Tethered robotics set for young children. Works with WeDo software or with Scratch. http://scratched.media.mit.edu/resources/wedoscratch-miniguide
LEGO MindStorms NXT	6-12	Win/Mac	LEGO's current line of robotics construction set emphasizing engineering and robotics competitions. Works with RoboLab software and MicroWorlds EX Robotics.
GoGo Board www.gogoboard.org	K-12	Win/Mac/Linux	Low-cost robotics controller designed for the developing world. May be programmed via MicroWorlds, Scratch and other programming languages. Use electronics, junk and broken toys in construction.
Arduino & LilyPad Arduino www.sparkfun.com web.media.mit.edu/~leah/LilyPad/	K-Adult	Win/Mac/Linux	Arduino is an open-source robotics controller standard that works with all sorts of programming languages and electronics. LilyPad Arduino is a variant designed for wearable computing. Scratch may be used for programming,
Wacom Bambook Pen Drawing Tablet www.wacom.com	K-Adult	Win/Mac	Low-cost, but powerful drawing tablet for use with graphics software. Available in different sizes. Refurbished models are often available online at a substantial discount.

Cameras, USB microphones, cables, card readers and other stuff are available. Just ask Gary.

Online bookstore: www.constructivistconsortium.org/books