

KIBO Curricula and Activities

***This was developed for KIWI, but can be used with KIBO.

Title (with Link)	Skill Level*	Grade Level	Hours of Instruction	Goals/Aims	Final Project	Learning Domains	Standards Addressed
Treasure Island ***	Beginner	PreK-2nd	5 lessons, 1-2 hours each (10 hours total)	A curriculum to explore literature and storytelling	An interactive robot that uses sensors to demonstrate a pirate adventure story.	Literacy Language Arts Computational Thinking/ Computer Science	ITEEA Common Core MA DLCS PTD
Everyone Feels ***	Beginner	PreK-2nd	3 Lessons, 1-2 hours each (6 hours total)	A curriculum to foster social and emotional competency through robotics	An original robot to demonstrate the student's emotions in a specific situation.	Socioemotional Learning Computational Thinking/ Computer Science	ITEEA Common Core MA DLCS PTD
How Things Move ***	Beginner	PreK-2nd	8 Lessons, 1-2 hours each (12 hours total)	A curriculum to introduce foundational movement and physics	A robot that can demonstrate a series of complex actions, such as completing an obstacle course	Physics of Movement and Force Computational Thinking/ Computer Science	ITEEA Common Core MA DLCS PTD
Sensing the World Around Us	Beginner	K-2nd	4 Lessons, 1-2 hours each (8 hours total)	This curriculum makes foundational biology connections related to animal/human senses.	A robotic animal that uses sensors and incorporates the animal's behaviors and movements	Life Science Computational Thinking/ Computer Science	ITEEA Common Core MA DLCS PTD
Coding as Literacy: Emergent Reader	Beginner/Intermediate	K	12 lessons, 1 hour each	This curriculum highlights connections between computer science and literacy using a well-known children's book.	Three-part final project that involves characterization, retelling and expansion	Literacy Computational Thinking/ Computer Science	Common Core English Language Arts (ELA)/Literacy Framework VA Computer Science Standards of Learning PTD

*Levels correspond with coding stages laid out in Coding as Another Language (Bers, 2019).

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Patterns All Around	Intermediate	PreK-2nd	8 Lessons, 1-2 hours each (20 hours total)	This curriculum introduces foundational concepts of mathematics such as pattern recognition and construction.	Build and program a robot that can draw a pattern (with a marker attached). These patterns will be combined into a class "quilt"	Mathematics Computational Thinking/ Computer Science	ITEEA Common Core MA DLCS PTD
Who Am I	Intermediate	PreK-2nd	8 Lessons, 1-2 hours each (20 hours total)	This curriculum is designed to help young children explore their self-identity, develop and a respect for diversity.	A robot representing a realistic or abstract self-portrait of the student	Socioemotional Learning Computational Thinking/ Computer Science	ITEEA Common Core MA DLCS PTD
Robotic Animals	Intermediate	PreK-2nd	8 Lessons, 1-2 hours each (20 hours total)	This curriculum is designed to help young children explore their self-identity, develop and a respect for diversity.	An interactive robot representing an animal of the student's choice	Life Science Computational Thinking/ Computer Science	ITEEA Common Core MA DLCS PTD
Where the Wild Things Are	Intermediate	PreK-2nd	8 Lessons, 1-2 hours each (20 hours total)	This curriculum introduces foundational literacy using the well-known children's book <i>Where the Wild Things Are</i> , by Maurice Sendak.	An interactive robot representing a Wild Thing character dancing in the Wild Rumpus dance.	Literacy Language Arts Computational Thinking/ Computer Science	ITEEA Common Core MA DLCS PTD
Dances from Around the World	Intermediate	PreK-2nd	8 Lessons, 1-2 hours each (20 hours total)	A curriculum to explore culture, history, and the arts through dance	An interactive robot to demonstrate a cultural dance of the student's choice	Social Studies Dance and the Arts Computational Thinking/ Computer Science	ITEEA Common Core MA DLCS PTD
Coding as Literacy: Reader	Intermediate/ Advanced	1st-2nd	12 lessons, 1 hour each	This curriculum highlights connections between computer science and literacy using a well-known children's book.	Write a Wild Rumpus composition and program your own Wild Rumpus	Literacy Computational Thinking/ Computer Science	Common Core English Language Arts (ELA)/ Literacy Framework VA Computer Science Standards of Learning PTD

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