

This framework is intended to support educators as they explore and consider appropriate activities for coding instruction with their students who experience learning challenges. The considerations outlined below include those that should be considered within the design interface as well as instructional supports, such as pre-teaching, scaffolded instruction and adapted resources to support explicit and accessible instruction.

General Information:

Name of Application:	
Image:	Cost:
	Website:
	Device requirements:
	Student Needs to consider: <input type="checkbox"/> Reading <input type="checkbox"/> Writing <input type="checkbox"/> Cognitive <input type="checkbox"/> Visual/Visual Perceptual <input type="checkbox"/> Fine Motor

Accessibility Considerations:

Potential Barrier	Severity of Barrier (0 - 5) (How inaccessible does this make it for your students?)	Potential Solutions (AT Tools, Instructional Strategies, Modifications)
Reading		
There are text instructions that require reading (i.e. are not presented auditorily or supported by images).		
Text is used to label/categorize and is not accessible auditorily or supported by images.		
There is challenging vocabulary used that is not explained.		
There are tooltips/hints that require reading (i.e. are not presented auditorily or supported by images).		

Writing

Students are required to type correctly spelled commands in order to carry out tasks.

Students are required to compose sentences to program a storyline (i.e. character conversation)

Cognitive

Students are required to store information and recall it later to carry out a task.

Students are required to follow a large number of steps sequentially that are not broken down.

Students are required to have an understanding /prior knowledge of certain concepts in order to carry out tasks. (i.e. left/right, sequencing)

Students are required to follow fast paced instructions.

Students are required to follow instructions that are provided auditorily but not visually.

Students are required to navigate across multiple screens.

Visual Perceptual

Students are required to have good spatial awareness to carry out the task.

Students are required to understand ratios or relationships of size, distance etc...

Students are required to transfer their understanding of concepts from different perspectives and/or planes.

Students are required to sort through and focus attention to several icons and features on a single page.

Fine Motor

Students are required to move items seamlessly using a small, single point of contact (i.e. finger)

Students are required to manipulate small objects in close proximity.



Students are required to effectively use a mouse (i.e. for scrolling, clicking and dragging)		
Students are required to perform complex gestures to carry out tasks. (i.e. pinch, 3 finger tap)		
Students are required to put together small pieces of machinery.		
Students are required to use small tools.		
Students use alternate access devices for keyboard and mouse functions.		

Potential Solution Ideas:

Reading	Writing	Cognitive	Visual Perceptual	Fine Motor
<ul style="list-style-type: none"> • Text to Speech Tools • Dictionary Tools • Word Wall with Symbols • Colour Coding 	<ul style="list-style-type: none"> • Word Prediction Tool • Speech Input Tool • Option cards • Partner Assisted Scanning • Alternate Keyboard 	<ul style="list-style-type: none"> • Visual Step by Step Sequences • Checklists • Anchor Activity • Picture supports • Guided practice • Repetition with variety • Adapt physical materials • Provide replicas of materials to isolate concepts 	<ul style="list-style-type: none"> • Anchor Activity • Visual replicas of materials to isolate concepts • Manipulatives (i.e. ribbon, blocks, stickers) • Directionality - bridge the gap between person and objects through physical orientation (i.e. identifying left/right of an object facing a different direction) • Adapt abstract materials to make them more concrete 	<ul style="list-style-type: none"> • Use of stylus • Modification of selection tool • Adjustment of accessibility settings • Gesture creation • Use of external alternate access devices • Partner assisted scanning • Modification/ adaptation of concrete manipulatives
<p>***NOTE: Be sure to check the compatibility of a student's current support products with the coding application(s) being considered. Also consider whether the use of the products requires instruction prior to expecting them to support coding instruction.</p>				

