







Device	Description	How it can be used in Assessment of Learning	How it can be used in Instruction	Approximate Cost	Challenges District level and Classroom Level	Most common use	Student's needs addressed by this device
Velcro Daily Schedule	 <p>A visual schedule that uses velcro icons of pictures/words of activity. When the activity is completed, the student moves the icon over to the "finished" column.</p>	Educators can assess a student's ability to follow a structured routine and complete tasks independently. You can also assess how a student transitions between activities.	Assists in teaching students with organization, time management, and self-regulation. Educators can visually structure a student's day, helping them understand what activities are coming and in what order. It increases independence.	For 1 student it may cost less than \$5 if you already have a laminator.	<p>At the district level, challenges may include consistent use across classrooms. District-wide training may be needed to help educators learn about the technology's benefits and how to implement it effectively.</p> <p>At the classroom level, challenges can include designing, individualizing, creating, and maintaining schedules. Some students may need more support than others in initially learning how to use the tool.</p>	The most common use is for students who require clear expectations in a visual schedule. Velcro daily schedules are commonly used for students with autism spectrum disorder or other developmental disabilities.	This device addresses the needs of students who require support with organization, time management, and task completion. It assists with students who have difficulty with transitions and daily routines.

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Object daily schedule	 <p>A type of schedule that uses an actual item that is associated with the activity. Lunch may be represented with a spoon, recess may be represented with a woodchip. Activities with less or no obvious item association may need to be taught to the student. Even though this is very similar to a velcro visual schedule, I wanted to show the range of modifications educators can make to individualize technologies for different needs.</p>	<p>Like the velcro visual schedule, the object daily schedule can also be used to assess a student's ability to follow a structured routine and complete tasks independently. You can also assess how a student transitions between activities. The object schedule may also help assess the student's comprehension of the schedule, do they understand the meaning of each object and the associated activity?</p>	<p>The object schedule can be used to teach students essential daily living skills. For example, a student can learn daily activities like brushing teeth, lunch, and recess with specific objects. It promotes independence by teaching a student to engage in an activity based on the order of the schedule. Instruction can also involve choice-making by teaching the student to select the order in which they do activities.</p>	<p>For 1 student, a schedule can cost less than \$3.</p>	<p>At the district level, training for educators on the varying needs on the type of schedule that may be most beneficial for a student may be challenging. Ensuring the most effective schedules for students are maintained across classrooms and years may be challenging.</p> <p>At the classroom level, it may be challenging to determine how to tailor schedules for students. There are so many ways to provide students with individual schedules, that it may be difficult to individualize.</p>	<p>Object daily schedules are most commonly used with students who have vision impairments. They are also commonly used with students who benefit from concrete, tactile representations of their daily routines.</p>	<p>It addresses the needs for time management and organization of students with vision impairments who may not benefit from typical visual schedules. It addresses the needs of students with cognitive disabilities and communication challenges by giving tangible representations of their daily activities.</p>

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<p>Cube chair with tray</p>	 <p>A cube chair is a low-to-the-ground chair that provides support on either side and the back of the child. A tray can also be used if the activity requires the student to use manipulatives.</p>	<p>Educators can assess the student's posture and ability to sit in a chair. The tray can be used to assess fine motor skills during drawing or playing with items. Educators can also assess for sensory sensitivities, and adjust seating arrangements based on comfort levels to improve their learning environment.</p>	<p>A cube chair with a tray provides a stable and supportive alternative seating for a student which can increase their ability to engage with learning tasks. The tray helps in fine motor instruction such as drawing, writing, or engaging with fine motor tasks. Educators can also teach students how to self-regulate with the sensory input from the chair.</p>	<p>A cube chair can cost \$50-200 and the tray can cost up to \$115.</p>	<p>Challenges at the district level include costs and accessibility. The chairs and trays are costly, and it may be challenging to provide the chairs to the students that need them. Another challenge includes training for staff in how to most effectively support students in using the chairs.</p> <p>On the classroom level, it may be challenging to determine which students require a cube chair. Because of the cost, it may be difficult to provide all students within a classroom with a chair, so determining seating for an entire classroom may be difficult.</p>	<p>Cube chairs with trays are most commonly used in early childhood settings, especially for students with sensory processing disorders.</p>	<p>The cube chair and tray address sensory needs for students who benefit from a secure chair with support on all sides and also low to the ground. The tray supports fine motor needs by providing access to manipulatives closer to the student. Both devices help with attention and focus by providing a stable but comfortable seat. Both devices also assist students with gross motor needs to ensure proper posture and positioning.</p>

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<p>Book adapted for access (Object Enhanced Books)</p>	 <p>An object enhanced book incorporates tangible items that a student can touch or manipulate while reading the book, these items represent elements or objects of the story (Dell, 2017).</p>	<p>Books enhanced with objects can be used to assess reading comprehension in the story by answering questions using objects, selecting objects, or engaging with the objects. They can also be used to assess fine motor capabilities based on how a student is able to manipulate or engage with an object. Finally, you can assess a student's literacy engagement based on how they interact with the items.</p>	<p>These types of books can be used in instruction by providing inclusion opportunities. Inclusion may consist of making books that may be above reading level more interactive and enjoyable. Inclusion for students with vision impairments or tactile preferences may be used in instruction.</p> <p>These books may enhance reading comprehension by allowing the student to engage with actual objects that they are reading about. This may also support vocabulary instruction by providing an actual tangible item for new vocabulary.</p>	<p>If an educator is creating books used with materials they already have access to, a book may cost \$5-10. If an educator is purchasing pre-made books, or books that may require more expensive objects, it can cost up to \$30-50.</p>	<p>Challenges at the district level include cost, accessibility and teacher training. If a student requires the use of adapted books with objects, they may need to purchase more expensive pre-made books. Educators may also need training in how to create and utilize these books effectively. Districts may need to come up with systems or libraries in which classrooms can access many books.</p> <p>At the classroom level, if a student requires object adapted books, it is a very time and resource consuming activity to create the amount of books a student uses through the school year.</p>	<p>The most common use is for students with vision impairments or students that benefit from tangible objects for instruction to promote literacy skills.</p>	<p>Students with multi-sensory needs may benefit from using books that engage multiple senses (touch, sight, and maybe even smell) at a time. Students with communication and comprehension needs may benefit from concrete objects tied to the story they are reading. Students with fine motor needs may benefit from manipulating objects. For students with inclusion and engagement needs, reading a book with objects to engage with may increase their enjoyment of reading.</p>

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Noise canceling headphones	 <p>Noise canceling headphones create an optimal learning environment for students by suppressing surrounding sounds.</p>	Noise canceling headphones can be used in Assessment of Learning by creating a quiet learning environment to more fairly assess students in testing environments. The headphones minimize distractions and allow students to focus on their tasks.	Noise canceling headphones can be used in instruction by supporting concentration for students that get distracted or over-stimulated by surrounding sounds.	Basic noise canceling "ear muffs" can cost around or under \$15, whereas premium brands or bluetooth capable headphone or earbuds can cost up to \$300.	<p>Challenges at the district level include cost, accessibility, and maintenance of headphones. There is a wide range of costs for different models of headphones, so finding the most effective yet budget-friendly options may prove to be challenging. While more economic headphones may be easy to access, they also are easily broken, so making sure headphones are accessible and maintained may be difficult for districts.</p> <p>On the classroom level, not all students may find the headphones comfortable initially or may have sensory aversions. This may be challenging for educators to teach students how and when to use the headphones.</p>	The most common use is to provide students with a quieter learning environment. For these students, they are most commonly used when tasks require increased concentration, or when their environment is too noisy or over-stimulating.	Student needs addressed by this device include: Sensory sensitivities by reducing environmental sounds and distractions, and addressing attention difficulties by making it easier to focus on tasks.

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Picture Exchange Communication System (PECS) Book	 <p>A PECS book is a binder with laminated icons/pictures of a variety of words a student may use to communicate by making requests, comments, answering questions, etc.</p>	<p>PECS can be utilized to assess a student's expressive and receptive communication who may not have vocal verbal abilities. They can also be used to assess a student's comprehension by selecting icons to answer questions about a story or reading passage.</p>	<p>PECS can be used for communication instruction to teach children the power of communication and language through the power of cause and effect. "I hand a communication partner a picture of a cookie, I get a cookie." PECS could also be used in vocabulary instruction to pair images and icons with real objects for different vocabulary. PECS can also be used for instruction on behavior regulation. A student who engages in challenging behavior to get their wants and needs met, can be taught to use icons to communicate their wants and needs.</p>	<p>A PECS book can cost \$20-50 depending on the type of binder used, the size or number of pages in the book, and how many laminated icons are created.</p>	<p>The biggest challenge at the District level may be educator training. To follow the PECS instruction with fidelity, it requires intense training. This may also require ongoing training or coaching for teachers. Another challenge at the district level is making sure books, lamination, velcro and other materials needed to create and maintain the books for students are accessible for staff members to use.</p> <p>Challenges at the classroom level may include the amount of time and resources required to create a book for a student. It also requires ongoing maintenance as a student's vocabulary expands or as pictures/icons need to be replaced. A teacher may be required to attend</p>	<p>The most common use is with students with autism spectrum disorders who are nonspeaking or have limited vocal speech. PECS books are used to support these students to express their wants, needs and thoughts.</p>	<p>PECS books address the needs of students with no or limited spoken language. It provides an alternative way for students to communicate. PECS also addresses the needs of students who engage in challenging behavior to access or escape certain items or activities. The picture exchange is a very effective way to show students they can get their wants and needs met instead of engaging in other behavior.</p> <p>While this AT has time and resource challenges, the long term benefits on communication and behavior are incredible.</p>

					<p>initial or ongoing training in how to effectively implement PECS, and the teacher may be expected to train any paraprofessionals in the classroom working with students.</p>		
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Another challenge a teacher may face is the amount of time and effort it takes to teach a student how to use the book. It requires many repetitions, especially in the beginning for a student to begin to use the system independently.