Examples of Assistive Technology Adaptations

Adaptations for young children often involve modifications of existing toys, learning materials, or other everyday items. These adaptations can serve a wide variety of purposes so that children can participate in all types of learning opportunities. Below are some examples of adaptations for self-help, toys and play areas, communication and literacy, and mobility and positioning.

1. Self Help

A zipper pull makes dressing easier for a child. You can buy zipper pulls or make one using a key chain as seen here.

Non slip shelf liner can be used to stabilize objects, such as a plate or bowl during mealtime.

A child can use a bath mitt to more easily participate in bathing. Washing with a bath mitt could be easier than holding onto a wash cloth. Bath mitts can also be used to assist in grasping objects. Secure Velcro to the object and the bath mitts will cling to the Velcro making it easier for the child to pick up the object.[i]

2. Toys & Play Areas

Confining toys to a box lid, hula hoop, or planter base keeps the toys within the child's reach and vision.[i,ii]

Knobs on puzzle pieces and foam around a rattle handle extend or build up the toy to allow a child to more easily grab and hold the toy.[ii]

3. Communication & Literacy

While many high tech commercially available augmentative communication devices are available, you can make your own low tech system using pictures of your own. Here is a photo of a homemade Picture Exchange Communication System (PECS). A child can choose what food he/she wants by pointing to or giving the photo to the care provider.[iii]
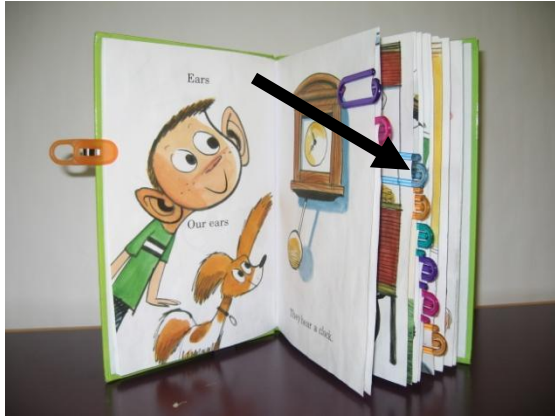
For children who struggle to turn the pages of books, large paper clips, binder clips, small chip clips, or self-adhesive index tabs can be used to give the child something to grasp to independently turn the page. Page fluffers allow for the same independence in reading by adding extra space between the pages. Use pieces of foam, peel and stick furniture protectors, or even just a dab of puff paint.[i]

Some children struggle to engage in reading activities, so providing interesting books is essential. For children with cognitive, motor, or sensory impairments, squishy books filled with a variety of materials can capture their interest and promote literacy. Books can be created with heavy duty zipper storage bags, a squishy filler (e.g., hair gel, lotion, sand, dirt, or packing materials), small toys or letters, and packing tape. Then words can be added by taping on strips of paper or writing on masking tape.[iv]
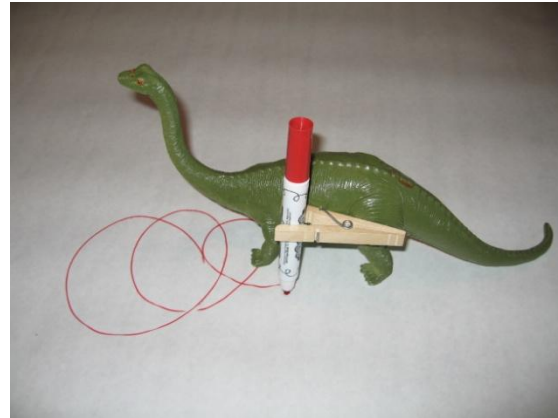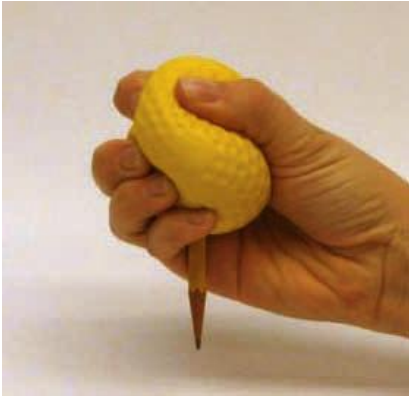
Pencils, markers, and crayons can be adapted with balls or even a fun toy with a clothespin attached so the child can more easily grasp and manipulate the pencil.[v]

4. Mobility & Positioning

If a child slides in a chair, try using bath decals to add friction and texture to a slippery chair seat.
To give a child more support in sitting during floor time activities, create a bucket chair using a 5 gallon plastic pail and a round pillow.[v]

[i] Demchak, M. (2007). *Tips for Home or School, Easy Adaptations for the Home or the Classroom.* Retrieved from Nevada Dual Sensory Impairment Project:
http://www.unr.edu/educ/ndsip/tipsheets/easyadaptationsforhome.pdf

[ii] Center for Assistive Technology, University at Buffalo. (2003). *Let's Play! Projects.* Retrieved from http://letsplay.buffalo.edu/: http://letsplay.buffalo.edu/toys/adapting-toys.pdf

[iii] Kideas.com. (2006). *Kideas Homemade PEC System.* Retrieved from http://www.kideas.com/:
http://www.kideas.com/pdfs/kideas_PECS.pdf

[iv] Pierce, P., Huston, C. & Franklin, J. (2009). *Fun Books for SHARED Reading.* Retrieved from
http://www.med.unc.edu/ahs/clds/files/early-childhood-resources/therm.funbooksfo.pdf

[v] *Tech n Tots*. (n.d.). Retrieved from Tech n Tots: http://tnt.asu.edu/