What are the features that an app needs in order to overcome functional limitations for disabilities in early childhood education?

**Cause and effect apps** – Cause and effect is important because it helps the child to have control over his/her environment. Cause and effect apps can help to assess children’s cognitive abilities.

  *Uncolor* - Child needs to wait for something to happen

  *Uzu, Rad Sound, Fireworks, Line Art, Music Sparkle, Glo Draw*

**Reducing cognitive load** - Single step response through auditory, tactile and visual mapping to reduce cognitive, sensory, and physical demands

  *Clicker Connect* – predictable sentence writing with phrases, word prediction and icon prediction

  Two switch scanning

**Auditory Processing** - Apps that use visual cueing verse auditory cueing to complete tasks

  *Toca Boca apps and Puppet Pals*

**Visual Processing** – can be due to font, eye tracking or cortical vision impairment.

  Apps that will: read to me, audio books, text to speech apps, digital verses synthetic

  *Auditory Cueing (ABA Apps)*

  *Bob Books, Dr. Seuss, Sesame St. collection*

**Blind and Low Vision** – Apps that feature audio books, text to speech apps, digital verses synthetic; large printing, contrast, zoom, braille, different fonts and colors.

  *MatchAnimals - Auditory sound matching game*

  *Provide Tactile overlays - Scene Speak*

**Deaf and Hard of Hearing** – Use external Speakers; voice recognition, speak to text; vibration patterns

  *ABC Music, ASL Tales, Baby Sign*

**Deaf Blind** – Vibration patterning built into the iPhone or vibration mapping to animals and sound

  *ABC Music, Alerts Lite, Beams, AnimalSounds*
**Speech output**—icons or words

485 apps for speech output

*Photo Albums (built in)*

**Physical access**—mounting solutions, styluses, keyboard overlays and accessories, virtual keyboards, external speaker, Tyvek glove

*Swirl Paint, Cupcake, Popcorn, Snackerdoodle*

**Processing**—Apps for sequencing, word retrieval, memory

*My Playhome, Scene Speak, Cupcake*

*Nudge, Iprompt*

**Behavior – Self-Regulation**—Apps to help regulate talking too loud, bite people, hitting, laughing

*Inside Voices, Choiceworks*

*Fluid, Koi Pond, Gravetarium, Time Timer*

Mindfulness activities, relaxation, video modeling (*Camera*)

**Personal responsibility**—for taking care of oneself and one's belongings

*iPrompt, iCan, Photo Album,*

**Slower learners**

Apps that have repetition

Apps that are interactive, Multimodel learning

Motor planning and Re-auditorization

**Data Tracking apps**—*Teach Me, See Touch Learn, Ecove*

*italics indicate app names*