

# Northeast Tennessee Assistive Technology Cooperative

East Tennessee State University Box 70548 Johnson City, TN 37614 (423) 439-4161

**NET-AT** 

# Assistive Technology Evaluation Developmental Delay – Early Childhood

Name: Student A

Primary Disability: Developmental Delay

Area(s) of Need: Communication
Grade Level: Preschool
Instructional Setting: Self-contained

**Team Members:** Member A, SLP, LEA AT Team Leader

Member B, Vision Specialist, LEA AT Team Leader

Member C, M.Ed., ATP, NET-AT Technical Assistance Instructor

## Purpose of Assistive Technology Evaluation:

The evaluation was conducted to determine appropriate forms of communication that will enable Student A to express her wants and needs and increase her participation and independence in school activities.

### Observations:

The technology team observed Student A in the transition kindergarten classroom. Student A was compliant and smiled throughout the evaluation. During the evaluation, the team set up 4 cause and effect stations: 1) star stacker with auditory and visual feedback, 2) vibrating switch attached to a switch activated toy with auditory and visual feedback, 3) PowerLink with a fan activated by a Big Mack switch with the voice command of "go fan", and 4) switch activated software (Monkeys Jumping on the Bed, Switch Basics, and Old MacDonald's Farm) with a TASH USB switch. At each station the team prompted (auditory and physical) Student A to use the switch to make selections/activations. She demonstrated the ability to push the switch to purposefully activate the devices and software with minimal prompts; however switch activation was not consistent with each activity. The team observed her positive responses when activities were integrated with music. She demonstrated the following skills at each station:

- Star Stacker
  - o eye-hand coordination to stack the stars
  - o when given a verbal prompt she chose the correct color
  - verbalized the beginning sound for green /g/ when shown the green star
- Vibrating switch and toy
  - o After 3 random switch activations Student A began to purposefully hold the switch down for continuous toy activation
  - o She placed the toy in her lap and smiled when movement and sound began
- Big Mack switch with fan and PowerLink
  - o After 2 random switch activations Student A purposefully activated the fan to blow

Enabling students to be active participants within their environment through the use of assistive technology.

- o The team observed an increased amount of eye contact with this activity
- Switch activated software
  - o When Student A sat down in front of the computer she immediately began to move/click the mouse and manipulate the keys on the keyboard. The team removed them to increase participation with switch activation.
  - o Student A complied when prompted (physically and verbally) to wait for participation cues (e.g., pushing switch, making choices, and waiting for software specific cues)
  - o When asked to choose a specific picture she pointed to the computer screen. Accuracy increased when choices were larger than 1"x1".
  - o When given more than three choices, Student A lost interest in the activity.
  - Student A was unable to make choices when provided with scanning options.

At the conclusion of the evaluation one of the team members programmed the BigMack to say "Bye, Bye" and prompted Student A to activate the switch to say goodbye to the team members. When Student A activated the switch and heard the recorded message, she verbally responded with "Bye, Bye".

### **Considerations**:

In order for Student A to be successful in the school environment and to address her educational needs, the team offers the following considerations:

- Continued use of switch activated devices to reinforce cause and effect skills
- Use pictures with BigMack, for matching and choice making activities, to reinforce communication
- When engaging in choice making activities, focus on choosing between 2 choices. When consistency is achieved across environments, the number of choices may be increased to 3
- Use of switch activated software to encourage choice making and verbalization skills
- Suggested software is listed below, but other exploratory software allowing for simple choice making would be appropriate.
  - o Don Johnston: You Can Do Series
  - On a Green Bus
  - A Day at Play
  - o Camp Frog Hollow
  - Living Books
- When mastery is demonstrated with one switch, add another switch to build choice making skills
- Use of a multiple choice communication device to encourage vocalizations and communication within her environment

\*Considerations are recommendations for the IEP team to utilize when taking into account the Assistive Technology needs of a student. The final determination of any AT device(s) and/or software is the decision of the IEP team.