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

Northeast Tennessee Assistive Technology Cooperative

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NET-AT

Assistive Technology Evaluation
Specific Learning Disability – Elementary

Name: Student B
Primary Disability: Specific Learning Disability
Area(s) of Need: Handwriting and Written Expression
Grade Level: Elementary
Instructional Setting: Resource
Team Members:
Member A, M.A., CCC-SLP, NET-AT Team Leader
Member B, M.S., CCC-SLP, NET-AT Team Leader
Member C, M.Ed., ATP, NET-AT Technical Assistance Instructor

Purpose of Assistive Technology Evaluation:
The evaluation was conducted to give assistance in the areas of handwriting and written expression that will enable Student B to increase his independence in school activities.

Observations:
The team evaluated Student B’s handwriting skills in Mrs. SLP’s speech classroom. Student B was a cooperative during the evaluation. He was very outgoing and eager to complete tasks, however he stopped working frequently due to the fact that he was distracted by all noises in the area. When given a verbal prompt by the evaluator he immediately returned to the task. When discussing the readability of his handwriting he stated that his teachers cannot read his work. He also stated that if he takes his time he gets behind in his schoolwork. The team observed that handwriting samples were illegible regardless of time spent on written task. When looking at a written sample provided by his resource teacher, one of the team members asked him why he misspelled words that were provided on the same page and Student B replied that he could not see it. His next statement was that he is misspelling words because he can’t see far away. The team asked him if he wore glasses and he stated that he does, but they are lost at this time. He also stated that if the print is big he can read it. When asked if he can copy from the board he stated that he can if he is sitting up front.

Student B’s teachers reported that he is eager and able to complete some classroom assignments and requirements, however ongoing documentation from the teachers consistently indicate that due to repeated absenteeism, Student B misses many assignments and does not make them up.

The team conducted 2 timed handwriting samples and 2 timed typing samples using 3 sentences from a worksheet (26 words). When asked to write, Student B did not demonstrate correct tri-pod grasp with right hand dominance. When writing, Student B was observed applying the correct amount of pressure to create letters (i.e., the letters were not overly dark and the paper was not torn). The results of the timed writing samples are as follows:

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The first sample was completed in 2 minutes without modifications resulting in multiple errors (e.g., punctuation, misspellings, omissions, & letter formation).

The team offered Student B a pencil grip to facilitate correct tri-pod grasp. He completed the writing sample in 2:45. The errors were consistent across writing samples. There was no noticeable improvement in his handwriting (timed or legibility) when using the pencil grip. When asked, Student B stated that the pencil grips didn’t help much and it hurt his hand.

When asked to type his creative writing sample (using the AlphaSmart portable keyboard), Student B typed using correct home key placement. Student B stated that he has had a little bit of experience typing on his computer at home. He demonstrated the ability to use the shift key, backspace key, spacebar, caps lock, and the return key correctly. The team observed that he was familiar with the punctuation keys. When he finished the task Student B said he liked using the AlphaSmart even though it took him longer to type the passage. A team member showed him a learning strategy using Co:writer, a word prediction program, on the AlphaSmart. The team observed that Student B was thoroughly enthused with the program.

Student B was also asked to independently generate a paragraph consisting of no less than 5-6 sentences. The writing sample was judged to have many grammatical and spelling errors. When Student B was requested to proofread his writing sample for any spelling errors, he was unable to identify any of the misspelled words. When the misspelled words were brought to his attention, he used a Franklin Language Master to spell-check the words. Then he proceeded to use the dictionary feature to verify that the device’s suggestion was his intended word.

**Strengths:**
During the evaluation the team noted the following strengths:
- Willingness to do a good job
- Motivated to make improvement
- Positive attitude
- Never complained
- Willingness to try new things
- Performed well under pressure
- Enthusiastic and outgoing personality

**Needs:**
The team observed the following areas to be addressed:
- The ability to complete written assignments legibly
- Appropriate spacing between words
- Attention to punctuation, capitalization and in some instances letter formation
- Spelling
- Written expression of ideas

**Considerations:**
In order for Student B to increase his handwriting and written expression skills the team offers the following considerations:
- Increase opportunities to develop keyboarding skills

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- Provide Student B with age-appropriate keyboarding software
- Continue modifications outlined in Student B's current IEP
- To decrease frustration when completing handwritten assignments the team offers the following considerations:
  - Extended time to complete handwritten assignments
  - Complete assignments orally (when appropriate)
  - Decrease length of written assignments, especially rote exercises
  - Trial use of AlphaSmart Keyboard to complete handwritten assignments.
  - Trial use of Co:Writer and Write: Outloud
  - OT referral
  - Grid paper to encourage correct alignment of math problems
- For writing assignments provide access to a voice-output word processing program. Teach Student B to use the spoken text to edit his writing.
- Focus spelling instruction on identifying the first 2-3 letters of words to assist with word prediction and spell checking.
- To assist Student B in making up missed assignments due to absences, provide an organizational notebook that is managed primarily by Student B, but supervised by teachers and parents. The organizational notebook can be used for both daily assignments and missed assignments.
  - Through use of the organizational notebook teach Student B to assume responsibility for his homework and classroom assignments.
  - Teach Student B to log in the notebook all homework instructions and assignments.
  - Teach Student B to log in the notebook all make-up homework instructions and assignments missed due to absences.
  - Include in the notebook an assignment calendar on which Student B, with the assistance of his teachers, marks major assignment due dates and dates for completing sequential steps of the assignment(s).
  - Provide within the notebook a system for ensuring that teachers and parents assist Student B in assuming responsibility for completing and turning in daily assignments, and missed assignments (e.g., a daily/periodic checklist requiring signatures from teachers, parents and Student B).
- A tape-recorder could be used to assist with creative writing assignments. Teach Student B to verbally record what he wants to write and then transcribe what he has recorded.

*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.