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**

**Visually Impaired - Middle School**

**Name:** Student F  
**Primary Disability:** Visually Impaired  
**Area(s) of Need:** Written Expression and Reading  
**Grade Level:** Middle School  
**Instructional Setting:** Resource  
**Team Members:**  
- Member A, NET-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 give assistance in the areas of Written Expression and Reading that will enable Student F to increase her independence in school activities.

**Classroom Modifications currently provided to student:**
- Enlarged print material(s)  
- Enlarged font on computer  
- Large print books when needed  
- Magnifier  
- AR reading materials  
- Preferential seating  
- Provide copies of material to be copied  
- Additional time  
- Assignment book  
- Extra grade opportunities

**Observations:**
- Student F was observed in her sixth grade classroom. Her teacher expressed concerns regarding her written language and math skills.  
- It was observed that Student F wears glasses to correct her vision.  
- During the pre-evaluation observation Student F was observed participating in a group reading activity. She did not seem to have difficulty seeing the photocopied text (a play) during the exercise. However, her oral lacked fluency, but the words were pronounced correctly.  
- The team asked Student F to participate in a few activities in her resource classroom. Lindsey was asked to read a passage out loud from a book (*The Bear*), write a sentence by hand, write a list by hand (orally given by a team member), write the same sentence on the computer using

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Simple Text, and also write the same list on the computer using Simple Text. The results are as follows:

- **ORAL READING:**
  - 1\textsuperscript{st} page, 34/37 words correct with 2 hesitations in 1 minute 19 seconds (25.8 words per minute)
  - 2\textsuperscript{nd} page, 61/64 words correct with 3 hesitations and 3 additions in 2 minutes 12 seconds (27.7 words per minute)

- **SENTENCE WRITING:**
  - Handwritten: 1 minute 4 seconds to copy from text “The next morning he found another trail and followed.” Student F demonstrated correct punctuation and structure.
  - It was observed that Student F has very neat handwriting.
  - Same sentence typed on the computer: 1 minute 26 seconds (6.3 words per minute)

- **LIST WRITING:**
  - Muffin ingredients: Blueberries, flour, sugar and eggs
  - Hand written: 19 seconds
  - Typed: 1 minute 7 seconds (4.4 words per minute)
  - Using enlarged font, Student F typed the same list in 34 seconds.

The team observed Student F using primarily her index fingers to access the keys. The team also observed that Student F did not have any difficulty in locating the correct letters on the keyboard. She is left-hand dominant due to CP, which impedes her ability to use right hand effectively.

Student F demonstrated the ability to correctly use a word processing program (Simple Text). She demonstrated the ability to navigate efficiently on the computer. She independently used the spacebar, arrow keys, cap lock, number keys and mouse.

During the evaluation Student F stated that she was able to see the print in the book (The Bear). She stated and demonstrated that she was able to see (and read) the 12 point font on the computer screen, but a font of 36 was easier for her to read.

Lindsey stated to the team members that, “math is hard because I can’t see and I don’t understand it.” She also told the team that she has a variety of math and reading games at home on her computer and that she plays them often.

The resource teacher discussed a variety of classroom modifications that are currently being implemented for Student F. Modifications address her vision impairment and math skills. These are listed above.

The team noticed an improper alignment of Lindsey’s back when seated at the computer when using a standard keyboard.

**Considerations:**

In order to maximize Student F’s functional reading and writing, the IEP team may consider the following recommendations:

- Provide Student F with access to a computer with a word processing program and word prediction software (e.g. Co:Writer) to assist with written composition.
- To develop typing fluency, provide Student F with up to 15 minutes per day on a keyboarding skills program such as Kid Keys.
- Provide proper positioning at the computer. For example, a seat cushion or a raised chair to place the keyboard at waist height. Encourage Student F to maintain aligned posture while

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accessing the computer.
- Encourage the use of graph paper to provide spatial orientation for performing math computations.
- Provide continued support of classroom modifications that are currently in use and listed in the above section.
- Provide extended time to complete handwritten assignments.
- To encourage note-taking skills, provide instruction that requires Student F to fill in the blanks or write short phrases. This can be done using pencil and paper. For prolonged writing assignments provide Student F with access to a computer with a word processing program.
- Continue use of math and reading “games” to reinforce concepts covered in class.

*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.