

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 (<u>The Bear</u>), 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:
 - 1st page, 34/37 words correct with 2 hesitations in 1 minute 19 seconds (25.8 words per minute)
 - 2nd 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 (<u>The Bear</u>). 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.

