

SETT Framework Educational Need Report (30 pts.)

Collaborative Consideration of Student Need for Assistive Technology Devices and Services

Student (First Name): Travis
Age: 13

Date: 2/14/2013
School: Northeast Middle School

Examining Current Conditions to Consider Educational Need

STUDENT	ENVIRONMENTS	TASKS
<i>Seating, position, & mobility</i> <i>Communication</i> <i>Computer Access</i> <i>Motor Skills</i> <i>Reading</i> <i>Writing</i> <i>Mathematics</i>	Classroom, playground, lunch Room, home In each: Technology equipment available Room arrangement Lighting Sound Activities	Produce legible written material Produce audible speech Read text Complete math problems Participate in recreation/leisure Move independently in the school environment.
<p>1. What is/are the functional area(s) of concern? (2 pts.)</p> <ul style="list-style-type: none"> • Comprehension • Communication • Reading • Writing • Listening Skills • Looking Skills <p>2. What does the student need to be able to do that is difficult or impossible to do independently at this time? (3 pts.)</p> <ul style="list-style-type: none"> • Travis needs to be able to understand the meaning of the words that he hears and/or reads in order to comprehend and learn school material. • Travis also needs an effective and personally appealing way to consistently communicate his wants/needs to teachers. Travis enjoys sports and music, which may serve as motivation to communication. • Travis needs to be able to type words independently in order to convey his want/needs. • Travis needs to be able to listen to more than 2-5 words of a 	<p>1. What materials and equipment are currently available in the environment? (2 pts.)</p> <ul style="list-style-type: none"> • Within the classroom, technology equipment available to Travis includes computers, I-pads and a projector/projection screen. • There is adequate ceiling lighting, but limited natural lighting <p>2. What is the physical arrangement (i.e. places within the student's environment)? (2 pts.)</p> <ul style="list-style-type: none"> • In the classroom, desks are arranged in a rectangle (8 desks) in the middle of the room. It appears there are individual work stations arranged at the outskirts of the room. <p>3. Any particular concerns? (2 pts.)</p> <ul style="list-style-type: none"> • Current concerns regarding the classroom 	<p>1. What activities take place in the environment? (2 pts.)</p> <ul style="list-style-type: none"> • Within the classroom, a variety of instructional learning tasks occur, along with routine management, upkeep of individualized portfolios that are specialized per student to fit their specific learning styles, and music time. Access to I-pads, computers, and dry erase boards is apparent for the means of communication, education, and leisure. <p>2. What activities support the student's curriculum? (2 pts.)</p> <ul style="list-style-type: none"> • Use of an I-pad, computer, and a dry erase board facilitate Travis's participation in mathematics, reading, writing, and

<p>peer or adults verbal communication.</p> <ul style="list-style-type: none"> Travis needs to be able to make and maintain eye contact with a peer or adults during verbal communication. <p>3. What are the student's current abilities? (3 pts.)</p> <ul style="list-style-type: none"> Travis is able to understand 200+ words. Travis demonstrates a comprehension at the first grade level with difficulty in the sequencing process; these deficits impact the student's ability to understand (comprehend) written text at grade level. Travis is able to answer questions that pertain to his interests in a "yes"/"no" format; Travis' interests include basketball, football, his pet dog, his family, and music. Travis can follow one to two classroom routines and follow simple directions such as sitting down, reading a sentence, and starting an application on the I-pad with minimal to no prompting. Travis is able to accurately match words from a word bank to words in an established sentence Travis is able to verbally greet several adults and peers by name with minimal to no prompts required. He has difficulty with reciprocal communication skills. Travis can label common objects. He has difficulty processing auditory information such as responding to questions and his echolalia often interferes with his ability to effectively communicate. With moderate to maximum visual supports, Travis is able to speak at a sentence level to request, comment or ask a question when visual supports are provided such as verbal scripts or an "I want" sentence strip. Travis is able to participate in 2 reciprocal verbal interactions with a peer or adult using visual scripting with maximum visual prompting provided such as having him orally reading verbal scripts. Travis is able to initiate a verbal exchange with a peer or adult in the classroom setting using a 2-5 word phrase/sentence with maximum visual prompting provided. Travis is able to verbally request items/objects using 3-5 word sentences with moderate to maximum visual cues. The deficits in this area impair the student's ability to effectively and clearly communicate in his classroom and community settings. Travis is able to read familiar words and simple sentences at a 	<p>environment include potential auditory and visual distractions stemming from the nearby cafeteria.</p> <ul style="list-style-type: none"> There is also the potential for distractions to occur from within the classroom, as students sometimes experience outbursts. There is no direct lighting at work station areas <p>3. What is the instructional arrangement (i.e. ancillary support)? (2 pts.)</p> <ul style="list-style-type: none"> Within the classroom, one lead teacher is present. The lead teacher is assisted by several assistants such as teacher aids and paraprofessionals. Travis receives OT services 1-4x/mo@10-30 min and ST services 1-4x/mo@10-30 min <p>4. Are there likely to be changes? (2 pts.)</p> <ul style="list-style-type: none"> Travis may be changing programs next year and it is possible that the classroom will be moving to a new building. It is unclear at this time if changes will be implemented. <p>5. What supports are available to the people supporting the student? (2 pts.)</p> <ul style="list-style-type: none"> Per teacher report, Travis's parents are very involved in Travis's education and social participation. Additional support is provided through the Midland ESA to provide OT and ST services, each at 1-4x/mo@10-30 min. 	<p>comprehension.</p> <ul style="list-style-type: none"> Music is his enjoyment. <p>3. What are the critical elements/needs of the activities? (2 pts.)</p> <ul style="list-style-type: none"> Travis needs to be able to understand the meaning of the words that he hears and/or reads in order to comprehend and learn school material. Travis also needs an effective and personally appealing way to consistently communicate his wants/needs to teachers. Travis enjoys sports and music, which may serve as motivation to communication. Travis needs to be able to type words independently in order to convey his want/needs. Travis needs to be able to listen to and comprehend more than 2-5 words of a peer or adult's verbal communication. Travis needs to be able to make and maintain eye contact with a peer or adults during verbal communication. <p>4. How might the activities be modified to accommodate the student's specials needs? (2 pts.)</p> <ul style="list-style-type: none"> The applications may be graded down by activating lower grade levels and graded up by activating higher grade levels,
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<p>3rd grade level, when prompted. Travis is able to listen to a short story (1 paragraph) with pictures and respond to literal “wh” questions in a multiple choice format on his computer, with 60% accuracy.</p> <ul style="list-style-type: none"> • Travis is able to copy (write) the alphabet, words, and simple sentences, with his dominant left hand. • Travis is able to turn his computer “on”, boot it up and type in the password. Travis is able to type his name and the date on the computer from the model. Travis is not yet able to independently utilize computer to answer simple questions in an educational setting. In addition, Travis is not yet able to print from a computer without assistance. This will impact the student’s ability to increase independence and progress in the curriculum. • Travis is able to transition from highly preferred to less preferred tasks 7/10 times without physical and emotional outbursts. This is impacting the student’s academic progress and his peer and adult relationships in the school setting. 		<p>dependent on the skill level Travis displays.</p> <ul style="list-style-type: none"> • Travis is able to operate the I-pad very well. He will benefit from hearing instructions regarding the program from someone he knows well, such as a teacher aid or his Mom. <p>5. How might technology support the student’s active participation in those activities? (2 pts.)</p> <ul style="list-style-type: none"> • Technology, such as the I-pad, is something that interests Travis and should prove to be motivational for his learning. In turn, the goal of increased reading comprehension, and subsequently communication, may be achieved.
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Assistive Technology Implementation Plan (30 pts.)

Collaborative Consideration of Student Need for Assistive Technology Devices and Services

Student (First Name): Travis
Age: 13

Date: 2/14/2013
School: Northeast Middle School

Examining Current Conditions to Consider Educational Need (TOOLS)

- 1. What is the Task that the student needs assistive technology for?** (based on #2 under Student). (1 pt.)
 - Primarily, Travis requires assistive technology for acquiring the skills necessary for reading comprehension, and secondarily communication.
- 2. In what Environment(s) will the student need to perform the task in?** (1 pt.)
 - Primarily, Travis will perform the task in the classroom, and secondarily in his home.

3. What are the student's strengths or present level of performance regarding the Task that needs to be performed? (2 pts.)

- Travis understands 200+ words; comprehends at the first grade level; accurately matches words from a word bank to words in an established sentence; can label common objects; answers simple questions in a “yes”/”no” format; follows 1-2 classroom routines and follows simple directions; verbally greet several adults and peers by name; can participate in 2 reciprocal verbal interactions with a peer or adult using visual scripting; initiate a verbal exchange with a peer or adult in the classroom setting using a 2-5 word phrase/sentence; verbally request items/objects using 3-5 word sentences with visual cues; can speak at a sentence level to request, comment or ask a question with visual aids and prompting; read familiar words and simple sentences at a 3rd grade level when prompted; listen to a short story (1 paragraph) with pictures and respond to literal “wh” questions in a multiple choice format on his computer, with 60% accuracy; copy (write) the alphabet, words, and simple sentences, with his dominant left hand; turn his computer “on”, boot it up and type in the password, his name and the date on the computer from the model; Proficient in the use of the I-pad; Transitions from highly preferred to less preferred tasks 7/10 times without physical and emotional outbursts; Accomplishes tasks more readily when the listener knows Travis well (his Mother is able to understand him the best)

4. What are the student's weaknesses regarding the Task that needs to be performed? (2 pts.)

- Travis speaks only a few words that the majority of people are able to understand. He must be prompted to and provided visual cues for the vast majority of reading, comprehending, writing, and communication tasks. He comprehends at a first grade level and comprehends at a third grade level

5. What low-tech, mid-tech, and high-tech tools/strategies should be considered when developing a system for a student with these needs and abilities doing these tasks in these environments? Name at least 1 in each area.

- **Low-tech (2 pts.)**

- ✓ Dry erase board
- ✓ Visual supports
- ✓ Interactive story
- ✓ Labels

- **Mid-tech (2 pts.)**

- ✓ Various educational and leisure applications
- ✓ Projector/projector screen
- ✓ Music

- **High tech (2 pts.)**

- ✓ I-pad
- ✓ Computer

6. What tools from above are the most appropriate for this student? Provide a list of at least 3 and rank them in order of what you plan to try out for the student. (3 pts.)

- I-pad with specified applications and music

- iAmBeatBox
- Speech with Milo
- Pocket Talk Sentence Builder
- Moody Me
- Computer and music
- Flashcards and music

7. Provide a detailed rationale for the implementation of the above selected tool for this student. (4 pts.)

- The I-pad is a tool that Travis routinely wants to use. It can be used as motivation for learning. A reading comprehension application that incorporates music, such as Speech with Milo, may entice Travis to learn. If Travis is enticed to learn, he may gain the skills necessary for reading, writing, comprehending and communicating, and therefore increase his independence and overall quality of life.

8. What are your strategies for implementing the Tool with the student? (4 pts.)

- Implementation of this program will start by playing music via an application called iAmBeatBox, in order to gain Travis's attention. As Travis gains trust in the student therapists, and allows them into his world of play (demonstrated by his willingness to allow the therapists to also create music with the application), the therapists will transition to Speech with Milo. This may be done with use of two I-pads so that Travis is better able to understand that he will be rewarded with additional music application time upon successful engagement in the reading comprehension application. When Travis completes a reading comprehension module, he will be rewarded with additional time to play on iAmBeatBox. If Travis displays frustration or anxiety while working within the reading comprehension application, displayed by being fidgeting and by his independent standing up and walking away, we will take a break to go for a walk. Walks are used frequently with Travis to disengage him from the stimulus that his causing anxiety and to regain his attention. The program will again be implemented, but more slowly. In order to more effectively discern when and if Travis is experiencing anxiety or needing a break, the therapists will teach Travis to use the application Pocket Talk Sentence Builder in order for him to type and communicate his needs. Given that Travis currently is limited in communication and his ability to convey such needs, therapists will rely initially on the application called Moody Me. Travis will be asked to choose the emoticon that best describes how he is feeling. Therapists will test Travis' ability to accurately match his emotions to the emoticon by having him match printed words to icons displayed.

9. What strategies do you plan to use to encourage the student/teacher to try out the Tool? (4 pts.)

- An explanation of the theory behind our choice of applications will be given to the lead teacher. A walk through of the process will follow. This step is important to ensure that the teachers are confident in administering the learning strategy. In regard to Travis, the use of I-pad and music are the motivation that is likely to engage him. With Travis, we will make sure that we slowly grade up the time for which we have him perform using the reading comprehension application. For instance, the program will start with 5 minutes of engagement with the reading comprehension module, since Travis is able to sit with instruction for up to 15 minutes. If Travis is successful at accomplishing a 5 minute module, the time will be increased by 2 minutes for the next module. If Travis is unable to accomplish a 5 minute module, time will instead be decreased.

10. How will you measure if the Tool is successful or not? (3 pts.)

- The success measure will be taken from tracking the number of correct responses that Travis receives on the reading comprehension modules. It is assumed that if the number of correct responses increases as time with the reading comprehension module has passed, then the application is successful. We will continue to grade the activity by the amount of time that he is able to engage in the application, and by the skill level he displays.