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STOUT
WISCONSIN'S POLYTECHNIC UNIVERSITY

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Assistive Technology Assessment

Consumer: TL
Counselor: LS
Case #:

SVRI Staff: Laura E. Plummer, MA, CRC, ATP
Rehabilitation Technologist / Sensory Specialist

Date: 10-21-15

Executive Summary:

This assessment will outline the following recommendations:

- Environmental awareness technology to include signaling devices for the home and consideration for future work sites
- Communication technology to include the use of an iPhone, Proloquo2Go and Speak It apps.
- Identification and selection of task and calendar apps
- Training and assistance with utilizing the technology recommendations

Referral Reason:

TL was referred to SVRI by his DVR Counselor, LS. The referral reason was for assistance with communication and employment.

Background Information:

TL is a young adult who is deaf and has a cognitive disability. His communication is limited to some ASL (American Sign Language), written notes and text messaging. It is not clear how much he understands with any of these forms of communication. His text messaging is generally repetitive and one-way in nature. This type of communication is primarily items he wants or needs. He underwent a cochlear implant procedure when he was approximately 3-4 years of age but no longer wears the processor to his language processing disorder.

TL currently splits his time between his mother's home and his father's place. His parents are his legal guardians and their names are MK and CL. He is seeking employment and is working with a job developer from GT Independence. He has previously worked at UW-SP in the cafeteria and continues to be interested in working there. He enjoys playing video games.

TL relies upon family or special transit services for transportation. He is enrolled with CCCW as his long term care provider.

Assessment:
The assistive technology assessment took place on September 22nd at CL's October 9th. The areas assessed included communication, organization, environmental awareness and future worksite considerations. The methods used included discussion, demonstration and device demo/trial.

Communication
As noted above, TL has very limited expressive and receptive communication skills. He does use some sign language but during this assessment he did not respond to my efforts at using ASL. His style appears to be passive and to just allow communication to happen around him versus with him. For employment purposes it will be important for him to improve and increase his communication skills. Most likely he will use a job coach for future work settings but if he would like to work more independently his communication will need to improve. This assessment addressed the use of assistive technology for communication.

TL currently has an LG smartphone from Cellcom. His primary use of this device is for text messaging. As noted earlier these messages are about his needs or wants and tend to be repetitive.

We reviewed options for communication including several smartphone apps.

Proloquo2Go: Proloquo2Go allows for photos and symbols to be pre-programmed and laid out with specific communication statements. Communication can also occur in real time, meaning TL could input text or symbols to respond to a request or to share a need. Communication partners would need to be reminded that when speaking with TL they should allow him time to formulate a response using the app.

The use of Proloqou2Go has several key elements that would benefit TL for employment and community involvement:

- User programmable – This app has a full manual and online video tutorials that allow consumers and family members the ability to program content as communication skills grow.
- Reduce Frustration/More Involvement – This app would allow TL to have greater involvement within his home, the community and employment settings. There could be less frustration by being able to express his needs and respond to questions more completely.
- Visual or Text Based – The messages and information can be set up in either way so that TL could type a message or use pictures, symbols, etc.

Speak It: The Speak It app is a quick and easy app that allows the user to input text only messages that are then spoken out loud. Messages can also be pre-programmed and saved.

The provision of the Proloquo2Go and Speak It apps will be included in the summary section and the related training will be outlined in a later area of this report. Having both tools available, one quick and one more robust, will provide two technology solutions for TL to use for communication.

The two apps outlined and recommended do require the use of an Apple based device, which he does not currently have. The use of an iPhone 6S was discussed with both of his parents and he may be eligible for an upgrade to his device. There are no comparable speech communication apps on the Android platform.

Discussion about the use of an iPhone versus an iPad was done with both of TL's parents. It was generally agreed upon that TL would be much less likely to carry around two devices (his existing phone and an iPad). Additional functions to communication for the iPhone for work include those outlined in the following section of this report.

I would like to recommend the provision of the iPhone 6S for TL so that he can utilize the Proloquo2Go and Speak It apps for communication. Within the summary section the contract or "locked" price for the device is listed. If TL is not eligible for a phone upgrade then the quote would need to be revised.

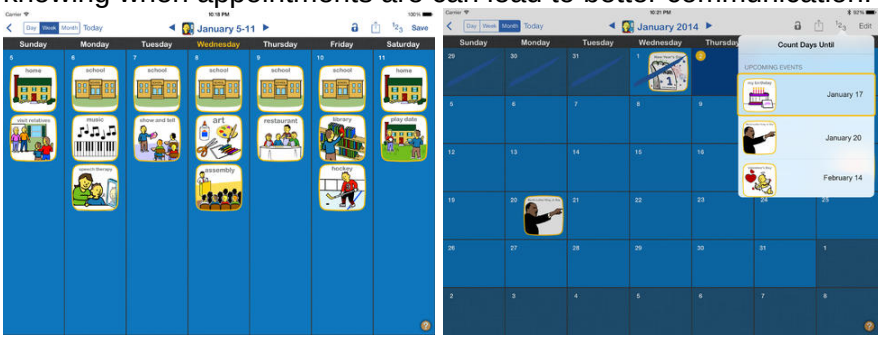
Task Management and Organization

TL is seeking employment and this will involve the need for task instruction and organization. The iPhone can be a tool used for task management and planning.

- Video Modeling – the use of the camera and video settings can provide for video task instruction and virtual job coaching
- Task Lists – in certain employment settings TL may have a set list of items that must be done or things that are completed step by step. The use of reminders or specific task apps (to be determined) can be applicable.
- Calendar – the use of a calendar with reminders and instructions could increase his employability skills, communication and independence.

Two specific apps are outlined for this area:

Choiceworks Calendar: This is a calendar app that will allow the family to use photos or text on a visual calendar. TL can input and see what the coming days or weeks involve which may reduce some of the repetitive text messages sent to his parents. Planning out the days and knowing when appointments are can lead to better communication.



Visual Schedule Planner: The other planning app which will be included in the recommendations is the Visual Schedule Planner. This tool is highly customizable for listing tasks per day or group of items to be done.

Environmental Awareness

The assessment covered the area of environmental awareness. This includes technology which will allow for TL to be aware of sounds within his home and in future workplaces. Neither his mother's nor his father's homes incorporate this technology. Awareness of sounds such as the telephone, doorbell, smartphone and smoke alarms would allow TL to be more connected within his environment. Technology in this category also increases safety. TL is an early riser and does not use an alarm clock but this does not mean that in a future setting it would not be needed. The systems outlined below can create greater independence within his home environment, which can translate into workplace skills.

- The Alertmaster system is one that can alert a user to the alarm clock, phone, doorbell as well as room noise or motion. The limitation on this system is the lack of signaling for cell phones, tablets (text messages) and videophones. This unit also is customizable for various room configurations

- The Sonic Alert system is one that can alert a user to the alarm clock, phone, doorbell, videophone and room noise. The limitation on this system is the lack of a mechanism for a tablet or cell phone alert. There also have been increasing reports of electronic interference with this system, causing false displays of sounds, etc. This unit also is customizable for various room configurations.

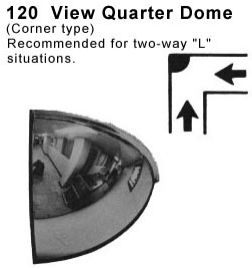
- The Central Alert system can alert a user to the alarm clock, phone, videophone, doorbell and tablets/cellphone text messages. This unit also is customizable for various room configurations. This will be the recommended system due to the flexibility to provide notification of the videophone and text messages or emails on the tablet.

It is recommended that TL use the Central Alert system within both of his residences. Funding can be made available for at least one set of this system through the TEPP program described later in this report.

Future Worksite Considerations

TL is currently working with a job developer but a specific, future worksite is not known at this time. Some general considerations for future workplaces include:

- Mirrors: Mirrors can be used within the workplace for providing greater visibility and safety in areas with limited sight lines or corners. These might include a quarter view dome mirror, convex mirrors, or a standard mirror. Examples are show below.



- Smoke Alarms: The workplace should be equipped with strobe style smoke alarms to provide visual awareness in case of a fire.

- Alert Lights: Red (or other color) alert lights should be incorporated into the workplacefor several functions. For example, it could be switch activated to call attention to a supervisor. They could also be used to alert an employee to dangerous situations.

- Taped Perimeters: The use of caution and/or reflective tape should be used to create a safe perimeter for walking around active machinery.

- Signaling Systems – The use of short range visual or tactile paging systems within a workplace can facilitate interaction and communication.

- Buddy System: The “buddy system” can be used to pair up employees within a worksite.

Resource

- TEPP: The TEPP Program (Telecommunications Equipment Purchase Program) is available to assist with the provision of specialized technology used to access telecommunications. For TL, this would include the Central Alert Signaling system outlined above; for one of his households. An application was completed and we are awaiting the arrival of the voucher. The TEPP program normally would only be available to cover one set of signaling technology and not both (for both homes). A request will be made for this but it is not certain two sets can be covered with the voucher. There will also be a $100 copayment that is required at the time of redeeming the voucher.
- Training: Training with the setup and programming of the apps would assist both TL and his parents with getting full use out of them for employment purposes. SVRI is available to provide this service and can also review other local options as implementation occurs.

Recommendations:

In summary, this assessment has outlined recommendations in the areas of communication, task management and environmental awareness. It is anticipated that this assistive technology will provide TL with the tools needed to increase his communication abilities for employment.

Attached to this report is an outline of anticipated costs including implementation of the recommendations by SVRI.

Thank you for the opportunity to work with TL and if you should have any questions please do not hesitate to contact me at 715-232-3300 or by email at plummerl@uwstout.edu

Sincerely,

Laura E. Plummer, MA, CRC, ATP
Sr. Rehabilitation Technologist / Wistech Director

ASSISTIVE TECHNOLOGY RECOMMENDATIONS: Lockery, TL Case # 001561814

Communication	
iPhone 6S (with two year contract)	$199.95
Protective Case	$89.00
Screen Protectors	$15.00
Proloquo2Go	$249.99
Speak It	$2.99
Choiceworks Calendar	$4.99
Visual Planner	$14.99
Shipping	$15.00
Total	**$591.91**

Environmental Awareness	
Central Alert Signaling System (1 home)	TEPP
Central Alert Signaling System (1 home)	$365.00
TEPP Copayment	$100.00
Shipping	$20.00
Total	**$485.00**

Implementation	
To include ordering, setup/training and travel. Up to two visits (second visit for further app training if needed).	
Up to 16 hours of time at $119/hour	**$1,904.00**

**Please note this quote is based on market value of all products; during the implementation phase we try to purchase products at lower prices when possible. We resell all equipment for the actual purchase cost.*