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Final Project Narrative

Our team has recommended several important assistive technologies for Jim. Of those recommendations the three most important are an iPad with a keyboard, Dragon Naturally Speaking software, and the Olympus VN-7200 Digital Voice Recorder. Each of these products will contribute significant assistance for Jim to be able to be successful in his classes.

The iPad is the most universally helpful assistive technology that we have decided Jim needs. The iPad has multiple capabilities which would help Jim. It can act as a portable note taking device, has speech-to-text capabilities, and can utilize various applications such as Inspiration for the creation of graphic organizers which would help Jim organize and understand complex concepts. We have noted that along with the iPad, a carrying case with strap for easier transportation of the device and a separate keyboard would be included prevent any potential issues that could be caused by the iPad virtual keyboard.

The main reasons for recommending the iPad are that it offers multiple ways and means for note-taking. Since Jim has difficulty with writing legibly and for long periods of time, it would be more efficient for him to use the iPad for this process. Most of the note taking applications have great organization capabilities so that Jim could type notes then automatically store them online. Jim could organize his notes into different folders for each subject in order to make them easier to find and even attach handouts from the teacher. Jim could attach pictures and videos to his notes. Applications such as Evernote would even allow Jim to see his notes on a desktop instead of just the iPad. The keyboard and iPad would provide Jim with a much better environment for taking notes during class. Typing is much easier than writing by hand for Jim as a result of his disability. By providing him with a keyboard and iPad, he could type the notes

smoothly and relatively quickly enabling him to keep up with his peers. Additionally, the iPad is light and easily portable with a carrying case so it can easily be taken from classroom to classroom with minimal additional weight for Jim to carry.

The iPad, with its multiple functions, includes native abilities to do speech-to-text recognition. However, there are applications that will do an even better job of this for Jim. The application we have chosen for Jim is one that is popular on both the iPad as well as on a desktop or laptop. Using the same software on multiple devices means that Jim only has to get used to using one type of program.

Dragon Naturally Speaking is a well respected and highly functional speech-to-text engine. As mentioned previously, it has both a desktop/laptop component as well as a mobile application for iPhones and iPads. This software will allow Jim to speak to his computer or iPad and it will do the typing for him. Jim would not be able to use this during lectures or in class, as his talking would be distracting. However, he would certainly be able to use it at home. He could write essays, lab reports, and make presentations using the software and not worry about getting tired from writing or typing. This product would drastically reduce the amount of time that Jim spends writing/typing, and it would be advantageous to use it on both an iPad and an existing computer in Jim's home.

Lastly, we recommend that Jim have an audio-recording device so that he can record lectures (with teacher permission) in class and play them back later should he, for some reason, not be able to keep up with the notes. While the iPad is a great tool for notetaking, Jim may not be able to keep up with the lecture and take notes as fast as the teacher is talking. With this device, Jim can take notes at his own pace and review the lecture later on the device, his iPad, or a computer, to hear anything he missed. The specific device recommended is the Olympus VN-7200 Digital Voice Recorder. This device would be optimal for a number of reasons, mainly

its storage capacity, its portable size, and low price.

The VN-7200 Digital Voice Recorder would be of great benefit to Jim. The device has 2GB of internal flash memory which means that it can store up to 1151 hours of audio at low quality, or 78.5 hours at high quality. This amount should be more than enough for Jim's use, particularly since the audio files can be downloaded from the device and stored on his computer and/or iPad for later use. To make recording and finding class lectures easier, Jim has the ability to place recordings in up to 4 different folders and make up to 16 index marks while recording so that he can refer back to important parts of the audio file. These features are important since they allow Jim to categorize the recordings and also call out important parts of lectures much easier.

The VN-7200 is also very small and very light so Jim can easily carry it in his pocket or in his backpack without adding large amounts of additional weight as Jim already struggles with the weight of his textbooks and transporting them from class to class. Lastly, the price for the device is about \$40 (Officemax). This is a fairly low cost for such a device, and in terms of the value that it provides Jim, is very cost-effective. Altogether, storage capacity and features, size, and cost point to a useful tool that fills a critical need for Jim.

All of these devices on their own would assist Jim in his academics, but the combination of all three would work together to provide somewhat of a "suite" of tools which would make them all even more helpful. For Jim, the ability to use Dragon both on his iPad and at home is ideal. The program will allow him get used to speaking the text he wants to write. Additionally, Jim can take the audio recordings of his classes and add them directly into the notes files that he created during the lecture. This will enable him to reference his notes and the lecture itself in the same place. Not only can he see them in one place, (if he has transferred the recording to the iPad) he can even listen to the lecture on his iPad without even needing the device or a computer

with him. These products along with the other recommendations will certainly allow Jim to perform up to his potential and also alleviate many of the concerns that were mentioned in the SETT report.