

Computer Technology and Childhood Cancer Survivors

By Kathryn Wissler, M.Ed.

Schools throughout the nation are viewing keyboarding skills as critical for living in the computer age. Twenty years ago, typing or “keyboarding skills”, were thought to be a vocational skill and offered only as an elective in high school. Now many school districts are teaching all children to type or “keyboard” in elementary school. New technology standards call for students to use keyboards efficiently and effectively by the end of fifth grade. It is not unusual for children to be exposed to keyboarding skills as early as the second grade. Keyboarding is currently used in the schools for drill and practice, word processing and using the Internet. Expectations for expertise with computer technology will continue to increase.

Keyboarding skills have been recommended to childhood cancer survivors as a way to compensate for late effects of treatment that diminish graphomotor speed and impact writing ability. Visuospatial and organizational skills, which are necessary to plan and organize writing projects, are also affected by treatment. Good keyboarding skills have been shown to assist survivors in meeting writing demands in school.

Unfortunately, due to various deficits survivors exhibit, even keyboarding may not be efficient. Another option for these students is assistive computer technology. Specialized software programs can be utilized which reduce the number of keystrokes to increase speed. They can include spell and grammar checks for written expression difficulties. Other software is available to assist students with organization of ideas by creating outlines and templates to assist students visually with regard to the structure of letters, term papers and other types of writing projects. Software can be employed which individualizes a student’s vocabulary so that it can predict common words used by students, thereby further reducing keystrokes and increasing speed and efficiency.

In the Rochester area, the Monroe #1 BOCES houses the Office of Assistive Technology Services (OATS). OATS evaluates students’ needs and spends time experimenting with different software packages to determine the most appropriate method for utilizing computer technology. The service also provides training for parents, teachers and students in implementing the plan they recommend. This service must be approved by the district’s Committee on Special Education (CSE). It is an expensive service, and in my experience, has rarely been recommended by the CSE itself. Occupational therapists working with children may recommend it to the CSE and I have also advocated for this service for students having difficulty keeping up with writing demands in the classroom. Despite the expense for the initial service, if the student is a good candidate for assistive technology, it may be cheaper than employing a scribe or notetaker throughout a student’s school career. In addition it can foster independence on the part of the student and eliminate the stigma of having an aide to take notes or scribe for the student.

Childhood cancer survivors who have difficulty keeping up with written demands of class work and do not have disabilities that make keyboarding inefficient, should pursue

keyboarding skills as early as possible in their school career and monitor their efficiency. It appears that in the near future, keyboarding will be an essential skill for school success. Accommodations in the form of special education software may need to be in place for some childhood cancer survivors who demonstrate deficits in the area of graphomotor speed and performance in order to keep pace with classmates.