ABSTRACT

This report describes the development of a tool for assisting the assessment of communication systems and devices during the study Technical aids for severely disabled children. Other reports of this study are titled Summary, Effects of new technical aids on social competence of severely disabled children, and Acquisition of technical aids for severely disabled children.

The basis for the development of this device has been a need to assess technical aids quickly and simply for severely disabled children. A prototype has been developed based on the Macintosh computer that could easily be taken to the child’s daily environment. Common controls that are used with current communication devices can be attached to this system. Modern software development tools eased prototype design.

Evaluations of the prototype were positive and encouraging. Clinicians that used the system were satisfied with its functions and performance. A nurse, an occupational therapist, two psychologists, and a speech therapist participated in the evaluation. The children who were assessed with the prototype were interested and motivated to use the system. They maintained concentration even during long periods of use, thus allowing the clinicians time to proceed with their assessment.

The main drawback of the system was a lack of variation with the tasks. There should be more communication programs for children with varied abilities. More effects should be added including a larger colour screen, animation, and sounds. Consistency in the use of the programs should be enhanced and guides to use should be included, e.g. finding the required programs.

The outcome of the evaluations suggest that this device is a beneficial tool to assist the prescription of communication devices and further development should be undertaken. In such future work, emphasis should be placed on more varied tasks but with consistency in use.