

Masonite, Glue & Computers

Taking the "Baling wire and Band-Aids" approach to available technology, a private organization called the Center for Computer Assistance to the Disabled (C-CAD) is working to improve the quality of life of the disabled in the Texas Metroplex.

The aim of the C-CAD is to get as many disabled as possible into the workforce by giving them a computer. "The computer becomes an intellectually stimulating companion" said John S. (Jack) Kishpaugh, chairperson of C-CAD. "Once they have some realization of its potential they become curious about what they can do with their lives."

C-CAD uses existing technology to help its clients back to the workforce. Often, their innovations are usually low-tech, using such materials as Lucite, Masonite and specially shaped pieces of metal to adapt existing machines. "We learned early on that many problems can be solved in the home with common sense" Kishpaugh said.

"People want to come back to work now, and we want to do what we can to make that happen," said James H. Muller, first vice-chairperson of C-CAD. Muller has worked extensively building hardware for C-CAD clients, combining off-the-shelf items with excellent results. One problem solved was the difficulty of those with cerebral palsy who cannot control their vocal cords. Muller's answer: a Casiotone keyboard with Masonite extensions glued to the keys and a cordless mike attached. The mike is tuned to a voice input module on a computer. The computer, in turn has a speech synthesis module running. The user hits the keys, and the computer dials the telephone and delivers a synthesized message. "A computer can be trained to recognize sound, unique sound" said Muller. "The tone could represent any command or program that you can activate via keyboard." He reports about 98% success with this system.

Another aspect of computing that C-CAD addresses is cost. They try to keep them as low as possible. "What about the disabled person that wants to come back to the workforce but only has hundreds, instead of thousands, of dollars to spend?" Muller said. Manufacturers are developing fantastic products but there are horrendous price tags.

The C-CAD approach works. Some success stories: Gene Reilly, a woman in her 40's with cerebral palsy who has a computer on loan from C-CAD with a specially-adapted keyboard and programming that enables her to do word processing from her home. Ronald Ballard, who is paralyzed from the neck down, runs a collection agency out of his home. Mr. Ballard owns his

own computer, which was modified with help from a friend, but got a lot of support and advice from C-CAD. "C-CAD was there to encourage, to advise. They helped me go on and pursue."

Unmodified computers can help the disabled, too. Take the case of Billy Yaws,



who suffers from Hurler's Syndrome (gargoylism) and deafness. He has a computer from C-CAD, and it has changed his life. According to his mother, Alice (Mickey) Yaws, Billy has worked through two TI/99 programming manuals. "I'll sit there and argue with the computer, but he'll patiently work and work and work until he gets it right."

The Center for Computer Assistance to the Disabled is not a large organization. They have a small suite of offices in Arlington, one paid employee, and a new IRS tax exempt status. They are already getting a larger number of referrals than they can handle, but are trying to expand their base of operations through fundraising, Kishpaugh said. At the beginning of November, C-CAD was serving 36 clients, and hopes to expand the number of clients served to 100 by the end of 1985.

Call The Midnight Turtle for More

To help spread information about the possibilities of personal computers, C-CAD has posted a list of computer-related resources for the disabled on *The Midnight Turtle*, the bulletin board of the Young Peoples Logo Association. The resource list includes manufacturers, software companies, and a bibliography of articles and books of interest to the disabled. Messages may be posted and will be answered.

The Center for Computer Assistance to the Disabled can be reached by writing, P.O. Box 314, Hurst, Texas 76053, or calling 1-817-640-6613. The Midnight Turtle, the Young Peoples Logo Association Bulletin Board, can be reached by dialing 214-783-7548. Board #6 is C-CAD.



by P.R. Adler

