Two residents design comp

By Rita Richardson

For anyone who thinks that computers will soon be doing all the thinking for us, two local residents with computers in their homes disagree.

John Linz and Eric Ellingson find computer programming a prodigious creative challenge in itself.

Once programming is done well, they say, computer "magic" keeps users from becoming bogged down in time-consuming mechanics such as the "busy work" of organizing facts. Then computer users are free to make intellectual judgments based on data which can be updated and reorganized as needs demand.

Using computer information is another intellectual challenge - especially if the data is complex and has many variables which impact decisions.

The excitement of intellectual challenge as it applies to computers became obvious recently as Linz, a Systems Engineer at Raytheon's Missile Systems Division, and Ellingson, an Associate Technical Director at Mitre Corporation, demonstrated on Linz' Apple II computer the intricacies of computer programming and use.

Linz, a member of Bedford's Finance Committee, has designed a "model" (program) containing information upon which projections of the upcoming Bedford town budget and tax rate can be ascertained.

This program is designed in such a way that totals, estimates, projections and changes can be obtained in a neatly categorized print-out in seconds.

Computer programs are restored on thin flat discs. Linz has "replicated" his "model" (directed the computer to make a replica of this data system) and delivered the "replica" to the Town Hall for use there.

When telephone receiver communication can be implemented, updates and changes can be made in both the "model" and the "replica" automatically without the loss of previous information.

"John's model is marvelous," interjected Ellingson. "It helps the Town Administrator and the Finance Committee make decisions.

"I can remember that when I was Chairman of the F.C., state law mandated that we formulate an 18-months' budget to coordinate the fiscal year dates across the state," Ellingson said. "It was hard enough to keep track of the budget figures and projections on a 12-month budget. The calculations and recalculations on 18 months were really back-breaking. I wish we had had computers then."

Linz added that prior to computer technology, vague estimates had to be used for town budget projections and, "when you're working with a half billion dollars, even a .5 percent leeway in the estimates adds up to big bucks."

When Ellingson stated he can envision that computer printouts from Linz' model will be used at Town Meetings to visually explain budget figures, Linz reached for a printout sheet already formulated by computer.

In the customary "pie" visual aid form, the percentages of dollars for various town expenses for one year were noted.

Ellingson has already built one computer and is working on another. He has taken the first one to work, and finds it an incomparable management tool for controlling manpower use on a variety of projects, including word processing functions, and in-house electronic mail. And he can reach his office via any computer to receive or leave messages at any time.

Recently, Ellingson organized a large symposium at Mitre with guest speakers of world reknown. His fingertips on the keys of his computer brought to him all the recent wire service stories which pertained to his guests.

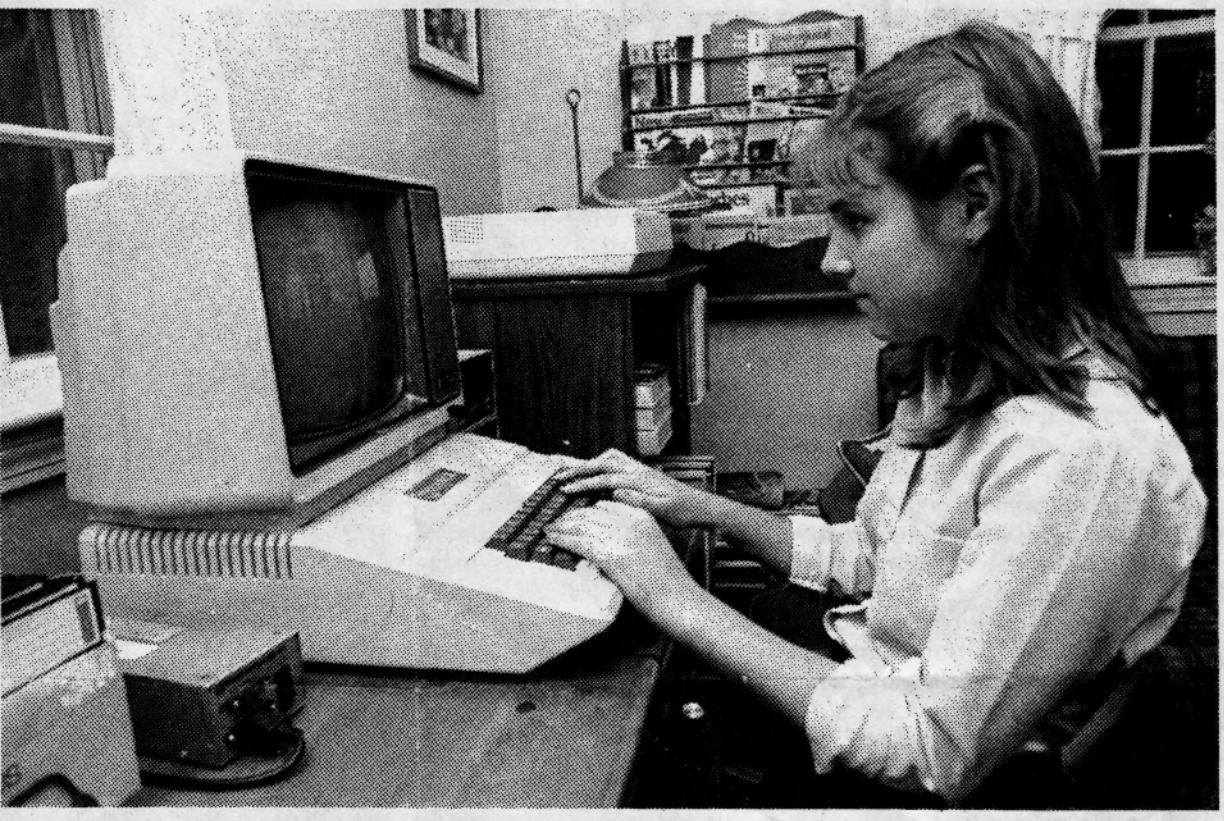
However, Ellingson was forced to do some fast thinking on a participant named Augustine, because the computer fed him information on the weather report in St. Augustine, Fla. But all it took was a change in the instructions Ellingson had given the computer.

Ellingson has designed computer programs for community projects also, as has Linz.

The American Field Service annual fruit sale has a data base management system designed by Ellingson. Customers, volunteer sales personnel, delivery routes, and financial data can all be updated or rearranged with the touch of buttons on the computer to help run a smooth, efficient operation.

The printout records of past years, the disc "model" and a list of the signals needed to instruct the computer are all in a looseleaf notebook ready for fu-

uter programs for town use



Lisa Linz works on her father's home computer.

(Photo by Owen O'Rourke)

ture use.

The Citizens Scholarship Fund Committee process which chooses scholarship recipients also has a basic computer program designed by Ellingson. It keeps track of money donated to the fund, and it sorts out and prints data from the 12 committee members. The members each score the approximately 100 applicants on need and merit qualifications.

After each member reviews his scoring via the printout, the computer totals all the scores and designates the recipients.

"This is much different from the past," Ellingson pointed out "when members juggled all those papers and all that information."

Linz keeps the records of the Knights of Columbus on a program he designed, and prints the address labels for their monthly newsletter mailing. He has also designed a program for his father, who owns a small business.

"I put my father's payroll function on a computer disc, and now it takes him longer to write the checks than it does for the computer to give him the payroll figures and make a printout record of his payroll transactions," he said.

"However," Linz commented "All this programming takes a great deal of time. Filling a need via computer seems to lead to other needs. But home computers are becoming less expensive and more capable."

Linz and Ellingson explained that there are a variety of computer services for sale which connect with all kinds of information from large computer systems. Airline schedules and library cataloging numbers are just a few such services.

Preprogrammed discs are also for sale, though they may not meet specific needs.

In addition, various computer clubs offer programmed discs which can be replicated free by their members.

But taking care of household finances via computers is not, according to Linz, an efficient method unless the household has a complex portfolio of investments, and the time and ability to monitor them.