



COMPUTER FUN FOR FUTURE USERS
or
4-H CLUBS - AN AGRICULTURAL EXTENSION FUNCTION

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Just as user services is expanding in the '80's to serve a larger audience with more diverse computing needs, so has the agricultural extension support of the national 4-H program been faced with expanding their role to address more than farming needs. It has rapidly expanded to support the growing needs of city kids such as ours. Thus traditional 4-H has expanded to include rocketry, electronics, and more recently, computer clubs.

In Nevada over 80% of all kids in 4-H come from an urban environment. And in Reno there is a thriving ACM chapter with adults enthusiastic about working with some of these kids. It seemed only natural to merge a group of 12- and 13-year-olds who had participated in electronics programs building everything from burglar alarms to metal detectors with the computer experts to introduce them to the

world of automated electronics.

Since it is a pilot program, we determined that at least for the first few meetings the membership would be limited to kids with a basic awareness of electronics as well as a minimal exposure to programming in BASIC. We had access to a Rockwell AIM 65 microcomputer for the group to use to learn at least a limited amount of assembler programming, and use of computing center classroom facilities for the meetings.

In order to keep the club from being just like school, we started from the beginning with a mix of academic endeavors and fun. The user services function provided a resource for various computing educational materials from video tapes to computer programs, and as a resource for programming information as needed. At the time of this printing the group has met for four

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sessions. In that period they have learned the basics of hexadecimal number systems, and programming (6502) Assembler code. The biggest hurdle for them occurred in the transition of realizing that writing assembler programs is a parallel to programming in BASIC. It already provided the grounding of awareness which makes them far more knowledgeable BASIC programmers. By the time of the conference, they should have accomplished independent development of simple programs. The AIM 65 also provides a simple enough computer that they may see and understand the basic electronic components of the computer.

Periodic field trips are planned to visit the speech department at the university and learn about computerized lighting, to visit a local slot machine manufacturer to see what computers are used for in slot machines, a computing center tour and a visit to a local microcomputer manufacturer. Obviously such activities would be dependent on availability within the community, but with the proliferation of computing power, similar opportunities should be available in any community. There, too, user services personnel can provide information about opportunities for field trips in the area.

In the past, computer clubs in Reno have been of two types: a core group of students who are in school taking computer classes and who want to spend time after school exploring computers in depth, or individuals who have computers at home and want to pool knowledge through a computer club. Such a group as described here is a relatively new endeavor in the state. The kids are grouped because of other 4-H interests and are using computers as adjunct to their other pursuits. They want to use

computers for real-life computing needs such as driving electronic equipment. They've also voiced an interest in building their own computers.

The leaders of the group enjoy investing in kids with demonstrated aptitudes for science. Meantime, the User Services group has participated because this is a valuable service of the agricultural outreach function just as surely as providing information about planting a garden is.

In Nevada, as in many western states, extension offices in all counties have been provided computers for accounting and other office functions. In the spring of 1984 at the western regional conference for 4-H leaders, several of the sessions for leaders will address uses of microcomputers as a resource for other clubs from rocketry to livestock functions, and as a tool for leaders. The same tools we use daily in our academic endeavors apply equally well to the volunteer functions of the extension support. As the demand for such resources expands, the user services function of providing educational resources for the university will potentially be requested to provide similar resources for the community and the state. If the university computing services are to survive with such a proliferation of cheap computing available to all households, certainly this is one service we as a user services staff can provide to the taxpayers of our state - and make an excellent investment in computer fun for future users!