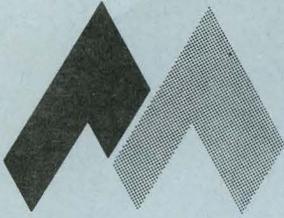


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# The Maricopa Colleges COMPUTING NEWSLETTER

*Vol 8 # 2*

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This  
Newsletter**



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- **Glendale Apple lab expanded - page 10**
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# COMPUTING NEWSLETTER

OCTOBER, 1984

VOLUME VIII - NUMBER 2

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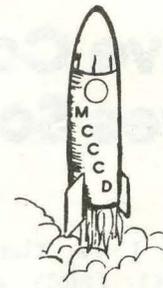


**MARICOPA  
COMMUNITY  
COLLEGES**

Maricopa Community Colleges abide  
by all state and federal non-  
discrimination and equal opportunity  
requirements.

# All Systems Go!

## (a message from the Director)



This is the year of student services. There is a district-wide task force addressing the many issues involved with student services. I am participating on one of the subgroups which is looking into how technology can benefit student services. Even before the report of this task force is finalized, many key activities have already begun.

From the computer side of the house, several systems are currently being implemented. These are the final steps in a long series of events that have taken place. Last February MCCD hosted a national conference on computerized student information systems. That conference produced findings on the needs and priorities for these type systems. At that point, the League for Innovation took over and created a national task force of which I had the opportunity of being chairperson. The guidelines for this task force will be published in the League National Conference in October. These guidelines add some of the specifics to the findings of the February conference.

Recently, Maricopa Community Colleges has entered into an agreement with Information Associates to jointly develop and program, during this coming year, the degree audit portion of the student information systems. A full time project manager and programmer will be assigned to Phoenix to help accomplish this task. Additional consulting support will also come from their organization. Maricopa will be involved in the design and direction of this project. By next summer, the system should be up and running. This system will be run

on the current DEC VAX computers and be completely integrated with the existing student information system and the new three character course prefix. The system will include ASU courses and programs so that a student may test out how well they will transfer to Arizona State University.

Several other systems are near completion that are modules of the student tracking system. A district-wide computerized job placement system is about to begin. The programs are nearly finished and should be operational very soon. There exists, on some of the colleges, a system for student activity planning. This system measures what students are interested in and would be willing to participate in student activities. Another project that is underway, with scheduled completion by January, is the electronic transfer of transcripts between the Maricopa Community Colleges and Arizona State University. This will greatly speed up the process of students transferring to ASU.

Another major step occurred in the computerization of student services during the last two months. A comprehensive financial aid system is now up and running at all seven colleges. This system has already greatly facilitated the disbursing of checks to the students. It will also provide information and controls to the financial aid offices.

Another major project underway is the computerization of the Counseling Department at Glendale Community Colleges. By using microcomputers, the Counseling Center



# Executive Computer Council Approves Software Policy

On September 5, 1984, the Executive Computer Council (ECC) approved a policy statement regarding college, faculty, and staff use of software on Maricopa Community Colleges' owned computer equipment.

It is felt that if the ECC takes a strong stand on enforcing copyright laws and license agreements, software companies would be more agreeable in improving their pricing policies.

The model for the following policy statement comes from ICCE (International Council for Computers in Education.):

## POLICY STATEMENT ON COMPUTER SOFTWARE

Just as there has been shared responsibility in the development of this policy, so should there be shared responsibility for the resolution of the problems inherent in providing and securing good educational software. Educators have a valid need for quality software and reasonable prices. Hardware developers and/or vendors also must share in the effort to enable educators to make maximum cost-effective use of that equipment. Software authors, developers and vendors are entitled to a fair return on their investment.

### Educators' Responsibilities

Educators need to face the legal and ethical issues involved in copyright laws and publisher license agreements and must accept the responsibility for enforcing adherence to these laws and agree-

ments. Budget constraints do not excuse illegal use of software.

Educators should be prepared to provide software developers or their agents with a district-level approved written policy statement including as a minimum:

1. A clear requirement that copyright laws and publisher license agreements be observed;

### All Systems GO! (cont.)

will be able to access the student database, perform word processing, use the system to present information to students, and perform unique counseling record keeping. This system could well be a model for Counseling Departments at the other colleges.

During the past year a study was conducted on the placement and diagnostic testing of students for assignment to courses. This report will lead to the use of computerized methods to facilitate placement.

In summary, this year will seem to be the year of success in the student services. However, it took last year's major effort of implementing the student database to permit these new systems to now fall in line. Last year represented the foundation or building block for student services. This year represents a leap forward into some new exemplary systems.

Ron Bleed, Director, MSCS

## Software Policy (cont.)

2. A statement making employees who use district equipment responsible for taking all reasonable precautions to prevent copying or the use of unauthorized copies on district equipment;
3. An explanation of the steps taken to prevent unauthorized copying or the use of unauthorized copies on district equipment;
4. A designation of who is authorized to sign software license agreements for the school (or district);
5. A designation at the school site level of who is responsible for enforcing the terms of the district policy and terms of licensing agreements.

### Hardware Vendors' Responsibilities

Hardware vendors should assist educators in making maximum cost effective use of the hardware and help in enforcing software copyright laws and license agreements. They should as a minimum:

1. Make efforts to see that illegal copies of programs are not being distributed by their employees and agents;
2. Work cooperatively with interested software developers to provide an encryption process which avoids inflexibility but discourages theft.

### Software Developers' Vendors' Responsibilities

Software developers and their agents can share responsibility for helping educators observe copyright laws and publishers license agreements by developing sales and pricing

ing policies. Software developers and vendors should as a minimum:

1. Provide for all software a back-up copy to be used for archival purposes, to be included with every purchase;
2. Provide for on-approval purchases to allow schools to preview the software to ensure that it meets the needs and expectations of the educational institution;
3. Work in cooperation with hardware vendors to provide an encryption process which avoids inflexibility but discourages theft;
4. Provide for, and note in advertisements, multiple-copy pricing for school sites with several machines and recognize that multiple copies do not necessarily call for multiple documentation;
5. Provide for, and note in advertisements, network compatible versions of software with pricing structures that recognize the extra costs of development to secure compatibility and recognize the buyer's need for only a single copy of the software.

### ATTACHMENT 1

#### Maricopa Community College District Policy on Software Copyright

It is the intent of the Maricopa Community College District to adhere to the provisions of copyright laws in the area of micro-computer programs. Though there continues to be controversy regarding interpretation of those copyright laws, the following

## Software Policy (cont.)

procedures represent a sincere effort to operate legally. We recognize that computer software piracy is a major problem for the industry and that violations of computer copyright laws contribute to higher costs and greater efforts to prevent copies and/or lessen incentives for the development of good educational software. All of these results are detrimental to the development of effective educational uses of microcomputers. Therefore, in an effort to discourage violation of copyright laws and to prevent such illegal activities:

1. District employees will be expected to adhere to the provisions of Public Law 96-517, Section 7(b) which amends Section 117 of Title 17 of the United States Code to allow for the making of a back-up copy of computer programs. This states that "...it is not an infringement for the owner of a copy of a computer program to make or authorize the making of another copy or adaptation of that computer program provided:

a. that such a new copy or adaptation is created as an essential step in the utilization of the computer program in conjunction with a machine and that it is used in no other manner, or

b. that such a new copy and adaptation is for archival purposes only and that all archival copies are destroyed in the event that continued possession of the computer program should cease to be right-ful."

2. When software is to be used on

a disk sharing system, efforts will be made to secure this software from copying.

3. Illegal copies of copyrighted programs may not be made or used on school equipment.

4. The Contracts Manager of this district is designated as the only individual who may sign license agreements for software for colleges in the district. (Each college using the software also should have a signature on a copy of the software agreement for local control.)

5. The president of each college is responsible for establishing practices which will enforce this policy at the college level.

6. All software will be inventoried by the district office of MCCCCD.

### ATTACHMENT 2

#### Maricopa Community College District Microcomputer Software Policy

It is the policy of this district that no person shall use or cause to be used in the district's micro-computer laboratories any software which does not fall into one of the following categories:

1. It is in the public domain.

2. It is covered by a licensing agreement with the software author, authors, vendor or developer, whichever is applicable.

3. It has been donated to the college and a written record of a bona fide contribution exists.

## Software Policy (cont.)

4. It has been purchased by the college and a record of a bona fide purchase exists.
5. It has been purchased by the user and a record of a bona fide purchase exists.
6. It is being reviewed or demonstrated by the users in order to reach a decision about possible future purchase or request for contribution or licensing.
7. It has been written or developed by a college employee for the specific purpose of being used in the microcomputer laboratory. Full credit should be given to the employee developer by other employee users.

It is also the policy of the college that there be no copying of copyrighted or proprietary programs on computers belonging to the college.

### ATTACHMENT 3

#### Suggested Format of Software Licenses

1. Designated on a per site, district-wide or other geographic basis.
2. Requires the signature of a responsible employee.
3. Includes provisions for a single copy purchase price with archival back-up copy.

#### 4. Multiple machine pricing:

Includes provisions for a quantity discount for subsequent purchases of the same software provided:

- a. the purchase discount applies to a single purchase order.
- b. the purchase discount is noncumulative.
- c. the software is for the same computer type.

#### 5. Network Pricing:

- May be offered as per school site or with quantity discount for school districts with multiple sites.
- Provide for a flat license fee for network compatible versions of the software.
- Flat fee provision is preferred over any variable rate based on number of computers or number of student users.
- Network compatibility, not just an unlocked version of the software, is required to eliminate the need for local reprogramming of copyrighted and licensed software.
- Include provision for purchase of multiple copies of documentation and accompanying materials.

# Exciting Things Brewing . . .

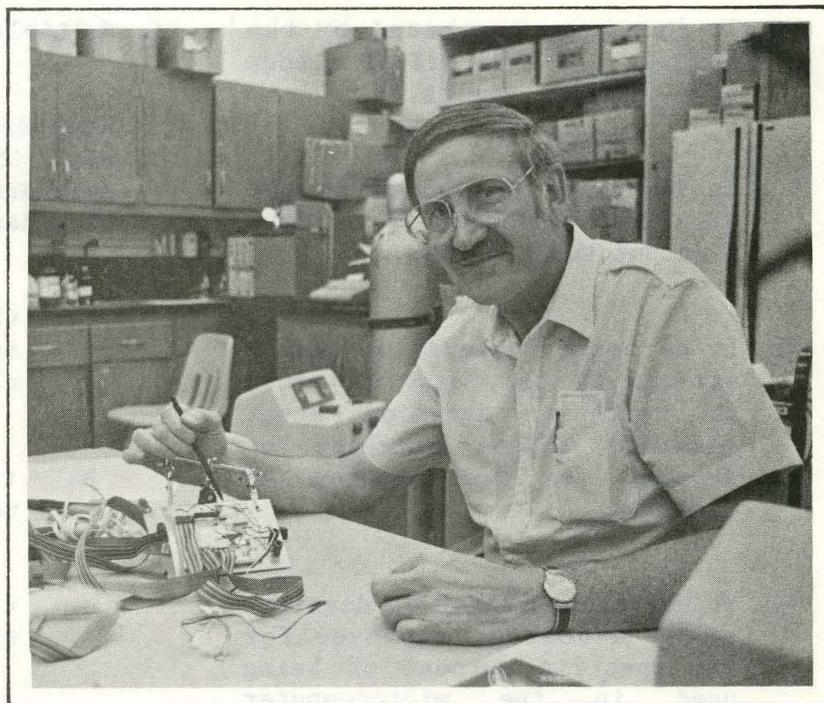
in

the

G.C.C.

Chemistry

Department



G.C.C. chemistry instructor Chuck West has become a hardware expert out of necessity. Feeling a need to get his students involved with using the computer as a tool in performing chemical analyses, Chuck has combined his own specially-designed board with an Apple, a Coleman spectroscope, and a graphics printer. With this apparatus he can enter a chemical solution in varying concentrations, analyze each, and produce a graph which shows the amount of light transmitted at the various levels of concentration.

This set-up is on wheels so it can be rolled into various labs and work areas. "I'd like to have about six. That's what I'd like," Chuck stated. The same computer can be hooked to a pH meter and used to do titrations. The Biology Department, too, is interested in using this device. Of course, setting up all of this has meant that Chuck has spend a lot of time on labor, trouble-shooting, and programming. "That type of thing we don't mind," he explained. "That goes along with the territory. If you are interested in computers, you are going to do this stuff on your own, whether you're paid for it or not."

As Chuck pointed out, "When we adopt a chemistry book, the publishing company sends us a set of computer assisted disks for general instruction. This is something some of the better publishing companies are coming out with now, in order to sell their books." A student can use the disks in the laboratory to study specific areas covered in that text.

In the future, the G.C.C. Chemistry Department hopes to have its own mini lab, with several computers in one area for student and faculty use. West feels that this is the inevitable direction his discipline must take. "Just about everybody now is going to computers--as we are." With inventive people like Chuck West on the faculty, the G.C.C. Chemistry Department will be able to train students to take full advantage of the new technology.

# Readership Survey Report

It is a known fact that people enjoy reading about themselves. Well, this article is about YOU! That is, it is about you, if you were one of the many people who responded to the recent Readership Survey requesting your thoughts about this Computing NEWSLETTER.

Many of you gave us ideas, some of which have already been incorporated into this publication. In future issues we will endeavor to use most of the ideas you have given us. The aim is to make this the best darn NEWSLETTER in the Community College World!

And now for a few facts. The response was very gratifying, a whopping 36% of you took time off from your busy schedules to fill in the blanks, and most of you had a suggestion on what to change to make the publication better. Space does not permit printing all of the suggestions but later in this article I will list a few of them. The comments, ah, the comments! The comments turned into kudos for which I wish to thank each and every one of you! It DOES make life easier. Being one of the early retirees, your kudos, I'm sure, will have an influence on the guy that signs my next six-month contract. You can all relate to that! I'm like you. I like to read about myself, too, so I will list a few of the comments also. You might recognize your suggestion or comment.

Most of you felt the NEWSLETTER was "District DP news." Ron Bleed noticed this before the survey was mailed. When I returned from vacation this fall, the DECmate

that I had been using in my office to produce the NEWSLETTER was gone. I went to him and asked, "How can I produce a NEWSLETTER without my DECmate?" and I asked to have it returned. He told me, "You don't need a DECmate." He reached in his desk and handed me a pocket-sized tape recorder. He continued, "I want you to go the campuses and interview people and bring back news from the various colleges. Give the tape to the Word Processing department and let them do the clerical work of transcribing. This will give you more time to gather news items.

I still miss my DECmate but he was right. I have been visiting my many friends at the colleges and gathering news that should be of interest to all readers. If you see me at one of the colleges and you have some news that you would like to share with others, please stop me and let's talk about it. I am especially interested in "how to" articles on the VAX and on micros. If you have discovered a "neat" way to do something, let me know!

The September issue, featuring Mesa Community College, is proof that the publication has ceased to be "District DP news." The current plan is to feature a college or administrative function each month. This month features Glendale. District DP news will remain for our many loyal administrative readers.

The following is a summary of the multiple choice section of the survey showing the percentage of responses to each item. —————>

## Readership Survey (cont.)

1. The Computing NEWSLETTER is

Response 55% a reference document  
80% District DP news  
35% College DP news

2. I usually receive the computing NEWSLETTER

Response ALL through the intercampus mail  
(Survey was not sent to approx. 40 external readers)

3. I read the Computing NEWSLETTER

Response 50% every issue  
27% regularly  
17% sometimes  
03% almost never

4. When I pick up the computing NEWSLETTER, I

Response 46% read most articles  
38% read a few articles  
16% just browse

5. Which articles do you find most interesting?

Response 19% Those dealing with hardware  
46% Those dealing with software  
65% "How to" articles  
20% Technical information  
43% Those dealing with microcomputers

6. Of the standing NEWSLETTER sections, I most often read

Response 42% Administrative news  
53% News from ECS  
44% Campus news  
32% Mates Ahoy (Word Processing News)  
43% Bits and Bytes

7. After reading the computing NEWSLETTER,

Response 43% I feel better informed about computers  
64% I save each issue for future reference  
14% toss is circle file

8. Do you pass the NEWSLETTER to a friend or colleague?

Response 03% always  
05% often  
20% sometimes  
20% seldom  
40% never

## Readership Survey (cont.)

### Item 9 on the survey asked:

What would you change to improve its content or design? The responses here are anonymous due to the fact that many people removed their mailing label prior to returning the survey. Here are a few of the responses:

Have a column for new users (less jargon).

Centerfold of a VAXy girl.

More WP news. There are other machines than DECmates. (Information on WP software for IBM PC for instance)

Fine just as it is!

Occasional (yearly) index of software/hardware subjects. (Editor's note: This has been a feature of the NEWSLETTER for many years. The last (May) issue contains the requested index of prior issues.)

More information on the use of microcomputers and their interaction with VAX.

Expand it to telecommunications, not just computers. Periodic articles on ideas for the future - what applications may be around the corner; exploration into linking our technologies, etc.

Include short micro IBM and/or Apple programs to do "neat" things.

Include some more articles for non-computer disciplines on how they may use the computer to aid them.

Nothing! This is an excellent NEWSLETTER. Don't fix it! Keep up the good work!

Item 10, "Additional Comments" was the last item on the survey. Again, just a few of the responses:

Good work, part-timer.

Good job - I often pull 2 years (or so) ago info to show someone "How to."

I really like the format, and especially the new front cover.

Have heard positive comments about the publication.

I feel Bert McNeill's column invaluable - I learned a great deal very quickly from her WPS MATH articles!

I enjoy the "how to" items, thought pieces, and general news about new hardware and software.

Keep it up Tex!

Superb public relations.

Very good - pictures excellent - format interesting.

Keep up the good work!

Excellent - keep up the good work.

Thanks for helping to improve my computer literacy.

Of course, I'm prejudiced, but I think it's swell!

I read Bleed's column.

I think you are doing a very good job. Thank you.

Has been great - gets better all the time.

The annual index is invaluable!

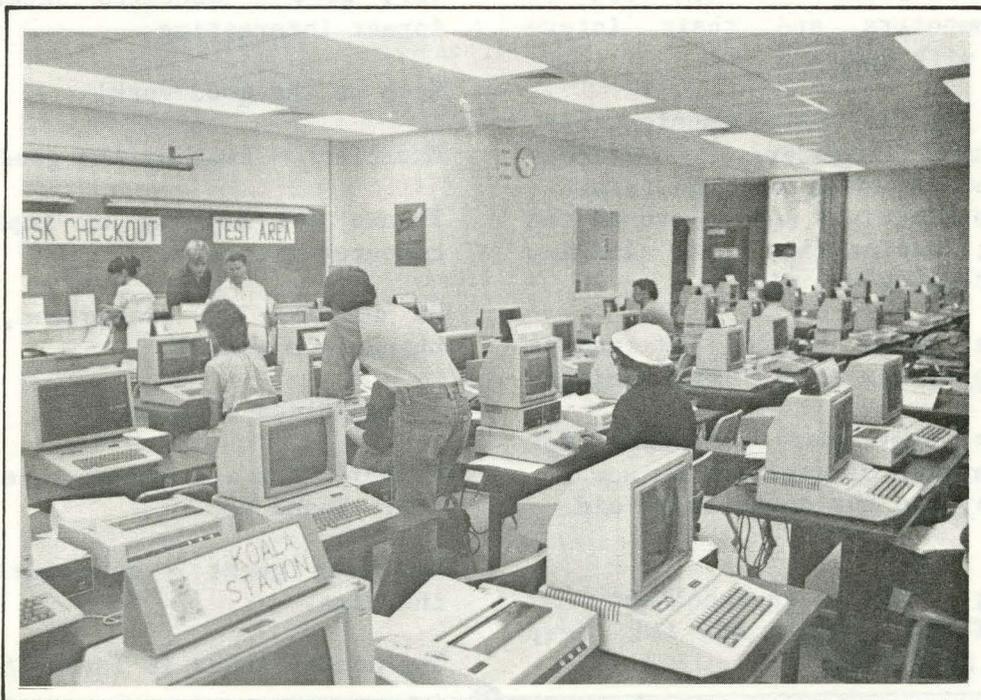
# Glendale Apple Lab Expanded

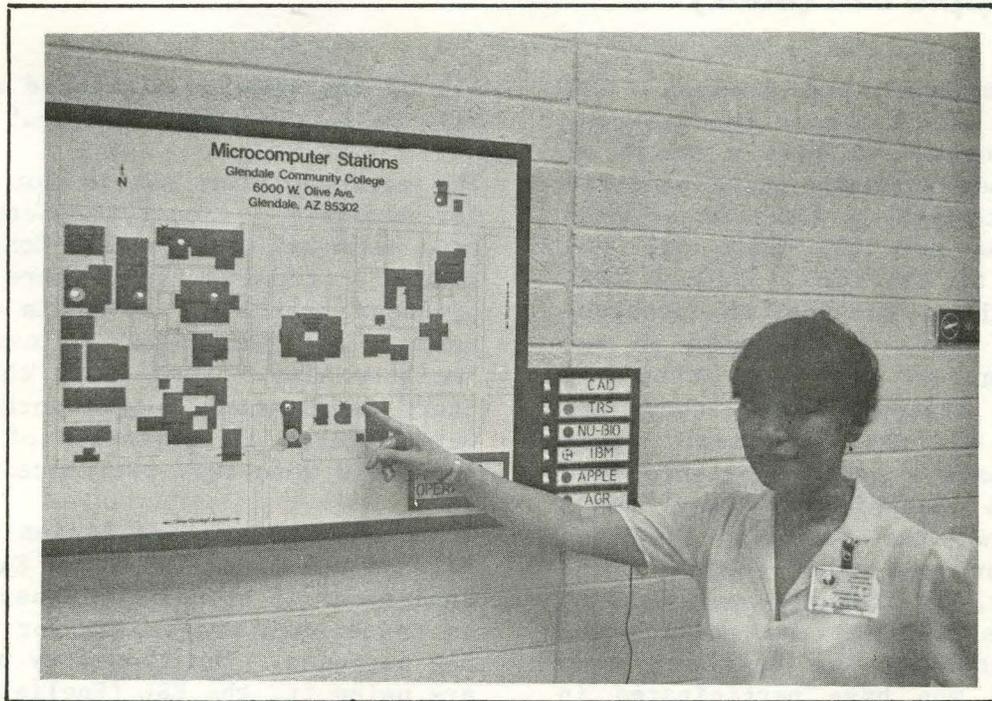
If you have not been to Glendale Community College lately, you are in for a big surprise. The space provided for the microcomputer lab has been doubled. 55 Apple //e's are housed in this area. The lab is open, with lab assistants on duty, from 7 a.m. to 10 p.m. on weekdays and 8 a.m. to 5 p.m. on Saturdays and Sundays.

A new course: PERSONAL-BUSINESS MICROCOMPUTERS, DP 100 AA AB, A Computer Literacy Course, (1 credit hour), written by Mark D. Montanus, is the prime reason for the expansion of the lab. The goal is to give the student "hands-on" the entire time they are in the course. The course, BP 100, actually has three levels, an A and a B level which are combined into basic computer literacy, and BP 100 AC which is a continuation of the same course. The A and B modules are

designed to introduce the student to a microcomputer, the general use and care of diskettes, and some skill building with keyboarding. It introduces the student to word processing, a data management system, and an introduction to the BASIC programming language. Almost all of the students move into the next phase which is another credit hour, BP 100 AC. Two new items, SPREAD SHEET and GRAPHICS are added. When they finish the two credit hours they really have a surprising amount of expertise.

Last semester, 400 students enrolled for these courses. They meet the "live" instructor only once, in an orientation session. The students are told what is expected of them and they are given the necessary materials to work with. From the orientation the students are taken directly to the





Adoracion (Doris) Velasco, Microcomputer Lab Technician, indicates the many lab facilities on campus. "Our goal is campus-wide computerization. We have furnished both equipment and human help to achieve this," she points out.

lab and shown how to get started. These courses are open-entry/open-exit and self-paced. Each module is designed to be completed in 30 hours. However, several students have completed the course in a week, while others have required more than a semester to finish the work.

The lab is divided into several areas which makes the process of learning very fluid. The first area, which is called the "lobby," is used by the student to log in. The student enters his name and instructor number code into a computer provided for that purpose. An attendance record is built by this method and reports are sent to the instructor on a regular basis. After they have successfully logged in, they are directed to the disk checkout area where they present their ID cards and check out the disks they will need for that day. From there the students continue to

the main floor where they are assigned one of the 55 Apple //e's. This is the coursework area. It is manned by two student lab assistants. There is very intense interaction between the users and the lab assistants in this area.

This is also the area where courseware is checked. When a student finishes an assignment, the work is checked by the lab assistant and the student is awarded the corresponding points. The point information is recorded on 3 x 5 progress cards. These cards are picked up by a records management person and the grades are recorded. Once a week these grades are posted on the bulletin board for the students to see and a copy is sent to the instructor.

Mark Montanus stated that, "The drop-out rate in this program is somewhere under 10% due to the fact that I receive weekly printouts of

## GCC Apple Lab (cont.)

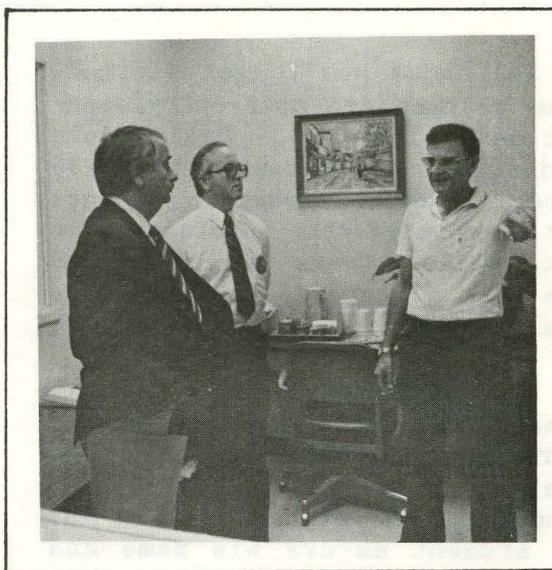
the attendance and grades. The minute I see a lag in the progress of a student, I have a staff of work study students whose specific job is to call a dozen or so students to see why they are not getting to the lab. Through this phone call we can find the problem. At this point I will make an appointment to meet with them. I usually discover that they are afraid of the equipment, they didn't have a good experience with the lab technician, they don't understand the problems they are given, or some other reason. Last semester, 17 students were 'saved' and were back in the class using this method. The feedback from students who have participated in this project is very, very positive."

When asked what's in the future for microcomputers at GCC, Mr. Montanus said, "This concept of training has been very successful so we are moving from this level of computer literacy to specialized modules. The courses will be written in a two hour module. I am presently working on a module for accounting and one for electronic spreadsheet. WordStar, an advanced word processing package will be used this spring. Lyle Langlois, a DP instructor, is developing a graphics course to be used by art majors, or anyone else for that matter, we want to get everyone involved. Shirley Petras, also a DP instructor here, is developing a course in BASIC computer programming using the CP/M operating system (CP/M is an acronym for "Control Program for Microcomputers). She is also creating a separate course on the CP/M Operating System itself. There are about 2000 really good CP/M software packages available at the present time and more on the way. We have 21 Apples equipped with Z80 boards that allow us to use the advanced CP/M software.

All of the modules mentioned above will be in place this spring."

The microcomputer lab is not just for students. Faculty members who have attended the District Computer Literacy classes come here for advanced training. Glendale staff members are encouraged to use the facility also. Last year, through Staff Development, eight workshops were offered in a variety of subjects and were very well received.

Other disciplines are beginning to rely on the micro lab. The English department is bringing classes over to teach word processing for writing purposes. The chemistry people are using it, the ESL (English as a Second Language) department is using it, Nursing, Journalism, and many more. The lab is not the business lab, it's everybody's lab.



Steve Kagan, Microcomputer Lab Technician, (on the right) explains the self-paced courses being taught at GCC to Raul Cardenas, President of South Mountain Community College, and Dan Whittemore, Vice Chancellor for Business Services, during their recent tour of the facilities.

# They're Training "FEs" at Glendale

THE COMPUTER IS DOWN! They say it's a hardware problem. What are you going to do about it? Computer operators can't fix it; all they know is how to operate the machine. Programmers can't fix it; all they know is software. Call the Field Engineer, right? (Sometimes they say, "Call the FE.") Well, what in the world is an FE? Just who are these mystery people who come in, are given complete control of the machine, wave a magic screwdriver and announce, "THE COMPUTER IS BACK UP!" Where do they come from? Where do they receive their training?

Many of these people receive their training at Glendale Community College. Manny Griego, in the electronics department at GCC, has developed a 2 year course of study that gives a student an AAS (Associate in Applied Science) degree in Electronic Computer Technology (ECT).

This program will prepare the graduate for employment in industry as a computer technician. It is designed to provide the student with skills in electronic computer circuitry and total computer systems, including directly required programming skills. Theoretical and practical training are heavily emphasized, with over 50 percent of the time spent in a lab gaining "hands on" experience with a totally operational computer system.

The system used in this program is a VAX 11/730 minicomputer. The students are not allowed "hands on" access with a screwdriver and a pair of pliers. That would void the maintenance agreement. But Digital has given the electronics department permission to use their diagnostic disk, complete with documentation. It is the same disk

that Digital Field Engineers use to test the hardware integrity. This type of testing would not be possible on the VAX 11/780 on the other side of the campus, due to the many educational and administrative users on that system. Thus, the Electronics Department needs its own computer.

The study does not begin with the VAX. In the first course, Introduction to Microcomputer Programming and Applications - EL 115 - the student learns how to solve electronic-type problems, using TRS-80 microcomputers, programming in the BASIC language. EL 124 - Microcomputer Assembly Language Programming - is the next course that is offered in the ECT curriculum. Continuing on the TRS-80s, the students learn the internals of the microcomputer. Programming at the assembler language level, they learn about the registers, how a computer sequences through an instruction, and how data is processed by the microcomputer. When the students have completed these courses, they are then introduced to the VAX 11/730.

Currently there are two courses offered on the VAX. The first is EL 217 - Digital Computer Operating System. In addition to learning how the operating system works, they also are taught to program the VAX in assembler language. The next course, EL 245 - Computer System Input/Output Processing - teaches the student the functional operation of audio devices, peripherals, terminals, printers, disks, and magnetic tape.

Manny Griego, the man who designed this curriculum, has been with GCC since 1976. Beginning in 1963, he spent many years in industry training Field Engineers for GE and

## FE Training (cont.)

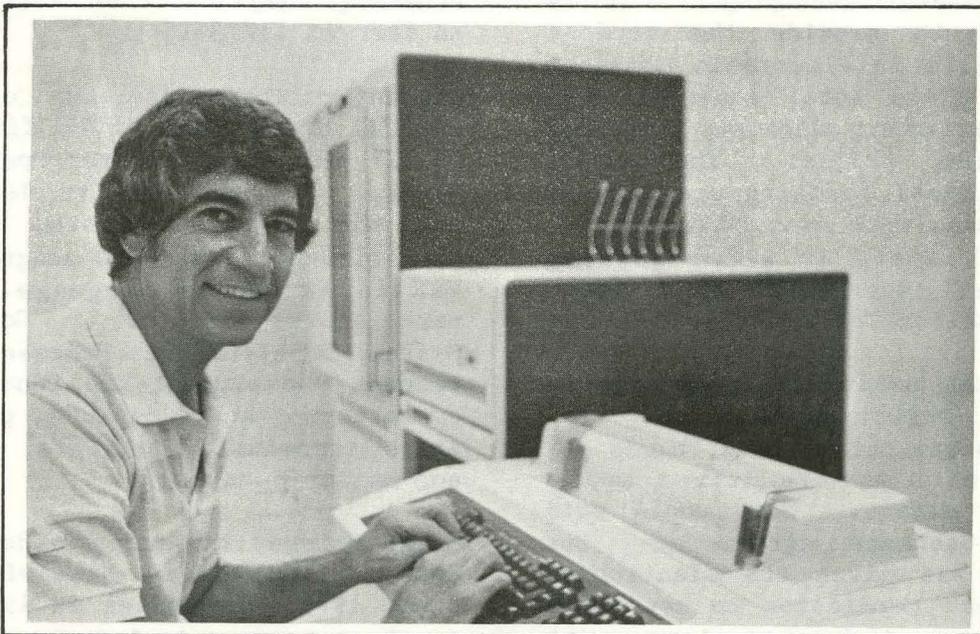
Honeywell. He was a Senior Systems Programmer for Motorola. There he was part of a team that developed and maintained a Message Switching (Electronic Mail) System that allowed Motorola to communicate with their sales offices all over the country. He also maintained an electronic mail system for Greyhound Corp.

Mr. Griego is very impressed with the type of student he gets at GCC. "The students here remind me of the students I used to have at GE; that is, they are are very serious. Anyone who enrolls in these classes expects to get a good paying job when they complete the course and there are many who are not disappointed," he said.

He continued, "This past semester was the first semester we had a graduating class, and while I do not have the figures at my finger-

tips, I can tell you that some graduates have acquired positions at Digital, Sperry, Intel, and one at the Arizona Republic. The other day, one of my former students visited us very, very, happy. She had a nice little business card that said Field Engineer on it. She was hired by Digital, was sent to California for four weeks training, and was here on the Glendale campus installing coin-operated DECmates in the library. It's really gratifying to see this. Now, I do not know the starting pay for all students but for three students that I've talked with who got jobs as Field Engineers, they started right at \$19,000! So that's not too bad considering the fact they started with only entry level skills."

It looks like GCC's degree program in Electronic Computer Technology is really meeting a need.



Manny Griego, Electronics dept., GCC

M A R I C O P A   C O M M U N I T Y   C O L L E G E S  
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Student Information Systems (SIS).....	Jim DeVere.....	267-4412
Financial Business Systems.....	Terry Caldwell.....	267-4405
Educational Computer Systems (ECS).....	Rick Meyer.....	267-4340
	Gary Kidney.....	267-4422
	Jamie Cavalier.....	267-4390
	Joe Shinn.....	267-4408
Operations Department.....	Dave Waters.....	267-4430
Systems Department.....	Don Shehi.....	267-4404
Computer System Service Department.....	(FOR EQUIP. REPAIR)....	275-0422
Learning Center (Micro Lab, Software Library)...	Betty McNabb.....	267-4424
Word Processing Information.....	Bert McNeill.....	267-4457

SUPPLIES

Cards (Special forms, etc.).....	Tech. Support Center...	275-4012
Forms Control Tape (Printers).....	Tech. Support Center...	275-4012

\*Paper--Send a Supply Stand Requisition to Jack Reynolds, District Purchasing

14 7/8" x 8 1/2" 1-Part, Continuous Form.....	No. P1735
DECmate White, Letter Size, Continuous Form.....	No. P1739

\*Ribbons--Send a Supply Stand Requisition to Jack Smith at Stauffer Annex

DECwriter Terminal (LA36).....	No. RIB097
DECwriter Terminal (LA34).....	No. RIB098
DIABLO Terminal (Models 1620 & 1650).....	No. RIB092
QUME Terminal with Keyboard.....	No. RIB093
Apple IIe, II+ (Prowriter Printer M-8510).....	No. RIB094
DECmate--QUME LQPO2 Printer.....	No. RIB091
DECmate--DIABLO Model 1345-A Printer.....	No. RIB092
Decprinter III (LA-120) Printer.....	No. RIB097
Digital Printer (LA-50).....	No. RIB094
Okidata Printer.....	No. RIB089
Prowriter Printer (M-8510).....	No. RIB094

Ribbons (Digital, Printronix, V77 mini).....	Tech. Support Center...	275-4012
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Word Processing Supply Information.....	Bert McNeill.....	267-4457
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\* Do not use the same Supply Stand Requisition to order Paper AND Ribbons.  
Please use a separate form for each category.

