



GOOD QUESTION!

Kwantlen College Computing Newsletter

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This newsletter is produced by the Kwantlen College Systems & Computing Department in order to assist computer users in solving everyday problems and update them on system changes. It features helpful information on current hardware, software, and services, as well as updates on future plans and releases.

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CONTEST! FAME! NAME IN PRINT! NO EXPENSIVE PRIZES!!

Help us name our new SUN computer! Soon two new computers will join our present, hardworking bunch - Envy, Ivy, and Jade. We need something with a "green theme" to fit in with the group. So far we have received the following suggestions: Olive (OV), Kiwi (KW), Khaki (KK), Forest (FR), Lime (LM), Emerald (EM), Seaweed (SW), Moss (MO), and Terra (TR). The new VAX will probably be named Olive as it will most likely arrive before you have a chance to send your suggestions. Suggestions, though, for the new SUN can be accepted right up until the time it is installed - May 15th would be a good date to shoot for. Send all your suggestions to Gaye at Systems and Computing, Newton Campus, by inter-office mail or ean.

CAI IN REMEDIAL ENGLISH

Many post-secondary students are not prepared for the demands that their studies make on their writing abilities. Research indicates that this under-preparedness may have a bearing on both incompletions and drop-out rates. In an attempt to address this problem, Athabasca University (AU) has developed a series of remedial English CAI (computer-assisted instruction) modules. These modules are available to students upon request or on the recommendation of their tutors.

AU is an open university; there are no educational prerequisites for admission, and registration occurs year-round. As a result, AU's students often require academic upgrading. The goal of these CAI modules is to improve students' writing skills from anticipated entry levels of as low as grade seven up to a first-year university level. The CAI modules are designed to cover specific, common problems in grammar and punctuation. Once students have signed on to the system, they are free to choose the unit or lesson of study. Each lesson contains a grammatical rule and a few screens of explanation followed by extensive practice exercises. Students complete their exercises on the screen, and feedback is received immediately. When student responses are correct, the system acknowledges the correct response and explains why it is so. When responses are incorrect, the system explains why the answer is wrong and waits for the student to try again. Grammar exercises are usually presented in a multiple-choice format, whereas punctuation exercises often permit the students to manually adjust various sentence features.

After the remedial English CAI modules were developed, they were implemented in AU's English 255 Writing Skills course. The modules were also piloted at several sites including the local high school in Athabasca, Alberta College in Edmonton, and the Edmonton Police Department. These pilot tests illustrated several important points about the delivery of CAI. First, in order for CAI to be successful, it must form an integral part of the program and be incorporated into the course curriculum in some vital way. Second, there must be some class or course time specifically designated for the use of CAI, and third, there must be a person assigned to the course who is familiar with both the course content and the related CAI software.

Based on the results of these experiences with the remedial English CAI modules, AU is in the process of developing a remedial writing course. The CAI will form a basic component of this new course, and student time with the CAI will constitute part of the total course hours. Tutors

assigned to this course will be thoroughly familiar with CAI and will be able to direct students to the appropriate lessons, which are based on the problems students demonstrate in their written assignments.

At present, several comprehensive CAI modules on sentence construction are under development. These new modules will allow students to manipulate words, phrases, and clauses, to correct grammatical errors or to create new sentences. The CAI modules will attempt to anticipate all of the possible correct combinations. It will also define the original error and will explain how a particular correct response affects the focus and meaning of the original sentence. Extensive practice with such problems as dangling modifiers and faulty or illogical subordination will be provided. The basic goal of these modules is to have the students refine their revising and editing skills. The amount of time students spend with CAI will depend on their personal desires and the results of ongoing evaluations of their writing skills.

It is AU's belief that CAI is a cost-effective method of teaching remedial English. AU's CAI modules provide the students with instruction in the mechanics of English and allow the tutors to concentrate on the development of composition skills. Although remediation is often expensive and time consuming, Canada's literacy statistics indicate that it must be done. In order to ensure that their students are successful, Canadian Educational institutions must be prepared to provide remediation in English.

by Karen Rosa

Academic Computing, Athabasca University
Published in the Winter 1990 edition of "Change",
produced by Grant MacEwan Community College,
Instructional Development, Edmonton, Alberta.

THINKING STRATEGICALLY ABOUT TECHNOLOGIES

Increasingly, technologies are used in training and education. In a recent study done for the World Bank on the costs of technologies for technical training, I undertook a comprehensive search of existing work before embarking on ten case studies.

These ten case studies, from industry as well as from colleges in both Canada and the United States, formed the basis of my analysis. The technologies reviewed ranged from print materials, to computers to interactive video, and included face-to-face instruction. The findings

indicated that the most critical economic factor was the fact that technology can achieve a significant saving in training time. Many of the other conclusions appear to stem from this particular finding.

The principal conclusions of this study are summarized as follows:

- All educational technologies are most effective when they are used in conjunction with self-paced, open entry/exit systems.
- Such systems are more readily implemented by industry than by public education, which has to deal with more rigid structures.
- All educational technologies, when used with self-paced learning systems, can achieve significant benefits such as quality instruction, reduced learning times, and reduced need for instructors who are fully qualified or up-to-date in their respective subject areas.
- The benefits of instructional technologies are particularly evident in industry because they reduce costs and influence productivity. In public education, the benefits will remain fewer until institutions adjust their modes of operation toward self-paced learning and open entry/exit systems, something that may not be easily accomplished within existing institutions.
- Educational technologies and courseware require high front-end resources, which are typically not available in public education. Cooperative ventures among a number of institutions or with industries are opening new venues, which will provide benefits for both sectors.
- In almost all cases, the cost of the hardware is the principal determinant cost per student, followed by the cost of replacing the worker who is away on training, and by the cost of the instructor. In many applications, the more expensive technologies are not economical (compared to face-to-face instruction) unless the hardware costs drop significantly, or unless the worker replacement costs are high. Other factors, such as the number of students who can access the hardware at any given time and the flexibility of immediately replacing graduates or dropouts with new recruits, are also important to the discussion of higher cost technologies.

The study concludes that there is enough evidence of the potential economic benefits related to the use of technologies in training to warrant further investigations of their potential. In public education and in training, pilot projects that include a mix of training technologies and that are accompanied by economic and institutional studies should give significant impetus to help policymakers develop appropriate public policies and funding mechanisms.

Although this report was primarily targeted to the work of the World Bank, its conclusions are also relevant to Canadian Educational institutions (Lockheed, Middleton, & Neetleton, 1990). A recent report for the Department of Communications highlighted the need for more concerted studies of institutional arrangements, more pilot projects, a clearinghouse service on existing information, and more economic assessments and business plans (Stahmer, 1989). These goals can only be accomplished through cooperative ventures of a national scale.

The training community needs to organize itself and press for such initiatives. In the training process, the penalty for not utilizing technologies to their fullest potential is considerable. Our workforce is changing; the skills required for future jobs are changing; and communication technologies will continue to be present in all aspects of our lives. We still have time to set new directions and to harness the potential that technologies can offer on a national scale.

References:

Lockheed, M., Middleton, J., & Neetleton, G. (Eds.). (1990). *Technology and teaching: Elements of sustainability in developing countries*. World Bank.

Stahmer, A. (1989, July). *Realistic partnerships for now and strategies for the future*. Report to the Department of Communications (Contract No. 36001-8-3601).

by **Anna Stahmer**

Educational Technology Consultant
Published in the Winter 1990 edition of *Change*,
produced by Grant MacEwan Community College,
Instructional Development, Edmonton, Alberta.

UNIPLEX HINTS

by *Nobu Chow*

Q: When I use multi-columns, the the columns look fine on the screen but print too close together. How can I fix this?

A: When setting up your ruler, put at least 4 dots between columns. If you have already typed your document with less space between columns, there is an efficient way to fix it. The method is easy but lengthy to explain. Call me if this happens to you.

Q: When I print my document, there is more white space at the right margin than I need. I would like the text to extend further and use some of that space. I have tried extending my ruler so it will be longer than my text, but that just makes it worse.

A: This situation can occur when you have a document, or part of a document in "no fill" mode. I have seen this happen when people do tables with columns of numbers. If, for example, the ruler extends to column 90, Uniplex will attempt to print 90 characters across even if your text ends at column 79. The result will be a large right margin.

To extend the text and reduce the right margin make sure that the ruler does not extend any more than one or two columns beyond the last character of text.

When you print, use the "change options" menu, and set a very small right margin, say about 3 (default is normally 12).

Note: In *fill* mode (single spaced text aligned under the 'L'), the text will fill the space between the left and right margins regardless of the width of the ruler.

Q: I have a document that I would like on one page but two lines print on the second page. How can I make it print on one page and still have reasonable top and bottom margins?

A: There are two ways to solve this problem:

1. If you don't mind smaller left and right margins, you can print with "change options" and ask for smaller margins—try 8 and 8. That might widen the text enough to take up the line or two that you're getting on the second page.
2. Change the line spacing to less than 1. At the top of the document, enter the command `.SP.9`. This will "shrink" the document slightly. You can use this same trick to extend a document that is too short for single spacing and too long for double spacing. You could set the spacing to say, `.SP.4`.

Q: Is there a simple way to print Uniplex documents? I don't require fancy formatting. Since I don't use it very much, I would rather not bother learning about rulers.

A: There is an option to print the "old" way. It will give you "what you see is what you get" in Courier font.

From the print menu, choose the "Special Printing" option, and then either "Old Uniplex Print" or "Old Uniplex Print:Options". The latter allows you to

choose the page offset (left margin) and the pitch (characters per inch). A pitch of 12 will print the contents of the full Uniplex screen. If you select 10, you have to shorten the ruler by placing the right margin at 70 or you will lose characters off the right hand edge of the paper.

This option will not support some of the special effects such as large font. Neither will it draw boxes. You must draw your lines with underscores. It does not understand the centering ruler so you have to center your text manually with `<ESC> c`.

KWANTLEN COLLEGE PHONEBOOK

A Kwantlen College phonebook was recently printed and distributed on all campuses. The plan is to distribute revised editions of the phonebook regularly.

In order to keep the phonebook up-to-date, please notify the appropriate campus representative when there is a change in your phone listing. The campus representatives who currently maintain the phonebook information are listed below along with their phone locals.

NEWTON CAMPUS	Sharlene Dubas	— L 0
RICHMOND CAMPUS	Lori Norum	— L 0
SURREY CAMPUS	Judy Johnstone	— L 284

You can also access the College phonebook through the computer system as follows:

1. From your main directory, you can access the phonebook by pushing `<i>` for Information, then `<p>` for the Kwantlen Phonebook. Then type in the name of the person you would like to call and push `<RET>`. You will then receive a list of all the people in the college with that name or whose name includes that name. For example, if you ask for "Eva" you will receive the phone listings for anyone named Eva as well as anyone whose last name is Evans, etc. Note that you don't have to use both upper and lower case. "EVA" or "eva" will find "Eva". You may also ask for a department, such as Purchasing, and you will then receive a list of everyone in that department along with their locals.
2. If you are in a document, you can access the phonebook by using "Uniplex Desk". To access Uniplex Desk, push `<keypad 9>` or `<F9>`. A window will appear in your document showing the options available in the Uniplex Desk. Push `<5>` for Kwantlen phonebook and your

document will disappear and the following will appear on your screen:

enter name or <RET> to continue

Type in the name of the person you wish to call and the listing for that person will appear. To return to your document just push <RET>.

COMPUTER AIDED PATTERN DESIGN, GRADING, AND MARKER MAKING FOR THE APPAREL INDUSTRY

Exciting things are happening in the Fashion Arts Program at Kwantlen College. In the spring of 1989, the College supported a Fashion faculty proposal to purchase two computerized grading, marker making, and pattern design systems to be used to train students in apparel manufacturing. The systems are the Accumark 300, developed by Gerber Garment Technology of Tolland, Connecticut. In Vancouver, this system can be found in use by a variety of large volume apparel manufacturers as well as smaller design companies with diverse product ranges.

In early June, 1989, Mary Boni, Cosimo Agostino, Ed Gesang, Karl Rangno, and Debra Jackowich attended an intense one week training program, provided by the software producers, then spent the remainder of the summer further developing their skills in the operation of the system. Mary has created the training procedure workbook that is being used in the two seven-week courses currently being offered to program students. Continuing Education courses, to train people working in the apparel industry, will be available in March, 1990.

What does the system do? First, pattern pieces are drafted by hand for a garment design, and grade rules are established and entered into the computer to be used to create various sizes of the garment. The pattern pieces are digitized, to transfer them to the computer. Once the pattern pieces are in the computer system they can be altered if desired, and quickly and accurately graded. Each piece for each size can then be transferred to the marker making monitor. Marking making refers to laying out the pattern pieces to cut the fabric., the pieces organized as to minimize the amount of fabric used to keep costs competitive. This can be done with the aid of the computer, greatly improving speed and efficiency. The pattern layout is transferred to an electronic plotter that draws the pieces on the paper, to later be placed on the

fabric.

Several Fashion Arts students, graduating this spring, have already put their computer training to use on the job during a one-week work practicum, in industry, in January 1990.

What's next? Fashion faculty are presenting a proposal to the College for a computerized design package that will allow students to create a design, on the computer screen, that can be stored and at any time and as often as desired, be copied and altered in terms of style lines, texture, and colour. These components of the technology provide a faster, more efficient mode for design experimentation and seasonal line development than traditional mediums.

The technology has exciting prospects for the future of the Fashion Arts Program and provides the opportunity for the local garment industry to look at what they are doing in a new way.

Anyone interested in a demonstration is welcome to contact Mary Boni, local 138, Richmond Campus.

PRESCRIPTION FOR VIRUS PREVENTION

The computer virus is named for its ability to spread from program to program, file to file, in a computer system or network. Attached to a program such as an electronic spreadsheet or word processor, a virus enters the computer's memory when the program is activated. There it lurks, examining data and software as they are loaded into memory and attaching a replica of itself wherever it finds none. Contaminated programs and data files infect any computer that uses them, spreading the virus like an epidemic throughout a system or network. Once the disease has spread, the original virus and its clones can go to work executing whatever instructions they carry. A virus can be programmed, for example, to erase files on a certain date or even to cripple the whole system. A virus is so small, occupying the space of only a few hundred bytes in memory, that it can remain virtually invisible among the hundreds of thousands of coded lines contained in a typical program for a big computer. It is also surprisingly easy to create: a decent programmer can write one in six hours, a novice can write one in 20 hours with assistance or 30 hours without assistance.

Routinely using good computing practices can reduce the likelihood of your computer's contracting and spreading any virus and can minimize its effects if one does strike.

Advice from experts includes:

- make frequent backups of your data, and keep several versions;
- use only software obtained from reputable and reliable sources. Be very cautious of software from public sources, such as software bulletin boards, or sent across personal computer networks;
- don't let others use your computer without your consent;
- use care when exchanging software between computers at work or between your home computer and your office computer;
- back up new software immediately after installation and use the backup copy whenever you need to restore. Retain original distribution diskettes in a safe location;
- learn about your computer and the software you use and be able to distinguish between normal and abnormal software activity; and
- if you suspect your system contains a virus, stop using it and get assistance from a knowledgeable individual.

In general, educating users is one of the best, most cost-effective steps to take, according to Dennis Steinhauer, manager of the computer security management and evaluation group at NIST. He said that users should know about malicious software in general and the risks that it poses; how to use technical controls; monitor their systems and software for abnormal activity; and what to do to contain a problem or recover from an attack. "An educated user is the best defense most organizations have," Steinhauer added.

(Hints on how to prevent virus infections based on an article in the October 13, 1989 edition of "Direct Access", published by Page Computer Publishing Inc., a unit of Laurention Publishing Group, Downsview, Ontario)

DID YOU KNOW THAT.....

The IBM Corporation takes training seriously. An average of 18,000 IBM employees per day are involved in training. Phew! That's a lot of Nobu's and Diane's!

Facts about computer dial-up communications according to M. J. Oke, Vice-President and General Manager, Racal-Guardata Canada:

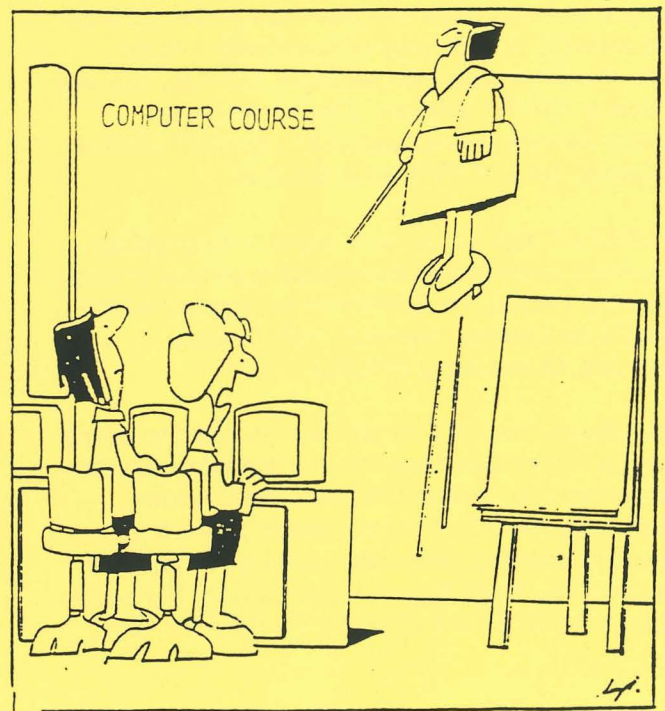
- It takes an average of two seconds for the telephone

number of a new dial-up port to appear on a hacker's bulletin board.

- There are 23,000 hackers in Canada.
- It takes an average of less than one week to break into a computer system with 100 users.
- About half of all computer users chose one of the 1,000 most common passwords.

If your password is a name, short or long, there are approximately 2,000 possibilities and the average time a "hacker" would need to discover it is 5 hours. If your password is a mix of initials and dates (or letters and numbers) there are 3,700,000,000,000,000 possibilities and it would take that same hacker an average of 1,200,000,000 years to discover it. To be REALLY secure, though, the first line of a poem (such as rosesared) wins the prize with 10,000,000,000,000,000,000,000,000 possibilities giving that poor hacker trouble for an average of 3,000,000,000,000,000,000,000 years!

Augusta Ada, Countess of Lovelace, the 19th-century mathematician and writer, is often credited with being the world's first programmer because of her interpretive writings about Charles Babbage's Analytical Engine in the pre-dawn history of computing.



... OOPS... WRONG BUTTON ...

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GOOD QUESTION! BULLETIN BOARD....

The Annual Guide to Highest-Rated Educational Software contains descriptions of the 185 highest-rated, new software programs. More than 40 American and Canadian professional evaluation services were involved in rating these programs. The book is available for \$26.95 US from R.R. Bowker Company, 245 West 17th Street, New York, NY 10011.

IBM On Disk is a list of 15,000 software titles produced by 2,600 software manufacturers. The disk's menus help users to search the list of available software programs. The program is available on seven, 5.25-inch high density diskettes or on three, 3.5-inch micro diskettes and retails for \$39.95 US from Menu Publishing, Mayview Road at Park Drive, Box Menu, Pittsburg, PA 15241.

Infinity: The Canadian Chronology Database is a software package that allows high school teachers and students to manipulate Canadian economic, demographic, historical, meteorological, and other statistical data on a spreadsheet-like program. The software can be ordered to suit MS-DOS, OS/2, Commodore, Apple II, ICON, or Macintosh computers. An instructor's manual and a student guide are also available. A single copy of the software sells for \$175. If multiple copies are purchased, each copy may cost as little as \$50. For additional information, contact Alastair Sweeny, Ottawa Researchers, Box 2831, Station D, Ottawa, ON K1P 5W8, (613) 828-5235.

Publish by Design is a computer-based training package that covers all the basic skills required to produce desktop published material. The \$149.95 US package is available from Online Computer Systems, 20251 Century Boulevard, Germantown, MD 20874.

The *Software Sampler Club* provides you with free sample software, a bimonthly magazine, free computer magazines, and discounts on software purchases. The Canadian membership rate is \$109 US per year, or \$169 US for two years. For additional information, contact: The Software Sampler Club, 16580 Harbor Boulevard, Suite D, Fountain Valley, CA 92708 (714) 775-0695, fax (714) 531-8546.

SYSTEMS AND COMPUTING GLOSSARY OF MYSTERIOUS TERMS:

WYSIWYG—What you see is what you get

GIGO—Garbage in - garbage out

LCD (Liquid crystal display)—a digital display device made up of character-forming segments of liquid crystal material sandwiched between polarizing and reflecting pieces of glass

Modem—A device (modulator/demodulator) that enables data to be transmitted between computers, generally over telephone lines but sometimes on fiber-optic cable or radio frequencies.

Bridge Box—A device which connects 10 or more terminals to a computer network. "Bridge" is the name of the company that built the first ones the College bought. Bridge Communications has since merged with 3Com.

Kill—Stop a process or disconnect a user from the system. This computer term has nothing to do with guns, knives, or poison.

Daemon—A program that continually waits for work to do, does the work, and then waits for more. Example, a daemon is waiting for you to ask for a document to be printed.



... I DON'T THINK YOU QUITE UNDERSTAND, YERA...

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Letters to Chip

DEAR CHIP:

I have a message on my computer screen which says, "you have new mail." I have checked the mailroom on a number of occasions and can't find any new mail. I don't know who sent me the message so I am unable to tell them that whatever they sent to me did not arrive in the mailroom.

— *Concerned*

DEAR CONCERNED:

Your computer is trying to tell you that you have electronic mail. Give Systems and Computing a call and they will send you information on EAN mail or set up a training session for you to unravel the mysteries of EAN mail and save you all those trips to the mailroom.

— *Chip*

DEAR CHIP:

I seem to have lost my cursor. I can't find it anywhere on my screen.

— *Lost*

DEAR LOST:

You are probably experiencing a glare problem. You should try to position your monitor so that the overhead lights or light coming through the window does not reflect on your screen. If it is not possible to change the position of your monitor, you should check into obtaining an anti-glare screen for your monitor.

— *Chip*

DEAR CHIP:

The message on the screen says "press any key to continue". Where is the "any key"?

— *Confused*

DEAR CONFUSED:

There is no special key called the "any key". If you wish to continue you can press one of the keys on your keyboard, it doesn't matter which key you press. If you are confused by any of the other procedure messages which appear on your screen from time to time, please refer to the written documentation you have received on that procedure. You should find more complete information or directions there.

— *Chip*

DEAR CHIP:

My friend told me that my computer has a bug in it. Who do I call for help - an exterminator?

— *Bugged*

DEAR BUGGED:

A computer "bug" is not a living, breathing creature, but the original "bug" was. The first computer bug was documented in 1945 by Grace Murray Hopper, a mathematician and pioneer programmer who developed considerable troubleshooting skills as a U. S. Naval Officer working with the Harvard Mark I computer. One hot, humid summer day, a mysterious malfunction caused the clattering Mark I to shutdown. Upon investigating, the programmers found that an electrical switch was blocked by the remains of a moth. Ever attentive to detail, they extracted the dead moth with tweezers and taped it into the logbook. The accompanying notation recorded the "first actual case of a bug being found." As Grace Hopper later recalled, "From then on, when the officer came in to ask if we were accomplishing anything, we told him we were 'debugging' the computer." The term stuck, and finding problems with a computer, particularly with its software, would forever after be known as debugging.

— *Chip*

DEAR CHIP:

I've been told that a computer virus is spreading and that my computer may get it. How do I know when it's sick and is it contagious to humans?

— *Healthy As A Horse*

DEAR HEALTHY:

"Computer virus" is a term often used to indicate any self-replicating software that, under certain conditions, can destroy information in computers or disrupt networks. Other examples of malicious software are 'Trojan horses' and 'network worms'. Viruses can spread quickly and cause extensive damage. They pose a larger risk to personal computers, which tend to have fewer protection features and are often used by people who are not versed in the technical details of the machine. Computer viruses are not contagious to humans, but if your PC software contains a virus, you may feel sick!

— *Chip*

SYSTEMS & COMPUTING STAFF

Randy Bruce
Department Manager

Donna Hrynkiw
Programmer/Analyst

Responsible for application systems software and inter-campus communications systems. Donna supports the SRS student record system, BAS accounting system, BUCAT library system, POM purchasing system, as well as other existing VMS and Oracle applications. She is also responsible for office automation (Uniplex) and desktop publishing - Framemaker.

Alan Fedoruk
Programmer/Analyst

In the process of developing extensions of some Oracle-based systems and investigating timesheet reporting systems. He will also assist in the implementation of management information systems.

Sukey Samra
Programmer/Analyst

Responsible for technical support of DEC VAX and Sun computer systems, including monitoring and maintaining system performance, disk space, backups, security, and computer networking systems.

Diane Bloom
Central User Support Person

Provides centralized user and system support from the Systems and Computing office.

Nobu Chow
Campus User Support Person

Provides on campus support to users and systems on all campuses.

Joseph Leong
Electronics Technician

Provides hardware installation, maintenance, and repair services.

Marnie McFarlane
Computer Operator

Performs data backups for DEC VAX and Sun systems.

Gaye Rider
Departmental Secretary

Provides first-line user support.

STAFF CHANGES

We are pleased to welcome Sukey Samra to the Systems and Computing Department as our third programmer/analyst.

With Sukey's appointment, some reassignment of duties has occurred which will provide a clearer distinction among the three positions. These changes have been reflected in the lists of responsibilities shown above for each department member.

SERVICES

Hardware / Software

DEC VAX 11/780 VMS node name LOMANI, 16 megabytes memory, 1.3 gigabytes disk space, supporting BAS for Douglas College, SRS for BCIT and Douglas, and Kwantlen instructional users.

DEC VAX 11/780 VMS node name JADE, 16 megabytes memory, 870 megabytes disk space, supporting BAS, SRS, TRAC, Library Acquisitions - for Kwantlen as well as Kwantlen students.

SUN 3/280 Unix node name ENVY, 16 megabytes memory, 1.1 gigabytes disk space, supporting administration for Kwantlen.

SUN 3/260 Unix node name IVY, 32 megabytes memory, 950 megabytes disk space, supporting Kwantlen instructional users and Oracle.

Dial-Up Ports

envy	591-6822	2400 baud
envy	591-1105	1200 baud

Electronic Mail Addresses

EAN mail:

envy/ivy
loman1
jade

userenvy.kwantlen.bc.ca
user@loman1.lmcc.bc.ca
user@jade.kwantlen.bc.ca

PSI/DECNET

loman1

PSI%66700092::user