

Computer science confronts problems

By TODD ADAMS
Of the Emerald

New director will take charge

The University computer science department is at a crossroads — some critical problems demand attention and yet there is potential for improvement in a field of enormous growth.

Dept. Head Steven Hedetniemi has seen some positive signs since arriving a year and a half ago, but problems such as out-of-date equipment, demands on computer use and staff shortages

still must be dealt with.

A lot depends on the prerogative of a new director of University Computing now being sought by a search committee, Hedetniemi says.

"The new director is going to have to decide on how to proceed, how to generate some revenue," he says. "And I'm talking about between a half million and \$1.5 million."

And though the nation-wide

search is almost over, the department's problems are not.

This year's operating budget in computer science left the department low on funds this spring resulting in curtailed access to the most vital computer science tool — the computer.

"From the fall of 1976 to the fall of 1977, the number of credit hours enrolled in by students in the department rose by 41 percent," says Hedetniemi. "The

comparison between the winter of '76 and winter of '77 showed a 34 percent rise."

The influx of students puts a strain on the department's budget and on use of the computer. But even if ample revenue is found next year, the problems won't end there.

"We have obsolete equipment," says Hedetniemi. "The computers we do have are out of date. One is eight years old (the model 50, 360 computer) and the other is six years old (the PDP-10). When they get that old, they tend to do what we call 'crash,' or shut down."

Hedetniemi estimates it would take about \$1 million to update the system in the department.

"Computers can be purchased much cheaper now than a few years ago," he notes. "We bought about a \$25,000 micro-computer about four years ago. An equivalent machine could be had for about \$1,000 now."

According to Charles Klopfenstein, who has aided in the application of computers in the chemistry department, the reduction in computer price is the result of a change in the "economy to scale." It used to be the bigger the computer, the more you got for the

money, but because the cost of computer hardware (the mechanical, electrical components) has gone down, it's now cheaper to buy smaller models.

Besides equipment needs and demands on computer use, another vexing problem is staff shortage. The department has hired two new instructors for the fall, only to fill existing vacancies.

"We have the highest student-faculty ratio of any department in the arts and sciences at the University," says Hedetniemi. "Staffing is a serious problem

That's not to say, however, that the present staff is not capable. In fact, Hedetniemi says the staff is perhaps the most positive of the department's good points.

"We have a high quality staff," he says. "The instructor's records are excellent. Faculty research is very active and some of the work that's been done is super, super good."

Good rapport between the department staff and the professional staff at the computer science center is another positive point, along with the graduate level program in computer science, which Hedetniemi likens to a family in closeness and cooperation between staff and students.

"Things are definitely looking up," says Hedetniemi. "We've seen definite improvement in the past year and a half."

Boyd

(Continued from Page 1)

together 42,000-plus people and not have some complaints," Boyd responded. But I think the problems and complaints were at a fairly low level."

When asked if he would support the idea of more such concerts at Autzen, Boyd says, "I'm open to the possibility." Then Boyd adds, "I have to confess that I was one of those who was unenthusiastic about it. A University works years building a good reputation and you hate to jeopardize it for mere money, consequently, I had thought it was a high-risk proposition."

"But we had it, and the judgement of people who thought it was a good idea" says Boyd, "turned out to be better than my own judgement, so if they wanted to have another one and I were assured that the controls were as adequate, and if we could continue to get the minimum support necessary from the larger community, I would be willing to have another."

TAXPAYER REVOLT: "I think that a Proposition 13-like action would lead to increases in tuition fairly dramatically, and I think that would be very bad for Oregon because our tuition is high enough now so that any significant increase would surely have the effect of reducing opportunity for a number of people who are now just barely able to get across the threshold."

Boyd adds, "Education could once again become a kind of ornament for the privileged, and I'm anxious for that not to happen."

NEW METHODS OF FUNDING: Boyd feels "that we should be funded on what is technically called a 'program budget' rather than a head count or student driven model." He feels the present method "does not provide adequate support for basic research," and makes programs that are not well-populated vulnerable since they can't be maintained.

"Population goes up and down according to vogues and to job market, Boyd says. "University programs are established at great costs over a long-run of years," and "need to be preserved from temporary deprivation."

Boyd has been working for a new funding method for three years, and says, "No one's going to be willing to go about new methods of funding until it's clear what the tax system is going to be like."

Boyd has just returned from a meeting in Denver of the Western Interstate Commission for Higher Education (WICHE). The meeting was "to develop plans for cooperation in the future of advanced graduate education," says Boyd, "so that as schools reduce or eliminate programs, we can keep alive in each area all the programs that are needed."

Boyd says that the University is "more apt to provide advanced graduate instruction than to look for it elsewhere because it's an important part of our mission." The WICHE Student Exchange Program is designed to help students from western states "obtain

access to fields of professional education that are not available in their home states," at in-state tuition rates. Boyd says this is important for Oregon students who want year-round librarianship training, for example.

"Many GRADUATE programs are shrinking — the assumption is that many will shrink out of existence — like librarianship. If that's going to happen it's terribly important that we coordinate with sister institutions so we don't all shrink the same program."

Boyd says that he doesn't expect to be eliminating much work at the advanced graduate level, but believes the volume of such work will be reduced substantially with smaller student populations.

"But it would be prohibitively expensive and perhaps impossible to recreate them. If you let them go out of existence some would be lost forever," he adds.

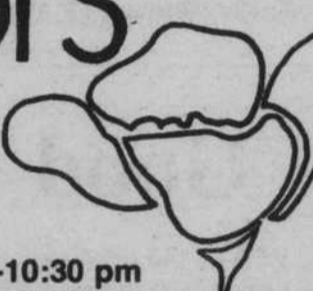
bistro • cafe • TAVERNA • restaurant • kafeneion • TAVERNA

ποτοπουι's

greek peasant food

675 E. 13th
343-0846

8:00 am-10:30 pm
closed Tuesday



Dairy Queen **Dairy Queen** **Dairy Queen**

Dairy Queen **Dairy Queen** **Dairy Queen**

Dairy Queen **Dairy Queen** **Dairy Queen**

Best Milkshake
and Hamburger
in Town!!

Campus Dairy Queen
706 E. 13th Ave.

Dairy Queen **Dairy Queen** **Dairy Queen**

We love phone orders.
Ready to go when you
arrive - Phone: 343-7512

DUFFY'S

Live Music Friday & Saturday

Foxe & Weasel 9 pm-2 am
\$1.00 cover

Ron Lloyd every Tues. & Wed.
9 pm-1 am
\$1.00 cover

Hawaiian night
Saturday night
anyone wearing
Hawaiian garment
FREE!

13th & Alder



MCAT GRE • DAT
GMAT

OCAT • MCAT • SAT • VAT • LSAT

NMB I, II, III
ECFMG • FLEX • VQE
NAT'L DENT BDS • NURSING BDS

STANLEY H. KAPLAN
EDUCATIONAL CENTER

Test Preparation Specialists Since 1938
OPEN DAYS, EVENINGS, & WEEKENDS
For Information, Please Call:

343-2618
Summer Class in Eugene
begins August 5th.