

Update

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Campus Policies Related to Academic Uses of Information Technology

INTRODUCTION

Every college and university uses computers in their educational programs. In many institutions, this information technology (IT) revolution has taken place without institutional policies in place. The potential educational uses of the Internet and the World Wide Web (WWW) add urgency to the need for institutional policies that protect the interests of participants while assuring the best educational use of these expensive resources.

Where they exist, institutions have implemented policies regarding the use of computers in educational programs unevenly. For example, according to the 1998 Campus Computing Survey, almost two-thirds of institutions participating in this annual survey report they have campus centers to help faculty with IT training and instructional support. However, only 13 percent included the use of IT in the faculty review and promotion process. Consistent institutional policies will help shape the character of academic computing in the next decade. Several institutional policies including the provision of IT support

and training for faculty, intellectual property agreements, and an explicit statement of how faculty members will be rewarded for their IT efforts need to receive more attention. These faculty issues have not received attention in many institutions to this time.

This report uses data from *Campus Computing, 1998*, which

is based on a survey of campus IT leaders conducted annually by Dr. Kenneth Green, a visiting scholar at Claremont Graduate University in California.¹ Because the NEA membership is primarily associated with public institutions, this report provides more information about colleges and universities in the public sector than for those in the private sector.

WHAT ARE THE FUNDAMENTAL POLICIES REGARDING COMPUTER USE IN COLLEGES AND UNIVERSITIES?

GENERAL CAMPUS POLICIES

Policies mandating the use of computers

Over one-third of the colleges and universities have formal policies promoting or mandating the use of computers in their educational programs. Public universities and public 4-year comprehensive colleges were more likely to promote or mandate the use of computers among their undergraduates than were community colleges. Only one-quarter of the community colleges reported that they promoted or mandated

computer resources for their students. (Table 1)

Distance education

Universities were more likely than either community colleges or other 4-year colleges to promote distance education. Several factors may contribute to this disparity. First, universities have larger geographic reach compared with community colleges and other 4-year institutions. Second, most universities have more resources available to develop new programs. Third, universities may be located too far away from

Table 1

Percent of Institutions with Formal Policy Promoting or Mandating Computer Technology Resources

Purpose	All (incl. private)	Public Univ.	Public 4 year	Public 2 year
Undergraduates	34%	42%	39%	25%
Curriculum Utilization	32%	39%	35%	34%
Distance Education	23%	44%	26%	25%
Graduate Students	15%	35%	22%	1%

Table 2

General Campus Policies Related to Desktop Computing

Policies	All (incl. private)	Public Univ.	Public 4 year	Public 2 year
Formal confidentiality of data policy	80%	91%	91%	72%
Computer use fees charged to all students	46%	66%	65%	40%
Computer instruction or competencies are required for all undergraduates	43%	26%	46%	42%
Average computer use fee, where charged	\$117	\$142	\$107	\$72

working adults who want to take specialized classes.

OPERATING POLICIES

Eighty percent of the campuses had formal rules about the confidentiality of computer data, which made it the most frequently reported IT policy. The least reported policy of the list in Table 2 was a formal policy to require computer competency for all students. Forty-three percent of the campuses reported this policy. Community colleges were more likely to require computer instruction or demonstra-

tion of competency than universities.

Forty-six percent of the campuses charged a computer fee to their students. The average student paid a computer fee of \$117 in fall 1998. Community colleges were less likely to charge a user fee than either public 4-year institutions or universities. If community colleges charged a computer fee, it was less, on average, than that charged by either public, 4-year institutions or universities. Both the percentage of institutions that have a mandatory IT fee and the average fee, have been rising across all sec-

tors of higher education in recent years.

PLANS FOR ACADEMIC AND INSTRUCTIONAL USE OF IT

Colleges and universities emphasize the research and educational uses of computers on campus. The three most frequently reported institutional IT plans provide support or assistance to faculty members who want to develop software for their research or instruction (Table 3). University and 4-year college campuses were more likely to provide these support functions than were community colleges.

Roughly one-fourth (24 percent) of the campuses have formal policies addressing the ownership of Web-based curriculum and intellectual property developed by faculty. Although intellectual property is an important issue for faculty, 75 percent of the institutions have yet to develop institutional policies or procedures to address this issue.

Two policy practices tied for the lowest number of responses. The first was including IT activities as part of a faculty member's formal review and evaluation for promotion. This does not mean that institutions ignore faculty efforts in this area. Twenty-eight percent of the institutions reported that they provide incentives to faculty members when they develop courseware. The second area that tied for last place was a mandate to assess the

Table 3**Percent of Institutions Having a Formal Campus Plan for IT**

Purpose	All (incl. private)	Public Univ.	Public 4 year	Public 2 year
Provide formal support or assistance to faculty members who want to develop software for their research	69%	92%	78%	69%
Have institutional projects for developing instructional software	62%	93%	73%	58%
Provide formal support or assistance to faculty members who want to develop instructional software	55%	84%	64%	47%
Provide agreements or licenses for on-campus duplication and distribution of desktop computer software products	54%	86%	71%	35%
Use the Internet and WWW resources in distance education	47%	46%	46%	40%
Integrate IT into the curriculum	41%	45%	39%	45%
Have a technology resource center for the instructional use of IT	36%	63%	52%	24%
Use the Internet and WWW resources in instruction	34%	33%	28%	38%
Use the Internet and WWW resources for marketing and promotion to off-campus audiences	30%	38%	33%	39%
Provide incentives to faculty for courseware development	28%	38%	35%	27%
Have a policy regarding the ownership of WWW-based curriculum resources and intellectual property developed by the faculty	24%	40%	28%	27%
Maintain a library of academic courseware for faculty review and evaluation	22%	32%	30%	21%
Recognize and reward the use of IT as part of the faculty review and promotion process	13%	9%	17%	10%
Assess the impact of information technology on instruction and learning outcomes	13%	25%	10%	11%

effect of IT on instruction and learning outcomes. Both policies existed in only 13 percent of the surveyed institutions.

QUALITY OF IT INFRASTRUCTURE

In *Campus Computing, 1998*, the quality of support services ranked lower than the hardware and software systems. Colleges and universities may be investing in IT without providing adequate training and

user support services. The rank order of the quality of the technology infrastructure is as follows:

1. Computer networks and data communication
2. Telecommunications and phone system
3. On-line reference resources in campus library/library system
4. User support services
5. WWW resources to support instruction

Campus IT officials acknowledge the need to do more in the area of user support. For example, more than 60 percent of IT leaders across all sectors of higher education identified user support and instructional integration as the single most important IT concern confronting their institutions over the next two or three years. Second, but well below user support, was the need to develop financial plans to support

the routine replacement of aging IT resources. About 20 percent of the survey respondents cited this concern. Without question, campus IT leaders recognize that training and technical support is the key to improving the use of IT in the instructional program.

SUMMARY AND CONCLUSIONS

American higher education is approaching the point at which IT plays a part in nearly all phases of the educational process. The results of this survey suggest that IT policies have been inconsistently developed or are lacking in many instances. Even as institutions help faculty members develop

educational and research applications, they have not developed policies to address intellectual property issues. Faculty efforts to bring IT into their teaching and scholarly activities are rarely considered in formal faculty review and evaluation for promotion.

Policies in community colleges typically lag well behind those of universities and 4-year colleges. In most cases, public universities are more likely to report developed policies relevant to IT.

In the future, it appears that campuses will need to put more emphasis on developing the human skills required to use IT effectively. Training and

technical support will receive more attention than they have in the past. In the long run, the effectiveness of these new digital tools will be dependent on the way in which they are (a) supported by the institutions and (b) accepted and used by the faculty.

End Note

The Campus Computing Project is the largest continuing study of the role of IT in American higher education. Copies of the 1998 report can be ordered from The Campus Computing Project, P.O. Box 261242, Encino, CA 91426-1242. Additional information about the Campus Computing Project is available at: <www.campuscomputing.net>



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