

# Higher Education Support Staff: The Impact of Technology

by Linda K. Johnsrud

**Linda K. Johnsrud** is associate dean for academic affairs, College of Education, University of Hawaii at Manoa. A past director of the University of Hawaii Professional Assembly and a 1998-99 fellow of the American Council on Education, she has also chaired the university's faculty senate. She currently serves as vice president of the Post-secondary Division (J) of the American Educational Research Association.

Johnsrud writes extensively on worklife issues of administrative staff and faculty. She is co-editor (with Vicki J. Rosser) of *Understanding the Work and Career Paths of Midlevel Administrators* (Jossey-Bass, 2000) and author of *Maintaining Morale: A Guide to Addressing the Morale of Midlevel Administrators and Faculty* (College and University Personnel Association, 1996).

A frequent speaker on campus and in the community, Johnsrud has worked with colleges and universities in Guam, Japan, Korea, and Western Australia.

Higher education support personnel (ESPs) are often called the “hidden workforce” on college campuses.<sup>1</sup> The reason: neither scholars nor administrators devote adequate attention to understanding or improving their worklives. A recent focus group discussion of the working conditions of ESPs listed key issues for attention:<sup>2</sup>

- the *impact of technology* on the worklives of ESPs.
- inadequate classification systems, adopted from the K-12 sector, that do not reflect the realities confronted by higher education support staff.
- the lack of competent, well-trained supervisors.
- inattention to discrimination and sexual harassment faced by ESPs.
- the lack of recognition and regard felt by ESPs for their contributions to their campuses.

This article—continuing the series appearing in the *NEA Almanac*—casts new light upon the working conditions of these employees. It compares the national demographic and salary data on higher education ESPs for 1993, 1995, and 1997 (the most recent available data),<sup>3</sup> and then examines the first of these high-priority issues: how union contracts address the impact of technology on ESPs working on college campuses.

## ESP CATEGORIES

Our discussion of ESP worklives begins by describing the groups included in the analysis. The National Center for Education Statistics provides data on eight classes of employees:<sup>4</sup>

- 1) Executive/administrative/managerial
- 2) Faculty (instruction and research)
- 3) Instructional and research assistants
- 4) Technical and paraprofessional
- 5) Other professionals (support/service)
- 6) Clerical and secretarial
- 7) Skilled crafts
- 8) Service/maintenance

This analysis excludes executives, faculty, and instructional and research assistants, and focuses on the five groups of ESPs.

**Distribution by occupation.** Figure 1 provides the percentage distribution of ESP staff in two-year and four-year postsecondary institutions in 1997. The largest proportion of ESPs are found in the support/service professional group (34.0 percent), followed by the clerical and secretarial group (31.8 percent). Service/maintenance, technical and paraprofessional, and skilled crafts are relatively smaller groups (16.0 percent, 13.6 percent and 4.7 percent, respectively).

Figures 2 and 3 provide the percentage distribution of ESPs, disaggregated for four-year and two-year institutions. The data show modest differences. Support/service professionals represent the largest proportion of ESP staff (36.0 percent) in four-year institutions (Figure 2); the clerical and secretarial group is the next largest (30.5 percent). Service/maintenance, technical and paraprofessional, and skilled crafts are relatively smaller groups (15.9 percent, 12.7 percent, and 4.9 percent, respectively).

In contrast, clerical and secretarial staff comprise the largest group (39.0 percent) in two-year colleges (Figure 3); support/service professionals follow (22.6 percent). The

proportions of the technical and paraprofessional, service/maintenance, and skilled crafts groups employed in two-year institutions (18.6 percent, 16.3 percent and 3.4 percent, respectively) differ slightly from their proportions in four-year institutions. Two-year colleges have proportionately more technical and paraprofessionals (by 5.9 percent), but proportionately fewer employees in skilled crafts (by 1.5 percent).

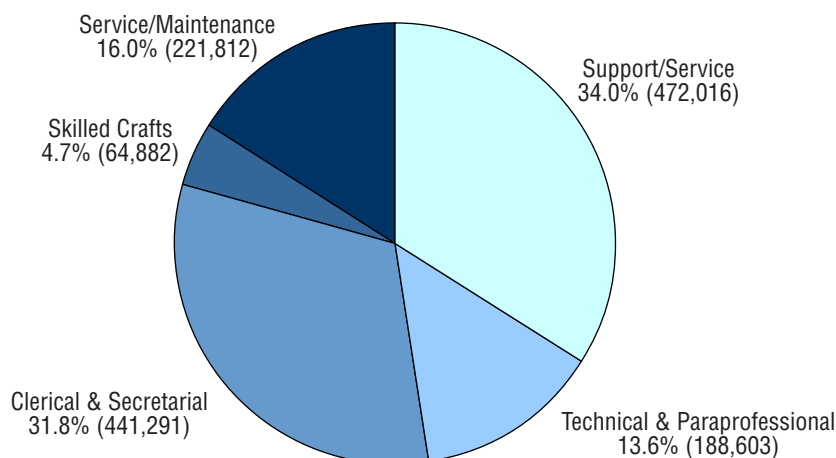
## COMPARATIVE DATA

**Occupational Group.** The total ESP staff employed in higher education increased by 6.9 percent between 1987 and 1997 (from 1,298,442 to 1,388,604).<sup>5</sup> Figure 4 shows the number of ESPs by occupational group for 1987, 1991, 1993, 1995, and 1997.

Support/service professionals showed the greatest increase among ESP groups (30,820 or 7.0 percent) between 1995 and 1997. The number of employees in two groups declined slightly between 1995 and 1997: clerical and secretarial workers (8,516; 1.9 percent), and the service/maintenance employees (1,717; 0.8 percent). Technical and paraprofessional workers and the skilled crafts group showed increases of less than one percent.

**Figure 1**

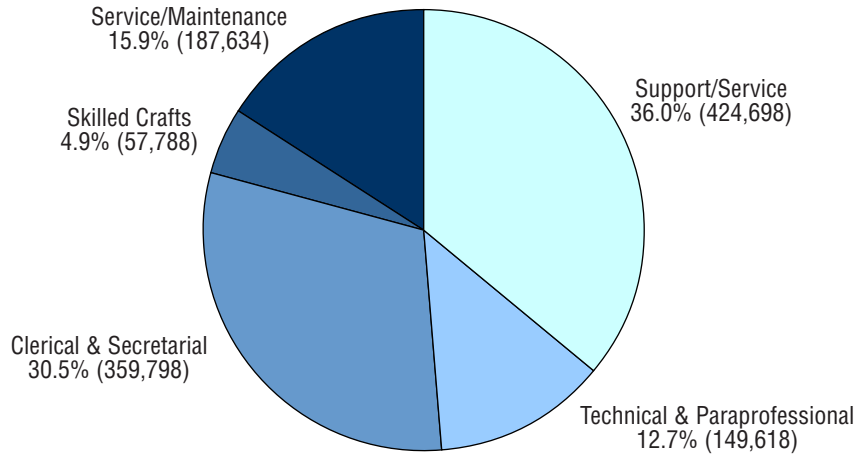
### Percent of Education Support Personnel (ESP) by Occupation, 1997



Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Data System (IPEDS), "Fall Staff" survey, 1997.

**Figure 2**

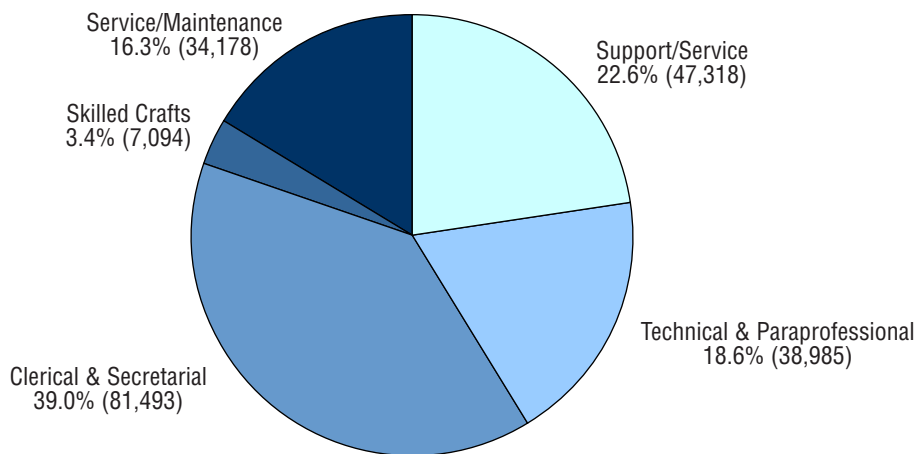
**Percent of ESP Staff by Occupation, Four-Year Colleges, 1997**



Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Data System (IPEDS), "Fall Staff" survey, 1997.

**Figure 3**

**Percent of ESP Staff by Occupation, Two-Year Colleges, 1997**



Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Data System (IPEDS), "Fall Staff" survey, 1997.

Figure 5 shows the percent change of part-time ESP staff members by occupational group for 1993, 1995, and 1997. The use of part-time personnel increased in every group. Skilled crafts showed the greatest percentage increase in part-time employees between 1995 and 1997 (12.3 percent). Then followed clerical and secretarial (9.6 percent), service/maintenance (8.5 percent), and support/service professionals (8.0 percent).

This increase in part-time service/maintenance workers contrasts sharply with the negligible change in part-time employees between 1993 and 1995. The reverse is true of the technical and paraprofessional group, which showed a one percent increase in part-time workers between 1995 and 1997 after a 12.4 percent increase between 1993 and 1995.

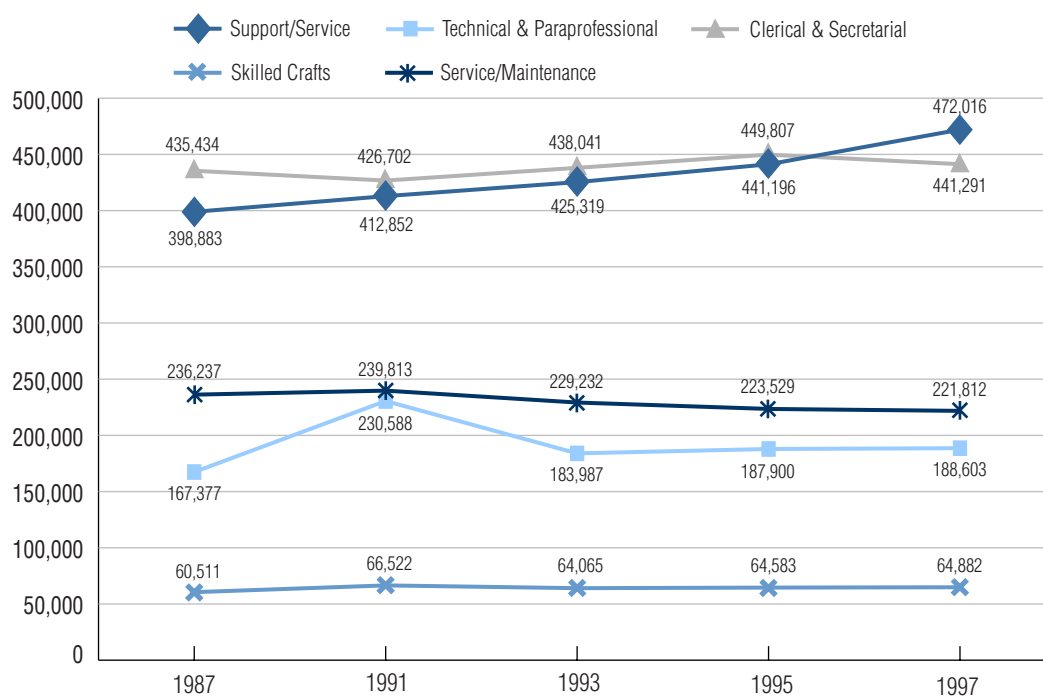
**Sex.** The representation by sex across the total ESP staff remained the same from 1993 to 1997: 37 percent men and 63 percent

women. The representation by sex within the occupational groups varied in expected patterns (Figure 6). Women vastly outnumbered men in the clerical and secretarial group (86.6 percent to 13.4 percent); men vastly outnumbered women in the skilled crafts group (93.1 percent to 6.9 percent). The gender composition of the technical and paraprofessional and support/service groups were the same: 60 percent women and 40 percent men. These proportions were reversed in the service/maintenance group: 61.8 percent men and 38.2 percent women.

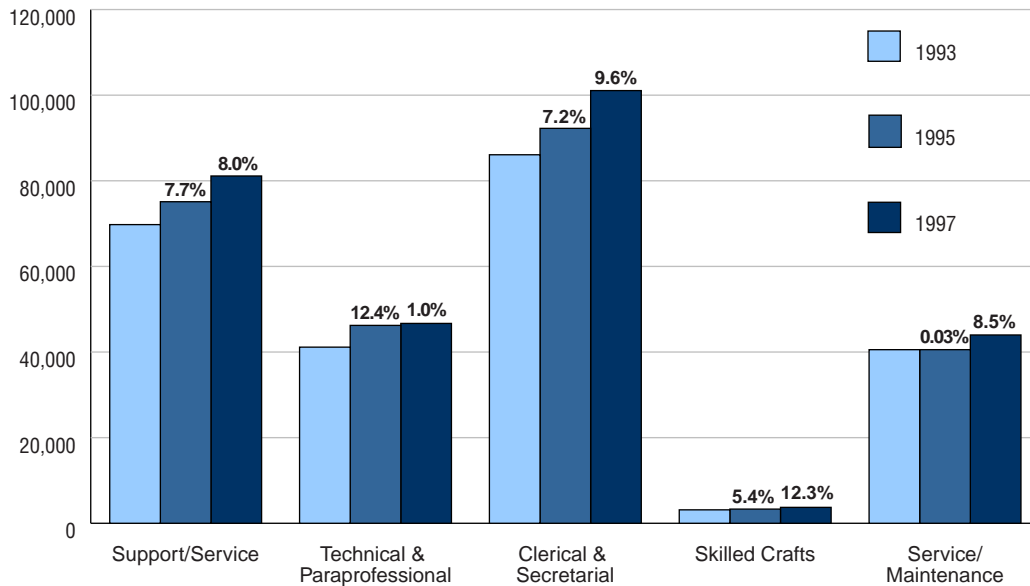
Table 1 provides the percentage change in representation by sex within the occupational groups between 1993, 1995, and 1997. The changes between 1995 and 1997 were modest. Skilled crafts was the exception: Representation of females grew by 10.0 percent; the representation of males declined by 0.2 percent. Men increased their presence in the

**Figure 4**

**ESP Staff by Year, 1987, 1991, 1993, 1995, 1997**



Source: National Center for Education Statistics (NCES), "Higher Education General Information Survey (HEGIS)," "Fall Staff" survey, 1976; U.S. Equal Employment Opportunity Commission "EEO-6 Higher Education Staff Information" survey, 1987-91; U.S. Department of Education, NCES, Integrated Postsecondary Data System (IPEDS), "Fall Staff" surveys, 1993, 1995 and 1997.

**Figure 5****Percent Change, Part-Time ESP Staff, 1993–1997**

Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Data System (IPEDS), "Fall Staff" survey, 1993, 1995, and 1997.

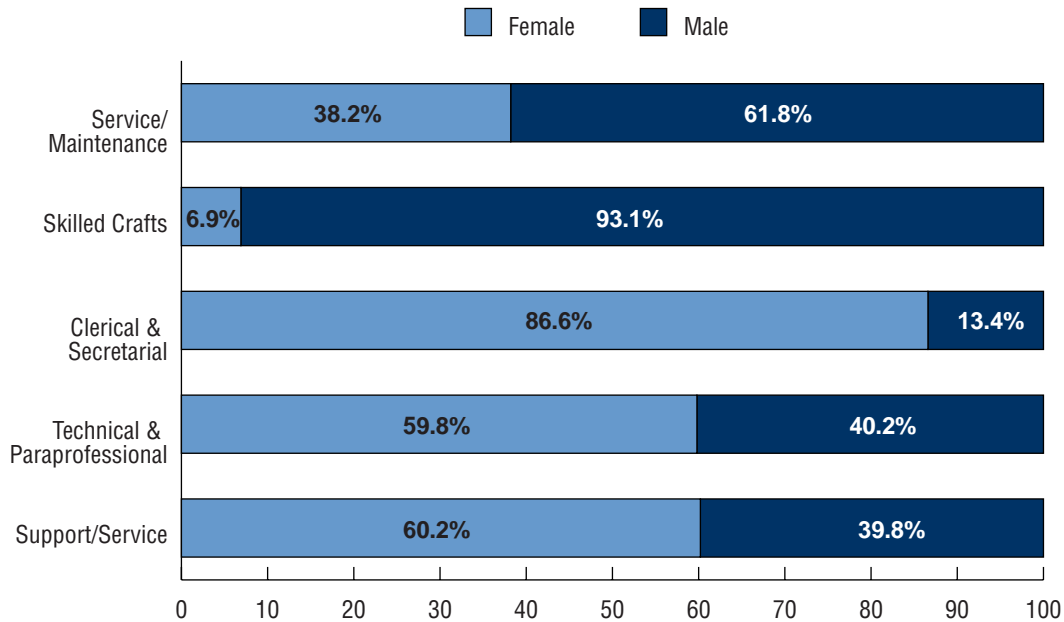
clerical and secretarial groups by 8.1 percent since 1995, and by 16.2 percent since 1993. The representation of women declined by 1.1 percent since 1995, and 1.3 percent since 1993.

**By Race and Ethnicity.** Figure 7 shows the representation of ESP staff by race and ethnicity in 1997. Of all ESPs, 74.4 percent were White, 15.0 percent were Black, 6.0 percent were Hispanic, 3.9 percent were Asian/Pacific Islanders, and 0.7 percent were Native American. These percentages differed markedly by occupational group. Whites predominated in every occupational group; ranging from 58.4 percent in service/maintenance to 81.7 percent in support/service (Figure 7a). The distribution of ESP staff by race and ethnicity across occupations also differed dramatically (Figure 7b). For example, 58.4 percent of service/maintenance employees are White, but only 12.6 percent of Whites in ESP positions were in the service/maintenance occupation. Whites were mainly concentrated among support/service workers (36.8 percent) and clerical and secretarial employees (31.9 percent).

Blacks held 9.2 percent of the support/service professional positions, but 28.5 percent of the total service/maintenance positions (Figure 7a). Among Black ESPs, 32.4 percent held clerical and secretarial positions (Figure 7b) and 30.5 percent had service/maintenance jobs. Then followed support/service (20.5 percent), technical and paraprofessional (13.1 percent) and skilled crafts (3.5 percent; skilled crafts represented only 4.7 percent of the total positions).

The representation of Hispanics closely paralleled Black representation across the occupations, though Hispanics held no more than ten percent of the total positions in any occupation (Figure 7a). The largest proportion of Hispanic ESPs was in the clerical and secretarial group (35.7 percent), followed by service/maintenance (25.9 percent), and support/service (20.2 percent) (Figure 7b).

Figure 7a shows the relatively small percentages of Asian/Pacific Islanders across all occupations (less than five percent). Asian/Pacific Islanders were concentrated in the support/service and the clerical and secretarial groups (42.8 percent and 27.1 percent,

**Figure 6****Percent of ESP Staff, by Occupation and Sex, 1997**

Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Data System (IPEDS), "Fall Staff" survey, 1997.

**Table 1****Percent Change in Numbers of ESP Staff by Occupation and Sex, 1993–1997**

| Occupation and Sex                    | 1993    | 1995    | % Change | 1997    | % Change from 1995 | % Change from 1993 |
|---------------------------------------|---------|---------|----------|---------|--------------------|--------------------|
| <b>Service/Maintenance</b>            | 229,232 | 223,529 | -2.5%    | 221,812 | -0.8%              | -3.2%              |
| Female                                | 88,168  | 86,183  | -2.3%    | 84,791  | -1.6               | -3.8               |
| Male                                  | 141,064 | 137,346 | -2.6     | 137,021 | -0.2               | -2.9               |
| <b>Skilled Crafts</b>                 | 64,065  | 64,583  | 0.8%     | 64,882  | 0.5%               | 1.3%               |
| Female                                | 4,164   | 4,089   | -1.8     | 4,498   | 10.0               | 8.0                |
| Male                                  | 59,901  | 60,494  | 1.0      | 60,384  | -0.2               | 0.8                |
| <b>Clerical and Secretarial</b>       | 438,041 | 449,807 | 2.7%     | 441,291 | -1.9%              | 0.7%               |
| Female                                | 387,143 | 386,490 | -0.2     | 382,137 | -1.1               | -1.3               |
| Male                                  | 50,898  | 54,706  | 7.5      | 59,154  | 8.1                | 16.2               |
| <b>Technical and Paraprofessional</b> | 183,987 | 187,900 | 2.1%     | 188,603 | 0.4%               | 2.5%               |
| Female                                | 110,746 | 111,904 | 1.1      | 112,721 | 0.7                | 1.8                |
| Male                                  | 73,241  | 75,996  | 4.8      | 75,882  | -0.2               | 3.6                |
| <b>Support/Service</b>                | 425,319 | 441,196 | 3.7%     | 472,016 | 7.0%               | 11.0%              |
| Female                                | 258,641 | 272,655 | 5.4      | 284,370 | 4.3                | 9.9                |
| Male                                  | 166,678 | 177,152 | 6.3      | 187,646 | 5.9                | 12.6               |

Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Data System (IPEDS), "Fall Staff" surveys, 1993, 1995, & 1997.

respectively) (Figure 7b). The representation of Native Americans was less than one percent in every occupation (Figure 7a), but their largest proportion was in the clerical and secretarial and support/service groups (31.3 percent and 26.7 percent, respectively; Figure 7b).

Table 2 presents the number of ESP staff by occupation and by racial and ethnic group for 1993, 1995, and 1997. Between 1993 and 1997, Hispanics, Native Americans, and Asian/Pacific Islanders increased their share of positions in every occupation. Hispanics showed their largest increases in three groups: support/service (28.1 percent), technical and paraprofessional (23.0 percent), and clerical and secretarial (15.4 percent). The greatest increases for Native Americans occurred in the technical and paraprofessional (38.9 percent), support/service (25.9 percent), and clerical and secretarial groups (17.6 percent). The largest increases for Asian/Pacific Islanders occurred in the support/service (24.4 percent), skilled crafts (23.5 percent), and clerical and secretarial categories (19.0 percent).

Whites, in contrast, showed decreased percentages since 1993 in the service/maintenance (-3.5 percent), clerical and secretarial (-1.9 percent), and skilled crafts groups

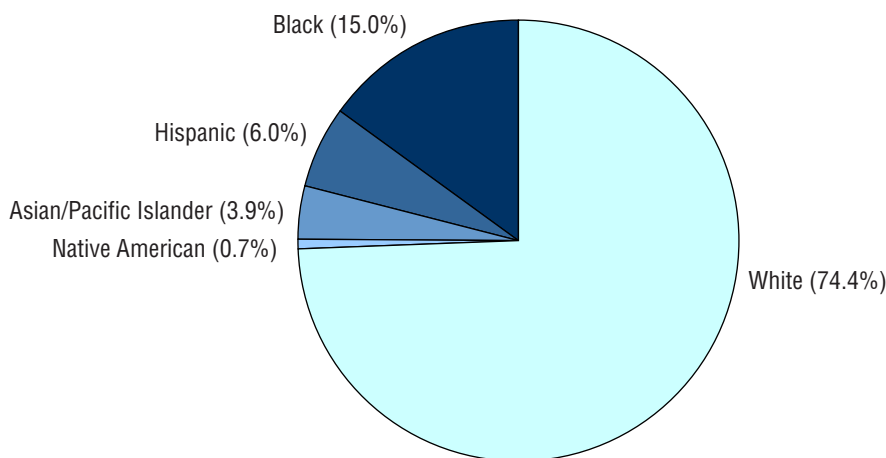
(-0.3 percent). The percentage of Blacks declined in the service/maintenance (-10.3 percent), clerical and secretarial (-2.6 percent), and technical and paraprofessional groups (-3.9 percent). Whites and Blacks made their only substantial gains in the support/service professional group (8.5 and 9.7 percent, respectively).

**Median Salary.** Figure 8 shows a considerable range in median salaries of ESPs by occupation and sex in 1997: from \$18,301 and \$21,630, respectively, for women and men in service/maintenance jobs to \$34,617 and \$37,948, respectively, for women and men in support/service positions. Men earned more than women in every occupational group, including the clerical and secretarial group, where women earned slightly higher median salaries than men in 1995.

Table 3 shows the percentage change in median salaries of ESPs between 1993, 1995, and 1997. Each group enjoyed an increase in median salary between 1995 and 1997, ranging from 6.3 percent for technical and paraprofessional employees to 2.9 percent for support/service professionals. This low contrasts sharply to the 7.2 percent increase enjoyed by the same group between 1993 and 1995.

**Figure 7**

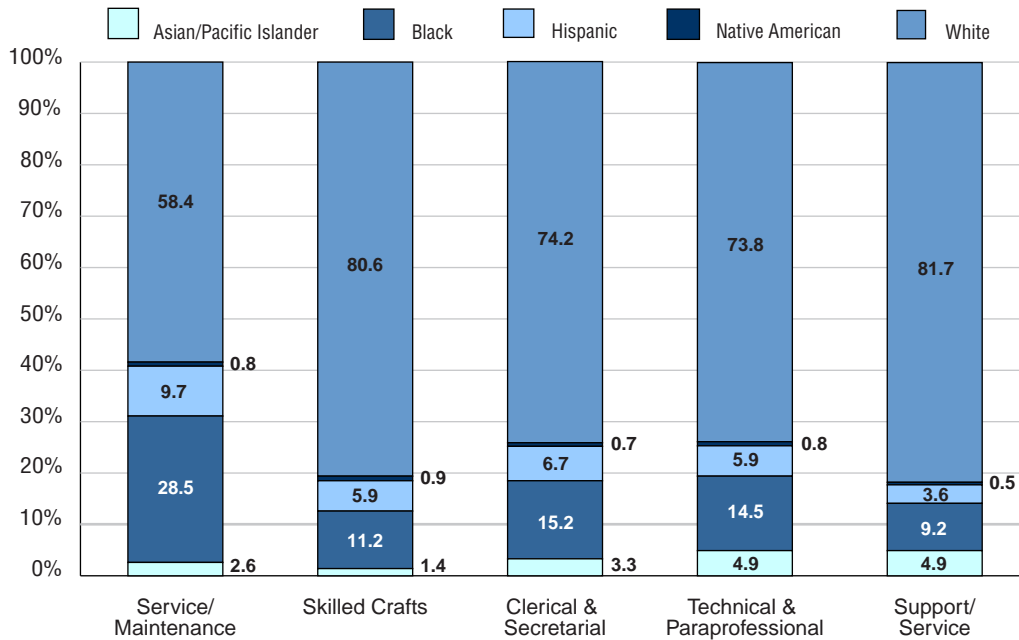
**Percent Distribution, ESP Staff by Race/Ethnicity, 1997**



Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Data System (IPEDS), "Fall Staff" survey, 1997.

**Figure 7a**

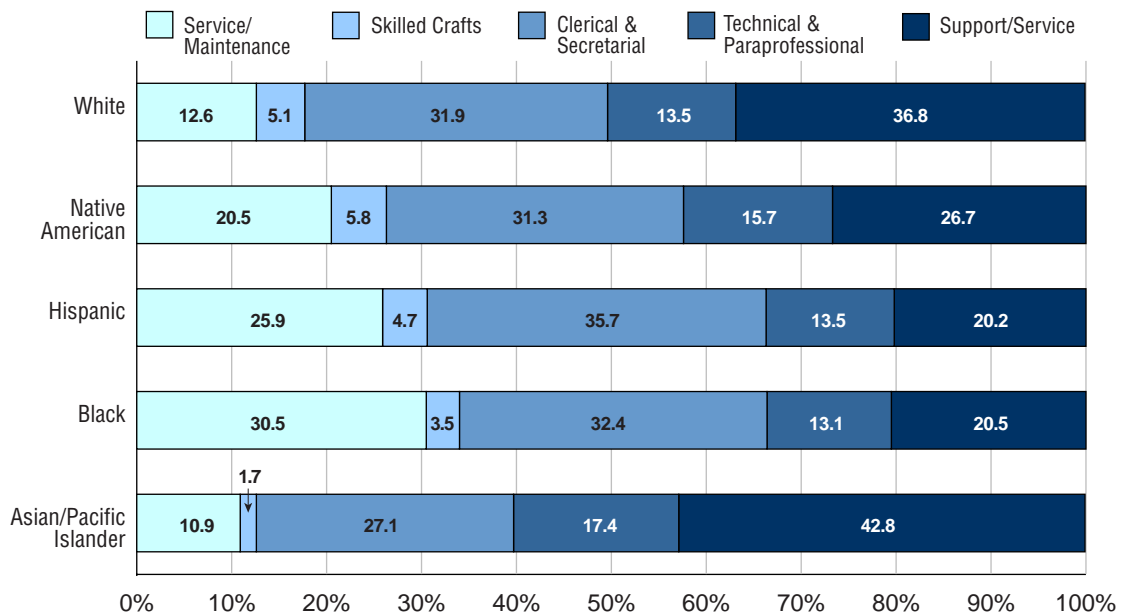
**Percent Distribution of ESP Staff Within Occupation by Race/Ethnicity**



Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Data System (IPEDS), "Fall Staff" survey, 1997.

**Figure 7b**

**Percent Distribution of ESP Staff by Race/Ethnicity Across Occupation**



Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Data System (IPEDS), "Fall Staff" survey, 1997.



**Table 2****Percent Change in Number of ESP Staff, by Occupation and Race/Ethnicity, 1993–1997**

| Occupation and Race/Ethnicity*          | 1993    | 1995    | % Change | 1997    | % Change from 1995 | % Change from 1993 |
|---|---------|---------|----------|---------|--------------------|--------------------|
| <b>Service/Maintenance</b>              | 229,232 | 223,529 | -2.5%    | 221,825 | -0.8%              | -3.2%              |
| Asian/Pacific Islander                  | 4,898   | 5,250   | 7.2      | 5,718   | 8.9                | 16.7               |
| Black                                   | 69,058  | 64,254  | -7.0     | 61,979  | -3.5               | -10.3              |
| Hispanic                                | 19,524  | 19,766  | 1.2      | 20,998  | 6.2                | 7.5                |
| Native American                         | 1,724   | 1,666   | -3.4     | 1,926   | 15.6               | 11.7               |
| White                                   | 131,565 | 129,139 | -1.8     | 126,961 | -1.7               | -3.5               |
| <b>Skilled Crafts</b>                   | 64,065  | 64,583  | 0.8%     | 64,895  | 0.5%               | 1.3%               |
| Asian/Pacific Islander                  | 735     | 778     | 5.9      | 908     | 16.7               | 23.5               |
| Black                                   | 6,970   | 7,186   | 3.1      | 7,174   | -0.2               | 2.9                |
| Hispanic                                | 3,440   | 3,647   | 6.0      | 3,824   | 4.9                | 11.2               |
| Native American                         | 498     | 585     | 17.5     | 549     | -6.2               | 10.2               |
| White                                   | 52,008  | 51,958  | -0.1     | 51,844  | -0.2               | -0.3               |
| <b>Clerical &amp; Secretarial</b>       | 438,041 | 441,196 | 0.7%     | 441,346 | 0.0%               | 0.8%               |
| Asian/Pacific Islander                  | 11,923  | 12,345  | 3.5      | 14,193  | 15.0               | 19.0               |
| Black                                   | 67,516  | 67,736  | 0.3      | 65,765  | -2.9               | -2.6               |
| Hispanic                                | 25,050  | 27,675  | 10.5     | 28,919  | 4.5                | 15.4               |
| Native American                         | 2,501   | 2,713   | 8.5      | 2,941   | 8.4                | 17.6               |
| White                                   | 327,483 | 325,112 | -0.7     | 321,338 | -1.2               | -1.9               |
| <b>Technical &amp; Paraprofessional</b> | 183,987 | 187,900 | 2.1%     | 188,619 | 0.4%               | 2.5%               |
| Asian/Pacific Islander                  | 7,757   | 8,219   | 6.0      | 9,084   | 10.5               | 17.1               |
| Black                                   | 27,684  | 27,249  | -1.6     | 26,602  | -2.4               | -3.9               |
| Hispanic                                | 8,891   | 10,089  | 13.5     | 10,934  | 8.4                | 23.0               |
| Native American                         | 1,063   | 1,173   | 10.3     | 1,477   | 25.9               | 38.9               |
| White                                   | 135,003 | 136,976 | 1.5      | 135,817 | -0.8               | 0.6                |
| <b>Support/Service</b>                  | 425,319 | 449,807 | 5.8%     | 472,016 | 4.9%               | 11.0%              |
| Asian/Pacific Islander                  | 18,002  | 20,537  | 14.1     | 22,398  | 9.1                | 24.4               |
| Black                                   | 38,049  | 39,767  | 4.5      | 41,744  | 5.0                | 9.7                |
| Hispanic                                | 12,813  | 14,568  | 13.7     | 16,408  | 12.6               | 28.1               |
| Native American                         | 2,000   | 2,162   | 8.1      | 2,517   | 16.4               | 25.9               |
| White                                   | 341,919 | 356,706 | 4.3      | 370,982 | 4.0                | 8.5                |

\*Although not displayed here, category totals also include nonresident alien and race/ethnicity unknown.

Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Data System (IPEDS), "Fall Staff" surveys, 1993, 1995, & 1997.

A closer look at the percentage increases in median salary by sex shows modest differences. Women received lower percentage raises than men in three of the five groups: clerical and secretarial (5.7 percent vs. 7.0 percent); support/service (4.2 percent vs. 5.8 percent), and service/maintenance: (4.2 percent vs. 4.8 percent). Women in the other two groups received larger increases in median salaries: skilled crafts (5.4 percent vs. 5.2 percent), and technical and paraprofessional (6.1 percent vs. 5.7 percent).

Table 4 shows the median salaries earned in 1997 by occupational group and ethnicity. Asian/Pacific Islanders earned the highest median salary in each of the five groups. Blacks earned the lowest median salaries in three occupational groups (skilled crafts, service/maintenance, and technical and paraprofessional). Native Americans earned the lowest median salaries in the support/service professional and the clerical and secretarial groups.

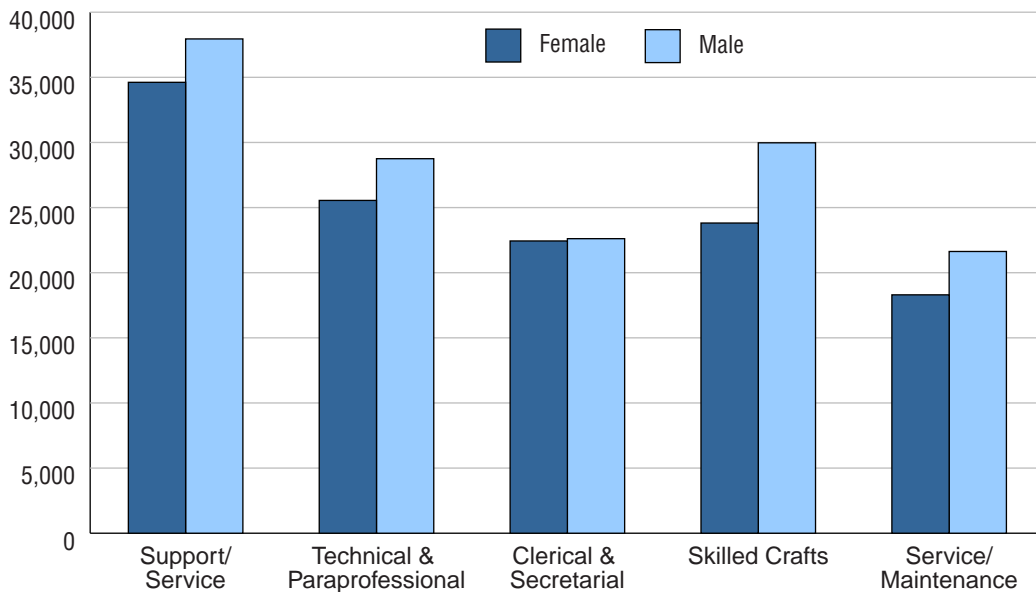
Table 5 shows the percentage change in median salary between 1993, 1995, and 1997.

Blacks in skilled crafts received the highest increase (8.9 percent) between 1995 and 1997, but they remained the lowest paid workers in this group in 1997. Asian/Pacific Islanders in technical and paraprofessional positions received the second highest increase (8.1 percent). The next highest increase went to Whites in clerical and secretarial positions (6.8 percent).

**Summary.** The demography of ESPs in higher education changed modestly between 1995 and 1997. Disaggregating the data by occupational group showed that only the support/service professional group experienced substantial growth since 1995 (7.0 percent). The technical and paraprofessional group enjoyed the greatest salary increase (6.3 percent). The use of part-time employees increased in every occupational group. The representation of women and men in each occupation remained fairly constant. Hispanics, Native Americans, and Asian/Pacific Islanders increased their share of positions in every occupation; White and Black ESPs lost ground in three of the five occupational groups.

**Figure 8**

**Median Salary of ESP, by Occupation and Sex, 1997**



Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Data System (IPEDS), "Fall Staff" survey, 1997.

**Table 3****Percent Change in Median Salary of ESP Staff, by Occupation and Sex, 1993–1997**

| Occupation and Sex                      | 1993   | 1995   | % Change | 1997   | % Change from 1995 | % Change from 1993 |
|---|--------|--------|----------|--------|--------------------|--------------------|
| <b>Service/Maintenance</b>              | 18,178 | 19,467 | 7.1%     | 20,305 | 4.3%               | 11.7%              |
| Female                                  | 16,571 | 17,559 | 6.0      | 18,301 | 4.2                | 10.4               |
| Male                                    | 19,294 | 20,645 | 7.0      | 21,630 | 4.8                | 12.1               |
| <b>Skilled Crafts</b>                   | 26,880 | 28,206 | 4.9%     | 29,642 | 5.1%               | 10.3%              |
| Female                                  | 21,316 | 22,603 | 6.0      | 23,814 | 5.4                | 11.7               |
| Male                                    | 27,211 | 28,499 | 4.7      | 29,973 | 5.2                | 10.2               |
| <b>Clerical &amp; Secretarial</b>       | 20,108 | 21,221 | 5.5%     | 22,453 | 5.8%               | 11.7%              |
| Female                                  | 20,082 | 21,230 | 5.7      | 22,437 | 5.7                | 11.7               |
| Male                                    | 20,380 | 21,126 | 3.7      | 22,613 | 7.0                | 11.0               |
| <b>Technical &amp; Paraprofessional</b> | 23,893 | 25,204 | 5.5%     | 26,790 | 6.3%               | 12.1%              |
| Female                                  | 22,794 | 24,088 | 5.7      | 25,550 | 6.1                | 12.1               |
| Male                                    | 25,882 | 27,193 | 5.1      | 28,753 | 5.7                | 11.1               |
| <b>Support/Service</b>                  | 32,517 | 34,854 | 7.2%     | 35,882 | 2.9%               | 10.3%              |
| Female                                  | 31,558 | 33,213 | 5.2      | 34,617 | 4.2                | 9.7                |
| Male                                    | 34,064 | 35,854 | 5.3      | 37,948 | 5.8                | 11.4               |

Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Data System (IPEDS), "Fall Staff" surveys, 1993, 1995, & 1997.

**Table 4****Median Salary ESP Staff by Occupation and Race/Ethnicity, 1997**

|                        | Support/Service | Technical & Paraprofessional | Clerical & Secretarial | Skilled Crafts | Service/Maintenance |
|------------------------|-----------------|------------------------------|------------------------|----------------|---------------------|
| White                  | 36,820          | 27,769                       | 22,759                 | 27,319         | 20,811              |
| Black                  | 34,001          | 24,800                       | 21,881                 | 25,166         | 18,255              |
| Hispanic               | 35,220          | 25,632                       | 21,374                 | 25,418         | 19,919              |
| Asian/Pacific Islander | 37,384          | 28,388                       | 23,953                 | 29,614         | 22,062              |
| Native American        | 33,345          | 25,599                       | 21,252                 | 26,827         | 19,418              |

Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Data System (IPEDS), "Fall Staff" survey, 1997.

**Table 5****Percent Change in Median Salary of ESP Staff, by Occupation and Race/Ethnicity, 1993–1997**

| Occupation and Race/Ethnicity*          | 1993   | 1995   | % Change | 1997   | % Change from 1995 | % Change from 1993 |
|---|--------|--------|----------|--------|--------------------|--------------------|
| <b>Service/Maintenance</b>              | 18,178 | 19,467 | 7.0%     | 20,305 | 4.3%               | 11.7%              |
| Asian/Pacific Islander                  | 20,212 | 21,282 | 5.3      | 22,062 | 3.7                | 9.2                |
| Black                                   | 16,344 | 17,317 | 6.0      | 18,255 | 5.4                | 11.7               |
| Hispanic                                | 17,890 | 19,047 | 6.5      | 19,919 | 4.6                | 11.3               |
| Native American                         | 17,038 | 18,610 | 9.2      | 19,418 | 4.3                | 14.0               |
| White                                   | 18,699 | 19,914 | 6.5      | 20,811 | 4.5                | 11.3               |
| <b>Skilled Crafts</b>                   | 26,880 | 28,206 | 5.0%     | 29,642 | 5.1%               | 10.3%              |
| Asian/Pacific Islander                  | 26,777 | 28,889 | 7.9      | 29,614 | 2.5                | 10.6               |
| Black                                   | 22,409 | 23,108 | 3.1      | 25,166 | 8.9                | 12.3               |
| Hispanic                                | 23,494 | 24,292 | 3.4      | 25,418 | 4.6                | 8.2                |
| Native American                         | 25,234 | 26,734 | 5.9      | 26,827 | 0.3                | 6.3                |
| White                                   | 24,515 | 25,913 | 5.7      | 27,319 | 5.4                | 11.4               |
| <b>Clerical &amp; Secretarial</b>       | 20,108 | 21,221 | 5.5%     | 22,453 | 5.8%               | 11.7%              |
| Asian/Pacific Islander                  | 23,087 | 23,105 | 0.1      | 23,953 | 3.7                | 3.8                |
| Black                                   | 19,697 | 20,582 | 4.5      | 21,881 | 6.3                | 11.1               |
| Hispanic                                | 20,441 | 20,526 | 0.4      | 21,374 | 4.1                | 4.6                |
| Native American                         | 19,280 | 20,302 | 5.3      | 21,252 | 4.7                | 10.2               |
| White                                   | 20,239 | 21,319 | 5.3      | 22,759 | 6.8                | 12.5               |
| <b>Technical &amp; Paraprofessional</b> | 23,893 | 25,204 | 5.5%     | 26,790 | 6.3%               | 12.1%              |
| Asian/Pacific Islander                  | 25,706 | 26,262 | 2.2      | 28,388 | 8.1                | 10.4               |
| Black                                   | 22,076 | 23,504 | 6.5      | 24,800 | 5.5                | 12.3               |
| Hispanic                                | 23,473 | 24,124 | 2.8      | 25,632 | 6.3                | 9.2                |
| Native American                         | 23,003 | 24,156 | 5.0      | 25,599 | 6.0                | 11.3               |
| White                                   | 24,859 | 26,201 | 5.4      | 27,769 | 6.0                | 11.7               |
| <b>Support/Service</b>                  | 32,517 | 34,160 | 7.1%     | 35,882 | 5.0%               | 10.3%              |
| Asian/Pacific Islander                  | 34,754 | 35,460 | 2.0      | 37,384 | 5.4                | 7.6                |
| Black                                   | 31,232 | 32,722 | 4.8      | 34,001 | 3.9                | 8.9                |
| Hispanic                                | 31,694 | 33,214 | 4.8      | 35,220 | 6.0                | 11.1               |
| Native American                         | 28,361 | 31,253 | 10.2     | 33,345 | 6.7                | 17.6               |
| White                                   | 33,212 | 35,037 | 5.5      | 36,820 | 5.1                | 10.9               |

\*Although not displayed here, category totals also include nonresident alien and race/ethnicity unknown.

Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Data System (IPEDS), "Fall Staff" surveys, 1993, 1995, & 1997.

We now turn from a snapshot of ESP demography and pay to an analysis of the language of recent collective bargaining contracts. The goal: gauging the impact of technological change on the worklives of ESPs.

## TECHNOLOGY IN HIGHER EDUCATION

Technology is changing the worklives of most higher education employees. The goal of a "computer on every desk" has expanded into networked offices and electronic mail, web-based calendars, databases stored on Zip disks and CD-ROMs, videoconferencing, and on-line availability of budgets, work assignments, and evaluation forms. Faculty and executives depend on ESPs to obtain, set up, and troubleshoot the many support-side electronic enhancements needed in any modern office. Technology, of course, is also changing the delivery of instruction, and many ESPs facilitate on-line instruction and distance learning.

Our increased dependency on technology seems without end. But how has technology affected the worklives of ESP staff? The popular press and the workplace have devoted attention to some drawbacks, such as eye-strain and carpal tunnel syndrome. We may obtain a more systematic assessment by examining the technology-related clauses in ESP collective bargaining agreements.

NEA's Higher Education Contract Analysis System (HECAS) includes 215 ESP contracts.<sup>6</sup> Not all ESPs are employed in collective bargaining units, and the percentage with union representation varies by occupational group. In 1995, for example, 14.8 percent of the professional technical employees were unionized, as were 37.2 percent of the clerical, and 42.8 percent of the blue collar workers.<sup>7</sup> But ESP contracts are guideposts to trends and current practices.

## CONTRACT ANALYSIS

Of the 215 ESP contracts in HECAS, 54 contracts (25 percent) included references to technology. These references occurred more frequently in contracts at two-year than at four-year colleges (37 vs. 16, or 68.5 percent vs. 29.6 percent).<sup>8</sup> Virtually all references to

technology occurred in ESP contracts negotiated at public institutions (52 vs. one at an independent college, or 96.2 percent vs. 1.8 percent). Seven national bargaining agents negotiated 46 of the 54 contracts, including the National Education Association (23 contracts or 42.5 percent), and the American Federation of Teachers (8 contracts or 14.8 percent). Independent unions negotiated the other eight contracts. Over half of the contracts came from three of the 16 states represented among the agreements with technology-related clauses: California (12 contracts or 22.2 percent), Michigan (11 contracts or 20.3 percent), and Ohio (5 contracts or 9.2 percent).

Four technology-related topics received the most frequent attention in the 54 contracts: training, health and safety, position reclassification, and job security. The following sections address these topics.

**Training.** Nine of the 54 contracts mentioned training employees to enable the use of new technology.<sup>9</sup> The contracts addressed two primary concerns: do employers provide worker training for newly required technological skills, and does the training occur during the employee's workday.

The Los Angeles Community College District (LACCD; California) contract includes the most comprehensive language:

All employees shall be provided training by the District in new office technology that they are required to use and operate. Employees are also encouraged to obtain training in new office technology as it is introduced in an office or operational unit; the District shall make every reasonable effort to make such training available to those who desire it. When the District requires an employee to be trained on new hardware or software, the cost of the training shall be borne by the District, and appropriate release time shall be granted to the employee. (Article 8, page 12)

Two of the nine contracts that address training ensure management's rights:

The universities will make reasonable efforts to provide training to current employees in the use of new technology or equipment when such changes are made. Nothing herein obligates the university to maintain current classifications, positions, or employees. (Florida State University System, Article 18.3)

If the affected bargaining unit members do not possess the requisite skills or knowledge to perform the required work in the new operation, the employer shall provide the necessary training. However, the employer's determination of qualifications, fitness for the new operation, and level and amount of training shall be final. (Prairie State College [Illinois], Article X, Section 10.1-C)

Many other ESP contracts provide for training and professional development,<sup>10</sup> but only nine contracts explicitly address training for skills needed to respond to the use of new technologies. Some observers characterize this minimal commitment by management to training and development as de-investment in support staff.<sup>11</sup> The limited language found in HECAS contracts suggests that, despite the advent of technology and the new skills required for implementation, this commitment has not substantially increased.

**Health and Safety.** Popular attention has focused on the health and safety of workers who spend more time typing on computer keyboards and staring at computer display terminals. But only four of the 54 HECAS ESP contracts attended to technology-related health and safety issues.<sup>12</sup> Two contracts called for forming technology committees:

The Provost shall establish a New Technology Committee with equal representation appointed by the UCPEA and the University. This committee shall study the impact of technological change and other new technology issues such as computer safety and computer use by pregnant operators. This committee shall issue a report making recommendations of the safe use of new technology. (University of Connecticut, Article 38.3)

The District and the AFT shall form a Technological Environment Committee (TEC) whose purpose it shall be to develop guidelines for the safe, healthful, and efficient use and operation of new technology and any affects on the Clerical/Technical Unit as a result of implementation of technological changes. (LACCD, Article 8 B)

LACCD's contract with its ESPs includes the most explicit language regarding health and safety. The contract commits the district to conforming with current "state of the art" ergonomic standards and details the compliance issues associated with the use of video display terminals and associated equipment:

lighting, glare, keyboard and screen, printer noise, adjustable chair and desk, maintenance and monitoring of equipment, work breaks, eye examinations, and pregnancy and disability (Article 8. J. pp. 8-11). The University of Maine System contract has similar provisions.

In contrast, the agreement covering the Feather River Community College District (California) seems to put the onus on the ESP workers:

Employee follows proper recommendations for the use, care, and safe operation of equipment and/or technology. (Article 6.2)

The growing importance of technology-related health and safety issues suggests more contract language in the future.

**Position Reclassification.** Eight contracts include procedures for reclassifying positions when new technologies mandated changes in work demands.<sup>13</sup> Several examples follow:

A request or reclassification of a position will be considered only if job responsibilities are substantially different....Substantial differences in new responsibilities must be the result of (1) significant change in program or service, (2) reorganization, or (3) technology. (Mt. Hood Community College [Oregon], D. 2)

Requirements for reclassification may include new and higher levels of knowledge to maintain the position and higher levels of ability to retain the position, for example: Knowledge and Ability-new or upgraded technical procedures and/or technology. (Monterey Peninsula Community College [California], Appendix F, p. 2, B)

Class specifications that have not been reviewed in a five (5) year period shall be revised to include current technology and duties currently assigned to the position. (Rancho Santiago Community College District [California], Article 26.2)

Other contract language calls for fair compensation for working-out-of-class-work that was not part of the employee's job description at time of hire. The Marin Community College District [California] contract, for example, calls for an upward adjustment in salary if an employee is asked to perform in a higher classification. In the case of new technology:

Use of new or additional equipment brought about by the development or application of

new technology shall be incorporated into job descriptions consistent with the level of responsibility and complexity of the job description. (D. 1. e.)

Similarly, a salary range review process attends to technology-induced change in a memorandum of agreement between the Northcentral Technical College (Wisconsin) and the Northcentral Educational Support Personnel Association:

That the current factors will remain and the definitions for levels within the factors will be updated to reflect actual job duties of support staff, reflect changes in trends and technology, recognize that new technology allows people to perform related tasks in different areas, and recognize customer service standards. (MOA, 2)

Standard language regarding reclassification and upgrading may cover many situations in which new technologies require ESPs to acquire new skills. But the nature, scope, and depth of the change demanded by the rapid expansion of technology use on campus may often require specific language to ensure fair and equitable treatment of employees.

**Job Security.** Collective bargaining agreements commonly include language addressing employee job security. But three of the 54 contracts specifically provided for the impact of technology on job security.<sup>14</sup>

If the job of any bargaining unit member is eliminated because of the implementation of new technological innovations, the Employer shall in the following order of priority: 1) place the bargaining unit member in a position comparable in level to his/her original position if available, and if qualified for the position, as determined by the administration, 2) place the employee in a lower level position for which he/she is qualified as determined by the administration and if a position is available and shall retain his/her existing rate of compensation; 3) follow the procedure under Article XVII, Reduction-In-Force. (Prairie State College, Article X, D.)

At LACCD, employees are protected from layoffs caused by the introduction of new technologies, *and* the work itself is protected:

No employee shall be laid off or demoted as a consequence of the introduction of

microelectronic technology (hardware or software); employees shall be required to participate in training on such technology as directed by the District to obtain or maintain an acceptable level of proficiency in the new technology. To the extent possible, affected employees shall be involved in the selection and implementation of technological changes.

Current bargaining unit work or new bargaining unit work which results from new or changing technology shall remain the work of the bargaining unit. (LACCD, Article 8, #9, p. 12)

Contrast the LACCD language to this clause in the Jackson Community College contract:

The parties mutually recognize the Employer's right to introduce new technology and techniques into the workplace. Any displacement or layoff of personnel caused by same shall be handled pursuant to the layoff and recall provisions of this agreement.

Definition: Layoff shall be defined as a reduction in the work force beyond normal attrition due to financial exigency, a change in job methods, technology, or the organization of the College. (Jackson Community College [Michigan], Article VIII & XVII)

The broad language contained in many management rights articles suggests the importance of provisions that protect ESPs from technology-induced changes in their working conditions. Five HECAS contracts contained management's rights clauses that addressed the utilization of technology.<sup>15</sup> Here's a typical statement:

Except as may be limited by law or the express terms of this Agreement, the College's right to manage its operations shall include, but not be limited to, its rights to:

1. Determine matters of inherent managerial policy which include, but are not limited to, areas of discretion or policy such as the functions, and programs of the College standards of services, its budget, utilization of technology, and organizational structure. (Northwest State Community College [Ohio], Article III)



## CONCLUSION

Some contracts show increased attention to the impact of technology on the worklives of ESPs. Still, only a minority of the employees represented by the 215 ESP contracts in HECAS enjoy any contract protection. Only 54 contracts refer to technology; fewer contracts substantively address the issues.

This analysis identified four areas of concern: training, health and safety, position reclassification, and job security. Most contracts cover these issues generically, but the treatment rarely suffices to address the impact of technology. The potential for an adverse impact on the quality of ESP worklife may depend on how future contracts and agreements address these issues. The four areas deserve careful, on-going attention.

There's no end in sight to the growth of new, more sophisticated technologies. Higher education will continue to look to technology for innovative and efficient solutions to academic and administrative challenges. We must be vigilant in our concern for our colleagues who support the enterprise when we celebrate these advances.

## NOTES

<sup>1</sup> Rhoades & Maitland, 1998.

<sup>2</sup> The focus group discussion was conducted at the 2001 NEA Higher Education Conference.

<sup>3</sup> Data source is the 1997 Staff Survey, part of the Integrated Postsecondary Education Data System (IPEDS), an annual survey conducted by the National Center for Education Statistics, U.S. Department of Education. Users of the 1997 Post Secondary Staff Survey are cautioned in making comparisons with earlier releases due to differences in the data for less-than two-year institutions; the data reported here do not include less-than two-year institutions.

<sup>4</sup> Ibid.

<sup>5</sup> Ibid.

<sup>6</sup> The HECAS database, developed by NEA, includes over 600 faculty and staff contracts for two-year and four-year campuses. There are 141 different colleges represented among the 215

contracts for support staff. Several institutions in the database have contracts with more than one ESP unit. The database includes contracts negotiated by bargaining agents of 21 national unions.

<sup>7</sup> Hurd, 1995.

<sup>8</sup> Totals do not add up to 54 or to 100 percent due to missing data.

<sup>9</sup> Los Angeles Community College District, #CA136; San Jose/Evergreen Community College District, #CA145; Wayne State University, #MI119; Grand Valley State University, #MI194; University of Cincinnati, #OH045; Santa Barbara Community College, #CA144; Florida State University, #FL031; Michigan State University, #MI189; Prairie State College, #IL034.

<sup>10</sup> Rhoades & Maitland, 1998.

<sup>11</sup> Ibid.

<sup>12</sup> Los Angeles Community College District, #CA136; University of Connecticut, #CT010; Feather River Community College District, #CA116; and University of Maine System, #ME107.

<sup>13</sup> Los Angeles Community College District, #CA136; Monterey Peninsula Community College District, #CA162; Rancho Santiago Community College District, #CA141; Prairie State College, #IL034; Marin Community College District, #CA185; Portland Community College, #OR085; Mt. Hood Community College, #OR081; Northcentral Technical College, #WI112.

<sup>14</sup> Los Angeles Community College District, #CA136; Jackson Community College, #MI221; Prairie State College, #IL034.

<sup>15</sup> Butler County College, #PA123; Community College of Philadelphia, #PA040; Hocking Technical College, #OH040; Northwest State Community College, #OH063; and Youngstown State University, #OH034.

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