

Chapter 5
Recruiting, Retaining, and Reskilling
Campus IT Professionals

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Technology Everywhere
A Campus Agenda for Educating and Managing
Workers in the Digital Age

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Recruiting, Retaining, and Reskilling Campus IT Professionals

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What a difference a few months can make! In September 2000, 76 percent of respondents to a *CIO* magazine survey reported that information technology (IT) workers were hard to find; in May 2001, just 20 percent gave the same response.

Because of the fluctuations in the IT job market, it is generally imprudent to follow the current fad or get caught up in media hype. There are, however, a set of strategies and principles related to recruiting and retaining staff that, if implemented, improve the chances of success in a tight labor market as well as in times of high unemployment. These strategies may be used in a mix-and-match fashion. Think of the whole landscape as a jigsaw puzzle. All of the pieces do not instantaneously fall into place; progress is made by joining one or two pieces together at a time and positioning them in roughly the right area of the puzzle. Over time, more pieces link together until you have the final coherent whole.

Whether in higher education or industry, the mechanics of recruiting, retaining, and reskilling IT staff are similar, even though the context differs. In fact, there is much that campus administrators can learn from their corporate counterparts about these activities. Thus the guidelines offered in this chapter draw on experience and recent research from the academic and corporate worlds.

Partnering with HR

Imagine an ideal world. Each institution of higher education has a central human resource (HR) organization staffed with certified HR generalists and specialists who view their mission as working collaboratively with the schools and departments to achieve the mission of the institution.

The HR staff is not only aware of what is going on elsewhere in higher education but is active in the HR profession, perhaps as members of the Society for Human Resource Management (SHRM) or the College and University Professional Association for Human Resources (CUPA-HR). The research and best-practice white papers from such organizations are routinely reviewed and appropriately incorporated into the institution's HR strategies. Legal risks associated with hiring and employment practices are minimized.

Industry salary surveys are regularly monitored and recommendations initiated regarding market equity increases. There is a recruiting staff that knows how to effectively attract candidates, backed up by an engaging job Web site and a sophisticated yet easy-to-use applicant-tracking system. High-quality, diverse résumés show up daily, and the typical search is closed within a matter of weeks.

The campus HR department creates a job classification system that balances structure and flexibility, so as to be responsive to changing job requirements as well as changing salary expectations. Compensation is not limited to base pay but includes forms of variable pay (technology bonuses, short-term pay increases). In short, HR is responsible for the infrastructure services needed to manage people in the same way that the IT organization is the steward for the technical infrastructure for the school.

An HR department that performs this way benefits the entire institution, not just the IT department(s). In many cases, campus IT organizations have forced attention on their staffing issues because of the media attention paid to dot coms and the impact of technology in the workforce. In some cases, IT departments have

felt compelled to take matters into their own hands, creating their own internal HR function. This may be a matter of necessity in the short run, but in the long run the partnership between the chief information officer (CIO) and the chief human resources officer (CHRO) discussed in the previous chapter is preferred. Even if a strong partnership does not exist at the senior level, progress can be made if IT and HR managers work together.

Recruiting

Higher education IT workers are drawn from the same pool of candidates as financial institutions, retail stores, and manufacturing firms use. To be a player in attracting high-quality candidates, a college or university must use the same sort of recruiting techniques employed by industry. It might be argued that many of the difficulties campuses have experienced in competing with industry have more to do with the lack of recruiting expertise than with lower salaries and lack of stock options.

Best practices for recruiting typically start with some form of focused effort, most frequently housed in the HR organization. Such a function has stewardship of the overall recruiting process, though it is not necessarily responsible for performing all the interviewing and selection. The strategies outlined in this section are best carried out in the context of such a focused recruiting effort. Contrast this with a campus where IT hiring is handled in the IT department by the same manager who is trying to install an enterprise administrative system or Web-based learning application on schedule and on budget. Rather than spend the time needed to do recruiting, the beleaguered IT manager hunkers down and gets the technical work done, leaving the staffing problems to fill infrequent lulls in “real” work.

A good example of a creative and effective recruiting effort in higher education is Wisconsin’s establishment of a state-level IT recruiting function. Over the past few years, the chief information

officers of the state government and the University of Wisconsin have partnered with the State Department of Employment Relations on a number of initiatives aimed at improving the recruitment and retention of IT staff. Three years ago, the CIOs pooled their funds and hired a state IT recruiter to lead their recruitment efforts. This individual, who is dedicated full time to recruitment efforts, is able to constantly seek creative methods to promote state IT jobs and effect “a solid link between the IT managers and human resource professionals” in the state system (Caruso and Gebert, 2000).

A skilled recruiting function can help the hiring manager create the job definition, identify critical skills and behavioral competencies, write and place the job advertisements, prescreen candidates, schedule interviews, train the interviewing team, answer candidate questions, handle reference checks, and even coordinate the job offer. The ideal recruiter has a good base of general HR knowledge so that she or he can help the hiring manager avoid legal land mines during the recruiting process. Having a defined and disciplined process reduces the risk of a claim of unfair hiring practices.

Developing a Brand

Every sustainable recruiting program begins with a clear understanding of why people are interested in working for a particular institution. Also known as developing a “brand,” this is the first step in the marketing program that is the essence of successful recruiting.

Your institution may already have a defined brand for attracting students; if so, it is a good starting point for defining the brand for attracting staff. In addition, you can ask new hires what factors appealed to them, and ask long-time employees what motivates them to stay. Some attributes you might hear:

- Appeal of the higher education mission (especially compared to companies that are forever trying to satisfy Wall Street investors)

- Workplace flexibility (variable work hours, tele-commuting options)
- Access to personal development (63 percent of visitors to the techies.com Web site said the opportunity to learn new skills is very important in evaluating an employer)
- Job stability (at least compared to a start-up company!)
- Good benefits

Some characteristics that may appeal especially to IT professionals:

- Fewer work hours (the average IT professional works more than forty-five hours per week)
- Less pressure (a higher education environment is typically less intense than, say, the IT shop at a major airline or an on-line retailer, where even a few minutes of downtime can result in major losses)
- “Extreme casual” dress (jeans, T-shirts); although many companies allow “business casual” dress, only 27 percent condone extreme casual
- Access to “toys”—the latest and greatest laptops, PDAs (personal digital assistants), and so forth
- Heterogeneous technical environment

Despite the impression created by the media during 1999 and 2000, not every IT professional worked in a dot-com company. Nor do most IT professionals work in high-tech firms. According to the Information Technology Association of America (2001), non-IT companies employ ten times as many tech workers as do IT companies.

Once you know what attracts people to your specific institution, the recruiting staff can focus the advertising in ways that attract desirable candidates.

Sourcing Candidates

In Chapter One, William Aspray and Peter Freeman discuss the supply side of the IT worker equation, noting in particular that the vast majority of IT workers do not have a degree in an IT-related discipline. This suggests that a campus starting its job advertising with “Required: B.S. in computer science” is disadvantaging the search from the beginning.

Employee referrals are a powerful source of candidates for a variety of positions, including IT (Neely, 2001). Many organizations have found that a referral bonus of \$100 to \$1,500 can stimulate staff to think about people they know who might be a good fit. Referral programs are well researched, and a variety of aids exist to help an organization implement a program; they have been found to be one of the most cost-effective recruitment tools.

Boomerang employees are those who left a while back and are now interested in returning. Some progressive organizations deliberately stay in touch with former employees, continuing to include them in e-mail lists or inviting them in for events. When there is a job opening, the former employee is contacted to see if he or she is interested. Even if uninterested in returning (yet), the person may know a colleague elsewhere who is interested.

A placement agency is also an alternative to, or adjunct to, campus recruiting staff. An agency can be used from the beginning of the search, or used as a last resort if internal efforts have not yielded results. Having a central HR function that can qualify and coordinate relationships with a small number of preferred companies is highly desirable.

Contracting is a well recognized form of staff augmentation. A contract company, especially a larger one, has a well-developed

recruiting and screening process. It can often handle a range of staffing needs, from contractors through temp-to-perm.

Chapter One also addresses H-1B issues. For some institutions, it may not be politically or administratively feasible to consider H-1B. For those that can, the October 2000 changes in H-1B policy offer some advantages to higher education (“Universities Would Gain . . .,” 2000). Although it is totally inappropriate to think of foreign nationals as a pool of cheap labor, the reality is that they may be willing to accept positions at the lower end of the market pay range. A campus with student or faculty diversity goals may find this path to increasing staff diversity appealing.

A later section of this chapter about reskilling discusses developing existing campus staff, or offering internships to students or others. All of these represent potential internal sources for IT staff, as do your institution’s own graduates who have IT interests and skills.

Recruiting Tools

Many organizations are shifting most of their job advertising from expensive, low-exposure print media (which can cost from \$3,000–7,000 for a one-time ad in a major metropolitan newspaper) to lower-cost, wider-distribution Internet job boards (\$200–400 for thirty to sixty days).

According to a recent survey, 78 percent of respondents felt their recruiting dollars were best spent using Internet job postings, with only 12 percent saying the same about print classifieds (“Facts and Figures,” 2001). Monster.com continues to attract the highest percentage of the job-hunting traffic; dice.com and techies.com are sites that specialize in IT staff.

Although free job boards can sound appealing, unless there is reason to believe that desirable candidates frequent those sites the time and effort to post there may not be worth it. A focused recruiting function can track the effectiveness of various forms and venues

for job postings and negotiate the most favorable pricing on behalf of the institution.

In addition to posting positions on commercial job boards, some effort should be made to point job seekers to a job Web site for your campus. Attributes of an effective site include having a job site reference on the home page and an easy way for job seekers to submit applications. Job sites at Microsoft and Compaq Computer have been mentioned as good examples.

There are other techniques, such as hosting or attending a job fair and building a relationship with community career centers, which an appropriately resourced recruiting team can leverage on behalf of the organization.

Logistics of Managing the Applicant Pool

The good news about Internet job sites such as Monster.com is that a hiring manager typically gets dozens if not hundreds of résumés. The bad news is that a hiring manager gets dozens if not hundreds of unqualified résumés. If the applicant system at your campus is still largely geared to paper submission, you should seriously consider an overhaul of the applicant-tracking infrastructure.

There are a number of software tools available to help an organization manage résumés. Professional HR organizations do periodic technical reviews of tools and publish their findings.

Because of the IT underpinnings of any solution in this space, implementing a new applicant tracking infrastructure is a unique reciprocal working opportunity. HR can use IT help with the technology, which in turn enables the IT organization to attract and hire the staff needed to assist departments such as HR.

Conducting Interviews

If your institution has a clear brand that is effectively used in your job advertising, then those who apply have a propensity for finding your environment attractive, even if the money isn't as much as they could get elsewhere. There are excellent sources of information (for example, Rosse and Levin, 1997; Camp, Vielhaber, and Simonetti,

2001) that can be shared with hiring managers to help elevate the hiring and interviewing process to a strategic level, tying hires at all levels to your institution's mission.

Because interviewing is one key to a successful hire, this process should not be left to chance. Here again, HR can play a major role, with general instructions or (preferably) just-in-time interviewing training for the hiring manager as well as any others involved. (Having team members—and even customers—involved in the interviewing increases the probability that a hiring decision will be a good one.)

HR can coach the hiring managers not to be overly focused on technical skills but instead to also explore whether the candidate has the particular behavioral competencies needed for success at your institution. Typical competencies in an IT world are ability to learn, customer orientation, and problem solving. (See the discussion of other such skills and competencies in Chapter Two.)

The HR department can also help a hiring manager weigh the various technical skills. Certainly the candidate needs to be at least technically acceptable; however, expecting a 100 percent perfect match is not necessarily ideal. Some hiring professionals advocate the 80 percent rule for hires: accept less than an 80 percent match and the person is likely to be overwhelmed by the new job; look for significantly more than that and the job may not be sufficiently challenging to sustain their interest.

It is equally important to understand an individual's motivational fit—the specific reasons the candidate is interested in a specific job. No matter how perfectly the technical skills fit, a department should avoid a hire whose personal values, interests, and motivational needs are not aligned with what the organization can offer.

Retaining the Staff You Want to Retain

A successful retention program starts with the recruiting process, carries through the first few weeks of employment, and permeates the work environment all year long. Some elements of it, such as good

benefits and compensation in line with market, typically require HR approval and implementation. Other (often more important) aspects such as creating a sense of affiliation, alignment with the departmental mission, and opportunities for development, are primarily the responsibility of the hiring department staff (Eley and Oppenheim, 1999). A positive work environment not only lowers attrition, which reduces the need to replace staff; it also creates positive buzz about an organization, making it easier to recruit and retain staff.

Retention starts with asking people why they stay. In describing retention research done by the Gallup organization, Marcus Buckingham and Curt Coffman (1999, p. 28) identified twelve questions that correlate very strongly with retaining the staff one wants to retain. Among those questions were the following:

- Do I know what is expected of me at work?
- In the last seven days, have I received recognition or praise for doing good work?
- Is there someone at work who encourages my development?
- Are my coworkers committed to doing quality work?

It is worth noting that “pay” is not even mentioned in any of the twelve questions.

Salary

When it comes to retaining IT staff in higher education, salary is typically mentioned as a problem. Not only have many campuses been structurally limited because of prevailing job classification and salary structures, but they have also struggled to understand how they can pay their IT professionals more than they are paying faculty and other academic staff who are, after all, the reason the IT staff is needed in the first place.

Although in study after study salary is not typically one of the top five retention issues, it does become a major issue if people perceive they are seriously underpaid, individually or collectively. Compensation professionals tend to consider organizational average salaries that are within 3–5 percent of the market to be close enough.

In reviewing several salary surveys that categorize results by industry, “education” often falls 8–10 percent below the overall average. Some surveys (such as the Hewitt HQT Technologies IT salary survey; see www.compensationcenter.com) calculate a tenth and twenty-fifth percentile. Senior management may decide that all acceptably performing staff should be paid at least at the tenth percentile. (Salary survey information such as this can also be incorporated into establishing the minimum pay for IT salary bands.) In one recent survey, the tenth percentile was on average 22 percent below the median pay.

In addition to base salary, your institution may want to consider other compensation options, such as a retention bonus (to retain someone with valuable traditional IT skills), a technology bonus (to recognize an individual with currently hot skills or critical legacy system knowledge who may not warrant a large base-salary increase), a performance bonus (to recognize significant efforts that exceed the norm), or a milestone bonus (often offered as an incentive to complete a phase of a project by a specific date).

There are many sources for credible IT compensation information, among them the Mercer IT Compensation Survey (www.imercer.com), Ivy Plus Compensation Survey (www.wmgnet.com), the Hay Local Area Pay Survey (www.haygroup.com), the Hewitt HQT Technologies Survey referred to earlier, and the salary.com Web site (www.salary.com). The HR department in a college or university should use a mix of higher education and industry surveys to set the best context for decisions regarding salary and other compensation.

Reward and Recognition

Showing appreciation for effort is a highly important element of retention. Many organizations have a formal reward and recognition program. Awards do not need to be large to be meaningful. A \$50 gift certificate, delivered in a timely way with sincere words of appreciation, can mean as much as (or more than) several hundred dollars showing up in a paycheck six months later without explanation.

Staff Development

Some organizations shy away from investment in staff development for fear that newly trained staff will then leave. However, considerable research indicates that an organization's commitment to staff development is linked not only to productivity improvement but also to increased staff loyalty (*2001 ASTD State of the Industry Report*, 2001).

Employee development is so much more than classroom or on-line training. The most effective and valued development comes in the workplace, facilitated by mentoring and coaching from supervisors, followed up with projects and activities that allow an individual to experiment and exercise new skills. Given how quickly training can atrophy, application of new skills is critical to success. In addition, development must be recognized as an unending set of activities, not one or two training events.

Leadership Development

There is a wealth of recent literature to support the thesis that retention correlates to relationships between managers and staff (Bernthal and Wellins, 2000; Buchingham and Coffman, 1999; Joinson, 2001; O'Reilly and Pfeffer, 2000; West, 1998). Although a departing staff member may say she is leaving because of the money, it is often true that the employee is receptive to another offer because the supervisor hasn't communicated the organization's goals and directions, provided individual performance feedback, acknowledged

work that is done well, created opportunity for development, or otherwise engendered personal loyalty.

Technical team leaders may not recognize their role in retention. Selecting the right competencies for a leadership role and working with leaders improves the quality of the work output, of course, and it is also a vital element of retention.

Reskilling

There are at least two categories of reskilling: developing non-IT candidates into IT staff, and developing new skills within existing IT staff.

Reskilling IT Staff

Unlike some professions that require long years of study, in IT many skills can be developed relatively quickly—over a period of weeks or months instead of years. Unfortunately, not a lot of research exists about how long it takes to develop an employable level of proficiency, so IT managers need to rely on their own experience (or anecdotal evidence) in other organizations. For example, in the early days of Windows NT, a proficient VMS systems administrator could competently manage an NT server essentially immediately. In general, a good Unix system administrator can add another Unix variant to his or her portfolio in less than six months, and it takes a good applications developer about the same time to begin getting results with a new language or new developer toolkit.

As part of the planning for reskilling, the manager responsible for the reskilling must address the following issues:

- Assessment of which skills the organization needs
- Assessment of the individual's current skills (technical and nontechnical), the gap relative to the desired state, and the probability that the individual can achieve the

desired skills on the basis of demonstrated ability to learn

- Who will be doing the training, coaching, or mentoring
- How much reskilling is formal classroom training as opposed to other techniques such as on-line training, self-study, and so forth
- How the individual undergoing training will gain the necessary practical experience in a timely way

For most organizations, the issues related to the training itself are often overshadowed by the problem of release time for the individual. All too often, an employee is expected to learn the new skills while continuing to support a portfolio of systems or customers. If at all possible, arrange to release individuals from a majority of the old work so they can focus on the new. (The fact that people are often reluctant to let go of the familiar can be an equally challenging effort!)

Turning Non-IT Workers into IT Staff

A number of programs have been developed at colleges and universities to offer IT training to non-IT workers. In an *EDUCAUSE Review* article, Brian Alexander and Kent Kuo (2001) described the FastTrack program implemented at the University of California, Davis, which established a focused internship program for a small number of students, with the goal of having ready-to-hire staff by the time the students graduated.

Another example is Purdue University's award-winning Information Systems and Technology Training Program, designed to address the university's need for IT professionals by creating a new applicant pool from within the university and without. After successfully completing the training, internally sponsored applicants

return to their sponsoring department, ready to accept new responsibilities requiring IT skills (Yuochunas, 1998).

Still another example is Alamo Community College's intern program, which gives a career development opportunity to an individual with a minimum of a two-year degree and no computer training who wants to train to be an analyst/programmer (Burmeister and Martinez, 1998).

A program that simultaneously employs and educates students in information technology is the award-winning Student Technology Services (STS) program at the University of Wisconsin, Milwaukee. A work-based learning organization, STS employs about three hundred students to deliver technology services to the UWM campus in more than twenty functional areas. It is entirely managed by students, with a unique organization structure and professional development program in which the students are the decision makers, budget and program managers, service providers, and technology paraprofessionals. More than half of STS participants are from nontechnology academic programs. Full-time IT staff serve as mentors to student supervisors, and a partner program with the local business community gives students external workplace experience and helps to develop a pool of future employees (see www.uwm.edu/IMT/STS for more details).

Such programs, which offer developmental opportunities to students or other institution staff, have several advantages, not the least of which is an existing sense of affiliation (which is an element of retention). Although some students can't wait until they leave campus, others are more than willing to remain in an environment they know and are comfortable with.

Competency Modeling Related to Development

Whether you are reskilling IT staff or bringing in non-IT candidates, it is important to understand that some competencies are easier to develop than others. For example, if someone lacks the ability to learn (that is, attends classes but doesn't seem able to put the

training into practice), it is almost impossible to modify that particular competency. On the other hand, a competency such as strategic thinking can be developed. Competencies that are difficult to develop include taking initiative, decision making, and flexibility. Screening candidates for the reskilling program for these competencies significantly improves the chances for success.

Conclusion

For various reasons, many institutions of higher education have lost touch with the research and best practices associated with recruiting and retention that are widely reported in HR journals as well as IT trade magazines and business publications. Although some recruiting and retention tactics such as stock options may be unique to private enterprise, the strategies and principles explored in this chapter are equally effective in an institution of higher education. Evaluating your institution's current practices with regard to recruiting, retention, and reskilling of IT professionals—as well as the relationship between your HR and IT organizations, especially at the leadership level—is an effort that could pay big dividends.

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