## EAB

# Extending the Student IT Workforce

Engaging Students and Managing Risk to Increase Student Employee Value

### Study in Brief

This report profiles the strategies that progressive institutions are using to increase the productivity of student workers and their value to the campus IT organization. Engagement driven by long-term projects and accountability measures to mitigate risks facilitates professional development for students and lower-cost employees for the institutions.

### 5 Ways to Use This Research

• Structuring long-term projects for student employees

• Evaluating student employee performance

• Screening prospective student employee maturity and risk level

• Brainstorming roles for student employees beyond the help desk

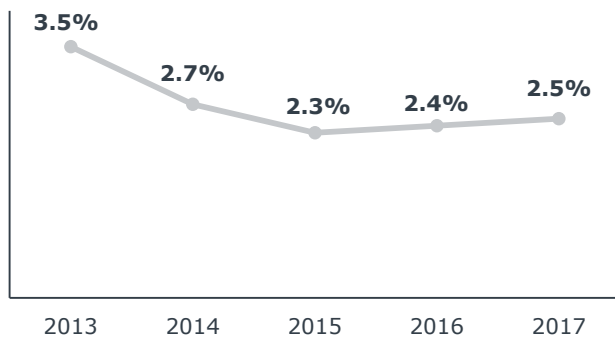• Developing a pipeline of IT talent from student employees

# Environmental Pressures on the "FTE-Only" Model

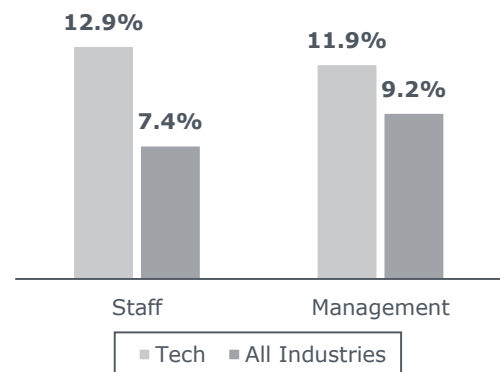## Opening the Talent Pool Increases Adaptability

IT departments have long been dependent on full-time employees, augmented by traditional contractors.  However, with 87 percent of managers indicating that additional staff positions are at least moderately important in order to meet institutions' needs in the next three years, CIOs and others on campus question how to fill those roles. While managers and IT leadership would typically turn to FTEs, market forces make that hard, and financial constraints and technological changes bolster these challenges.

**A Tough Market for IT Talent Recruitment**

*Tech Unemployment*

*Job Growth Forecast, 2016-2026*

3.5%  2.7%  2.3%  2.4%  2.5%

2013   2014   2015   2016   2017

12.9%  11.9%

7.4%  9.2%

Staff   Management

☐ Tech   ☐ All Industries

**Seeking an Alternative to FTEs**

Full-time employees do bring clear benefits to an institution, including greater productivity from tenured staff, and deeper organizational knowledge and relationships. However, full-time employees are expensive and costly to onboard and offload. In addition, a market that makes it difficult to recruit into the higher education industry means that alternatives, including upskilled student workers, are increasingly attractive.

**"Beyond the Help Desk" Student Workers**

Student workers are often the backbone of the help desk, triaging requests and providing Tier I support. But they also have the potential to offer greater value to both the service management department, through longer term projects and more complicated technical support, and elsewhere across the IT organization. Therefore, concerns related to engagement and risk limit their value at institutions without appropriate vetting and opportunities for extended projects.

# Overcoming Challenges to High-Skill Student Work

## Mitigating Risk and Promoting Engagement

### Two Barriers to Increasing the Value of Student Workers

**Risk**

**Giving students higher-value projects increases their access to systems and data, which generates risks for the institution.** While IT managers report that as a whole their student employees are well-intentioned and responsible, concerns related to maturity and professionalism may needlessly limit them to low-value roles because of legal and financial concerns. Whether it's temptation to improve their number in the housing lottery or change a grade, or the slip of a finger that exposes a vulnerability in security, untried employees operating in more complex environments increase institutional risk.

**Reliability**

**Competing priorities make students unreliable workers, and limiting students to help desk work exacerbates the challenges of disengagement.** Typical help desk roles are inherently lower-skill positions, have no clear applicability to future career goals, lack advancement or incentive opportunities, and have limited exposure to broader activities in the IT organization. With this disconnect between the role and more ambitious personal goals, student performance and responsiveness to departmental and community needs may suffer.

### Expanding Student Value in IT Service Departments

Students are a critical component of the help desk workforce – they can comprise up to two-thirds of FTEs at institutional help desks, and save upwards of 50 percent of labor costs across employment in computer labs, help desks, and service centers. This value can be scaled across the IT function, but only if students are trusted, and put in roles that build engagement in their work while providing greater benefits to the institution.

When IT managers invest in strategic recruitment for student employees and hold them accountable to institutional processes, they can be trusted to complete project-based work that creates a virtuous cycle of value for the institution and benefit to the students. Vetted and valued students can develop specialized skillsets, complete more complex and longer-term projects, and take advantage of opportunities for growth and ownership. Even if student employees require additional training and turn over relatively often, the additional support at lower cost is a viable alternative to additional FTEs.

# What the Best Are Doing

Practices to decrease risk and expand the value of student employees on campus include revised hiring processes and evaluations to instill accountability, and structured projects and internships to increase engagement.

## *Vetting Students to Limit Risky Hires*

### Screens to Identify Low-Risk Student Candidates
*Identifying Student Workers with a Track Record of Reliability*

IT managers seek referrals from trusted sources who can pre-vet prospective employees. This limits the number of less mature student applicants, who may create security and liability risks for the institution. Standardizing relationships with these people and organizations streamlines the process to recruit reliable student employees.

## *Building Accountability into Student Roles*

### Student Employee Evaluation Toolbox
*Holding Student Workers to the Same Norms as Full-Time IT Staff*

Systematic student employee performance evaluations can identify unreliable employees early in their employment or address risky behavior. Holding students accountable to professional norms of all IT employees allows them to be placed in higher-risk, higher-value roles. Review policies also offer structures to put on probation or terminate employees who place technology or data assets at risk, and reward high-performing students.

## *Structuring Student Roles For Long-Term Engagement*

### 10 Weeks+ IT Projects for Student Employees
*Sourcing and Managing High-Value Student Work*

Projects for student employees that extend beyond a single shift give students ownership of their work in a way that increases their engagement and reliability in their IT service management roles. When student employees work on a single project over the course of a semester, they extend the IT department's capacity for complex work and fulfill the institutional mission to educate students in digital citizenship.

# Looking for Frontier Practice

> " 
> *How can we meet campus IT service needs with limited funding for additional full-time staff?*

CIOs asked the Forum to find promising, replicable approaches to help extend workforce capacity through expanded student employment, without increasing risk or decreasing service to campus.

This brief is based on understanding gained from diverse higher education IT leaders. We are grateful to interviewees for sharing institutional insights and leading practices. We have abstracted the institutional insights to make them more generalizable for colleges and universities with different missions and budgets, but the Forum's work is, as ever, grounded in the proven innovations of progressive practitioners.

## *Featured Institutions—With Sincere Appreciation*

### RUTGERS
THE STATE UNIVERSITY OF NEW JERSEY

### Western Oregon UNIVERSITY

**Frank Reda**
University Director, Enterprise Service Delivery

**Adry S. Clark**
Director, Service Learning and Career Development

**Keri Budnovitch**
Director, OIT Enterprise Service Delivery

**Kathryn Plummer**
Assistant Director, Experiential Learning, Service Learning & Career Development

**Ana Verma**
Associate Director, OIT Enterprise Service Delivery

**JT Chirco**
Senior Computer Facilities Manager

## *Selected Research Participants*

**Shannon Valerio**
University of Denver

**Lauren Adams**
Saint Joseph's University

**Jake Bushnell**
Bryant University

**Beth Ambort**
University of Wisconsin - Platteville

**Tom Langdon**
University of Alaska, Fairbanks

**John Landers**
Case Western Reserve University

**Jerome Hilscher**
Drake University

**Curtis Spears**
Our Lady of the Lake University

# Screens to Recognize Low-Risk Student Candidates

## Identifying Student Workers with a Track Record of Reliability

**Practice in Brief**

IT managers identify individuals and organizations on campus who can serve as a maturity filter for potential student employees. These organizations develop relationships with students who might be interested in employment within the IT service management department, and who will vouch for prospective employees' trustworthiness and reliability. Through consistent communication, they streamline the process to increase the quality of prospective student employees.

**Implementation Steps**

• Create a list of department chairs, individual faculty members, student organizations, and other IT hiring managers that may have relationships with students who exhibit necessary qualities for IT student employees. The goal is not necessarily to source students with experience in IT, but instead find students with interest in the roles and with references or experience that engenders trust in their performance.

• When building a reference network, contact the people and organizations on this list to introduce yourself as you post job openings, and inquire about their willingness to refer specific students to your positions. In this communication:

  • Emphasize the sensitive nature of information and assets these employees may have access to

  • Communicate the importance of reliability for student employees working in the IT service management department

  • Provide a copy of the position posting, to ensure that the referrals are best suited for the position(s) you are currently considering candidates for

• Track which people and groups source the candidates who are mostly likely to receive an offer of employment, and who preform well in the role, to ensure that you maintain a relationship with their referrers and conduct similar outreach to them in subsequent years.

**Benefits to Institution**

» Increased likelihood of identifying high-quality student employees, with less effort

» Risk to the institution due to untrustworthy or negligent student employees decreases

> " Word of mouth and referrals are the best way for us to hire students for retention – and that doesn't just mean students who will return for multiple semesters, but also students who we *want* to come back because they are reliable. Actually speaking to references is one of the most important parts of the hiring process."

IT Support Specialist
*Public Master's University*

# Spotlight Practice

## Contacts to Help Expand the Pool of Quality Student Applicants with Desired Experiences and Interests

### Maturity

- Chair and faculty in the Computer Science Department
- Chair and faculty in the Mathematics Department
- Chair and faculty in the Communications Department
- Chair and faculty in social science departments with quantitative requirements (e.g., economics, political science, psychology)
- Teaching Assistants in entry-level courses in relevant departments

> Make sure to communicate to faculty members interest in hiring graduate-level, as well as undergraduate, students

### Technical Interest

Officers (e.g., president, vice president, treasurer) or faculty and staff advisors for organizations such as:

- Women in Technology
- Computing Competition Team
- Communication Association
- Business and Information Technology Society
- Association of Computing Machinery
- Cybersecurity Club

### Diversity

Campus office staff or student organization officers that serve affinity groups based on:

- Gender
- Sexual Orientation
- Ethnicity/nationality
- Religion
- Disability
- Medical History

## Finding IT Student Employees Prepared for Greater Responsibility

| FIRST TERM | END OF SECOND TERM | THIRD TERM |
|---|---|---|
| **Help desk managers** hire students to work in triage or low-level support positions | **IT hiring managers across the unit** approach help desk managers to identify students who have demonstrated necessary character traits for more sensitive positions, and actively recruit them for roles | **Help desk student employees** who receive an offer of employment from elsewhere in IT start employment in those divisions |
| Set department-wide expectation of high help desk performance prior to consideration for other roles communicated to students | Promote a culture of development, so that units do not resent others "poaching" their high-performers | With a track record of reliability, supervisors and colleagues have greater confidence in their maturity |

⚠ While referrals are an invaluable source of talent for the IT organization, hiring managers should take steps to ensure that they do not perpetuate existing hiring biases; they should strive to avoid self-replication.

# Student Employee Evaluation Toolbox

## Holding Student Workers to the Same Norms as Full-Time IT Staff

**Practice in Brief**

Systematic evaluations for student employees, conducted by their IT supervisors, give students a greater sense of ownership for their work, and encourage responsibility to the campus community to provide high-quality service and limit institutional exposure to risk. These conversations emphasize to students the significance of their roles, and also provide a format to review student work for errors or vulnerabilities.

**Implementation Steps**

- **Create an inventory of types of student employees** within the IT service organization. Determine whether all employees can be evaluated using a single rubric, or if different roles or departments need to modify beyond a core set of department-wide skills.

- **Determine which skills are universal to all student employees**, and articulate department-wide expectations related to these competencies**.** Include a standardized scale for evaluating employees, and definitions to categorize performance to each level on the scale.

- **Articulate next steps** for students who fail to meet expectations outlined in performance reviews, especially for actions that expose the institution to legal or security risks, or the department to reputational risk.

- **Integrate performance evaluation tools** with other software, when applicable, to automate performance tracking competencies related to areas such as attendance, campus survey feedback, and data quality.

- **Require supervisors to complete evaluations on a semester or annual basis.** Identify students who are performing poorly and put in place plans to modify their behavior or terminate their employment, and students who are exceeding expectations and should be considered for higher-skilled roles.

**Benefits to Institution**

» Students alter behavior to improve quality of service and lower institutional risk

» Mentoring students provides early-career staff lower-stakes opportunities to develop leadership skills

> "
> I understand why some institutions don't give employees students evaluations – it can be a hugely time consuming process. But we need to talk to students about their performance, both to recognize high and low performers, and to help them understand the value of their work and its applicability to their careers in or outside of IT."
>
> Director, IT Support Services
> *Private Research University*

## Overcoming Common Objections to Systematic Student Evaluation

⚠ **Common Objection:** It's time consuming for IT supervisors to offer individualized feedback to students

💡 **Solution:** Automate as much of the process to collect student performance metrics as possible

| Performance Tracking System, Effective Spring 2017 | |
| --- | --- |
| **Perfect Performance Merits** | **Minor Infractions - 10 percentage points** |

**Perfect Performance Merits**

30 merits will be received for each period in which no warnings or infractions occur.
Consultants who are on probation do not receive perfect performance for that period.

| Fall Period | Spring Period |
| --- | --- |
| 8/20/16 - 12/31/16 | 1/1/17 - 5/10/17 |

**Major - 50 Merit Incidents**
Consultant of the Semester Award
Permanent assignment to hard to fill shift

**Moderate - 30 Merit Incidents**
Consultant of the Month Award
Promotion

**Minor to Moderate - 10 to 30 Merit Incidents**
Volunteering for tasks or projects
Special project
Exceptional handling of an unusual situation
Emergency coverage (Merits based on conditions)

These incidents may be awarded 10, 20 or 30 merits

**Minor Infractions - 10 percentage points**
*Lateness under 15 minutes
Lateness of 15 mins or more, with notice
Lateness to staff meeting/training
*Failure to follow coverage procedure
Repeated requesting of emergency coverage
*Failure to sign-in/out properly
Failure to follow shift turn-over protocol - leaving without relief/unauthorized breaks
Failure to comply with work hours policy
*Inattention to responsibilities and/or users
*Poor work ethic or attitude (Minor)
*Poor communication
Minor failure to enforce/follow procedures or rules
Minor failure to cooperate with management or coworkers
Failure to address or escalate a problem correctly
*Failure to properly log in to the SC staff chatroom
Failure to read/respond to work email in a timely manner
Failure to complete assigned task/project by deadline
*Failure to wear a badge or display nameboard
*Minor substandard ticket writing

A student-built system automatically collects information about students' tickets, customer satisfaction, attendance, and other relevant metrics to limit time spent by supervisors aggregating data.

Students start with a 100% performance rating; rather than earning points, supervisors operate from a position of trust and all students start the review period with perfect performance.

Guidelines for behavior emphasize rewards for community support and exceptional service – performance tracking is equally designed to incentivize positive behavior.

A hierarchy of incidents demonstrates the severity of certain behaviors, and associated consequences.

⚠ **Common Objection:** Expectations for non-technical competencies are difficult to articulate

💡 **Solution:** Use existing language in full-time employee rubrics and policies to inform student evaluations

**1**

**Acceptable Use Policies**

Require student employees to review and sign existing acceptable use policies for the institution; include adherence to the policy in performance rubrics

**2**

**Non-Disclosure Agreements**

Although NDAs are most often used for third party vendors, adapt them for student employees to impress upon them the importance of discretion when they get access to sensitive information

**3**

**Institutional Review Board (IRB) Documentation**

Borrow language from IRB training and documents to articulate expectations to students related to different types of data they may access governed by regulations related to PII, HIPAA, or FERPA

# 10 Weeks+ IT Projects for Student Employees

## Organizing High-Value Student Work

**Practice in Brief**

Ownership for IT projects with the duration of a semester or longer improves student employees' reliability and quality of work, while completing initiatives within the IT organization that would otherwise not be done or would require the attention of a full-time employee. Students receive the benefits of a traditional internship, including: a position within a functioning business, a supervisor with expertise in the field, and the development of skills transferable to other industries and organizations.

**Implementation Steps**

- Identify partner organizations such as academic departments, center for experiential learning, career services, or other offices in the student affairs or academic divisions. These units can help provide funding for salaries, evaluate potential student employee roles, and advertise positions.

- Secure funding for student employee salary; at Western Oregon University students receive $1,000 for 10 weeks of work, paid by the Career Development Center.

- Preferably in collaboration with the institutional partners, identify requirements for supervisors or units hoping to hire a student employee for a project. Requirements to consider include manager availability, project scope, and defined student employee learning outcomes.

- Ask units to submit applications to host a long-term student employee. Evaluate possible student employee placements and select those with the most clearly defined student roles and responsibilities and greatest institutional need. Publicize these opportunities through the career services center and other on-campus partners.

- Require students to submit a formal resume, undergo basic professional skills training through the career services center, and complete a formal interview prior to receiving an offer for project-based student employment. This sets expectations for applicants about required commitments in the role, limits the amount of non-position specific coaching supervisors must provide, and ensures that selected students are appropriate for the job.

- Manage student employees to complete outlined roles and responsibilities, providing feedback and support during the course of their work.

**Benefits to Institution**

» Completion of IT projects that would otherwise require additional time from full-time staff

» Contribution to the university mission of student development

» Improved student employment outcomes

» Identification of possible candidates for full-time employee positions after graduation

> " IT can offer students a great opportunity for experiential learning – it's helping the university develop a pipeline of IT workers, which will benefit us in the long run, but it's also helping the university develop those skills in students, which will support them in a pretty much any future role."

CIO
*Public Research University*

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## Identifying Opportunities for Long-Term Projects

*Characteristics of Quality Long-Term Project Placements*

- Position within a functioning business
- Reporting line to a professional with expertise in the field
- Assignments and responsibilities target field-specific learning outcomes
- Skills developed are transferable to other organizations or companies
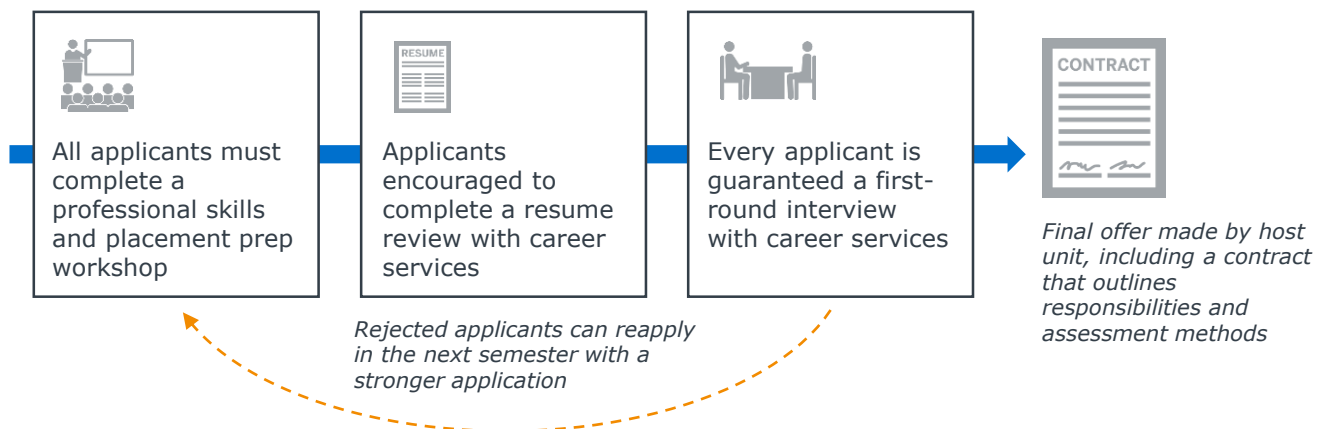- Access to resources and facilities necessary for learning outcomes

*Select Service Management Opportunities*

- Set up or refresh instructional technology in a classroom or academic building
- Conduct analysis on metrics available in the ITSM system to evaluate performance against KPIs
- Create a communication plan and manage communications for the IT service management organization
- Integrate the service management system with other tools to increase proactive servicing of technology

## Prior to Advertising a Student Employee Job Posting for Non-Shift Work, Define:

- Supervisor availability and willingness to supervise student employees
- Learning objectives for the student
- Roles and responsibilities to achieve learning objects and support departmental needs

- Experience and qualifications for applicants (i.e., knowledge, skills, and abilities)
- Desired academic background (i.e., majors and minors)

## Create an Application Process that Vets Students and Trains them in Professional Norms

All applicants must complete a professional skills and placement prep workshop

Applicants encouraged to complete a resume review with career services

Every applicant is guaranteed a first-round interview with career services

CONTRACT

*Final offer made by host unit, including a contract that outlines responsibilities and assessment methods*

*Rejected applicants can reapply in the next semester with a stronger application*

**32*** Students received on-campus placements in 2016

**110** Students received career development as part of this program in 2016

* This is the number of placements across administrative units at Western Oregon University, not just the IT Service Management unit.

# Extending the Student IT Workforce

**Using this Report to Speed Consensus for Change**

Many Forum members use our research as an occasion to convene IT and campus leaders. Together, they review best-practice lessons from innovative higher education institutions and deliberate about the need to revisit policies, implement new processes, or reallocate staff and budget dollars.

Forum reports now feature self-evaluation diagnostics and discussion guides that IT leaders can use as a backbone for focused working sessions. We recommend that members distribute this report to the relevant stakeholders as pre-reading to establish a common vocabulary and fact base. Then, spend time going through the diagnostics and discussion questions to decide whether policy course-corrections or resource re-allocations make sense. Forum staff would be delighted to facilitate such discussions live on your campus or on a private webconference as helpful.

## Creating a One-Hour IT Team Working Session

- Send report to IT leadership or IT management committees or taskforces for pre-reading

- Convene group to discuss diagnostic questions and assess need for adopting profiled practices

- Contact IT Forum for implementation support:

  – Unmetered consultation with Forum researchers

  – Networking contact with profiled institutions

  – Model policy and process templates

# Screens to Recognize Low-Risk Student Candidates

IT managers seek referrals from trusted sources who can pre-vet prospective employees. This limits the number of less mature student applicants, who may create security and liability risks for the institution. Standardizing relationships with these people and organizations streamlines the process to recruit reliable student employees.

**Found in Forum Research**

Typical Practice   **Frontier Practice**
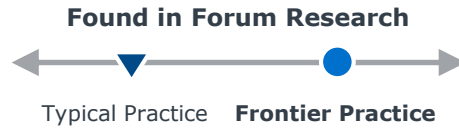
**1. How often do IT hiring managers seek candidate referrals?**

Only for difficult to fill positions

On an ad hoc basis, determined by individual relationships

**Seeking refrerrals is part of recruitment for every open position**
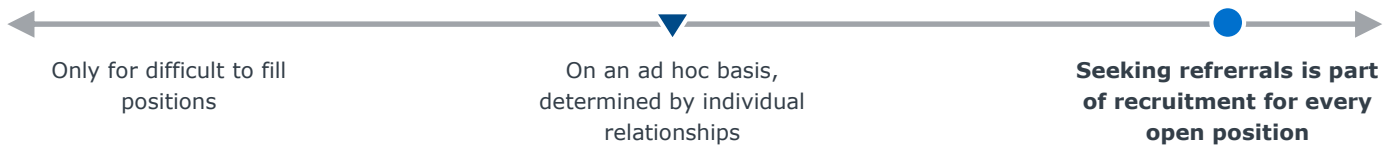
**2. From whom do IT hiring managers source candidate referrals?**

Colleagues within the IT organization

Colleagues and academics in targeted departments and programs

**Colleagues, academics, and leadership in related student organizations**

**3. Do evaluate students on their demonstrated professional maturity, or the recommendations of others in help desk roles prior to consideration for higher-skilled positions?**

No

Only for leadership roles at the help desk or in computer labs across campus

**Yes, for all non-entry level student positions**
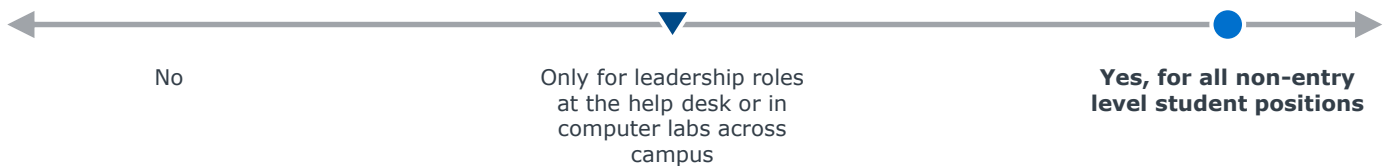
**4. What percentage of your student employee workforce routinely exposes your institution to risk, through either mishap or ill intent?**

**<5%**

10%

15+%
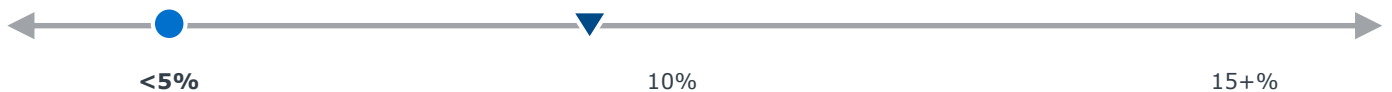
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Systematic student employee performance evaluations can identify unreliable employees early in their employment or address risky behavior. Holding students accountable to professional norms of all IT employees allows them to be placed in higher-risk, higher-value roles. Review policies also offer structures to put on probation or terminate employees who place technology or data assets at risk, and reward high-performing students.

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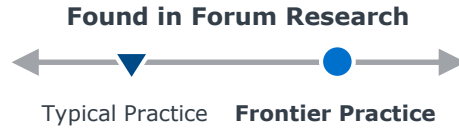
**1. Which student employees receive formal performance evaluations?**

Only obvious underperformers

Under-performering and high-performing employees

**All student employees**
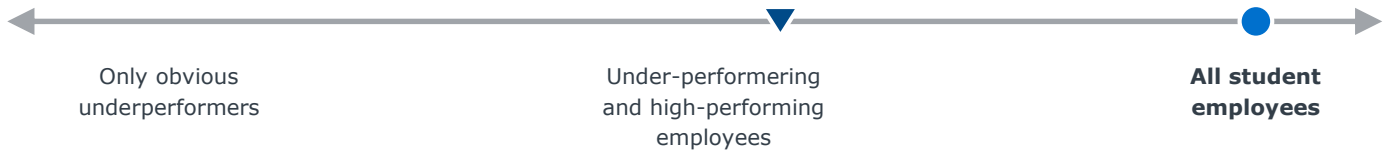
**2. How often do student employees receive a formal evaluation?**

Student employees are never evaluated

On an ad hoc basis, when they are in danger of dismissal or we want to promote them

**Regularly, once a semester or once a year**
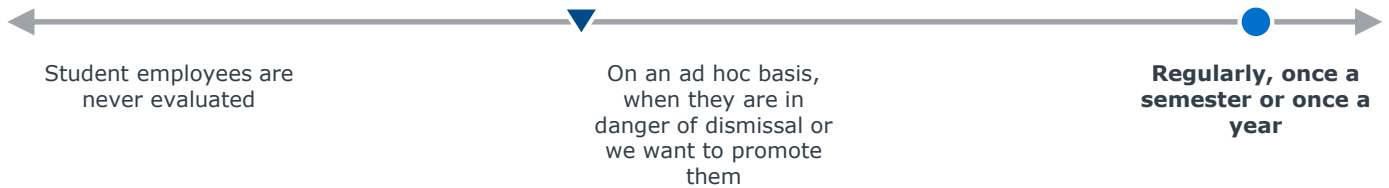
**3. On what aspects of their performance do you evaluate student employees?**

Student employees are not evaluated

Students are only evaluated based on customer satisfaction and productivly metrics

**Evaluations metrics include professionalism and audits of student employees' work**
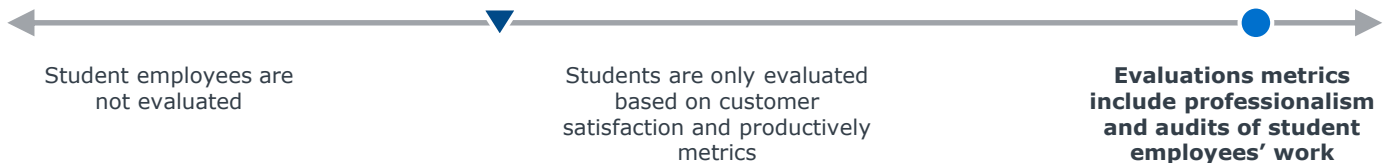
**4. Who contributes to student employee performance evaluations?**

Direct supervisors give employees feedback

Direct supervisors use already available campus feedback to supplement their observations

**Direct supervisors contact other, relevant IT staff to supplement their observations and already available feedback**

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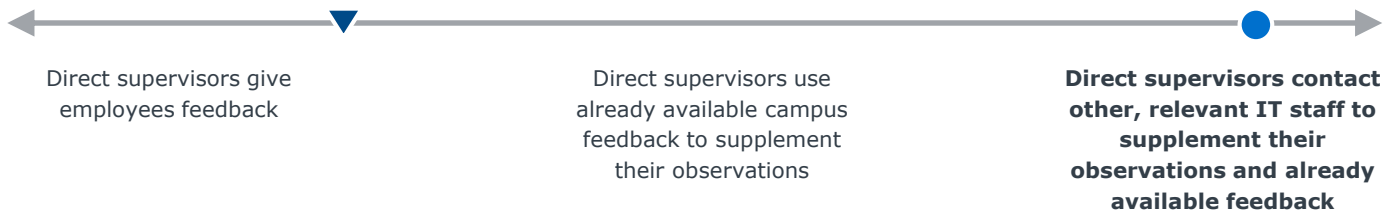
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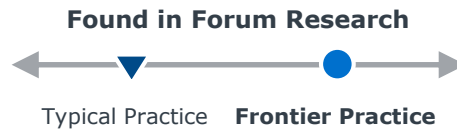
**1. What roles do student employees currently fulfill in your IT service management organization?**

Students conduct triage for the help desk and staff computer labs

Students solve Tier I and II service requests and manage other students

**Students support departmental priorities beyond customer-service roles**
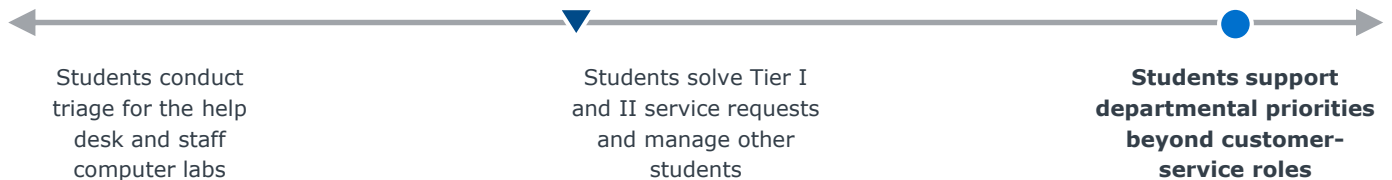
**2. What is the duration of student employee responsibilities?**

No task lasts beyond a single shift

Only student employees with supervisory responsiblities have responsbilities beyond a single shift

**Students across the organization own projects that last more than 3 weeks in duration**
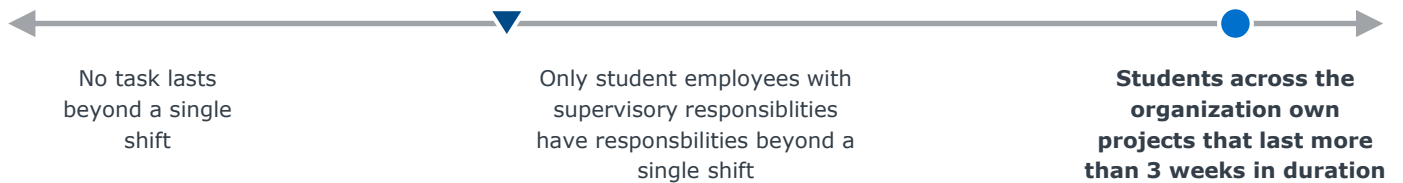
**3. What relationship do student employee supervisors have with the career development center?**

No relationship

Supervisors rely on the career service center to provide training to students

**Supervisors collaborate with the center to design roles that provide value to the student and institution**

# IT Forum
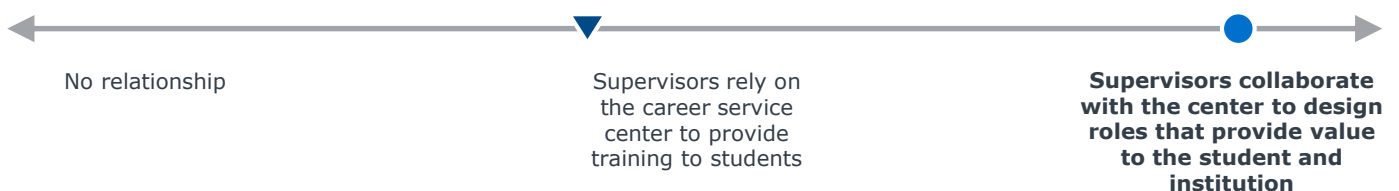
Project Director

Scott Winslow

Contributing Consultants

Anna Krenkel

Design Consultant

Kevin Matovich

The best
practices are
the ones that
work for you.[SM]