Kicking It Up a Notch: 
Adding Zest to Your Student Employee Training

Celisa Mettler Manly
Cornell University
119 Comp. & Comm. Center
Ithaca, NY 14853
(607) 255-6948
cjm5@cornell.edu

Abstract
Does your recipe for success at the HelpDesk or in the Labs include student employees? If your recipe seems to have lost its zest, you might want to “kick it up a notch,” as Chef Emeril Lagasse would say, by spicing up your student employee training program.

Even a good training program can become a left-over if reheated year after year. This paper discusses the challenges of revitalizing a solid technical training program for student employees. Evaluation of the training program at Cornell University was conducted on a session-by-session basis in 1998, 1999, and 2000, providing a quantitative basis for this discussion.

HelpDesk technical staff successfully redesigned their student employee training program in order to achieve the following objectives:

• prepare new and returning staff to provide top-notch support from day one
• establish the organizations expectation for professionalism
• recognize the different learning objectives of new and returning employees
• improve employee participation in training
• integrate training with other IT units in order to consolidate costs and effort
• collaborate with service owners in developing curricula
• have fun!

This paper will identify the specific challenges and solutions that worked best at Cornell. This paper will also show the evolution of the training program from a single track course for HelpDesk employees to a multi-tracked conference-style event for student employees throughout Cornell Information Technologies.

Keywords
Students, student employees, staff training.

1. INTRODUCTION
Student employees are the faces and voices of many campus IT organizations. For many users, an individual student employee—on the phone, or face-to-face—will be their only contact with the IT organization. This is true at Cornell University, where 180 student employees work the front lines of user support across functional areas in Cornell Information Technologies (CIT). In CIT, students are lab operators, consultants, trainers, database administrators, technical writers, web designers, programmers, and peer supervisors.

In all these roles, it is important to make a great and lasting first impression. CIT’s student employee training program establishes and reinforces that expectation with employees, while providing both the general and specific skills necessary to make that expectation a reality.

This integrated training program evolved from smaller, independent programs and faced many programmatic challenges. In 1996, these challenges included low morale, weakening participation, disruptive employees, growing costs, and diminishing returns on the organization’s investment in training. In the following years, we successfully met these challenges by improving communication and increasing collaboration.

In 1999, the idea of an iterative design process is central to the discussion of how to revitalize a training program. The student employee training program must adapt as technologies emerge, customer expectations grow, and organizational foci change. Success requires an on-going review and revision schedule.

2. PROGRAM DEVELOPMENT
2.1 Evaluating the Existing Program
The CIT student employee training program features a three-day intensive event, offered immediately before freshman orientation begins in the fall semester. Other elements include a new hire orientation, computer based tutorials, formal mentoring, and on-the-job training. This paper will discuss revision of the annual fall training event.

Employee training sessions presented at the annual event increased in number gradually over the course of many years. The focus of training was mastery and retention of detailed technical material. As new products and services were offered, new training classes for employees were developed and new documentation was written. The incremental addition of material reached critical
mass in 1998, when student employees attended over 30 briefings on various products and services in a 3-day period.

Program evaluations showed that new employees were overwhelmed by the detailed technical material, while returning employees were bored by repetition from previous sessions. Presenters were challenged by disruptions from bored participants. Subsequent performance reviews showed that employees were not retaining the detailed information presented to them.

The program evaluation data in 1998 clearly indicated a need to revitalize, and possibly restructure, the training program. More data would be necessary to give direction to that effort. But the idea of a comprehensive assessment seemed daunting to a staff already tasked with many other responsibilities.

It is possible to gather useful feedback from existing mechanisms without investing additional resources. Many of the resources used at Cornell can be found in any IT organization. For example, trouble tracking systems, customer feedback forms, performance evaluations, exit interviews and simple surveys are all affordable, easily implemented means of gathering information.

2.2 Developing Strategy
In analyzing the data that we had gathered, we found that new and returning employees had different training needs. Student responses to open-ended questions showed that they didn’t feel the training that they received would prepare them for their jobs. We decided to adopt a problem-based approach, by including case studies in all presentations.

Our strategy was to offer two levels of training, the first appropriate for entry level employees with limited background in the specific technical area. A higher level course was also planned for the returning students.

We also found that focusing on the technical details of a product or service did not give employees the ability to support that product or service. Our strategy was to shift the focus to problem solving and research skills. Where we determined technical knowledge was necessary, we decided to keep that information focused on support services and point to web documentation for those interested in more detail.

Some strategies were purely logistical, and not related to the content of the training program. A single location that could accommodate the whole training program was chosen. We decided to offer more meals, and shorter, more frequent breaks.

Finally, we decided to add more recreational events. Some were technology oriented, such as a visit to Cornell’s 3-D imaging facility. Others were purely recreational, like volleyball and other feats of skill and strength.

3. IMPLEMENTATION AT CORNELL
In August 1999, our training strategy became a reality. We were pleased to find that our new program was better attended, and generally considered more successful. This section details the techniques we applied to our program to make it a success.

3.1 Engendering Professionalism through the Conference Model
We wanted our training program to show by example the level of professionalism we expect from employees. In our orientation sessions and student handbook, we have explicit statements regarding punctuality, time keeping, ethical behavior, and non-disclosure. If our training program itself was not professional, it would subvert those materials.

Professional development for full-time staff often comes in the form of conferences, like SIGUCCS. Since we couldn’t realistically send 180 student employees to SIGUCCS, we decided to bring a conference to the students.

In the conference model, annual or semesterly training events are positioned and conducted as would be a national conference like SIGUCCS. Attendees receive regular communications and updates, which build excitement and enthusiasm for the event itself. Registration at the event includes a pre-printed nametag, with recognition for student supervisors, presenters, and new staff participating for the first time. Participants receive a binder in which to store class hand-outs and take notes. If the budget allows, a tee-shirt or souvenir may also be included. In our implementation of this model, frequent meals and plenty of refreshments are also key.

But there’s more the conference model than give-aways and food. The structure itself includes both assemblies and break-out sessions. In the conference model, speakers are experts in their fields, prepared to deliver presentations or lead discussions on their material. At Cornell, we’ve been fortunate to have participation from the highest levels of the IT organization.

3.2 Finding Economies of Scale Through Integration
While the conference model conveys professionalism, that professionalism comes with a cost. Guest speakers demand honoraria and have travel expenses. Binders, nametags, and other trappings add up. Good food costs real money. And at Cornell, there are fees for the use of facilities.

At first glance, these expenses seem prohibitive. A single unit’s budget may not allow for the conference model. We overcame that obstacle by finding economies of scale.

Several units in CIT employed students, and had their own training programs. By integrating these separate programs as tracks in the conference model, we were able to reduce total cost and offer more opportunities to a larger number of employees. At the same time, we were careful to ensure that unit managers retained oversight of the content of their track.

In examining our program, we found that two units were each hiring the same speaker to give the same presentation on two occasions. By making that presentation a plenary session in the conference, we not only eliminated redundant honoraria but were able to expand the audience.

The organization itself benefits from these economies both in dollars saved and staff hours reclaimed. Staff hours spent planning events are harder to account for, but also add up. Likewise, the staff time saved in integrating training frees staff to work on other projects.

3.3 Collaborating to Develop Comprehensive Training Curricula
The majority of network services at Cornell are the product of collaboration between programers, network engineers, desktop support specialists, HelpDesk consultants and technical writers.
Just as these various perspectives are necessary to develop and release a service, we found that they were necessary to develop the associated training.

In past training events, technical training had been developed either by HelpDesk staff working alone based on their experiences or by subject matter experts working alone based on their knowledge. We found both approaches to be flawed. When the subject matter experts were not involved, reliability suffered. When the support staff were not involved, relevance suffered. Balancing the strengths of each group was the key to the success of our technical training.

3.4 Organizing the Event

3.4.1 Core Training

Core training provides those skills necessary for success anywhere in the IT organization. At Cornell, we identified the following core skill sets: communication skills, customer service skills, knowledge of IT policies and ethical standards, knowledge of the IT structure and campus expectations, problem solving skills, and the ability to resolve or refer every inquiry. We found that traditional lecture-style presentation worked best for these topics, especially when combined with examples from the tracking system and the role-plays.

It is worthwhile to note that both new and returning employees attended these core training events together—even if the returning employees attended previously. Combining new and returning staff in the same session was contrary to our initial strategy, where new and returning employees would attend customized sessions.

However, there were compelling reasons to provide the core training in plenary sessions. In some cases, like IT policy, there are changes form year to year and all employees need the most recent information. Product and service offerings also change, reflecting changing customer expectations.

Returning employees reported that they were able to retain more of the material the second time it was presented. The returning employees also contributed valuable discussion, and testimonials.

3.4.2 Technical Training

By comparison, the technical training sessions provide student employees with the information and skills that are specific to their job function within the organization. Technical training is offered in supporting dial-up services, supporting core internet services such as e-mail and web browsers, DHCP and network infrastructure, access and accounting procedures, operating systems support, authorization and authentication, and networked printing support. These subjects are covered in small group sessions, allowing for a seminar-like environment, or a hands-on session in a lab when appropriate. As with the core skills presentations, case studies are used throughout.

New and returning employees attend separate technical sessions. New employees can focus on the fundamentals and the most common problems, while returning employees are given the opportunity to explore the subject in more depth.

Technical training is offered in concurrent 45-minute classes. Each employee is on a conference track that corresponds to one and only one set of classes throughout the day. A returning employee may choose to follow the advanced track in their area, or may opt to follow a second track in preparation for a transfer between areas. For example, a student returning to a position as a HelpDesk consultant may choose to follow the ResNet track, in order to qualify to take shifts with that staff periodically throughout the year.

3.5 Synchronous and Asynchronous Training

This paper has focussed on synchronous training: where employees are trained in real-time en masse. This approach has been effective at Cornell because student employees are typically hired annually, in groups of about 30-50 each. Synchronous training offers teambuilding opportunities and promotes relationship building between levels of the organization.

However, there are employees hired off-cycle in response to unusual situations, gaps in a schedule, or a mid-year change in staffing levels. There are also a number of students who are unable to attend the training conference for various reasons each year. Synchronous training is also resource intensive.

Asynchronous training opportunities have evolved to meet this off-cycle need. It includes a new hire orientation program, web-based materials, and on-the-job training.

A “New Hire Orientation” program is offered within the first week of an employee accepting a position in CIT. The New Hire Orientation offers a taste of the full training conference conducted in August, allowing the employee(s) to meet the various staff with whom they will be working. It is a formal setting for explaining the expectations of the position. The New Employee Orientation covers the role of CIT on campus, customer expectations, and CIT’s professional expectations regarding punctuality, ethics and the like.

With this grounding, student employees are directed to training material on the web. Each session in the training conference is documented, and converted after the event to a web presentation. Several sessions combine the actual audio recording of the original speaker with that speakers’ slides. Other sessions may consist only of an outline of troubleshooting steps.

This body of material, easily accessible from the web, allows off-cycle students to prepare at their own pace for their first shift. It also offers opportunities to students already in the organization. It also allows students to review material that they may have missed in the original conference, or to prepare for a transition in responsibilities by going through the materials for a different functional area.

250 titles from CBT Systems computer based training are also available at no cost to members of the Cornell community. Several of these titles have been identified as valuable to student employees, and supplement the training program.

Lastly, some training occurs on-the-job, during the employees’ first shift. More senior employees work in a mentoring relationship with the new employee, reviewing a checklist specific to their work area. When both mentor and mentee agree, the new employee begins work on their own.

CIT uses an on-line Student Management System which, among other functions, documents completed training levels and prompts supervisors for action when necessary training remains uncompleted.
4. NEXT STEPS
At the time of this writing, the 2000 training conference has yet to take place. By the time SIGUCCS occurs, it will have been completed, and evaluation data from the program will be covered in the presentation.

The primary change between 1999 and 2000 is an expansion in scope, inviting a wider range of student employee groups to the conference. In addition, feedback from the 1999 sessions has led us to make minor changes like providing more handouts.

Over the course of the next year we are hoping to obtain more formal recognition for the training program, and to unify the funding under a single budget. (Currently, it is paid out of the various budgets of the participating units, which results in undesirable accounting overhead.)

5. CONCLUSION
Training student employees to provide the highest quality service is important because of the number of student employees in IT organizations and the front-line duties they perform. Training programs that evolve slowly over many years can become stale and out-of-date in the absence of an iterative review and revision cycle. It’s important to base revisions on feedback from all perspectives: the employees themselves, their managers, back-line staff, and even campus colleagues outside the IT organization. A communication strategy, tying expectations throughout the students employment can be formed from this feedback and used to refine existing materials. Collaboration between divisions of the IT organization can leverage common interests and economies of scale, making it possible to offer centrally training materials and programs that exceed the resources of any single contributing area. Collaboration also improves the working relationships between divisions of the IT organization. A conference model for annual training can be the highpoint of an annual training program that also offers asynchronous, independent learning, computer based training, mentoring, and guided on the job training.

6. ACKNOWLEDGEMENTS
I would like to thank the following individuals for their contributions: J.P. Brannan, Lisa Mix, Eric Nobel, Amanda McAuley, and Jim Lombardi.