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Creating Pathways to Develop Student Professionalism – a New Direction

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ABSTRACT
The 2007-2008 academic year brought a new program of student employment to our IT department called IT Fellows. This program brings together the technological skills of IT along with soft business skills to assist our student employees in becoming well-rounded individuals fully prepared for life after college. In previous years our primary area of student employment was the Help Desk in which there was a tiered system in place with opportunities for resume and interview experience, raises, and promotions. The area of training needed further development and the move to the new program provided enhanced opportunities for training at all levels of employment. First-year candidates attend a week-long Leadership Academy, followed by a full year of training in four six-week rotations of their choice, after which they interview for year-long assignments as interns. Internship opportunities are provided in all areas of the department as well as some campus departments outside of IT, and provide transcript credit for them to carry forward in their prospective careers. As they progress, some upper-class Fellows become mentors, coaches, managers, and trainers themselves. All Fellows participate in educational seminars throughout the year which address many areas of technology and professionalism. Come journey with us as we explore the new terrain of students as colleagues, and the benefits of expanding skill sets, both in full-time staff as well as student employees.

Categories and Subject Descriptors

General Terms
Management, Performance, Human Factors.

Keywords
Student training, career development, mentoring, coaching, Help Desk, management, student employment, recruiting.

1. INTRODUCTION
Valparaiso University is a coed, four-year, private residential Lutheran institution located in northwest Indiana. The Office of Information Technology serves approximately 3,000 undergraduate, 900 graduate and Law School students, 350 faculty and 625 staff members, as well as Valparaiso University retirees and community members. This is a total customer base of more than 5,000.

In order to provide adequate services, student employment is both a necessity and an opportunity. It is a necessity due to decreasing budgets and resources, yet it is an opportunity due to the benefits both received and given in the student environment. By focusing on this opportunity, Valparaiso University has taken our student employment program from a group of kids who staff the help desk, assist the residents, and perform other limited tasks to a comprehensive program of training, opportunity, and credited employment.

2. THE BEGINNING OF STUDENT EMPLOYMENT
Student employment in our department began in 1986, with approximately a dozen students hired to be student aides for assisting with word processing on Unisys machines or with the University’s Data General mainframe terminals. These machines were located in separate labs within the Academic Computing & Communications Center building; this arrangement continued for several years, and the student aides reported either to the Word Processing Coordinator or to the mainframe administrator. By 1989 the department started replacing the DG terminals with IBM PS/2s, and the Unisys machines with Mac Pluses; the student aides were still hired mainly to provide support for one platform or the other but their skill sets began to overlap and they became more interchangeable between positions. As use of campus computing resources and services offered by the two computing departments (Academic Computing, and Administrative Computing) grew, the number of students hired also grew. By this time all student aides were now reporting to the Word Processing Coordinator.

In 1990, the Help Desk was founded as the brainchild of the sole user support person in Administrative Computing, and the two University computing departments merged to become Electronic Information Services (EIS). At the time, the Help Desk was staffed only by full-time staff members who were each assigned a block of time during the week to monitor the Help Desk phone number (464-5678) and handle incoming calls. The Help Desk was located in the same building as the student aides but in a different office. The hours were limited to Monday-Friday 8am-5pm, with the primary aim of aiding faculty users. The full-time staff experienced a great deal of frustration, however, because
faculty were accustomed to calling staff members directly, not a central point of contact.

In 1992, the approximately 20 student aides were given a title: Student Consultants, commonly known as “StuCons.” Many StuCons were still basically word processing and mainframe terminal aides and covered the large number of hours the computing center labs were open to the campus community. The more experienced StuCons were given opportunities to staff the Help Desk, which assisted in reducing frustration levels of full-time EIS staff. These students could answer most questions or fix most problems because they were involved in building almost every system, network, or program in use at the time. Recruitment of new StuCons was done largely through word-of-mouth by existing staff; the position was posted as a work study opportunity but other advertising was limited at best. Students were required to submit an application and complete an interview before being hired, and the pay rate started at minimum wage. The Help Desk was still open only a limited number of hours and the Help Desk StuCons were given the use of a consumer-grade wireless phone to use in the event they needed to leave the single phone workstation. These StuCons were those with the most experience and the best problem-solving skills. No new hires were ever placed on duty at the Help Desk; only StuCons who had at least one year of experience with EIS were permitted to staff it.

The next year, the Academic Computing & Communications Center building was renamed Schnabel Hall (in honor of a retired president), and a front desk was created in the building to centrally host all non-Help Desk StuCons on duty at any given time. By 1995, the staff and duties of the front and Help Desks had merged to become one position, and multiple phones were installed for all workstations. A phone tree was setup on the 464-5678 phone number: this allowed for multiple simultaneous incoming calls. All requests for service were submitted via forms printed on blue paper, infamously known as “blue forms.” Training offered to EIS StuCons was largely on-the-job. To help this process run more smoothly, new staff members were paired with experienced staff members who showed them the ropes. Staff meetings were held at the beginning of each semester to review the staff schedule, review policies and procedures, and general customer service skills. Further training and informational meetings were held as needed and email use as a method of staff communication increased as those systems developed.

3. THE TECHNOLOGY ASSISTANT PROGRAM

A new position of student employment, Technology Assistants (TA’s), was created in 1994 for the purpose of assisting with network users in the residence halls. At that time, EIS sold network cards to users, installed and configured them, and provided support to ensure network connectivity and desktop support. This was very labor-intensive, so hiring student employees was a way to reduce strain on full-time staff while still providing high levels of technical skill to network users. Candidates with significant hardware experience were recruited to fill the TA positions and were trained in the specifics of configuring network cards to work on the VU network. Due to the unpredictability of the TA workload over the course of the semester the position became salaried, thus stabilizing their biweekly income. As the campus network has grown and evolved, so has the position of the TA’s. It eventually became logistically prohibitive to sell, install and configure network cards for all residential network users, and we began encouraging users to purchase and install network cards before they arrived on campus. TA’s were still hired and trained to assist residential users with connecting to the campus network, eradicating malware infestations among student constituents (a frequent occurrence), and monitoring residence hall computer lab equipment and supplies.

4. THE HELP DESK PROGRAM

In 1996, the Help Desk was restructured. A full-time Help Desk manager position was created for the purpose of supervising all Help Desk staff and managing daily HD functions. An electronic method of tracking work requests, HEAT (Helpdesk Expert Automation Tool), was also implemented to help in this process. This split further separated the TA positions from the Help Desk positions, since TA’s continued to report to the Director of Instructional & User Support. Around this time it became more difficult to attract enough students to fill all the available positions at the Help Desk, so the pay scale was restructured. This allowed staff the opportunity to demonstrate their knowledge and achieve a pay raise while providing an incentive to work at the Help Desk despite higher stress levels. Over the next several years, the Help Desk student positions were expanded to provide career growth opportunities.

In 1999, several staffing improvements developed. A second full-time position was created, Help Desk Specialist, which delivered greater consistency and a higher level of professionalism to the campus community. Later that fall, a second Help Desk student position was created to allow StuCons the opportunity to obtain managerial experience by empowering them to function in a supervisory capacity, assist in training younger staff, and assist in resolving issues during times when full-time staff were not present (evenings, weekends). The position of StuCon Manager had a higher pay rate and scale: it became the highest paid student employment position on campus. The opportunity to gain real management experience was quite attractive to many students and proved to aid students in gaining better post-graduation job opportunities.

In 2001 a third position, StuCon Specialist, was created at the Help Desk to provide additional on-site desktop support to faculty and staff. The Specialists were able to troubleshoot problems more in-depth, provide face-to-face training and education to users, and function as an intermediary support level between the Help Desk and the full-time staff. The pay scale was between the basic level StuCon positions and the Manager positions, which further added to career path opportunities. A requirement was created that all SC Manager candidates must have served in the SC Specialist role before being considered; this equipped the Managers to better understand all staff positions and provide more effective leadership.

The period of 2000-2004 was a turbulent time for the Help Desk due to the fact that the full-time Manager changed a few times–there were even some periods of time when the position was not filled. Despite these challenges, the Help Desk continued to recruit students with strong technical and soft skills (though training was identified as a recurring weak spot). The idea was born to provide a “Boot Camp” training session just before the beginning of the fall semester. Providing this training helped the start of the fall semester run more smoothly as new staff members
were able to learn more information before starting their duties. This also helped increase both customer and staff satisfaction. The question remained about providing similar training for students hired after the academic year had started; we continue to work on developing better mid-year training opportunities for late hires.

After a restructuring in this timeframe, the TA position reported to the Network Services group. This seemed to be a better fit as this group was responsible for networking and desktop support on campus, among other things. The TA staff had greater access to the full-time staff and resources they needed to complete their duties under this restructuring.

In 2004, the Help Desk finally found a long-term Manager when Jeni Elkins was hired from the corporate world. She was able to provide the needed stability and professionalism that had been lacking during the previous few years. The position was filled just before several significant changes occurred that greatly affected the Help Desk; VU finished building a new Center for Library and Information Resources (CLIR), and EIS administration and Instructional & User Support Services were moved into the new building. At one time during that summer, the Help Desk was split among three buildings but by the fall all Help Desk services were fully located in the CLIR. This move allowed for better collaboration with library staff and made technology support services more centrally located and attractive to the user base. The Help Desk experienced a 400% increase in service requests that fall and realized that the improved visibility created a need to again increase the size of the staff. By the end of the academic year the Help Desk was up to 30 staff. Recruitment at the time was very easy: our prominent new position on campus allowed students to interact with us who never had before. They saw the benefits of having a position that sharpened their computing and professional skills: we received more applications than ever before.

During the following years, EIS experienced continued stability in the Help Desk and TA student employment programs. Most changes were primarily tweaks to perfect the system; at the same time, our reputation on campus consistently improved due to the strong leadership for the student employees.

5. EIS BECOMES IT
In July 2006, Dr. Mike Yohe retired from Valparaiso University as Executive Director of Electronic Information Services, and Dr. Dennis Trinkle became Valparaiso University’s first Chief Information Officer. Along with this new title, the department name was changed to Information Technology. In this new era for our department, changes occurred at a rapid pace and helped us to achieve the CIO Top 100 Award in 2007.

6. IT FELLOWS BEGINS
One of the changes was to look at our student employment program. In his previous position, Dr. Trinkle had begun an honors program of student employment in IT and wanted to establish something similar at Valparaiso University. As Jeni brought a background of program and training development from previous positions in her career, she was chosen to take on the position of Coordinator of the I.T. Fellows Program in addition to her Help Desk role. A committee was also formed to discuss the possibilities of such a program on the Valpo campus. Through the work of the committee and the experiences of Jeni Elkins and Dr. Trinkle the IT Fellows program was initiated.

The basic premise of the program was to recruit freshmen to the program and place them in a series of training rotations in the first year. From there, they would interview for internships when they reached upper-class status. Each internship would last a year and thus a student would have to interview each year for a position. Along with the freshman training, a series of enrichment seminars would be developed to provide additional training to upper-class students and provide them with both technological and business skills. Thus, the student would have a well-rounded set of skills upon graduation and set themselves apart from their fellow graduates.

6.1 The Initial Student Position Restructuring
In January 2007 the TA position was combined with the Tech Support student aide position; those students now provide desktop and connectivity support to all students, faculty, and staff on campus. Student positions were also no longer guaranteed until termination or graduation: all students were now required to reapply for their positions every year. This gave students the opportunity to explore other areas of interest and to gain a broader range of experience to enrich their career beyond the college years.

6.2 The First Freshman Class Recruited
To recruit the first freshman class of IT Fellows, a series of emails was sent out to prospective students. Over 50 students were invited to campus interviews for 25 positions in the program. Students who were able to come to the campus interview were invited to register in a central welcome room before being escorted to their interview by full-time staff. During the interviews, their parents and/or significant others were invited to wait and talk with IT employees about the program and partake in refreshments. This allowed us to have a location for the parents and to answer the parental questions while simultaneously interviewing prospective students for the positions.

Students who were not able to come to campus were interviewed via telephone call for their consideration. In the final analysis of candidates, 26 were chosen to participate instead of the expected 25. The final two candidates for the last spot had similar qualifications, so it was decided to add a position for the first year.

6.3 Upper-class Students in the First Year
For the first year, upper-class students were interviewed and placed into a position based upon their skill sets and interests. A total of 50 students were placed into internships within the university. While most of the IT Fellows worked within the IT department, two Fellows were given a position working with an outside department as a liaison between the department and IT.

6.4 Full-time Staff in the First Year
We did not have a position allocated to the development of the program. In order to get IT Fellows up and running, Jeni’s title was changed from Coordinator of Help Desk Services to Coordinator of Help Desk Services and Coordinator of IT Fellows. By January 2008, the position had grown into a full-time position and she is now exclusively the Coordinator of the IT Fellows Program.

6.5 Cohorts
Once hired, the students were asked their preferences on training areas (i.e. hardware/software, help desk, web, programming, networking, and video) and were placed into a cohort of five or
six students that would give them at least two of their desired training areas.

Each cohort would go through four six-week sessions of training in their first year. For example: cohort 1 trained in hardware/software, web, networking and programming while cohort 5 trained in networking, video, programming and web. There were five cohorts in the program. The breaks between each six-week session allowed for midterms and finals, thus keeping the academic focus.

### 6.6 Leadership Academy

In previous years, Help Desk students attended a two to three day training session known as Boot Camp. The primary focus of Boot Camp was largely technical skills with a limited amount of customer service and other soft skill training.

One goal of the IT Fellows program leadership was to expand training at the beginning of the academic year into a full week to get the students off on the right foot. We included a greater emphasis on leadership skills, team building, and other soft skills while still including technical training. This would create well-balanced participants in the program who would be well-equipped to pursue any career post-graduation, not limited to the technical realm. The Academy includes topics that are oriented at team building, as well as teaching problem solving, technical and professionalism skills. It also allows the students time to get to know one another before the school year starts.

For the first year of the program, all students including upperclassmen were included in Academy. In subsequent years, only freshmen will attend the full week Academy, while each department will have the opportunity to offer a two-day training session at the end of the week if needed.

### 6.7 Enrichment Seminars

The enrichment seminars are 60 to 90 minute sessions covering a variety of topics that are both technical and soft skill related. Some of the topics this year included Network Peering, Disaster Recovery, Mac 101, Professional Writing and Communication, and Resume Skills. These seminars were taught by IT Staff, VU Faculty and some outside speakers from both corporate and higher education organizations.

Each IT Fellow is required to attend at least two seminars each semester as part of their employment agreement.

### 7. THE YEAR IN ACTION

The year began well with the new Leadership Academy. Right away potential future leaders emerged from within the group. Our students had time to get to know each other and bond as a team prior to the new school year. The strain of move-in weekend was also reduced, as all Fellows assisted residents in the dorms with connectivity issues instead of the usual ten or twelve students from years past.

Move-in weekend also allowed the IT Fellows to get their feet wet in the program and to start the cohort training rotations and upperclass internships. According to one of the Fellows, “The staff was generally very helpful in giving students responsibilities that helped the development and learning process.”

Having students in a specific concentration area in addition to the Help Desk (such as networking, programming, hardware) allowed the department to better serve the university in many more ways than before. The program allowed us to increase the diversity of services available to our campus. For example, we began to work more with video production projects on campus and became a more visible presence to the university community.

At the beginning of the spring semester, internship hosts began placing classified advertisements for the internships on the Fellows website. Students were encouraged to apply for the position(s) of their choice. Each student was asked to rate their preferences of position and each interviewer was asked to rate their preference of candidates. A meeting was then held where decisions were made about the placement of each student. Most Fellows received their first choice of placement within the internship of their choice. However, it became apparent during the matching process that not everyone used the same methodology of ratings; the Coordinator of IT Fellows plans to standardize the rating system next year.

The introduction of the Enrichment Seminars brought about a good change in the program: that of added professionalism and an open atmosphere of learning. It may help IT Fellows create a network outside of the campus for future jobs – this would be quite a bonus!

### 8. LESSONS LEARNED

While the enrichment seminars added to the training possibilities for the students, we learned that we needed to vary the times of the seminars and that we may need to add more subjects to our listing. That being said, we offered over 14 seminars each semester with either departmental or outside speakers.

In a feedback survey given to the students and from feedback from full-time staff it was found that not all rotations kept the students busy for the minimum number of hours each week we had expected. For this reason, we are looking closely at each rotation to improve the level of information presented and received.

One of the requirements of the program is journaling at the cohort level and a variety of methods were used: from paper journaling to blogging. We plan to try blending the best of both methods and implementing a better way of capturing their thoughts about their experiences.

We learned that some students will sometimes go overboard in their enthusiasm and dedication for the program and we will need to work with them so the program does not consume them. Our goal is to help them learn how to maintain a balance between the professional and academic worlds.

### 9. PLANNING FOR NEXT YEAR

As with most academic IT departments, summer is the time for evaluating and updating many areas. As we strategize about this year's Leadership Academy, we are again anticipating a full week of learning and team-building activities. However, this year we will require the full week only for freshmen. The Thursday and Friday training days are available for departments that request it, and we are presently taking their requests and including them in the planning.

For the 2008-2009 academic year, we are bringing all internships in-house. As an example, we are adding a web consulting team, which will handle all campus web projects so they stay within the standards set by the university. We tentatively plan to again create some internships outside the department for the 2009-2010
academic year, once we have another year of experience with the program.

We are planning to provide a wider variety of enrichment seminars set at varying times to better accommodate student schedules, and are considering increasing the required number of seminars to be attended by each Fellow.

After a great deal of collaboration with the Registrar’s Office of the University, Fellows will be given a half credit for each semester worked in the program. Additionally, should they graduate in good standing from the program, they will have a statement on their transcript stating that they successfully completed the IT Fellows program.

The Coordinator of the IT Fellows Program will be working with the hosts of each rotation on the curriculum on their training programs to ensure that the experience for each cohort member will include the items needed to move them forward in the program. We want to insure that the skill sets taught in each rotation will provide the students with a similar experience and yet allow them to explore their areas of interest.

10. HOW WE ENVISION THE FUTURE
We foresee the inclusion of internships with departments not only outside of IT but also with companies outside of the university itself. Through the enrichment seminars and other events we have begun developing relationships that will assist us in this endeavor.

We anticipate that our students will be sought after by companies upon their graduation because they will not only have developed the technological skill sets needed, but they will also have developed the soft skill sets which many employers are seeking in today’s world. They will have had experience in interviewing, resume writing, time management, and project management and thus, they will be several steps ahead of their fellow graduates.

The energy and knowledge of the students, combined with the knowledge and expertise of our full-time staff, will create unlimited possibilities within our field. We anticipate being able to take on projects which once were only on our never-ending “wish” list due to the limited resources available as compared with the need.

We are already seeing students taking charge of some of the training in our program. We anticipate that this will grow as students become leaders in the program and coach, mentor and train their fellow students even as we are training, coaching and mentoring them.

11. ACKNOWLEDGMENTS
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