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ABSTRACT
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Berry College (Georgia) is an apprenticeship opportunity associated with
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shooting, networking, Web development, and user and technical support. In
addition, students work collaboratively and with faculty and staff in problem
solving, attend workshops in management, supervision, and technology, as well
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students have passed the A+ certification exam. (Author/MES)

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By: Amy Cornelius & Paul Macaluso

Eighth Annual
Mid-South Instructional Technology Conference
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Abstract

The Berry Informational Technology (B.I.T.S.) program is an apprenticeship opportunity associated with student work. The program gives students the opportunity to seek technological training in areas such as building computer systems, trouble-shooting, networking, Web development, and user and technical support. In addition, students work collaboratively and with faculty and staff in problem-solving, attend workshops in management, supervision, and technology, as well as obtain certifications in various areas. Two measures of the program's success are its 90-95% student retention rate and that 24/25 returning students have passed the A+ certification exam.

Proceeding

Introduction

The Berry Information Technology Students (BITS) program is an apprenticeship opportunity associated with the Berry College student work program. It gives students the skills and professional experience that will make them valuable to

future employers while they receive an academic education. Our students are given the opportunity to make valuable contributions to the Berry community by assisting their peers as well as faculty and staff with their computing needs.

The BITS program offers professional training from A+ Certified technicians and hands-on experience building and troubleshooting computer systems. Students earn nationally recognized certifications in the information technology (IT) field. In addition, students can obtain professional references, in the form of letters of recommendation, which include information such as certifications they have earned and experience gained, for future job or intern possibilities.

The students must receive one IT certification per year in order to remain in the program. Berry College provides study materials such as books, videos, and training labs to aid the student's progress toward certifications and also pays for the student to take the certification exam. Over the course of four years, Berry College invests over thirty-five hundred dollars on each individual student.

Students are required to work a minimum of 8-10 hours weekly. Berry College will allow incoming freshman to work a maximum of 15 hours so they can adjust to college life. After the freshmen year, students are permitted to work up to 20 hours per week. Thus, the average student works 15-20 hours per week.

Upon admission to the BITS program, every Berry College student is classified as a student technician. Upon receiving the A+ Certification, the students become A+ Certified technicians. The students have a full school year to complete the A+ Certification or any other IT certifications. Once the students pass the A+ they become supervisors and get a higher rate of pay and have more responsibilities.

The acceptances of students for the program are on a yearly basis. This past year we accepted 25 new students consisting of freshman, transfers, and upper classmen. The interview process takes place during the summer student orientation and registration (SOAR) sessions. The students do not need to have previous computer knowledge to be accepted into the program. A student who poses strong characteristics such as the willingness to learn, a strong work ethic, and the ability to get along well with others are of primary importance.

Before the beginning of each school year, the accepted students participate in "boot camp," which is a two week training period. During boot camp, the students begin to learn about the IT field, including how to build a computer system. They receive Mike Meyers Passport A+ Certification material (videos and book) to use as a study guide to prepare them for the certification exam later in the year (Meyers, 2002). They also use LearnKey (www.learnkey.com) which is a web based program that has streaming video along with practice and post exams based on the streaming video. Students are required to pass all of the post exams before taking the A+ certification exam.

All students in the program are invited to participate in team building exercises with the "BOLD" program which stands for Berry Outdoor Leadership

Development. For many of the students this is their first time away from home. We use the BOLD program as an ice breaker for the students to introduce themselves to other students and for them to learn about others. The first task the students perform is to take the first letter of their first name and have to associate something from the IT field with it. An example is my name is Paul so I would pick "processor" so, for that day I would be known as "processor Paul." The students learn how to solve problems as a team. Many of the exercises cannot be done individually. The students learn how to interact with others and form new friendships in this short amount of time.

The BITS program is divided up into eight tracks. They consist of the Training Center, Macintosh Support, Networking, Web Development/Flash, Technical Training, and PC Support (with staff technicians), Technical Help Desk, and Rome City Schools which is a community outreach program/internship.

In the first semester, the track rotation is broken down into three week cycles. An incoming student will rotate into the six basic tracks of the BITS program. The reason for the rotational system is that many of the students do not have enough experience yet to give professional advice for the Technical Help Desk or to work in an internship position (e.g., Rome city school system). Students receive excessive hands on training to help them study for the A+ Certification.

Training Center

The Training Center is our main facility where we build all of the systems for Berry College. The BITS built 400 systems last year for Berry faculty and staff. All new students were able to build at least one new computer during the school year. Some students were able to build several computers during the latter part of the school year. We also handle all Berry network related work orders for students. When the work order is placed we have an A+ certified student technician and a student who is studying for their A+ certification go together to resolve the network issue. The most common problem is not being able to get on the internet. If the port is bad or the student cannot solve the network issues, the work order is passed over to the networking or telecommunications staff. At the Training Center we staff an average of 6-12 students on a daily basis. This year the new and returning BITS configured over 500 student computers for the network. They gained valuable experience installing network cards, installing drivers, and setting up the PCs for the Berry network. These projects were completed during Viking Venture, which is a three day time period at the beginning of the school year when primarily freshmen students arrive to Berry.

Macintosh

Students learn to troubleshoot and correct hardware and software problems and assist the Macintosh technician in providing support for the Macintosh computers on campus. These students achieve Macintosh related certifications beginning with the Apple Certified Technical Coordinator certification. The Mac track is responsible for user support and upgrades for the Mac community on campus.

The Macintosh students are also responsible for all student work orders for students with Macintosh Computers. We have two Mac labs on campus comprising of G4's and G3's. We presently have four full time students working in the Mac track.

Networking

Students in networking create user email and Novell accounts, change passwords as requested, provide support for Berry College Dial-In services, and assist the networking staff in maintaining the network. After earning the Network+ certification, the networking students often work toward the MCSE, MCP, CNA or Linux certifications.

Technical Training

Students in this area assist the technical trainer in preparing and teaching Microsoft Office products to faculty and staff. Students might even teach a class with the technical trainer's supervision. The students in this track also assist the technical trainer in showing new students how to use their Berry College email and how to log on to the Novell network. Those who choose this as their major area certify in current Microsoft Office Products and eventually work toward a certification in training.

Web Development/Flash

Web Development students create web pages and assist in updating the Berry College website. Students in this track often take online classes through the HTML Writer's Guild (www.w3.org) and certify in web related technologies including HTML, Cascading Style Sheets, Macromedia Dreamweaver, Macromedia Flash, and Adobe Photoshop. Some of these students also create tutorials for the campus using Macromedia Flash and Dreamweaver.

User Support

These students assist the PC technicians in troubleshooting and correcting hardware and software problems for PCs. After achieving their A+ certification, these student technicians earn certifications of their choice.

Technical Support Desk

Students begin to rotate through this area during their second year in the BITS program. The Technical Support Desk is the primary point of communication in User Support and requires extensive knowledge. Second year BITS will train with experienced students during their rotation through the technical support desk and may choose this area as their major area of interest if the Technical Support Desk Coordinator agrees. Our student workers work the help desk from 7:30 am until 6:00 pm. These students choose their certifications in a variety of areas. This is

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the highest level available in the student work program.

Rome City Schools

Students in this track work in the Rome City Schools with the technical support staff in those schools. They provide a variety of support from network support to hardware or software desktop support and assist with creating and maintaining web pages. The students in this track are allowed to work toward the technical certification of their choice after completing the A+ certification.

Conclusion

Each spring, the staff plans a banquet to show their appreciation of the students and to recognize the graduating seniors. Certificated are awarded to the seniors and those who completed the A+ certification are given special recognition. Throughout the year, the students are also awarded financial bonuses based on the certifications they achieve and the completion dates for those certifications. Each student must complete a technical certification prior to spring break to be eligible for a bonus.

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NOTICE

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