Instructional Support at Small Universities: A Training Perspective

Vidya Ananthanarayanan
Trinity University
One Trinity Place
San Antonio, TX 78212
210.999.7346
vidya@trinity.edu

Judith Reiffert
Trinity University
One Trinity Place
San Antonio, TX 78212
210.999.7446
Judi.Reiffert@trinity.edu

ABSTRACT
This paper intends to present the challenges and opportunities encountered in technology training at small institutions using Trinity University as a case in point. During the course of this presentation we will provide:

- An overview of Trinity University
- Initial training efforts undertaken by Information Technology Staff: what did and didn't work, challenges and roadblocks incurred during this process, response from staff and faculty
- Current scenario: Creation of a new position for instructional support and how the position is evolving, what new challenges and opportunities are being encountered in the process, nature of data collection in terms of training needs, further investigations into resources and infrastructure,
- Future training trends: New resources and methodologies in the pipeline, creation of online training documentation and resources, opportunities for liaisons with other university divisions such as HR to better integrate training with orientation programs, impact of these methodologies on existing support systems such as the Helpdesk

Categories and Subject Descriptors
K.6.1[**Management of Computing and Information Systems**]: Project and People Management–*staffing, training.*

General Terms
Management, Documentation, Performance, Design, Human Factors, Standardization.

Keywords
Training, instructional support, small university, Trinity University, Vidya Ananthanarayanan, Judi Reiffert, user services, Help Desk, faculty, technology, trainer, trends.

1. INTRODUCTION
Trinity University is a nationally recognized, private liberal arts and sciences institution founded in 1869. A fully residential campus, Trinity University offers Bachelor's and Master's degrees, but does not grant PhD's and certifications, nor does it offer any distance education programs.

We have a static student body of 2700, about 200 faculty and a little less than 400 staff. We have over 2000 computers on campus in offices, labs, and classrooms. This doesn't include the computers that students bring with them and connect to our residential network in their residence rooms.

2. INITIAL TRAINING EFFORTS
Traditionally, information technology support and training has been handled by Information Technology Services (ITS). Prior to 1985, information technology (IT) support at Trinity was divided into two distinct areas: Administrative and Academic. We offered "on-demand" training because it was simple and manageable by the number of current IT support staff.

Administrative training related to mainframe access using dumb terminals. Training was only needed for one or two applications, and was offered as brown bag classes over the lunch hour. Initial attendees were among the more savvy users, but in time, these brown bag sessions became popular with the not-so-savvy users as well.

Academic support was primarily provided for specialty software specific to departmental technical needs. The training was usually handled one-on-one or learned by both user and IT support staff at the same time. The latter also facilitated better bonding between the IT personnel and the departmental support staff.

2.1 "Cadillac" Training
Over time, the mainframes were phased out and PCs were brought in. As the PC user base grew, the two support areas began conflicting with each other in accomplishing their overall goal of user support and training. Consequently, they were merged into one support unit that supported both the academic and administrative areas.

The training methodology itself continued to be customer-oriented: on-demand, one-on-one office visits, and personal hand-holding. Not surprisingly, the users became accustomed to this type of "Cadillac" training and support.

2.2 The Participation Decline

As computer technology, especially Microsoft Windows, evolved, ITS had to dedicate more time to training internal IT staff to ensure that they kept up with the latest technology. This resulted in less time and staff available for the "Cadillac" style support and training that users had become accustomed to.

Although brown bag classes were still offered, fewer and fewer users attended them. The primary factors that contributed to this decline were:

- Classes were targeted at acquiring either basic skills or very high tech specialties, neither of which was applicable for the average user.
- Staff paid on an hourly basis didn't want to spend their lunch hour at a class.
- Motivation was low across campus even for brown bag classes because there didn't appear to be any real benefit to attending these classes.

Eventually, users became dissatisfied with the lack of IT support and training.

2.3 Computer-Based Training

In the late 1990s, ITS decided to make Computer-Based Training (CBT) software available on the campus. It seemed the best solution at a number of levels:

- It allowed users to increase their knowledge irrespective of what level they were at.
- It could be offered for a wide variety of user applications
- It could be taken at the user's convenience.
- It was presented by a professional online trainer.
- It could cater to on-demand training.
- It did not require internal ITS specialty learning or an increase in IT staff for support or training.

Initially, users were excited about using the CBT, but for many, that soon wore off. There was no skill-level testing in the CBT, so every user basically started at the same level. It was also time-consuming in scenarios where users had a specific question they wanted answered, but there was no talking head to direct it to. Further, ITS had not advertised or in any other way prepared users in advance on using the CBT software.

In hindsight, this was not a productive approach because it moved away from the personalized, customer-oriented training that users were accustomed to. It also diminished user confidence in the Help Desk's usefulness. As a result, ITS reverted to the classroom-led training, with the CBT available for those who preferred that type of learning.

2.4 Classroom Training

In Spring 2001, IT User Services staff offered a basic class in Outlook. The response was tremendous and it was obvious that there was a high demand for classroom-led learning. However, ITS simply did not have the staff or time to cater to the training needs of users as well as meet requests from user software support. Further, IT staff were predominantly technicians, not "trainers" in the true sense of the word. Thus, there was still a gap in terms of having a dedicated technology trainer available for formal training.

ITS continued to use the CBT software but this time implemented a more user-friendly approach. Along with office visits to explain what features were available on the CBT, ITS also made sure that every PC had a shortcut to the CBT on the desktop. Despite their best efforts however, the majority of users had already developed a negative attitude toward the CBT and found it hard to change.

Concurrently, faculty began to request training and support on instructional technology tools that enhance the teaching process. To accommodate these needs, Trinity University implemented Blackboard, a course management system, on an experimental basis. Preliminary training conducted for faculty was highly received, and reiterated the need for a qualified full-time trainer.

3. CURRENT SCENARIO

In August 2001, Trinity University created the position of Instructional Support Manager to function under the aegis of Instructional Media Services (IMS), the department that serves the educational technology and audio-visual needs of the faculty and students of Trinity University.

The primary responsibility of the Instructional Support Manager is to assist faculty by providing training and support for the integration of educational technology into the curriculum via a broad range of hardware, software and multimedia systems including Blackboard.

3.1 Blackboard Training

Introductory workshops to provide hands-on training in Blackboard were conducted before the start of the Fall 2001 semester to facilitate faculty awareness and adoption. While new faculty were introduced to Blackboard as a part of their New Faculty Orientation program, returning and existing faculty attended the initial workshops conducted prior to the start of the semester.

About 20 new faculty and 60 returning faculty attended these preliminary workshops. The introductory workshops continued to be offered throughout the semester to ensure that all interested faculty had the opportunity to work with Blackboard. Staff who assist faculty also attended these workshops.

As the semester progressed, advanced Blackboard workshops were offered to introduce faculty to collaboration and communications tools, and online assessment and grading features available in Blackboard. Attendees at these workshops were typically faculty who had become adept at using the basic tools and were ready to move to the next level.

A survey was conducted in December 2002 to determine Blackboard usage and identify future training requirements for Trinity faculty and staff. Of the 72 faculty who responded to the survey, 70 had used Blackboard in Fall 2002. Content Areas was the most widely used feature in Blackboard followed by Email, Grade book**,** and the Digital Drop box (see Figure 1).

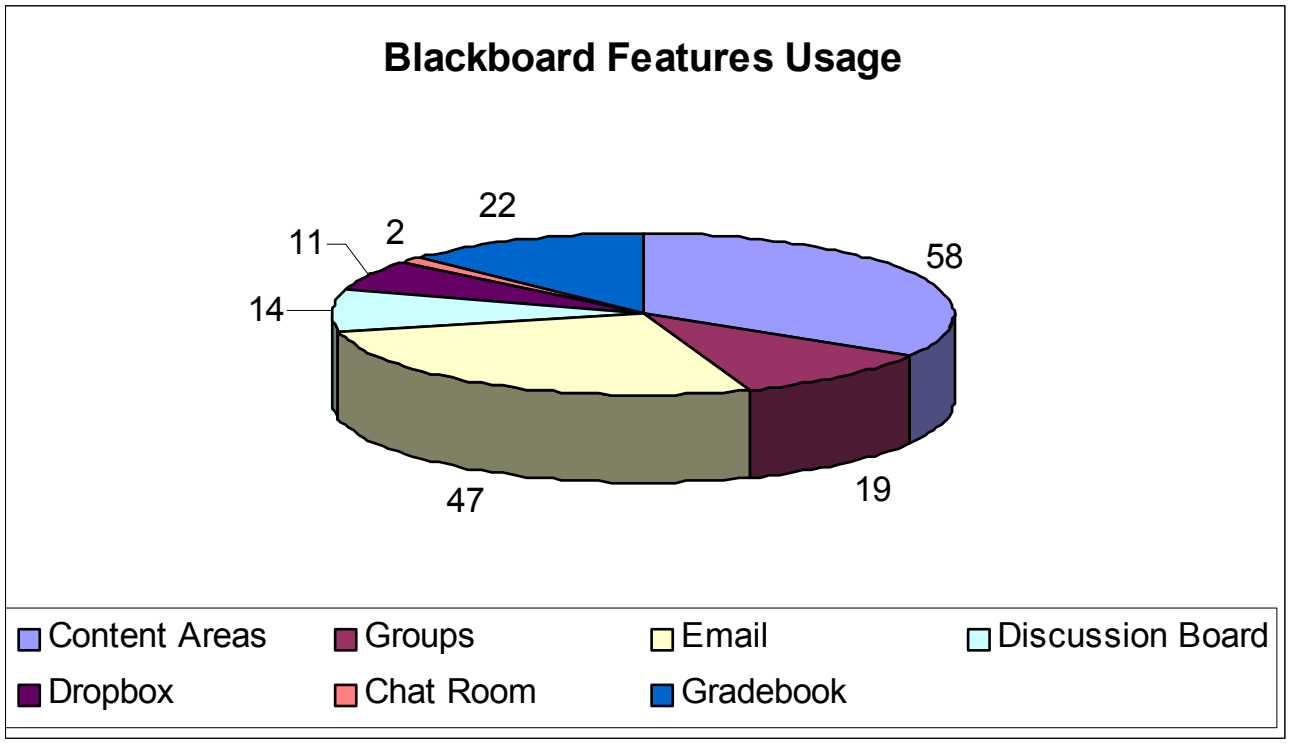

Figure 1. Blackboard Features Usage

In the school year 2002-2003, the trend shifted from instructor-led, classroom training to on-demand, one-on-one training. There are two reasons for this:

- After the initial blitz in Fall 2001, new converts to Blackboard began to request training at their own pace and time, making it a little difficult to get a group together in a classroom environment.
- On the other hand, faculty that had been using Blackboard for at least a year began to explore other features based on their individual curriculum needs.

A customized, one-on-one session was the ideal solution for both scenarios. It also allowed the Instructional Support Manager to identify solutions that were pedagogically sound as well as technologically feasible. Classroom-led training continued to be offered with new topics available so that faculty still had the opportunity to work in a group environment if they so chose. Group sizes however, diminished radically to two or three per group from the initial 10 or 15.

3.2 Technology Training

Concurrent with Blackboard support and training, the idea was proposed that the Instructional Support Manager could also undertake technology training in other areas such as office productivity applications and essential computing skills. The advantages included:

- The Instructional Support Manager had established credibility as an effective trainer and was recognized as such around the campus.
- The ITS staff could now focus on Help Desk and User Support services, which is what they were trained to do.
- Many times, the instructional and information technology needs of the users overlapped, and they could now be resolved more effectively with active collaboration between the two departments.

Building on the idea, a Needs Assessment Survey was conducted in May 2002 to identify current technology usage by faculty and staff at Trinity University, as well as their training requirements and needs. Survey findings revealed that staff and faculty needed to acquire basic proficiency in the following areas:

- Computer and networking concepts
- Office productivity
- Graphics design
- Presentation tools
- Web design

It was decided to address computing skills and office productivity – especially using Outlook for communication and collaboration – first as they directly impacted the daily work activities of most staff and faculty. In collaboration with ITS staff, a series of workshops were offered in these specific areas.

3.3 Challenges & Opportunities

As always, the workshops were well-attended reinforcing the demand for training of this nature. However, they were conducted as lecture-demonstration style presentations rather than hands-on workshops, resulting in limited retention of concepts and process by participants. In fact, along with requests for more workshops, participants mentioned the need for hands-on training.

This brought to light an important fact that nobody had really explored until now: the need for a *dedicated* training facility. The

"Cadillac" style training had not needed a dedicated training facility, and as the University built up electronic classrooms, it was assumed these could be used for these types of training sessions as well. This did not always work out that way, as these classrooms were heavily utilized by faculty during the school semester. Consequently, it boiled down to using any room that was available, a situation that for the most part did not support the hands-on training model.

The other challenge of course was that the Instructional Support Manager was now the "expert" on campus and began to be called upon for high-level troubleshooting that the Help Desk was not in a position to support. When the CBT contract expired in December 2002, the Instructional Support Manager became the primary training resource on campus. The Instructional Support Manager now had to schedule training workshops, identify resources, build documentation and training materials, and also provide high-level support when required.

3.4 New Directions

With a single person handling both instructional support and technology training, it was clearly time to explore new ways of bringing technology to the Trinity community. The first step in this direction was the *Munch & Learn* seminars.

Based on the original concept of brown bag lunches, Munch & Learn establishes a forum for faculty and staff to share ideas and practices that effectively leverage technology for teaching, learning, and productivity. The first Munch & Learn seminar was held in Spring 2003 and featured a presentation on using discussion boards in the classroom. More seminars are planned for the new school year beginning Fall 2003.

Another new venture was *Tech-Beat*, a summer technology camp intended as an annual event. The primary motivation behind Tech-Beat was to leverage the early part of the summer break. Typically, at this time of the year, faculty and staff have fewer demands on their time and can easily attend such events. Also, resources such as the electronic classrooms are readily available and can be used for hands-on training.

Tech-Beat 2003 featured a two-day workshop in web site design and a three-hour session on basic Photoshop. Both sessions saw high participation, and there have been requests to conduct a repeat session later in the summer as well.

4. FUTURE PLANS

Thanks to a generous grant of $1.3 million from the Priddy Charitable Trust, a 15-year limited life trust headquartered in Wichita Falls, this summer one floor of the library at Trinity University will be converted to an Information Commons. One part of this renovation includes a new training room, a dedicated facility where library and IMS personnel can conduct their workshops. This facility will also function as a GIS lab for the GIS-centric classes taught on campus, and will therefore, be a training facility for faculty interested in using GIS, as well.

At another level, we are exploring Web-Based Tutorials (WBT) providers such as Element K, Infosource, and New Horizons for online training in Microsoft Office products. These will supplement classroom-led training conducted by the Instructional Support Manager and other experienced personnel.

The onset of ubiquitous computing has led to a scenario where new employees are expected to be up and running within days of being hired. To facilitate this process, the Instructional Support Manager will conduct new staff orientation programs once a month. These sessions will provide new employees with an overview of the university's network topology for effective file management, and get them up to speed with Outlook's (Trinity University's preferred email system) email and calendaring functions.

Another plan is to identify a technology contact within each department to function as that department's support system. The idea is to facilitate knowledge transfer across the department through these technology contacts. This will, we hope, encourage self-sufficiency across the campus, as well as reduce the load in terms of overall support.

In the short-term therefore, we hope to establish a training pedagogy that blends classroom-led training with online and other measures to establish base line proficiency across campus. For the long term, we hope to establish a teaching and learning center that will allow faculty and/or staff opportunities to better integrate technology into the process of teaching, learning, and working.