Abstract
At Carthage College, we have combined at one service point the services traditionally made available by libraries, computer centers, and media services at multiple desks. With the opening of Hedberg Library in January 2002, the merged information desk began providing reference, computing and media service from a single point, staffed by students and cross-trained professionals from those three disciplines. This presentation provides a short history of Academic Information Services and the evolution of the basic underlying concepts. The day to day operation of the services, the training of students and staff, the benefits of the information desk to users and staff, and its challenges are described along with indications of where we go from here.

Introduction
Located in Kenosha Wisconsin, on the shores of Lake Michigan, between Milwaukee and Chicago, Carthage is a four year liberal arts co-educational college affiliated with the Evangelical Lutheran Church of America, with a full-time enrollment of 2,063 students and 115 faculty. Besides its liberal arts core, Carthage has undergraduate business and education programs along with a masters program in education.

In early 1993, the Computer Center was merged with the Library creating Academic Information Services (AIS), headed by a newly created vice president position reporting to the president of the college. The following year, Media Services was added to AIS. The computing services portion of AIS includes responsibility for the campus network, the campus e-mail system and almost all student and faculty computing needs that do not take place on the administrative AS400 (grades, payroll and related tasks). The media services portion of AIS is responsible for all classroom technology on campus, including all technology enhanced (“electronic”) classrooms, and shares responsibility for computers in those classrooms with the computing services portion of AIS. The college

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has a campus-wide network, with a fiber backbone and Ethernet to the desktop.

Because of the strong belief in the ‘electronic teaching library’ concept, and that the ‘network is the library’, a holistic computing philosophy prevails. These concepts have been the driving force behind information and technology deployment for well over the past decade. This means, in essence, that virtually all staff and public access computers should be, and are, networked and that, as much as possible, all information and general applications should be accessible from anywhere on campus. Therefore, all faculty offices are networked, as are all student residence hall rooms, student computer labs, and classrooms. All academic buildings also have wireless coverage, including full coverage of the Hedberg Library and the student center.

To help meet the need for computing assistance, the technology helpdesk was created in the Computer Center in early 1997. The goal was to provide a point of contact for the Carthage community, while at the same time better track help requests and streamline the unit’s workflow by minimizing direct calls to computer staff. During the first year of the helpdesk, operation was fairly simple. A notebook was used to track issues not immediately resolved. Initial staffing for the desk was provided by IT staff and student assistants.

At the same time, computer use in the library was growing. Ruthrauff Library was the home of the largest computer lab on campus. Computing assistance for this early version of an information commons was provided by library reference staff and student assistants.

The creation of the technology helpdesk and the increasing computing support provided by the library reference desk led to a merging of the student support staff for both areas. Created over the summer of 1997 to help both with computing and information seeking, the information technology assistants (ITAs) became a cross-trained pool of students combining the old reference assistants and computer lab assistants.

The student ITAs became part of the staff of both desks. Beginning in the fall of 1997, Academic Information Services staff began to work at both desks with members of library and media services staff providing assistance at the technology helpdesk and media and library staff providing assistance at the renamed library information desk. The size of shifts varied, with desks often being staffed both by student ITAs and professional staff. While each desk primarily continued to offer specialized assistance, with calls occasionally transferred between desks, staff at both desks began to appreciate the similarities between their activities. The technology helpdesk began using HelpTrac software at this time to streamline issue tracking and resolution.

About this same time the dream of building a new college library was becoming reality at Carthage. As the planning process unfolded, it became clear that we were duplicating efforts and that we would be able to provide more hours of coverage while keeping staffing needs under control by combining the functions of the two desks into one merged service point.

The move to Hedberg Library and the creation of the merged Information Desk

Culminating nearly a decade of research, planning and piloting, Carthage’s library, computing, and media services moved into the new Hedberg Library over the December 2001 holiday break. After the last fall term final exam was completed, trucks began loading. Books, equipment and staff were relocated to the new Hedberg Library and we began operations in the new building in early January. This move centralized activities for Academic Information Services. As a single point of contact, the new information desk replaced the computing help desk and the library reference desk staffed with students and professionals from all three disciplines.

The two-level, 60,000 square foot facility included nearly 1,500 network jacks and wireless capability throughout. Within the building are 38 networked computers spread between a large information commons and a computer lab/classroom heavily used by the education department in association with the children’s and curriculum collection. At opening, thirty wireless notebook computers were available for checkout—that number has since increased to fifty. The building also included two additional electronic classrooms and a seventy-seat media theater.

The main entrance of the library is located on the upper level, and the upper level is devoted largely to public services activities. The information commons and the merged information desk are both located on this level and are the first areas encountered upon entering the library. In an effort to bring the staff as close to our patrons as possible, most public services staff from all three units—library, computing and media services—are located on this level. The ITA supervi-
sor has a desk in the staff office complex with a large window that allows him to monitor the information desk at will.

All functions from both the previous library information desk and the computer center technology helpdesk have been combined at the new desk. All phone numbers that went to both desks were initially available at the desk; several of the numbers have now been consolidated. The technology helpdesk extension HELP (x4357) was one of the numbers retained. In addition to walk-in and phone traffic, the desk also has an e-mail address that is monitored by staff members. The desk is open whenever the library is open, over 100 hours a week. Most hours are staffed by professionals and students, only a few each week are staffed by ITAs alone.

Training and Resources

With the mixture of professional and student staffing, we faced a number of different training needs:

- First, the need for our professional staff to learn new areas outside their primary areas of expertise.
- Second, the need to train the professional staff regarding new services, software and programs we were adding for our users.
- Third, the need to train an ever changing pool of students in a wide variety of areas.
- And fourth, the professionals and student staff needed a set of “ready reference” tools and procedures to access answers or approaches to a wide variety of questions.

The AIS professional staff had been cross training since the beginning of the technology helpdesk a few years earlier, but the training was occasional and often “on the job” during desk shifts through collegial collaboration and mentoring. After the move, a series of joint unit-wide training sessions were offered, where staff members would demonstrate their area of expertise to other unit members. Often, role playing of desk questions was included. New staff members are trained by sharing desk hours with experienced staff members, preferably from outside their area of expertise, for the first few weeks they work the desk.

A more formalized training program has been implemented for the ITAs. Students are required to attend weekly, paid training sessions. A make-up date and time is available for each session. Each session covers a specific skill set and most sessions include discussion of current problems and issues. The sessions include computer based training using the Blackboard course management system. Handouts and notes from each session and a weekly quiz are posted on the Blackboard site. Each student is required to pass the weekly test and, if they are having problems passing the test, work with staff members until they understand the material.

After having experimented with several training models, we significantly improved our success when we required students to attend training sessions. Previously, paid, but optional, sessions had been poorly attended—even if we provided lunch during the sessions. This requirement has been strengthened and now the student assistants understand that their continued employment is contingent upon their active participation in the training sessions.

Both groups, professional staff and student assistants, often need information at their fingertips. Binders of forms and instructions have been compiled for reference purposes and the computers at the information desk provide access to important ‘quick reference’ information in special folders on the computer “desktop.” The primary repository of useful information is the “eBinder,” an internal web site where important forms, documents, web links and instructions have been collected for AIS staff to use. Among the information in the eBinder is:

- information technology assistant job descriptions;
- student and staff schedules and phone numbers;
- library opening and closing procedures;
- instructions for operating library scanners and printers;
- instructions for accessing and printing electronic reserves; and
- how to find library materials that do not appear to be on the shelves.

Though a work-in-progress, eBinder provides an excellent single access point for training and reference aids. When used in conjunction with the materials in the ITA Blackboard training site and materials readily available in the AIS web site, desk staff have at their fingertips the answers to the most commonly asked questions.

Desk Operations

The primary goal of our desk assistance is to accurately
answer questions as quickly as possible, during the initial contact. Anecdotal evidence suggests that roughly seventy-five to eighty percent of all calls and walk-up queries are resolved on the initial contact. If the answer cannot be provided by the desk person immediately, escalation takes place. Desk staff often will seek expertise from other staff members, if someone with stronger, appropriate skills is immediately available. The practice then is for the desk staff to continue working directly with the patron in conjunction with the newly enlisted staff expert. This consultative exchange and collaborative effort provides another opportunity for desk staff to gain expertise outside their area.

When someone is not available immediately, a decision is made regarding the urgency of the problem. If the issue requires immediate intervention from a staff member, the desk staff ensures that someone is dispatched to work on the issue. Failures of classroom technology during a class presentation or of campus wide electronic resources would fall into this category.

If immediate attention is not required, unanswered questions are entered into HelpTrac and assigned to a staff member for follow-up. All staff members check their HelpTrac tickets several times a day with the goal of contacting the person with the question on the same day. HelpTrac includes a prioritization capability to assist staff in reviewing their trouble tickets.

Supervisors of the three units periodically follow-up and review all tickets in the system to assure that they have been “closed” properly and promptly. This procedure applies to traditional reference questions, as well as, media and computing questions.

Benefits and Challenges
The combined information desk has been in place for over three years and its benefits and challenges have become apparent, both for users of the service and for AIS staff. Among the benefits for users of the desk are:

- Information technology assistance is centralized. A single, dependable service point with known hours means less opportunity for users to be given the “run around.”
- Immediate personal response is provided. We have not used automated attendant or other electronic routing of calls. Callers will talk to a live person on first contact, but may get a busy signal if all the phones are in use.
- Choice of assistance provider is available to walk-ups. Users can choose to ask for assistance from ITAs or a professional staff member, whichever makes them the most comfortable. For example, student users who may be intimidated by professional staff members have an ITA available. Similarly, faculty and professional staff members have professional staff members to talk with if they prefer.
- The issue or user need is identified more frequently and more accurately on first contact.
- If the problem is not resolved on the first contact, a trouble ticket is created and the most appropriate expert is assigned the case for follow up.
- Knowledgeable service staff provide a more consistent quality of service. Before the information desk was in place, it sometimes was more difficult to find the right person for a particular problem on the first contact.

Overall, while this merged information desk has been a successful response to users’ information needs, there have been occasional frustrations on the part of patrons. For example, the user may have formed a personal relationship with a particular staff member. This new system prevents the user from always going directly to that “favorite” assistant. There may also be some frustration if the staff member with the area of perceived expertise is not immediately available and the desk staff cannot immediately solve the problem. Similarly, while the student staff is trained on an ongoing basis to deal with myriad problems, there may be user frustration when a student cannot answer a question because of inadequate expertise.

For AIS staff members, benefits from the combined information desk fall into three kinds of categories. First, having the information desk as a “triage” service location for all three units has given staff greater control over their own schedules and workload and allows for streamlining of the workflow. Before the creation of the technology helpdesk, requests for assistance and problem reports were piecemeal. Faculty, students, and staff contacted whatever staff member they thought would be most helpful or that they knew the best. Problem tracking was not coordinated. Now, AIS staff know when they are scheduled for desk duty and when they can focus on other projects and activities in their offices or elsewhere. Interruptions have been significantly decreased and, when interruptions do occur, desk staff have done the preliminary legwork...
and troubleshooting in order to identify who is the best person to solve the problem and that it is of such complexity, urgency, or importance that the specific staff member needs to be involved.

Second, there are the benefits associated with improved workflow, problem tracking and follow-up. With the built-in follow-up measures gained with trouble ticket tracking software, the unit has gained more credibility and respect because problems are solved more rapidly and follow-up is more consistent. Urgent matters receive the attention they deserve, because they are identified more rapidly, while less urgent issues are solved by the scheduled desk staff or by experts as time allows.

Third, there are the advantages that come from members of all departments being “in the trenches” at the information desk and answering questions and solving problems directly with students, faculty and staff. All AIS staff gain a better understanding of common user problems, needs and activities. They see how well their unit is serving the college and how that fits into the mission and purpose of AIS. They learn how well training materials and “point-of-use aids” are working. And, there are additional benefits resulting from the various staff specialties enriching the overall program, better overall communication within the department, and the improved “esprit de corps” and collegiality stemming from all individuals collaborating to help each other and our patrons.

Involving staff from across all three units leads to certain advantages, but it can also lead to challenges. Staff absences require finding substitutes to fill desk hours and that may require complicated solutions. Good communication is required in all organizations, and it is particularly important in a team environment that depends upon the good will and cooperation of a diverse group of professionals. Ongoing challenges can be as diverse as making sure the next shift at the desk is briefed on the current situation or insuring that everyone is aware of new and evolving policies and procedures. Even when cross training initiatives get off to a strong start, ongoing in-service and updating of skills need to be a permanent priority as equipment, resources, software and staff change.

Spikes in activity are a challenge, as are the traffic peaks and valleys so common at service desks. Hectic periods and lulls in activity are common and their occurrence depends upon the time of day, day of the week, and time of the semester. While having a large pool of desk staff does make some elasticity of desk staffing possible, the total size of the unit limits how many people can be at the desk for extended periods. There are peaks in computer needs at the beginning of the year, peaks in classroom media needs as students make presentations at the end of each term, and peaks in research and reference needs depending on when faculty require assignments to be completed. Teamwork and collegiality allow the deploying of the cross trained staff to assist members of other units when demand is high.

Hiring, developing, and ongoing training of the staff of the desk, both professional staff and student staff, continues to be a major challenge. In addition to finding individuals with the requisite technical skills, we need assistants with desirable people skills. All student supervisors are well aware that finding students with a customer service ethic and an interest in learning about a multitude of information technology skills can be a major challenge. On the other hand, finding them and helping them grow has been rewarding. In our experience, we have found that if we catch them early and dedicate our time and efforts, students will continue to improve over four years and become valuable assets.

The Information Desk now and in the future
Recognizing that while we are now doing some things better than we had in the past, the service improvements at the information desk continue. Certain activities have become fairly routine:

- Staffing rotation for professional staff and student employees is well established and accepted.
- Prioritization and escalation procedures are working well. Tickets are created in HelpTrac software for all issues not resolved immediately.
- Procedures and resource materials are in place for routine activities such as password changes, directional reference queries, inter-library loan requests, and audio visual equipment troubleshooting.
- Faculty, staff, and student expectations of the desk have been clarified over time, leading to better understanding of when desk assistance is available and how the staff at the desk can help.
- All incoming calls are screened by the desk, including sales calls, helping all departmental staff.

April 7–10, 2005, Minneapolis, Minnesota
• Ongoing training is in place for students and for professional staff.

There are several areas where we are working to improve the desk and where we must remain vigilant to meet the changing information needs of the campus community. We continue to refine and expand training opportunities and resource materials. Older resources require regular updating and ongoing training must address changes in available resources, newer equipment and software, and staff changes. We are applying many of the lessons learned during student training to our staff cross training. We are piloting use of Instant Messenger software for internal communication within AIS and are researching how we might be able to expand its use as an alternative method of contacting the desk, in addition to the current phone, walk-in and e-mail.

In addition to the above initiatives, we are paying particular attention to the evolution of computing equipment, such as tablet computers, personal digital assistants (PDAs) and personal audio players like the Apple iPod. These resources, and assistance with them, will be added as service demands increase.

Conclusion

We believe the merging of the library, computing and media services staffs provides a richer environment to investigate, pilot, and implement the newer technologies and then incorporate them into the resources we make available to our users. It means too, we believe, that we are able to provide much better personal service to our students and faculty than if we were attempting to provide desk assistance from multiple desks with limited staff or unsupervised student assistants.