When the library becomes the largest computer lab on campus

Supporting productivity software in an academic environment

by Krista Graham

Most contemporary academic libraries provide computer workstations to allow patrons to access electronic research tools. Typically, users are able to use library workstations to access electronic versions of the catalog, online indexes and abstracts, reference tools, online journals, and electronic books. In addition, libraries often provide Internet access for research purposes. However, in order to ensure that workstations are available for research, libraries often leave the provision of productivity software (i.e., word processing, spreadsheets, and presentation tools) to campus computer labs.

When libraries do provide access to productivity software, a separate group of computers, whether in a lab or a selected corner, is often designated for this purpose. But what happens when the distinction between lab and library disappears? When all library computers provide access to a broad range of software tools? When the library becomes, in effect, the largest computer lab on campus? These were the questions facing the Central Michigan University (CMU) Libraries in the fall of 2001 as we planned for the opening of our new building in January 2002.

Background

At the beginning of fall 2001, the CMU Library was rapidly approaching the end of a major two-and-a-half-year building expansion and renovation project. When completed, the new building would contain over 300 public workstations dispersed over four floors, which, when combined, would be equal in size to about three-and-a-half football fields. In addition, we planned to provide a further 300 network connections for laptop users.

At that point in the project, the decision had already been made to provide a full suite of productivity software on all public workstations in the building. In addition to a complete installation of Microsoft (MS) Office (including Access, Excel FrontPage, PowerPoint, Publisher, and Word), all workstations were configured to allow unblocked Internet access. This meant that students would be able to access e-mail and chat software from any library computer. Furthermore, all computers were to be equipped with CD burners and DVD players and the appropriate software to operate this equipment.

Although we had a clear vision of the type of information technology that we would provide in our new setting, we did not have a plan for how to provide quality service and support to patrons using this new software. With limited time and resources, we set about developing and implementing a software support service plan.

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The plan
Level of support
The library provides full support for the commonly used MS Office programs (i.e., Word, PowerPoint, and Excel), but not for the more specialized programs, such as Project and FrontPage. This decision made sense for two reasons. First, we anticipated that these core programs would be the most heavily used by our students. In addition, we were confident that most library staff members already possessed a basic familiarity with these programs and would not need extensive training to assist others with their use.

In addition to the core Office software, we also help patrons use the CD burners to copy data files, troubleshoot basic e-mail problems, and provide assistance to patrons using all traditional online library resources. We do not provide assistance to students playing games or chatting online, although both activities are allowed on library computers. Illegal downloads of music files are not permitted.

Support model
Prior to the opening of the new library building, the university's information technology (IT) group already operated a number of conventional computer labs across campus. Since the software configuration in these labs was similar to the one we planned to provide, we met with IT representatives to get their perspective on the situation. They warned us to expect a high volume of questions on a wide range of topics varying in complexity from simple to the most advanced. Based on the IT staff's knowledge of lab support needs, and our understanding of library reference, we developed the following software support model.

Tier 1: Software support student assistants
Primary support is provided by a core group of students who are trained at the highest level possible. These students have been trained primarily to assist library patrons working with Microsoft Office. They also provide assistance with the printing system and troubleshoot equipment problems with the public workstations and compact shelving.

Our original plan called for a staffing level of two students when the library was open, or 210 hours per week. However, due to our short timeframe, we were unable to hire and train as many students as we needed to cover all proposed hours. With the number of qualified students we were able to hire, we were able to schedule two students most of the hours the library was open, and at least one at all other times.

During the interview process, we concentrated on identifying students who already had a high degree of familiarity and competence working with computer software and hardware. Upon completion of an in-person interview, all students were required to pass a computer-based test (CBT) to demonstrate competence with Microsoft Word, Excel, and PowerPoint at an intermediate level. For this testing, we used a Microsoft CBT training program made available through the university's information technology Web site.

Before working with patrons, each student assistant was required to complete 17 hours of technical and public service training. The technical training was completed using the same CBT training modules used during the interview process. Students were required to take advanced tutorials for Word, Excel, and PowerPoint and reach an 80 percent mastery level. The students were given a timeframe for completion of the tutorials and were required to complete them at their own pace. After finishing the program, the students received a curriculum progress report indicating their level of achievement on the module. They submitted this report to their supervisor as proof that the training had been completed. On average, this portion of the training took 15 hours.

In addition to the technical training, all student assistants were required to attend an in-house service training session. During this two-hour session, students were given a tour and introduced to the organizational structure of the library. In addition, they were introduced to the concept of the library as an organization committed to service quality. Finally, we taught them how to differentiate between a software question and a reference question, and to make referrals to the appropriate service desk for questions they were not trained to answer.

Tier 2: Librarians and support staff
Library staff working at all service desks provide secondary support. They are trained to answer all basic software questions, and may make referrals to technical support students as needed.

As with the software support students, library staff members were asked to self-train using the CBT training modules. Reference librarians were required to complete the intermediate level modules, while other library staff members were ex-

pected to have a basic understanding of the software.

Tier 3: Information technology help desk

Questions that cannot be answered by library or technical support staff are referred to the IT Computer Help Desk. For example, students experiencing difficulty configuring their laptops for access to the university network are routinely referred to the help desk. Fortunately, the computer help desk, although under the auspices of the campus IT group, is conveniently located within the library building.

The outcome

In January 2002, the new building opened and the software support plan was immediately implemented. During our first semester, we kept detailed statistics of the number and types of questions, as well as the time of day questions were received. In addition, we met with the software support students during the middle of the semester to get their feedback on the effectiveness of the service.

Types of questions

During our first semester, software support students answered over 2,500 questions. Unexpectedly, only 20 percent of the questions received were related to the use of Microsoft Office applications. Questions related to the new network printing system, including demonstrating how to set up new accounts and send and retrieve print jobs and troubleshooting printing problems, represented the largest proportion of questions answered (50 percent). Software support students also assisted with a significant number of hardware-related problems (15 percent).

Staffing

During our first semester, we scheduled two software student assistants during most of our hours of operation. However, based on our observations and statistical analysis, we determined that two students were not needed to adequately provide this service. Specifically, we found that relatively few questions are asked during the morning hours, while evening and weekend hours are quite busy. Consequently, we modified our schedule for fall 2002 to eliminate student staffing during the mornings and provide appropriate levels at other times of the day based on use. When software support students are unavailable, reference librarians

are expected to provide first tier technical assistance.

Implementation tips

For those libraries interested in implementing a similar type of software support program, the following tips and suggestions may be of interest.

1) Hire students with a technology background AND people skills. During our initial hiring stage, we focused primarily on identifying and hiring students who already possessed a high level of proficiency with computer hardware and software. Because of our tight timeline for hiring and training the software support staff, we needed students who would require little technical training. We focused less on their public service experience and skills. Unfortunately, some individuals who possess outstanding technical abilities may have trouble effectively communicating that knowledge to others. We have found that the best support students exhibit a balance between computer competency, communication skills, and people skills such as patience and friendliness.

2) Locate a software support service desk in a highly visible location. Because software support was an add-on service in our new library, the original construction plans did not provide for the inclusion of a physical computer help desk. Since the students had no official location from which to provide service, our initial plan was to provide them with identification badges and clipboards, and have them rove around the library providing assistance as requested. Unfortunately, this plan did not work. Students could not easily identify the software support staff, and seemed to prefer approaching a traditional service desk with their questions. As a result, we decided to provide a clearly identified seat at our reference desk specifically for software support questions. Ultimately, we would prefer to place a separate, clearly marked, software support service desk on another floor in the library in addition to providing support from the reference desk.

3) Be flexible and experiment. When implementing any new program a willingness to be flexible and experiment is essential. Because we were moving into an entirely new environment, and were at the same time significantly expanding our software provision, we had no past experiences on which to base our expectations. As a result, flexibility was of paramount importance. We had to be willing

Notes

1. A recent survey of academic libraries in the United States reported that over 90 percent of respondents identified a librarian as coordinator of library instruction. See Kristin Johnson and Kathleen Carlisle Fountain, "Laying a Foundation for Comparing Departmental Structures between Reference and Instructional Services: Analysis of a Nationwide Survey," *College & Research Libraries* 63 (2002), 281.

2. For an example of this thread in the literature, see Lewis-Guodo Liu (ed.), *The Role and Impact of the Internet on Library and Information Services* (Westport, CT: Greenwood Press, 2001).

3. National Association of Elementary School Principals, *Leading Learning Communities: NAESP Standards for What Principals Should Know and be Able to Do* (Alexandria, VA: National Association of Elementary School Principals, 2001).

4. James Weber, "Leading the Instructional Program," in *School Leadership: Handbook for Excellence*, 3rd ed., eds. Stuart C. Smith and Philip K. Piele (Eugene, OR: ERIC Clearinghouse on Educational Management, 1997), 253–78.

5. Larry Lashway, *Can Instructional Leaders be Facilitative Leaders?* (Eugene, OR: ERIC Clearinghouse on Educational Management, 1995) [online]. Retrieved June 11, 2003, from http://eric.uoregon.edu/publications/digests/digest098.html; Weber, "Leading the Instructional Program," 277.

6. Nathalie Gehrke, *Developing Teachers' Leadership Skills* (Washington, DC: ERIC Clearinghouse on Teacher Education, 1991) [online]. Retrieved June 11, 2003, from http://www.ed.gov/databases/ERIC_Digests/ed330691.html; Deborah Perkins-Gough, "Beyond Instructional Leadership," *Educational Leadership* 59 (2002): 96 [online]. Retrieved June 11, 2003, from http://www.ascd.org/readingroom/edlead/0205/perkinsgough_2.html.

7. Robert J. House, "Leadership," in *The Blackwell Encyclopedic Dictionary of Organizational Behavior*, ed. Nigel Nicolson (Cambridge, MA: Blackwell, 1995), 284.

8. For representative examples, see ACRL Bibliographic Instruction Section, *Learning to Teach: Workshops on Instruction* (Chicago: ACRL, 1993); and Esther Grassian, "Setting Up and Managing a BI Program," in *Sourcebook for Bibliographic Instruction* (Chicago: ACRL, 1993), 59–75.

9. See, for example, Abraham Zaleznik, "Managers and Leaders: Are They Different?," *Harvard Business Review* 55 (1977): 67–78; and, Warren Bennis, *On Becoming a Leader* (Reading, MA: Addison-Wesley, 1989).

10. Sharon Mader, "Instruction Librarians: Leadership in the New Organization," *RQ* 36 (1996): 192–97.

11. Bennis, *On Becoming a Leader*.

12. See, for example, Robert T. Sweeney, "Leadership in the Post-Hierarchical Library," *Library Trends* 43 (1994): 62-94; and Terrence F. Mech and Gerard B. McCabe, eds., *Leadership and Academic Libraries* (Westport, CT: Greenwood Press, 1998).

13. J. Holt, *What do I do Monday?* (New York: Dutton, 1970). ■

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and able to implement, assess, and adapt our program quickly. In order to facilitate this adaptability, we let the newly hired software support students know that they were participating in a trial service and that their assigned shifts and tasks might vary throughout the pilot project.

Conclusions

During the course of our pilot software support project, we found that the technical expertise and competence exhibited by our student assistants complements our existing reference service. These students can be deployed by librarians to handle most technical questions received at the desk, thus freeing librarians to focus on research related questions. In addition, software support students are able to quickly resolve many technical problems that previously would have been referred to the already busy library systems department. Their assistance is particularly valuable during evening and weekend hours, when the library systems department is not staffed and the reference staff is extremely busy. Overall, the software support program has allowed us to provide quality technical support without overwhelming the professional staff. ■

Correction

Ilene F. Rockman is affiliated with the California State University Office of the Chancellor and not the University of California-Berkeley as was listed in the May issue of *C&RL News*. The editors regret the error.