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The Core Competency Program at the University of Iowa Libraries

Paul Soderdahl and Donna Hirst

Overview

At the University of Iowa Libraries the development and implementation of an information technology (IT) Core Competency Program took place over five years. There was no single individual or department who managed this entire effort, so the program evolved slowly and the focus shifted from time to time. The development of the Core Competency List is discussed, and the framework for technology training in the libraries is highlighted. Core competencies are used for training and staff evaluation.

Introduction

In 2003, the University of Iowa Libraries began a formal project to address the issues of core technical competencies for library staff. Section I of this chapter covers the development of a Core Competency Program at the University of Iowa Libraries. The identification of needs and the libraries' organizational context are discussed. The subsection on the University Information Technology Reclassification describes the larger university setting from which the libraries' core competencies grew.

Section II describes the elements that were in place or developed once the core competencies were put into production. An interim program was begun until a trainer was hired. An example is included of a specialized competency for a single software application that is a model for similar extensions once the general program is more fully in place. Some detail about the technical trainer is included, a position that is critical to the program. Human resources issues and concerns are presented.

The Environment at the University and the Libraries

The University of Iowa was established in 1847 and has 11 colleges—the largest is the College of Liberal Arts and Sciences, with additional colleges in Law, Business, Engineering, Medicine, Education, Pharmacy, Nursing, Dentistry, and the Graduate

College. Approximately 30,000 students are enrolled at Iowa, and 1,700 faculty and 13,000 staff are employed. The university has nationally and internationally recognized programs across the campus.

The University of Iowa Libraries is a large research library system with over 4.5 million volumes. The library system includes the Main Library, the Hardin Library for the Health Sciences, and 10 branch libraries. As of July 2007 the system employed over 100 Merit employees, over 75 Professional and Scientific employees, and one faculty member (the dean). University Merit staff include blue collar, security, technical, and clerical employees. Professional and Scientific employees are defined apart from the Merit system based on the professional, scientific, or administrative nature of their work. Librarians and other library professionals are classified as Professional and Scientific; library support staff are classified as Merit. The libraries have historically been understaffed and have had minimal technology support staff. As with all large research libraries, the University of Iowa Libraries is completely dependent on technology, and desktop applications are used by every employee in the system. This dependency has led the library system to explore a range of training programs and staff development programs to enhance the skills of library staff. The University of Iowa Libraries' Core Competency Program is an outgrowth of this exploration.

Section I: Planning the Core Competency Program

Identifying Core Competency Needs for Library Staff

As the University of Iowa Libraries entered the twenty-first century, the general IT competency of the library staff was a concern for all library units—IT departments, general library departments, and library administration. A very minimal technical orientation for new staff was in place, but everyone at the institution felt that the technical training needed to be enhanced. Staff raised concerns from a variety of perspectives:

- The libraries needed to establish a baseline of technology skills so that general staff, supervisors, and IT trainers could all work toward the same goals.
- All library employees needed to become more productive and more proficient at using the workstation and peripherals required for their day-to-day work.
- The libraries needed to shift the control for technology training from the library IT department back to the supervisor of the staff members' department.
- The libraries needed to focus IT training efforts on basic skills and leave advanced training to units or to individuals desiring advanced skills.
- Library employees wanted formal training classes to allow the staff to choose options in upgrading their technical skills.
- The libraries didn't have adequate technical staff to train general library staff to be technically competent. Training tools and focused goals would need to be developed.

The issue of core competency training was brought to the Library Information Technology Advisory Committee (LITAC) in 2003. The committee did a literature search at that time and did not find much relevant information except for a helpful article by Scott Childers (2003) titled “Computer Literacy: Necessary or Buzzword?” in *Information Technology and Libraries*.

The article by Childers included a history of computer literacy going back to the 1960s. In particular, a 1984 article by Donald Norman titled “Worsening the Knowledge Gap” provided a framework for Childers’ work. Norman (1984: 222) described a hierarchy for computer literacy:

- General principles of computation
- How to use computers
- How to program computers
- The science of computation

Childers subsequently took this hierarchy and updated it to reflect requirements for libraries in the early twenty-first century. Childers’ (2003: 102) hierarchy grouped competencies into three levels:

- Level 1 is the baseline proficiency level, and any skills that a staff member is lacking within this level should be approached and mastered as soon as possible. . . .
- The second level is that of a barely computer-literate person, similar to the literacy of someone with a kindergarten reading level. This level of computer competency is the minimum level that the majority of the library staff should rate. Skills that an employee is lacking could be possibly ignored if their other job skills are high enough. . . .
- The third, or target, level is the level of computer proficiency that all library staff should try to achieve; however, staff members who do not have these skills should not be penalized.

One section of Childers’ article focused on the impact that computer literacy has on libraries. He raised the question of whether the impact of computer literacy is different for general library paraprofessionals as opposed to professionals. He concluded that the demand for computer-related skills has moved from insignificant to critical for most academic library positions, quoting Krissof and Konrad (1998: 32) that “training should be viewed as a necessity, not a luxury; as mandatory, not voluntary; and as comprehensive, not superficial.”

Childers added his own information and perspectives to a chart prepared from the Basic Computer Equipment Competencies created by The Library Network (TLN) Technology Committee at tech.tln.lib.mi.us/finalbasic.htm (accessed 2007). LITAC found the Computer Proficiencies Chart in the appendix of Childers article to be particularly valuable.

Early Efforts Toward Core Competencies

After careful review of the Childers article, the committee decided to adapt his Basic Computer Equipment Competencies as the basis for a local implementation. The content of the Childers' competency list was largely accepted for local use, and the list from the Childers article was revised into a table format (Appendix 8-1). Additional competencies were not added, but the revision to a table facilitated its use for individual staff evaluations. The group decided that this Core Competency List would be used as the basis for staff training. Because of university hiring guidelines the list could not be used in the recruitment of new staff.

The Desktop Support Group reviewed the competencies list to see if support documentation for training was available, particularly for those baseline topics identified in the Core Competency List. These baseline topics received special attention, because all staff members were required to meet them. The university subscribes to the SkillSoft service, a collection of online professional development courses available to both Mac and PC staff users. The Libraries' Desktop Support staff searched the SkillSoft resources to determine if documentation addressing the competencies was available through this resource, again focusing on the baseline topics.

The committee agreed that it was very important that Iowa's core competency document be flexible in structure and also allow departmental customization. Customization should be easy for departments such as a public services unit or a branch library, allowing units to add competencies specific to the unit. Additionally, customization for particular special cross-departmental functional requirements, such as word processing, spreadsheets, or support for cross departmental projects, should be permitted.

After final approval by LITAC, the document was forwarded to the Director of Information Technology, who presented the document to the Libraries' Executive Council in August 2004. The council was very favorable but decided to postpone implementation so that a newly formed Technology Training Task Force could consider core competencies in the broader context of technology training.

Defining a New Framework for Staff Training, Development, and Enrichment

LITAC's discussion of core competencies began at about the same time that the libraries at large launched a major planning initiative. Recognizing that the libraries' existing strategic plan had been drafted in very different budgetary times, a planning effort was undertaken "to become more focused on a narrower group of well-chosen priorities if the Libraries intends to continue to innovate and move in new directions" (University of Iowa Libraries, Annual Report, 2003/2004). In order to implement a new strategic plan that reflected current financial realities in an ever-changing information landscape, the libraries made significant organizational changes by restructuring departments, streamlining workflows, and reevaluating

services. Key to the planning effort was a focus on taking advantage of changing technologies to make the best use of an ever-decreasing number of staff. In a 2006 self-study report it was noted that the libraries experienced a \$1.3 million reduction in funds for staffing from 1998 to 2006, the equivalent of approximately 25 entry-level positions (University of Iowa Libraries, Self Study Report, 2006).

In June 2004, the planning committee recommended that a task force be formed to consider how best to deliver just-in-time technology training that could be focused on individual user needs. Focusing on just-in-time training would require that training be responsive to the current needs of the individual as well as the climate and needs within the organization. A four-person task force was launched in July and quickly realized that in order to develop a new model for technology training, the notions of staff training and staff development would first need to be considered more broadly.

The libraries have had an active staff development program for many years, offering forums and workshops to all staff on a regular basis. Included in the program was a technology training series, organized by the libraries' coordinator of assessment and staff development with input from a number of technologically savvy library staff. The new task force faced the challenge of identifying which elements of the past staff development sessions were effective and should be retained and where there were gaps in meeting current technology training needs.

The task force decided to distinguish three different types of learning activities: (1) staff training, (2) staff development, and (3) enrichment. Staff training was used to describe those activities that taught skills required in order to do a job. Staff development described activities that would generally improve one's ability or quality of job performance but might not be skills that required mastery. Enrichment activities were considered slightly distinct from staff development in that they were always voluntary and not undertaken on work time. For example, enrichment activities might include brown bag sessions on hot topics only tangentially related to libraries and librarianship.

In order to clarify these distinctions, the task force crafted a Framework for Staff Training, Development, and Enrichment (see Appendix 8-5). The framework identified three different triggers for staff training: (1) something about the employee's situation has changed, (2) something about the institution or environment has changed, or (3) a remedial training need was identified. Determining who should deliver the instruction and how to deliver it would be dependent on the trigger. With the framework in hand, the task force could identify more precisely where the current technology training program was insufficient. For example, if the trigger for training was that the employee's situation has changed, then a class scheduled months in advance could not meet that individual's needs. Rather, just-in-time, point-of-need training would be most effective.

On the other hand, there are many situations where something about the institution or environment has changed, such as a new version of the library management

system or a change in e-mail software. In these instances, training scheduled in advance and offered in groups might be efficient. However, library staff often reported that group training was not effective, because the training classroom was an artificial environment with machines that were sometimes configured very differently from their own individual workstations. Thus, for a system-wide training need, small group sessions within the department would generally be more effective than a classroom filled with staff from other departments whose job responsibilities and workflows varied widely.

By contrast, staff development and enrichment could take place effectively in a large group setting. The task force concluded that the existing staff development program could adequately meet the needs for staff development and enrichment related to technology but was not well suited for staff training.

Putting the Supervisor in Charge

In addition to defining a new framework for training, the task force also recommended that supervisors at all levels needed to assume primary responsibility for the training required for their employees. The supervisor has knowledge of the particular responsibilities of a staff member and also knows what is likely regarding new responsibilities. Although obvious, this statement had not been made so plainly in the past. The task force acknowledged that supervisors might not be in a position to offer the training personally, but, nevertheless, an IT trainer or a staff development coordinator would rarely know the training needs of an individual in another department. In some cases it may be evident.

Placing the training responsibility on the supervisor has been critical to integrating core competencies into the performance evaluation process. The task force concluded that only the immediate supervisor is in a position to address core competency concerns in an evaluation setting, and thus the immediate supervisor needs to be the one responsible for addressing any deficiencies and arranging training as needed. The task force further recommended that administrators need to emphasize to their managers the importance of orientation and training and that the libraries need to provide opportunities for supervisors to develop and improve their training skills. The full set of recommendations made by the task force are provided in Appendix 8-6.

The task force recommended that a trainer be hired to meet the increased demand that would result from adopting a point-of-need training model. Recognizing the close link between technology training and desktop support, it was recommended that this new position also include responsibilities for general one-on-one IT support.

Standardizing University IT Classifications

Facing repeated budget cuts, the libraries would not receive new funding for the desired Desktop Support and Technical Trainer. Thus, in order to create the

salary line, funds would have to be reallocated from other library staff positions. Reallocating salary funds from one functional area to another, however, was not uncommon. As part of the planning process, the libraries had adopted a pattern of reallocating positions in order to move in strategic new directions, and a priority was given to making better use of technology in order to cope with a reduced work force. Nevertheless, identifying funds for the new position was not easy. On the other hand, fitting the position into the restructured library IT division was straightforward.

In 2000, the a group convened to overhaul the university's classification descriptions, pay grades, and career paths for IT staff in an effort to increase the ability of the university to attract and retain quality staff. Like many similarly sized state institutions, the University of Iowa has predefined job classifications for all positions, including IT professional staff. Over the decades, however, these positions had become outdated. Some job titles, such as "senior analyst" or "department information specialist," were so vague that they had lost any specific meaning. Others were tied to dated technology, such as "operations manager of mainframe computing facility." Several named specific campus units, many of which were no longer in existence, such as "CONDUIT marketing and distribution administrator." Even when relevant, these classifications were so specific that they would never have more than one incumbent, and the university felt this contributed to a lack of career path. Job classifications were used inconsistently from one department to another, and department managers often felt compelled into gaming the system in order to pay a competitive salary.

The IT Job Reclassification Committee was charged with developing a new system that could be applied campus-wide, provide well-defined career paths, reflect updated qualifications, and omit any references to specific technologies (e.g., names of specific programming languages). After soliciting information from peer institutions, studying IT classifications used in the private sector, and analyzing IT position descriptions currently in use at the university, the committee developed a matrix that could be applied consistently for all IT positions across the campus enterprise.

On one dimension, the committee divided IT tasks into eight job families: (1) applications development and support, (2) database administration and development, (3) data center operations, (4) IT management, (5) IT security, (6) IT support services, (7) network and communications engineer, and (8) systems administration and systems programming. A second dimension was job level, with Level I used for entry-level positions and Level V for the highest senior-level positions. This grid allowed for up to 40 job classifications—eight families with up to five levels each. In practice, however, only 27 job classifications were created. For example, no classifications were defined for IT Support Services IV or V because the most senior-level IT staff would either tend to move into a specialized functional area (such as systems administration or applications development) or into management.

Similarly, no classifications were defined for IT Management I or II. This system allowed the levels to be used consistently across all job families so that all Level IV jobs would be similar in scope and responsibility regardless of job family.

This new system provided a career path, allowing individuals to move from Level I up to Level V. It also provided for the possibility of moving into senior-level positions without necessarily moving into management. An Applications Development and Support V would be considered on par with IT Management V, roughly equivalent to a director or other senior administrator. The Chief Information Officer is the only IT position above Level V and is the equivalent of a vice president or associate provost position. As a result of the reclassification project, the number of IT classifications used on campus was reduced from 58 to 27.

For each level, a set of criteria was developed to describe the characteristics of positions at that level with respect to independent judgment, problem-solving skills, communication skills, end-user interactions, resource management responsibilities, business knowledge, sphere of influence, impact of errors, and technical competencies. The criteria that were used for each of the five levels across job families served as the foundation, and more specific criteria were defined for individual job classifications. Figure 8-1 shows how technical competencies were applied for Applications Development and Support Levels I and II.

With the criteria in hand, the committee developed a general classification description for each of the 27 new IT classifications. Each description followed a similar template: (1) basic function and responsibility (a brief paragraph describing the jobs in that family), (2) distinguishing characteristics (features that distinguish

Figure 8-1. Competencies Applied to Select Positions

APPLICATION DEVELOPMENT LEVEL I	
Technical Competencies for all IT positions at Level I	Stays up-to-date in use of tools and skills required to perform the job, as well as major new technology trends
Technical Competencies specific to Application Development Level I	Has programming experience and/or formal logic education. Demonstrates ability to translate functional specifications into program code
APPLICATION DEVELOPMENT LEVEL II	
Technical competencies for all IT positions at Level II	Stays up-to-date in use of tools and skills required to perform the job, as well as major new technology trends. Researches and evaluates new tools/processes for area
Technical Competencies specific to Application Development Level II	Competent in one or more tools, operating systems, and languages used by the unit. May be involved with multi-platform and intersystem relationships. Demonstrates ability to write functional and technical specifications for complex integrated systems. Conceptual knowledge of databases used by the unit

jobs at that level from other jobs in the same job family), (3) characteristic duties and responsibilities, (4) supervision received, (5) minimum qualifications, and (6) knowledge, skills, and abilities. Knowledge, skills, and abilities included those competencies that may or may not be required for any given position. The section was not intended to be a checklist of competencies but rather a sampling of the types of competencies that a department might demand for a specific position. IT managers might pick and choose from the knowledge, skills, and abilities of several different classification descriptions in order to identify the competencies required for a given job.

To implement the new system, all of the approximately 500 IT jobs on campus were reviewed. Each employee was required to complete a position description questionnaire; IT managers were invited to suggest a classification; and the committee reviewed each position and placed it in one of the 27 new classifications. Dozens of interviews were held, appeals were heard, and, in July 2003, central human resources switched all IT staff to the new system. The reclassifications were generally budget neutral, with only a handful of situations where employees' current salaries were outside the range of their new classifications. Interestingly, three of these were library IT staff whose salaries needed to be raised in order to bring them up to the minimum.

Because the IT reclassifications were taking place at about the same time as the libraries' reorganization, the new library IT organizational structure was modeled after the new campus-wide job families, with separate units for applications development and support, desktop support services, and systems administration and programming. (Digital library services and Web services were later added as additional library IT departments.)

With respect to technical competencies for the University of Iowa Libraries' IT staff, the core competencies certainly apply to all staff, including IT professionals. In addition, advanced technical competencies required for each individual position are drawn from the knowledge, skills, and abilities in the classification descriptions, although they are typically not formalized except when a vacant position is advertised.

The newly created technology training position was easily placed within the IT support services family, because the job consisted of a combination of technology training and desktop support. The scope of the position placed it at Level II. The IT Support Services Level II classification is described in Appendix 8-7.

Section II: Implementing The Core Competency Program

Putting the Core Competencies into Production

After review by the Libraries' Technology Training Task Force, the library administration accepted the IT core competencies for all library staff as approved by LITAC. Iowa's Core Competency List (Appendix 8-1) includes requirements at

the baseline, intermediate, and advanced levels. It organizes the requirements according to areas such as basic workstation set up, printing, Internet, computer security, Microsoft Windows operating system, e-mail, calendaring, IT policy, and a number of other categories. Some of the specific competencies are common knowledge, but many are less commonly known.

The Core Competency List was acknowledged to be a very useful IT management tool. Library administration wanted the document to serve as:

- a staff training tool,
- an orientation tool for new staff,
- a tool to build staff empowerment, and
- a tool to reduce the IT support burden.

Without an adequate IT trainer in the systems office, the core competencies were largely a symbol rather than a tool for change. The library administration acknowledged that a full, system-wide implementation could not be put into place until a technical trainer was hired. Yet the demand for IT troubleshooting and training had been strong across all library units even prior to the acceptance of the document. With the Core Competency Program the libraries could effectively address training, orientation, staff empowerment, and enhanced IT troubleshooting support.

The libraries' Head of Desktop Support Services was given responsibility to implement the core competencies until a trainer could be hired. She quickly decided that she would use the tool for all new staff and would work with experienced staff as time allowed. She developed a Core Competency Self-checklist (Appendix 8-2) as a training aid. The self-checklist includes all of the baseline competencies, but they are formatted as a self-help tool rather than as a policy document. The checklist also embeds the answers to the questions inside the questions when possible so that the process of completing the checklist actually teaches the staff member many relevant concepts. The self-help checklist removes, or at least reduces, the need for IT staff mediation, thus saving IT department time and empowering staff.

A general technical orientation has always been necessary for new employees. When new staff members are assigned their workstation and peripherals, the IT department reviews login and security issues. A basic introduction to workstation software and policy also takes place at the orientation. The Core Competency Self-Checklist became part of this process. Frequently supervisors asked to be present at the core competency session for their new employees in order for them to learn about the baseline and to learn what was being taught to their staff.

Competencies Required for Specific Applications

The initial Core Competency List was intended to be flexible by allowing customization for particular functional requirements. This feature was tested when the libraries changed their Web page editing software from Adobe Dreamweaver to

Adobe Contribute. In addition to allowing the libraries to adopt a more standardized look and feel through the use of required templates, Contribute's user-friendly interface and lower cost permitted a much wider deployment than had been possible with Dreamweaver. The expanded usage prompted a desire to define application-specific competencies for Contribute users that were appended to the original core competencies document. Appendix 8-3 lists the Contribute competencies. Competencies for other applications have not been developed but can quickly be added when the need arises.

New Trainer and Desktop Support Staff Position

In June 2006, the university libraries began the hiring process for a Desktop Support and Technical Trainer. The position reports to the Head of Desktop Support Services and provides support to the Main Library, the Hardin Library for the Health Sciences, and 10 branch libraries. The position is described in Appendix 8-8. The trainer is expected to work with supervisors throughout the library system to develop and implement personalized technical training plans. There were many position requirements for the new trainer, but it was particularly important to the libraries to find someone who was flexible, was skilled at teaching computer concepts, and had strong interpersonal skills. Hiring someone who was comfortable with the core competency information was important.

The libraries hired a very strong candidate with lots of experience who could "hit the ground running." The trainer works with the Core Competency List and the checklist. Because of the great demand for his services, he frequently works with whole units rather than one on one, but he does do a lot of personalized training as well. During the original planning for a core competency program, analysis emphasized individual training, but demand has resulted in offering a number of group meetings. A group meeting typically includes 12 staff members. The unit meetings have been a very good forum for asking questions, because people's queries often generate additional questions from their peers.

The trainer has indicated that typically it is best if a group's supervisor does not attend the meeting, because the presence of the supervisor can suppress questions and comments. Sometimes the process, both the meetings and the questionnaire, elicit sarcastic comments. These training events can offer staff a chance to vent and describe their frustrations. Because the trainer works to make the training course a safe environment, the staff members feel comfortable in voicing concerns about their hardware, the software they are required to use, their supervisor's expertise, the physical environment (light, workstation height, etc.), and more. The trainer is not always able to solve problems voiced by participants, but sometimes problems can be resolved, and typically the participant learns that the trainer is an ally in addressing technology issues.

Orientations for new staff continue to be offered. Typically an orientation takes place mid-morning on the staff member's first work day. After the installation of

the workstation, the staff member is lead through the Core Competency Self-Checklist (Appendix 8-2). Instruction is offered in any area needed. One month after the orientation, the checklist is sent to new employees in campus mail and they again review the document and ask for assistance if needed.

Experienced staff may be offered a one-on-one session when the employee or the supervisor makes the request. Often these one-on-one sessions are for employees needing remedial assistance or who have been having trouble with technology. The trainer never does special training for advanced staff. Once staff members develop beyond the baseline, they are expected to progress on their own. The trainer has limited time for training activities, and it is recognized that the trainer cannot be an expert in all the specialized software functions and packages that the libraries use. The core competency goal is to get all staff up to a baseline, and then the individual staff members can take responsibility for their own advanced training. Although staff would like the library and the trainer to offer advanced IT training, advanced users know that it is unlikely that the trainer would know more than they do about their specialized software. The trainer has considered having a supervisors' meeting to encourage supervisors to take more responsibility for training their staff in technology, but this has not yet been possible to organize.

The libraries' trainer has become well integrated into the staff. He is a strong member of the IT department's Desktop Support team. Approximately 20–25 percent of his time is spent on training, and the rest of his time is in desktop support. One of his special strengths is his ability to present technical training information in a very inviting way. The trainer has created "Weekly Tech Tips" that go to all staff each week. Appendix 8-9 includes three Weekly Tech Tips from January and February 2007. These tips are both e-mailed to all staff and posted on the Desktop Support intranet page. The tips in Appendix 8-9 focus on Internet Explorer 7 and RSS Feeds, the IE7 Menu Bar, and Phishing Scams. The tips use graphics effectively and use color to highlight sections. The tips are very informal and frequently include humor. The trainer establishes a non-threatening environment for learning.

Through the Weekly Tech Tips the trainer began to encourage staff to submit effective or interesting tips to be promoted in the weekly publication. Competition has developed among the staff to see who could get their tips published. Generally staff sees the acceptance of a tech tip for publication to be a way that they can help each other. Appreciation of the tech tips has even extended beyond the library. One of the library staff is married to a faculty member in the College of Business, and the tips began to be routed through the Business College to rave reviews.

Core Competencies within the Human Resources Context

The libraries' human resources (HR) division was involved in the development of the core competencies policies and procedures from early in the library exploration of this support program for library staff. The early distinction between training

and staff development was a significant HR concern. It was important for the Core Competency Program to include training with a hands-on component. It was important to move away from the staff development model with a large group receiving lecture-type information.

The Core Competency List is referenced in the Libraries' Personnel Evaluation Documentation. The competencies are not mentioned or included in position descriptions when advertising for new positions. They might be mentioned in interview sessions, but generally the new pool of prospective employees seem already to have most of these skills, especially the baseline skills.

A number of problems were identified with the initial computer-related staff development sessions that existed before the Core Competency Program. HR hoped to address many problems through the Libraries' Core Competency Program, including the following:

- The development sessions were not offered at a point of need.
- Sessions were not offered when there was a staff demand.
- Sessions did not include a hands-on component.
- Supervisors were not involved in the sessions.
- The sessions did not allow for one-on-one instruction.
- There was inadequate staff in Desktop Support to meet the demands.

Once the Core Competency Program was in place and a trainer was hired, various HR documents referenced these requirements. The Performance Evaluation System for professional and scientific staff members (e.g., librarians and other professionals) documented the core competencies as additional position expectations along with a guide to their use. Appendix 8-4 presents the Guide to Using the Core Competency List. Professional job responsibilities (University of Iowa Libraries, Performance Evaluation) are explicit in stating: "Competence in appropriate areas of technology (See Libraries' Core Competency List and Guide)."

Merit staff members (i.e., nonprofessional staff) are evaluated annually against the core competencies. The evaluation questionnaire is explicit in asking whether there are expectations in the Library Technology Skills: Core Competency List that need to be discussed/addressed. When Merit employees develop their annual goals, they frequently mention the core competencies. Goals might include taking a SkillSoft course or the development of other technology skills above and beyond their basic job responsibilities.

Library administration is aware that many long-term employees have a tendency to deny that change is continual in the academic library environment these days. However, change is ever present inside the library and in the larger environment as well. Flexibility and computer competency is a necessity for library employment; the Core Competency Program is a focused attempt to assist these employees in making the transitions.

Summary and a Look to the Future

Iowa's Core Competency Program is based on establishing a strong, deliberate baseline of competencies in staff. The baseline is very basic and provides an appropriate level of detailed information. This baseline defines a cultural foundation for the libraries across departments. The self-checklist that was developed from the Core Competency List allows staff with few computer skills to confirm that they are up to the minimum. The program raises self-confidence and expertise in staff with marginal skills. The program is well designed so that the process frees up Desktop Support staff time to handle trouble calls.

The actual training sessions, be they one-on-one or group sessions, put the trainer face to face with staff. The formal training sessions establish a focal point for subsequent informal desktop support. For new employees, the number of computer problem calls has significantly dropped since the Core Competency Program was initiated.

The Core Competency Program and its documentation need to continue to evolve. As library employees offer feedback, the trainer needs to make changes to the list and the checklist as well as to respond to suggestions about processes that occur in the training sessions themselves. As with any documentation, wording needs to be adjusted and sections need to be less ambiguous. Redundancy in the documents should be removed.

Changes in the broader technology environment will certainly influence the ongoing Core Competency Program. Changes to the operating system (e.g., Microsoft Windows Vista) and to major enterprise software (e.g., Microsoft Office 2007) have the potential to require alterations to the core competencies. The addition of new enterprise software or unit-specific software will also require that the documentation be kept current and relevant.

The intermediate and advanced levels of the Core Competency List may not be particularly relevant at Iowa. In Iowa's current program these levels don't serve any active purpose. The intermediate and advanced sections are relatively self-explanatory and do provide the supervisor with a resource for possible discussions with staff. Possible future uses of these levels may develop over time.

At the University of Iowa the first full year of the Core Competency Program is largely complete. A full cycle of personnel evaluations has taken place within this context. The libraries expect that a second year of training and evaluations based on the core competency baseline is appropriate. This coming year's work will focus on reinforcement and follow-up. It has not been decided whether, once the program is in its third year, to revise the program so that it will be positive and effective for experienced staff. It is possible that the libraries may not need to do a full core competency effort every year.

LITAC continues to have a role in the Core Competency Program, primarily in updating the official list of competencies. Four times a year the trainer updates the

Core Competency List. LITAC reviews the revised list once or twice a year as needed to provide system-wide input into the revisions.

Iowa's Core Competency Program has in large part addressed the concerns that library staff had with the earlier minimal orientation sessions for new staff. The development of the program took several years with ever-shifting leadership, but input into the program from a broad spectrum of individuals and units resulted in a program that addressed the needs of multiple constituencies. IT administrators in the university's central IT department have voiced interest in promoting the libraries' Core Competency List among other campus units. The implementation of similar programs at other institutions should be considered.

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Appendix 8-1. Library Technology Skills: Core Competency List

	LEVEL 1: BASELINE	LEVEL 2: INTERMEDIATE	LEVEL 3: ADVANCED
Basic workstation	<ul style="list-style-type: none"> • Be able to identify location of equipment power buttons. • Be able to turn equipment on and off. • Understand difference between log-off, restart, and shut down. • Understand best practices for shut down or restart of equipment. • Be able to identify location of power cords so connections can be checked if there is no response from equipment. • Understand password prompts and be able to provide the appropriate password. • Know your Hawk ID and password. • Know when “iowa” or “iowa\” is needed in addition to your Hawk ID. • Understand how screen layouts for software tools should look. • Understand how various storage media work and are accessed. • Understand which files are backed up and which are not, based on storage location. • Understand that files should be cleaned up on a quarterly basis. 	<ul style="list-style-type: none"> • Be aware that system checks are performed by the computer on start up. 	<ul style="list-style-type: none"> • Be able to backup files to a network share or CD-ROM.
Printing	<ul style="list-style-type: none"> • Be able to turn the printer on. • Be able to add paper. • Be able to print specific pages (rather than the entire document) • Be able to choose a network printer. 	<ul style="list-style-type: none"> • Be able to change toner cartridge or ribbon. • Be able to diagnose and correct printing problems for various applications. • Be able to clear a paper jam. • Be able to add a networked printer to your workstation. • Be able to check and clear the print queue. • Be able to print large PDF documents by selecting “Print as Image” command. 	<ul style="list-style-type: none"> • Be able to print white text (if dark background). • Be able to check the printer setup for proper configuration. • Be able to install printer and drivers.

(Cont'd.)

Appendix 8-1. Library Technology Skills: Core Competency List (Continued)

	LEVEL 1: BASELINE	LEVEL 2: INTERMEDIATE	LEVEL 3: ADVANCED
Internet	<ul style="list-style-type: none"> • Be able to open and close browser. • Be able to use browser menu and toolbar buttons. • Be able to change browser options and preferences. • Be able to add, use, and edit browser bookmarks. • Be able to type in a URL. • Be able to understand a variety of error messages. 	<ul style="list-style-type: none"> • Understand differences between various browsers and their versions. • Understand terms and jargon (such as telnet, chat rooms, blog, etc.). • Be able to deal with frames when printing Web pages. • Be able to use Tools and Internet Options to change the home page or delete temporary Internet files. 	
Computer security	<ul style="list-style-type: none"> • Be able to respond to computer virus, parasite, or hacking incidents. • Understand and practice good password strategies. • Change passwords frequently, at least every 180 days. • Be able to differentiate between legitimate security threats and hoaxes. • Understand potential security and privacy threats while using e-mail, including attachments, chain letters, hoaxes, spam, and viruses. • Understand the importance of locking or logging out of a workstation when away. 	<ul style="list-style-type: none"> • Be able to scan files or media for viruses. 	<ul style="list-style-type: none"> • Understand how security software protects the computer. • Understand potential security problems that can arise from patron usage of library computers. • Understand potential security and privacy threats while using the Internet, including cookies, downloading malicious or unauthorized files, unsecured communications of private information, viruses, etc.
Operating System	<ul style="list-style-type: none"> • Be able to navigate in the folder, directory, and drive system. • Be able to create or delete folders. • Understand differences between files and folders. • Be able to open applications and documents. • Understand various save options. • Understand common menu items in applications. • Be able to create a shortcut on the desktop. • Be able to copy and paste and drag and drop within files and folders. • Be able to utilize right-click mouse options (2-button mouse). 	<ul style="list-style-type: none"> • Be able to navigate without the mouse. • Be able to toggle or use the task bar to move between multiple open applications. • Be able to select multiple files or folders. • Understand file-naming conventions and extensions. • Be able to navigate from within an application to open, save, or delete. • Be able to share files with others. 	

(Cont'd.)

Appendix 8-1. Library Technology Skills: Core Competency List (Continued)

	LEVEL 1: BASELINE	LEVEL 2: INTERMEDIATE	LEVEL 3: ADVANCED
E-mail & calendar	<ul style="list-style-type: none"> • Be able to use department-provided e-mail software to: • Send and receive messages and attachments • Resend bounced messages • Understand that the mailbox should be cleaned up on a quarterly basis. • Be able to use Outlook Web Access (http://email.uiowa.edu). • Be able to make calendar entries for own schedule. • Be able to check calendars of others. 	<ul style="list-style-type: none"> • Be able to accept calendar invitations from others • Be able to participate in e-mail listservs. • Be able to organize messages with filters and folders. • Be able to recognize questionable attachments. • Understand appropriate use of attachments. • Understand difference between a list posting address and a list owner address. • Be able to schedule meetings with others, including groups. • Be able to schedule rooms for meeting usage. • Be able to set privacy and priority levels. • Be able to subscribe and unsubscribe from lists. 	<ul style="list-style-type: none"> • Be able to make e-mail and calendar groups. • Be able to create personal mail folders on the H: drive. • Be able to create and maintain a listserv. • Be able to designate viewing and scheduling rights.
IT Policy	<ul style="list-style-type: none"> • Be able to locate the libraries' IT (LIT) policies on the intranet 	<ul style="list-style-type: none"> • Demonstrate familiarity and understanding of acceptable use policy. 	
Technology support	<ul style="list-style-type: none"> • Be able to relay basic, complete troubleshooting information, including error messages, to LIT. • Understand where to look for troubleshooting information. • Understand the need to reboot computer and try to replicate problem before calling for support. • Know the phone number, e-mail address, and Web site for LIT. 	<ul style="list-style-type: none"> • Understand the procedure for requesting new hardware and software as described on the LIT Web site. 	<ul style="list-style-type: none"> • Knowledge of file extensions and how they are used by the computer
Voice mail	<ul style="list-style-type: none"> • Be able to create outgoing voice message and forward calls to voice mail (if applicable). 		
Supervisor responsibilities	<ul style="list-style-type: none"> • Understand procedures for requesting hardware and software. 		

(Cont'd.)

Appendix 8-1. Library Technology Skills: Core Competency List (Continued)

	LEVEL 1: BASELINE	LEVEL 2: INTERMEDIATE	LEVEL 3: ADVANCED
Application-specific skills			
Example: Contribute	<ul style="list-style-type: none"> • Be able to locate and open files. • Be able to make page edits. 	<ul style="list-style-type: none"> • Be able to create pages using a template. 	<ul style="list-style-type: none"> • Be able to create templates.
Example: SharePoint	<ul style="list-style-type: none"> • Be able to access a SharePoint. 	<ul style="list-style-type: none"> • Be able to add to a SharePoint. 	<ul style="list-style-type: none"> • Be able to create and maintain a SharePoint.
Example: MacroExpress	<ul style="list-style-type: none"> • Be able to use existing macros. 	<ul style="list-style-type: none"> • Be able to create simple macros. 	<ul style="list-style-type: none"> • Be able to create complex macros. • Be able/authorized to distribute macros to a dept.
Example: MS Access	<ul style="list-style-type: none"> • Be able to open and use a database. 	<ul style="list-style-type: none"> • Be able to create a simple database. • Be able to generate reports. 	<ul style="list-style-type: none"> • Be able to create a complex (relational) database. • Be able to create queries. • Be able to create relationships between databases.
Department-specific skills	<ul style="list-style-type: none"> • TBD. 		
Library resources	<ul style="list-style-type: none"> • Be familiar with the library's e-resources, including lib.uiowa.edu, InfoHawk, Google, application help files. 		
Public computers	<ul style="list-style-type: none"> • Understand the limitations and support procedures for public computers. 		

Appendix 8-2. Core Competency Self-Checklist

This checklist is a tool that employees and their supervisors can use to identify technology training needs. The core competencies can be viewed at <http://intranet.lib.uiowa.edu/litac/corecompetencylist.doc>.

✓	Basic Workstation Skills
<input type="checkbox"/>	I am familiar with the location of the power buttons on each piece of equipment for which I am responsible.
<input type="checkbox"/>	I know how to power my computer and peripherals on and off.
<input type="checkbox"/>	I know how to locate power cords for the equipment I use.
<input type="checkbox"/>	I know that I can hold the power button on my computer for five seconds to force it to shut down even when it's frozen.
<input type="checkbox"/>	I understand the difference between log-off, restart, and shut down.
<input type="checkbox"/>	I know my Hawk ID and Hawk ID password.
<input type="checkbox"/>	I know which of the applications and Web services I use are tied into my Hawk ID and Hawk ID password.
<input type="checkbox"/>	I know which of the applications and Web services I use require that I enter my domain "iowa\" before my Hawk ID. I know that if my Hawk ID doesn't work one way (with or without "iowa\") I can try it the other way.
<input type="checkbox"/>	I am familiar with the screen layouts in the software I use.
<input type="checkbox"/>	I know how removable storage media (CD, DVD+-R[W], USB) work and how to access them. When I've connected removable storage, I know how to get to the files and folders on those media.
<input type="checkbox"/>	I know that files on H: and L: are backed up and that files on my hard drive are not. I understand that files on my PC should be cleaned up quarterly.
✓	Printer Skills
<input type="checkbox"/>	I know how to add paper to my printer.
<input type="checkbox"/>	I know how to print specific pages of a document.
<input type="checkbox"/>	I know how to select the printer I want to use.
<input type="checkbox"/>	I know how to set my default printer by right-clicking on a printer and choosing "Set as Default Printer."
<input type="checkbox"/>	I know how to delete a print job I sent to the printer.
✓	Web Browser Skills
<input type="checkbox"/>	I know how to open and close Internet Explorer (IE).
<input type="checkbox"/>	I understand IE's menus and toolbars.
<input type="checkbox"/>	I know how to change IE's options and preferences by choosing "Internet Options" under the "Tools" menu.

(Cont'd.)

Appendix 8-2. Core Competency Self-Checklist (Continued)

<input checked="" type="checkbox"/>	Web Browser Skills
<input type="checkbox"/>	I know how to add, use, and edit my IE favorites.
<input type="checkbox"/>	I know how to get to a specific URL by typing it into the IE address bar.
<input type="checkbox"/>	I am familiar with a variety of Web search engines, including Google.
<input type="checkbox"/>	I understand the importance of noting exact error messages.
<input checked="" type="checkbox"/>	Computer Security Skills
<input type="checkbox"/>	I know I should turn my computer off and contact the libraries' IT (LIT) department immediately if I suspect I have a computer virus or my computer has been compromised.
<input type="checkbox"/>	I am aware that The University of Iowa and other legitimate businesses will not ask me for my passwords or personal information via e-mail or phone.
<input type="checkbox"/>	I know how to lock my workstation by pressing Ctrl-Alt-Del and choosing "Lock Computer."
<input type="checkbox"/>	I regularly lock my workstation (or log out) any time I step away from my computer.
<input type="checkbox"/>	I understand and practice strategies for keeping a strong password.
<input type="checkbox"/>	I have provided my password hints at http://hawkid.uiowa.edu .
<input type="checkbox"/>	I know how to change my password by pressing Ctrl-Alt-Del and choosing "Change Password."
<input checked="" type="checkbox"/>	Operating System Skills
<input type="checkbox"/>	I know the difference between a file and a folder.
<input type="checkbox"/>	I know how to create and delete a folder.
<input type="checkbox"/>	I know how to start a program and how to open a document.
<input type="checkbox"/>	I understand the various ways to save my files.
<input type="checkbox"/>	I understand the functionality of the menu options in the software I use.
<input type="checkbox"/>	I know how to create a shortcut to a file or application.
<input type="checkbox"/>	I know how to drag and drop and copy and paste within files and folders.
<input type="checkbox"/>	I know how to utilize right-click mouse options.
<input checked="" type="checkbox"/>	Outlook Skills
<input type="checkbox"/>	I understand how to send and receive messages and attachments in Outlook.
<input type="checkbox"/>	I know how to resend an undeliverable or bounced message.
<input type="checkbox"/>	I know how to access and use Outlook Web Access (OWA), the Web-based version of Outlook at http://email.uiowa.edu .
<i>(Cont'd.)</i>	

Appendix 8-2. Core Competency Self-Checklist (Continued)

<input checked="" type="checkbox"/>	Outlook Skills
<input type="checkbox"/>	I know how to create an appointment on my Outlook calendar.
<input type="checkbox"/>	I know how to check the Outlook calendars of other library staff.
<input type="checkbox"/>	I know how to accept a meeting invitation in Outlook.
<input checked="" type="checkbox"/>	IT Policy
<input type="checkbox"/>	I am familiar with University information technology policies at http://cio.uiowa.edu/policy .
<input checked="" type="checkbox"/>	Technology Support
<input type="checkbox"/>	I know where to report problems/issues regarding technology.
<input type="checkbox"/>	I understand the importance of noting exact error messages.
<input type="checkbox"/>	I understand that restarting the computer is always the first step to take when a problem occurs.
<input type="checkbox"/>	I know that I should report a problem to LIT only if I can replicate it after restarting my workstation.
<input type="checkbox"/>	I understand how to provide LIT with enough detail so that they have sufficient information to attempt to replicate the problem.
<input type="checkbox"/>	I know how to contact LIT by phone and by e-mail.
<input type="checkbox"/>	I am familiar with the LIT Web site at http://intranet.lib.uiowa.edu/lit .
<input type="checkbox"/>	know the procedure for requesting new hardware and software as described on the LIT Web site.
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Appendix 8-3. Adobe Contribute Software Competencies List

LEVEL 1: BASELINE	LEVEL 2: INTERMEDIATE	LEVEL 3: ADVANCED
<ul style="list-style-type: none"> • Understand the libraries' Web policies as stated in the Web Policies Guide. • Know where to locate Contribute documentation on the staff intranet. • Know where to look for help and troubleshooting information within Contribute. • Understand the difference between www.lib.uiowa.edu and test.lib.uiowa.edu. • Be able to locate and open files. • Be able to edit an existing page. • Be able to change text size, style, and justification. • Be able to create links to other pages and e-mail addresses. • Be able to create links to non-Web files (e.g., PDF files) • Be able to create a new page in the appropriate library template and publish it. • Know how to form a proper page title. 	<ul style="list-style-type: none"> • Be able to add a borderless PDF icon next to PDF links. • Be able to create an anchor on a page and link to it. • Be able to insert images. • Be able to insert a table. • Know how to use the "imgborder" (image border) style. • Be able to add page keywords and descriptions. 	<ul style="list-style-type: none"> • Be able to make a copy of an existing page. • Be able to edit images (resize, crop). • Be able to edit a table (resize, add rows and columns). • Know how to use Shared Assets (where available). • Know how to create a link to proxied URLs.

Appendix 8-4. Guide to Using the Core Competency List

The Libraries Information Technology Advisory Committee (LITAC) has prepared a document entitled *Library Technology Skills: Core Competency List*. This document outlines three levels of basic technology skills. **Level 1: Baseline** lists those skills in which all libraries' staff should show proficiency at the time of hire or as soon as possible thereafter. **Level 2: Intermediate** and **Level 3: Advanced** outline skills that might be required depending on individual job responsibilities. For some positions, these skills are needed in order to complete essential job functions. For other positions, these skills are desirable, although the need to learn them is not as immediate.

New employees should be able to demonstrate Level 1 and any appropriate Level 2 and Level 3 skills, identified by the supervisor, by the end of the training period.

Although these instructions reference new employees, supervisors should also review the Core Competency List with current employees, perhaps at the time of performance appraisal.

1. **What to do when filling a vacant position:** During the search and interview process, the supervisor should keep in mind the technical skills required for the position, referring to the Core Competency List as needed, and consider including them in the stated qualifications.
2. **What to do when preparing the training plan:** Before a new employee begins, the supervisor should review the Core Competency List to determine which skills are relevant to the position. These competencies should be highlighted and prioritized.
3. **What to do the first week:** Within the first week of employment, the supervisor should review the highlighted Core Competency List with the employee and make note of which skills the employee already possesses and which will require further training. A copy of the annotated Core Competency List should be given to the employee for future reference.
4. **What to do when arranging training:** The supervisor should determine what training can be accomplished within the department. It is likely that much of the initial overview or basic training can occur there. The supervisor can then arrange with the staff of ISST (Information Systems Support Team) for any additional technical training required by the employee. When necessary, ISST staff will work with the supervisor to develop and implement a personalized technology training plan (e.g., one-on-one training sessions, SkillSoft training, etc.).
5. **What to do as follow-up:** Supervisors and employees may review the Core Competency List during performance evaluation conferences. Employees may request, or supervisors may identify, additional technical training as appropriate.

Rev. 12/8/04

Appendix 8-5. The University of Iowa Libraries' Framework for Staff Training, Development, and Enrichment

	DISTINGUISHING CHARACTERISTICS	EXAMPLES	WHO IDENTIFIES THE NEED?	WHO COORDINATES AND SCHEDULES	WHO DELIVERS THE INSTRUCTION?	HOW IS IT BEST DELIVERED?
Staff training: Employee change	<ul style="list-style-type: none"> Required New employee, employee with new tasks, job training Something about the employee's situation triggers training need May be handled differently for student vs. Merit/Professional and Scientific (P&S) Immediate application in job Typically takes place where employee works or close approximation 	<ul style="list-style-type: none"> Checking out a book Cataloging a CD Working at a public service desk Filling out an EMJFA Chairing a P&S search Assuming new selection responsibilities 	<ul style="list-style-type: none"> Supervisor Employee Library administration Library HR ISST/Automation University HR 	<ul style="list-style-type: none"> Supervisor Library HR 	<ul style="list-style-type: none"> Supervisor or designee Web-based or print documentation SkillSoft ISST/Automation Library HR 	<ul style="list-style-type: none"> One-on-one (verbal, hands-on at desk, etc.) Self-directed, self-paced (library intranet, online tutorial, SkillSoft, iLecture, etc.)
Staff training: System change	<ul style="list-style-type: none"> Something about the institution or the environment changes Change in procedures, change in technology or infrastructure Improved workflow Necessary for doing job after change is implemented 	<ul style="list-style-type: none"> New e-mail system New calendar system New version of InfoHawk Training supervisors in new university sexual harassment policy University workflow change Change in library procedure 	<ul style="list-style-type: none"> Supervisor Library administration Library HR ISST/Automation University HR 	<ul style="list-style-type: none"> Supervisor Library HR ISST/Automation Library staff development InfoHawk subcommittee Task force or working group 	<ul style="list-style-type: none"> Supervisor or designee Web-based or print documentation SkillSoft ISST/Automation Library HR University HR 	<ul style="list-style-type: none"> Self-directed, self-paced (library intranet, online tutorial, SkillSoft, etc.) Small group (hands-on in department, etc.) Large group (lecture with handout, etc.)

Appendix 8-5. The University of Iowa Libraries' Framework for Staff Training, Development, and Enrichment (Continued)

	DISTINGUISHING CHARACTERISTICS	EXAMPLES	WHO IDENTIFIES THE NEED?	WHO COORDINATES AND SCHEDULES	WHO DELIVERS THE INSTRUCTION?	HOW IS IT BEST DELIVERED?
Staff training: Remedial	<ul style="list-style-type: none"> Not triggered by a change in situation Employee evaluation may identify training need Typically not related to primary job tasks Typically not urgent, but still has immediate application 	<ul style="list-style-type: none"> Improving customer service skills Using network directories Changing application defaults 	<ul style="list-style-type: none"> Employee Supervisor 	<ul style="list-style-type: none"> Library HR ISST/Automation 	<ul style="list-style-type: none"> Employee Supervisor Supervisor or designee Web-based or print documentation SkillSoft ISST/Automation Library HR 	<ul style="list-style-type: none"> Self-directed, self-paced (online tutorial, SkillSoft, iLecture, etc.) One-on-one (verbal, hands-on at desk, etc.)
Staff development: Job-related	<ul style="list-style-type: none"> Typically voluntary Will improve ability or quality of job May or may not have immediate application Often take notes Requires supervisor approval Ongoing learning, improving, updating skills May prompt attendee to propose workflow change, which then requires training 	<ul style="list-style-type: none"> Customer service Working with international students Conducting better evaluations Intro to Online Resources Working with digital images Staff recognition programs Getting published 	<ul style="list-style-type: none"> Library HR Library committee ISST/Automation Library staff development Library administration 	<ul style="list-style-type: none"> Library staff development 	<ul style="list-style-type: none"> Typically university expert May be in-house May be outside paid instructor 	<ul style="list-style-type: none"> Large group (lecture with small group activities, presentation, Q&A, etc.) Small group Self-directed, self-paced (SkillSoft, library intranet, etc.)

Appendix 8-5. The University of Iowa Libraries' Framework for Staff Training, Development, and Enrichment (Continued)

	DISTINGUISHING CHARACTERISTICS	EXAMPLES	WHO IDENTIFIES THE NEED?	WHO COORDINATES AND SCHEDULES	WHO DELIVERS THE INSTRUCTION?	HOW IS IT BEST DELIVERED?
Staff development: General interest	<ul style="list-style-type: none"> • Topics that are informational or of general library interest • Open to all staff • Typically no immediate work application • Rarely take notes • Supervisor approval only to ensure continuity of service 	<ul style="list-style-type: none"> • What's new in InfoHawk • Update on emerging technologies • What's new in a branch library or department • Provost Hogan talk • My sabbatical as a third-world librarian • Hot topic in librarianship • Overview of university benefits 	<ul style="list-style-type: none"> • Library administration • Library committee • Library HR • Library staff development • Branch library or department 	<ul style="list-style-type: none"> • Library staff development 	<ul style="list-style-type: none"> • Library staff • University staff • Guest 	<ul style="list-style-type: none"> • Library forum • Large group (demonstration, presentation, Q&A, etc.)
Enrichment	<ul style="list-style-type: none"> • Voluntary • Not on work time • Informal • Open to all staff • Typically interactive, thought-provoking • Discussion format • Hot topics 	<ul style="list-style-type: none"> • Discussion of gay marriage issues • Consumer technology gift ideas • Human rights issues • Implications of RFID (radio frequency identification) 	<ul style="list-style-type: none"> • Any staff member • Library committee • Library HR • Library staff development • Library administration 	<ul style="list-style-type: none"> • Library staff development 	<ul style="list-style-type: none"> • Typically in-house, although host may arrange for others to lead or participate 	<ul style="list-style-type: none"> • Brown bag sessions may be small group (facilitated discussion, etc.) or large group (facilitated discussion, etc.)

Appendix 8-6. The University of Iowa Libraries' Technology Training Recommendations for Merit and P&S Staff

GENERAL RECOMMENDATIONS

1. The Libraries should adopt the task force's Framework for Staff Training, Development, and Enrichment (Attachment A) as a model for the Libraries' staff instructional programs.

Executive Committee (ExCo) approved this recommendation and instructed the task force to develop a plan for communicating the new model to staff (e.g., a library forum) after making final edits to the documents.

2. Supervisors at all levels should assume responsibility for the training needed by their employees. Supervisors are responsible for training in local processes and workflows.

ExCo approved this recommendation. Directors will ensure that supervisors in their directorate are aware of these responsibilities.

3. Administrators and managers should emphasize to supervisors the importance of orientation and training of new staff and of new systems to all staff.

ExCo approved this recommendation. Directors will emphasize this with the supervisors and department heads in their directorate.

4. The Libraries should regularly provide opportunities for supervisors to develop and improve their training skills (effective training techniques, adult learning, etc.).

ExCo approved this recommendation. Libraries' Human Resources/Staff Development will implement.

TECHNOLOGY TRAINING RECOMMENDATIONS

5. Supervisors should make use of the Libraries' Core Competency List (maintained by Libraries Information Technology Advisory Committee) to identify technology training needs for new employees and to develop a plan to meet those needs, relying on Information Systems Support Team (ISST) staff resources as necessary. See the Guide to Using the Core Competency List for details. (The Guide and the Core Competency List are included here as Attachments B and C.)

ExCo approved this recommendation. Libraries' Human Resources will incorporate these instructions into materials given to supervisors on orientation and training for new staff, as well as into the performance evaluation systems for staff.

6. Supervisors should contact ISST and the Automation Office to arrange for each new Merit and Professional and Scientific (P&S) staff to meet with a representative from each of the two departments within the first few weeks of employment for hands-on orientation and training in system-wide technology.

ExCo approved this recommendation. Libraries' Human Resources will incorporate these instructions into materials given to supervisors on orientation and training for new staff.

7. Supervisors should arrange for each new P&S staff to meet with the heads of ISST and the Automation Office within the first two months of employment for a high-level overview of system-wide technology and related issues.

ExCo approved this recommendation. Libraries' Human Resources will incorporate these instructions into materials given to supervisors on orientation and training for new staff.

(Cont'd.)

Appendix 8-6. The University of Iowa Libraries' Technology Training Recommendations for Merit and P&S Staff *(Continued)*

TECHNOLOGY TRAINING RECOMMENDATIONS *(CONT'D.)*

8. Staff from ISST and the Automation Office should assume responsibility for identifying and for providing and/or coordinating technology training that is required by all (or large numbers) of staff across multiple departments. Libraries Staff Development may provide coordination, consultation, and support.

ExCo approved this recommendation. ISST and the Automation Office will assume these new responsibilities.

9. The Libraries should increase and improve use of the intranet as a central repository of documentation and training materials for Merit and P&S staff as a way to foster good communication and to make it easier for staff to find the materials. Toward this end, ISST and the Automation Office should oversee maintenance and availability of system-wide and cross-departmental technical documentation, and individual units should maintain their local documentation and training materials on the staff intranet.

ExCo approved this recommendation. Department heads will ensure that local documentation is made available on the staff intranet. ISST and the Automation Office will coordinate efforts to determine and document procedures for posting on the Web.

ORGANIZATIONAL CHANGES

In order to implement these recommendations, we propose the following organizational changes:

1. The Libraries should disband the informal staff development technology training group. Responsibility for identifying technology training needs is distributed to supervisors (for local needs) and to ISST and the Automation Office (for system changes and other system-wide needs).

ExCo approved this recommendation. The group has already been disbanded.

2. The InfoHawk Management Advisory Committee (IMAC) should disband the InfoHawk Staff Training/Documentation Subcommittee. If the need arises, an InfoHawk working group could be charged to address a specific training or documentation issue. Routine workflow documentation and training (e.g., acquisitions or cataloging) is most effectively handled locally within the department. Cross-departmental documentation and training (e.g., circulation) is most effectively handled by the InfoHawk subcommittee responsible for that function. System-related ALEPH documentation and training (e.g., installing client software) is most effectively handled by the Automation Office and/or ISST.

ExCo endorsed this recommendation and approved forwarding it to IMAC for its discussion and action.

3. An additional employee should be hired in order for ISST to meet this increased demand for point-of-need training. This employee's primary job responsibility would be to work with supervisors to develop and implement personalized technical training plans as needed and to help identify, prepare, and deliver departmental or large group training for system changes. Recognizing the close link between technology training and desktop support, this new position would also include responsibilities for general one-on-one desktop support.

ExCo will consider this recommendation when it reviews other staff positions as part of the Provost's reallocation plan.

Respectfully submitted by the members of the Technology Training Task Force: Sue Julich, Susan Marks, Paul Soderdahl, Carlette Washington-Hoagland

January 26, 2005

Appendix 8-7. Information Technology Support Services: Classification Description

Issued October 2002

Classification Code: PC55

Title Information Technology (IT) Support Services-Level II

Grade: 08

Basic Function and Responsibility

Positions in this job family are primarily responsible (at varying degrees) for providing assistance and consultation to technology users. Incumbents may perform help desk functions and training, provide direct user support and guidance, and assist with technology planning. Incumbents at this level typically provide advanced technical support on hardware and software applications.

Distiguishing Characteristics

This classification is the second in a series of three levels in the IT Support Services family and is distinguished from the others in the breadth and depth of skills required. Incumbents may function independently in local and/or remote locations to perform work that requires extending established procedures and interpreting moderately complex issues. Errors may result in loss of customer/user time and/or data, substantial impact on unit image, and/or minimal legal exposure from software licensing noncompliance.

Characteristic Duties and Responsibilities

- Performs advanced installation, maintenance, and support of hardware and software within a given unit
- Serves as liaison between technical staff and end users to resolve customer/user problems and concerns
- Explains computing concepts to nontechnical staff
- Provides training (one-on-one, small group, and formal presentations) in the context of delivering technical support
- Recommends procedure and workflow modifications in order to use available technology most effectively
- Provides input in determining technology needs of the unit
- Assists with user account administration and file rights management
- May provide functional and/or administrative supervision over assigned staff
- *In addition to the duties and responsibilities noted above, this classification description must include one statement from each of four categories of statements (i.e., select one statement from each category, for a total of four additional statements to be added to the duties and responsibilities section). To view the list of statements and explanations of their intended application, please go to the following web page: www.uiowa.edu/hr/classcomp/expectations.html*

Supervision Received

Direction is received from IT Support Services Level III or above or (IT or non-IT) supervisor.

Minimum Qualifications

A bachelor's degree in related field and experience (typically 1-3 years) in IT Support Services is necessary. An equivalent combination of education and related experience may also serve to meet these minimum requirements.

Knowledge, Skills, Abilities

Knowledge, skills, and abilities are cumulative from previous levels in this job family. Certain of the following items may be required based on the specific needs of the position.

- Full understanding of desktop operating systems, hardware configurations, and software
- Basic understanding of network concepts and/or administration
- Ability to work independently in local and/or remote locations
- Ability to prioritize multiple tasks
- Skill in explaining computing concepts to nontechnical staff
- Skill in providing technical training (one-on-one, small group, and formal presentations)

Appendix 8-8. Position Description: Desktop Support and Technical Trainer

Position: Desktop Support and Technical Trainer
The University of Iowa, Library Information Technology

Summary

Reporting to the Head, Desktop Support Services, this position coordinates technical training and provides desktop support for library staff located in the Main Library, Hardin Library for the Health Sciences, and 10 branch libraries.

Specific Responsibilities

- Work with supervisors to develop and implement personalized technical training plans as needed
- Help to identify, prepare, and deliver training to library staff
- Provide first- and second-tier desktop computer support and systems support for the university libraries, including all branch libraries
- Serve as backup for Information Arcade PCs and Macintosh computers
- Provide functional supervision over other LIT desktop support and training staff; provide administrative and functional supervision over LIT student staff
- Assist with the distribution, installation, and testing of hardware and software for library staff workstations
- Provide support and training to library staff in the use of applications needed for word processing, graphic design, databases, communications, spreadsheets, Web authoring, multimedia, and other areas as they arise
- Serve as information technology consultant to library staff with respect to computer use, applications, needs, networking, and support services
- Assist in evaluating the ongoing information technology needs and services provided by the university libraries
- Assist library staff with Internet applications, Web site development, educational and instructional technologies, and related technologies
- Recommend changes to procedures and staff workflow as appropriate
- Help recruit and retain a well-qualified and diverse staff

Additional Expectations of the Position

- **Civil and Respectful Interactions:** Demonstrates respect for all members of the university community in the course of performing one's duties and in response to administrators, supervisors, coworkers, and customers
- **Diversity and Inclusion:** Welcomes the richness of talent from a diverse workforce and recognizes that diversity brings stimulation, challenge, and energy that contribute to a productive and effective workplace
- **Leadership Accountability:** Represents the interests of the university and of unit leadership in the use of resources to meet service and productivity demands within unit goals and budgets; strives to promote continual process and quality improvement
- **Learning and Professional Development:** Seeks opportunities to enhance one's own professional knowledge, skills, and abilities as they relate to one's current position and/or to prepare for potential future roles and overall career development

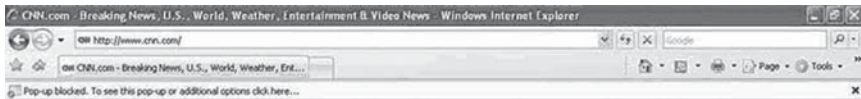
Appendix 8-9. Selected Weekly Tech Tips, January and February 2007

2/1/07

Weekly Tech Tip-IE7 and RSS Feeds

With the upgrade from Internet Explorer (IE) 6 to IE7, we discover many exciting new ways to stay jacked into the zeitgeist. This week: RSS Feeds! (Bring the latest in Library Science, Information Technology, and celebrity gossip right to your fingertips.)

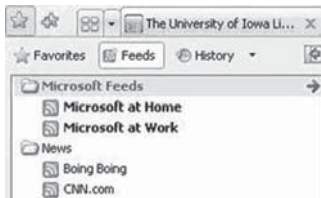
Perhaps you have noticed that in addition to Windows' many dings, beeps, balloons, and puppy dogs, different buttons occasionally begin to glow, seemingly of their own accord. In IE, see the orange button below that looks like this?



When you visit certain Web sites, this will glow to indicate that they have RSS Feeds available.

RSS stands for "Really Simple Syndication" and is an XML format used to send quickly changing digital content to subscribers. It can be read by standalone feed readers or by browser-integrated readers such as IE7. Basically, it's a way to get news blurbs quickly without going to several news sites and loading the pages with all of their ads and pop-ups (see that yellow bar above-thank you, CNN). RSS shows a distilled version of the site, which usually contains a headline, a brief, and a link to the full story. However, RSS Feeds can include images, full-length stories, blogs, or whatever.

After you subscribe, click the favorites button, then choose Feeds:



From here you can view all of the feeds you've subscribed to. Notice that it shares a space with Favorites and History, so don't forget to click back to Favorites when you want to visit other saved Web sites.

This just in! According to Linda Roth, the UofI Libraries will soon be sporting its own RSS Feed with links to newsletters and other info. Stay tuned to this e-mail and the listservs to find out when it's available.

As Fritz said, "If you're not jacked in, you're not alive." (BtVS, Season 1, I Robot . . . You, Jane)

Now, save the latest Brangelina feed for later and get back to work.

Special thanks to Paul Soderdahl for suggesting this week's topic.

(Cont'd.)

Appendix 8-9. Selected Weekly Tech Tips, January and February 2007 (Continued)

1/4/07

Weekly Tech Tip-IE7 Menu Bar
Greetings fellow library workers!

This is the first in a series of weekly Tech Tips I will be sending out to the lib-forum list. The subject line will show the topic for each week's e-mail, so feel free to disregard the message if you already know all about it.

This week's topic: What the heck happened to my Internet Explorer menu bar!!!?
Answer: It's still there; however, there are basically two ways to access the menu items:

- All of the menu items can be found somewhere in the new streamlined interface. For example:
 - o Favorites are under the Star button on the top left
 - o "Save As" and "Send Link" are found on the right under the Page button
 - o "Internet Options" are found under the Tools button on the right.
 - o Can't find something . . . ? Hit the F1 key for help!

OR

- Hit the "Alt" key on your keyboard. The menu will reappear just as before.

I encourage you to explore the new interface whenever you get a chance. Click here for a tour that highlights many of the new features of IE7. Microsoft will continue to change the appearance and function of its Office tools, so open yourself up to change and assume they are not random and senseless, but improvements based on years of market research costing millions of dollars. ;)

Finally, I encourage you to send me suggestions for future Weekly Tech Tips. Try to avoid topics that everyone should already know, such as "how to create a calendar appointment" or "how to use InfoHawk."

I'm looking for topics that are short, helpful, and fall under the heading of "Here's a cool feature that everyone ought to know about!"

1/18/07

Weekly Tech Tip-Phishing Scams

This week's topic is very near and dear to all of our hearts here in LIT. Namely, **PHISHING**. I will now avoid the obvious water sports jokes and leap directly into the education part:

Wikipedia says: "In computing, phishing is a criminal activity using social engineering techniques. Phishers attempt to fraudulently acquire sensitive information, such as passwords and credit card details, by masquerading as a trustworthy person or business in an electronic communication. Phishing is typically carried out using e-mail or an instant message, although phone contact has been used as well."

The following figure (courtesy of my UofI inbox) has several tell-tale signs of a fake e-mail:

1. "Dear Bank of America Member"—**It does not contain your name.**
2. "If this is not completed by January 16, 2007, will be forced to suspend your account indefinitely . . ."— **This threat conveys urgency and wants you to respond quickly, without thinking.**
3. **My favorite, and the one that fools the most people: Notice the pop-up balloon in the following:**

(Cont'd.)

Appendix 8-9. Selected Weekly Tech Tips, January and February 2007 (Continued)



If you roll over the [bankofamerica.com](http://www.bankofamerica.com) link, you'll notice the actual link will take you to [33rd.de/boa/](http://www.33rd.de/boa/) (.de = some Web site based in Germany). What is this? Who knows? I didn't follow it. And neither should you.

There are hundreds of variations on this theme. If you follow this link (please don't), you will probably see a very good copy of the Bank of America Web site. When you input your username and password, you've just given it to the criminals.

If you see an e-mail like this and you're really worried about your money, type your bank URL into a browser and login to your account. DO NOT FOLLOW LINKS SUPPLIED BY QUESTIONABLE EMAIL.

Also, there is no one in Nigeria who wants to give you a cut of \$21,320,000.00. Trust me.

Have you seen Snopes.com, yet? (www.snopes.com/crime/fraud/nigeria.asp) It's a great site to send to all of those annoying relatives who keep sending you chain letters about gas prices or Do Not Call lists. You're not doing that are you? I didn't think so.

Here's a final link to our good friends at Microsoft with more to say about phishing: www.microsoft.com/athome/security/email/phishing.mspx.

Remember: You are the fish. Avoid the hook.