

## **AC 2009-1403: COMPETENCIES FOR STUDENT-SUPPORT STAFF AND ENGINEERING LIBRARIANS**

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## **Competencies for Student Support Staff and Engineering Librarians: Did we answer your question?**

### Introduction

It's a dark and rainy Sunday night at 10pm. Two student workers are the only staff in the engineering library. The phone rings ominously. On the other end is a distraught professor. The article database that he often uses is asking for a password, which it has never done before. The other student worker sees a young student at the counter fighting back tears. "The copy machine is out of toner". As soon as that problem is solved there's another student asking how to find an SAE paper. The next student in line wants information on Charles Dickens' Great Expectations.

Can student workers solve all of these problems? Should they be able to? Would a set of competencies prepare them to excel at their jobs?

### Background

We think that student support staff should be able to solve a wide range of problems. It is our job to give them the necessary training. Wendt Library at the University of Wisconsin-Madison is a large engineering library which relies heavily on student staffing at the public services desk. The public services desk is a multi-function area with Circulation staff at one end and Reference staff at the other. Reference librarians staff the desk 41.5 hours/week, but Circulation students staff the desk without librarians 61.5 hours/week. Staff are well trained, but there is room for improvement. We want to ensure a positive experience when patrons do ask a question at the public services desk.

Our librarians work closely as department liaisons with faculty and students, teaching course-related sessions and creating library course pages for faculty. They make promises to students and faculty that certain materials are available through the library. If these students come to the library and are unable to find these promised materials, the liaison librarians have egg on their faces.

We employ 13 student circulation staff and have seven reference librarians, one reference librarian intern, one reference student and one practicum reference student. We have a low turnover rate for student staff, needing to hire only one to three new people each semester. Even with low turnover, we train approximately three librarians and five students every year.

We have several types of training for our staff. We provide a formal six-eight hour training program for circulation students and on the job shadowing for both circulation students and reference librarians. We keep reference staff up to date with monthly reference training programs which are co-presented by an experienced librarian and a newer librarian. We also send our

reference staff semimonthly emails of five interesting or difficult reference questions. Questions are compiled from our database of incoming questions with their answers and annotated with additional comments by our Reference Coordinator.

Competent staff should know when and how to refer questions. We want our student staff to refer general questions to the campus chat librarians who are available during the evenings and on Sundays. We also want our student staff to refer engineering reference questions to our own librarians.

All of our current training programs do not guarantee consistency of excellent service. We realize that staff need more competence in answering simple reference questions and in referring more complicated reference questions. Staff are motivated to do a good job and are willing to learn, but don't always know what is expected of them or what level of expertise they are responsible for achieving.

#### Definition of competence

Competence is "...the state or quality of being capable of adequate performance. Individuals are described as competent if they can meet or surpass the prevailing standard of adequacy for a particular activity. While competence does not equate with excellence, it does imply a level of proficiency that has been judged to be sufficient for the purpose of the activity in question." <sup>1</sup>

The literature surrounding competency presents 1) a behaviorist approach where the competency is a list of tasks; and 2) an integrated, holistic approach where the competency is part task, part attitude and part adaptation to context. The integrated approach elevates the roles of coaching and problem solving in actual world settings. <sup>2</sup>

The competency training program can provide a foundation of learning for a set of tasks, but attitude and interpretation of context are an important part of library staff training. On-going job training is best accomplished by interacting with a mentor/supervisor and learning day by day. Based on our research and needs we decided to adopt the competency-based training (CBT) model. CBT has three parts: a set of defined competencies, a training program, and an assessment. <sup>3</sup> We hoped to provide systematic training and assessment for our circulation and reference staff.

#### Writing the competencies

Our process began by defining a competency. A competency can be a general description, for example, SLA professional competencies: "advises the organization on copyright and intellectual property issues and compliance" <sup>4</sup> A competency can also be a very specific set of tasks, such as, "To search by author type last name first." Our Reference staff met to look at examples and discuss what level of specificity we should use. We decided to write competencies that were

general enough not to need constant updating, but specific enough to use the tasks in the competency as learning objectives for training purposes.

We used a problem-based approach to decide which competencies to create. Student staff and librarians contribute data to a reference question and answer database. We reviewed the data and identified areas where staff could improve. We also had personal experiential data from working next to student staff in our combined service/reference desk. Twenty-five databases were chosen which were deemed popular or essential to the specific campus community that we serve (engineering/computer science/statistics/oceanic and atmospheric studies). The competencies lists were reviewed by all reference staff. The Refworks competency is an example of one that was suggested by reference staff and added to the list.

We identified two different types of competencies: services and databases. We created a list of services competencies and a list of database competencies (Appendix A). Members of the reference staff volunteered to work on either the services competencies team or the database competencies team. Armed with our competencies lists, each team met separately to write the competencies.

Each competency has the potential to have three different, increasingly difficult levels of expertise. Every competency has a Basic Level that all staff, including student circulation staff, is required to complete. For some competencies, the basic level is just to know how to locate a specific resource, but not necessarily know how to use it. The Intermediate Level must be completed by all staff, excluding student circulation staff. The Intermediate level for databases is aimed at student and intern reference staff who are only on staff for 6-18 months. The Advanced Level must be completed by permanent Reference staff. While every competency has a Basic Level, we found that not every competency warranted the additional levels.

The database competencies team was the larger of the two due to the enormous amount of resources that are available at University of Wisconsin-Madison. The five members of this team were assigned or volunteered to write certain competencies (deadlines included). They then met as a group to edit the competencies. After the group edit, the database competencies were sent to the services team for another editing session.

The services competencies team had only three members. Because of the small nature of the group, they met and collectively brainstormed to write fifteen service competencies. They met a few times and wrote a couple of competencies each time. The services team then submitted their competencies to the database team for editing.

Once drafts were edited by the other team they were sent back to the original team, who responded to the suggested edits. Initially we thought to run all final drafts by the entire reference staff, but after doing this once found that it was very time consuming, and not worth the effort. Staff on both teams who created the competencies found, for the most part, that it was easier than expected, and very worthwhile. Many staff felt that they learned valuable new

reference tools and that our customer service would improve as a result of these competencies. One of the biggest challenges we faced was distinguishing the fine line between the different levels of competencies. Another challenge was the large scope of the project. Sometimes it is difficult to start a project when you can't see the end of it. We also "took a break" from this project at the beginning of the fall semester, when we were extremely busy.

### Writing the training and assessment

Once the competencies were written, reference staff met to discuss the next step. We formed a smaller subgroup of seven volunteers to help write the training and assessment pieces based on our final competencies.

The Reference Training and Assessment team was co-chaired and included some former members of the competency teams. At this point, about 35 of the competencies had been finalized. Along the way we added a few and revised some but felt we had enough to get started.

The co-chairs assigned completed competencies to team members based on individual expertise. Each team member had the same number of pieces to write and was assigned an editing buddy from within the team. The idea was that an individual would create a training and assessment piece and then have their editing buddy provide feedback. The plan was designed to optimize our progress in moving forward.

Before actually beginning to create training documents or tutorials we held several brainstorming sessions about different tools we could use. We realized early on that different competencies would require different methods of training and assessment, and we explored many possibilities. Several team members looked into already created materials that are provided by library websites, teaching librarians, or commercial vendors. In the end it was determined that group members could choose their own tools for the pieces they were creating, but the underlying goal was that every piece should be simple and easy to use (and edit). Training pieces could be video tutorials, but more ideally would be PowerPoint or other easily created materials. We agreed that we would not create very specific materials that would need constant updating, such as screen shots of our campus library web page within a video tutorial. Assessment pieces could be quizzes, or simple exercises, for example: making a pdf of a microfiche and emailing it to a supervisor. "Less is more" became our motto.

Team members had deadlines for the completion of individual training and assessment pieces. After each deadline we met as a team and did a show and tell of our latest creations. The team made edits together and then the individual finalized the changes and submitted them for addition to our online learning management system – Moodle.

## Moodle as the online framework

Our staff had experience using online course management software: Web CT and Desire2Learn. We understood that use of an online course management system would enable us to package all elements of the training and assessment, simplify the grading of a learners progress and possibly provide a more engaging learning environment. Our main choice was between using Desire2Learn (D2L) or the open-source Moodle platform. We were familiar with D2L and the range of tools it offered. At the same time, use of Moodle on campus was growing fast, and the College of Engineering had recently adopted Moodle as the recommended platform for faculty-created course websites. Moodle offers useful teaching tools such as quizzing and grade-books, and is easier to use than D2L, while offering many of the same features as D2L.

We ended up switching our platform from D2L to Moodle quite early in the process for a number of reasons. First, we had recently hired a staff member with extensive experience teaching in Moodle. We also wanted to explore Moodle as a possible alternative to another D2L online course that the library teaches. The ease of learning Moodle, as compared to D2L, and the comparatively small amount of administrative intervention involved in its use seem to make it more flexible. As staffing changes over time, we need a tool that doesn't present too many obstacles and can be learned easily by new people. In short, it was the economical choice for us to make, as it could get the job we needed done without being as fully developed a software as D2L. Early on in the process we had agreed to seek the most efficient solutions that would get the job done, selecting tools that would make frequent updates feasible and still remain easy to use for "trainees."

So what, exactly, would go into our Moodle Reference Training & Assessment course? Our "course content" needed an organizing principle, but beyond that, any type of media or presentation of materials would be used. We had decided that the training and assessment for a given competency could take any form deemed appropriate to the job. For example, a Captivate tutorial may be the tool of choice for explaining the nuances of searching ENGnetBASE, followed by a quiz. Or, it may be decided that in-person training is the right approach, followed by a scavenger hunt assignment. Either way, a literal description of the training, and all relevant training materials would be presented in its designated place in the table of contents. In the event that a training exercise consists of a simple instruction, such as, "Get a tour with the Circulation manager before completing Part Two," this instruction is literally stated in the Moodle entry for that competency.

## What's next

The ebb and flow of the academic year has slowed the development of the competency project. Many team members are busy doing reference and instruction and unable to work on staff training until later in the semester. The training and assessment pieces for the finished competencies are not all in the online Reference Training & Assessment course in Moodle.

Meanwhile, to identify any problems with our training materials or process, student reference staff are testing each module as it is finished. So far our students have given us useful critiques about:

- ease of use
- effectiveness and appropriateness of the content and assessment pieces
- effectiveness of assessment activities and quizzes for reinforcing training lessons
- alignment with the stated competencies
- errors and gaps in coverage
- wording, visual appeal, and organization

With this feedback we are able to assess each module for improvements as we progress through the entire list of competencies. Since the Wendt Library Training & Assessment project is still a work in progress, we haven't been able to assess the program as a whole yet. The assessments conducted so far have proved invaluable to us for improving the quality of our training materials.

### Summary

Our project was designed to supplement existing on-the-job training. Our goal was to improve service to our customers and help staff understand their levels of responsibility. We wrote task specific service and database competencies at multiple levels of expertise. The project was time-consuming, but helped us to define our expectations of support staff and professional librarians. The involvement of most reference staff in the project helped spread out the work load and was a training opportunity in itself. When a dark and stormy night confronts our student staff with a barrage of difficult questions, the staff will have been well trained.

### Appendix A. Service competencies

	Basic	Intermediate	Advanced
Reference interview /customer service	X	X	X
Wendt Library Building	X	X	X
Misc. Equipment & Suppli	X	X	X
Computers	X	X	X
Copiers/Scanners	X	X	X
Wendt Library Staff	X	X	X
Wendt Library website	X	X	X
Libraries website	X	X	X
Library Express	X	X	X
Book Retrieval	X	X	X
Ask a Librarian	X	X	X
Emergency/Security	X	X	X

## Appendix B. Database competencies

	Basic	Intermediate	Advanced
OPAC Basic	X		
OPAC		X	X
WorldCat	X	X	X
Metalib Quicksearch	X	X	X
Engineering Village (Compedex)	X	X	X
Knovel	X	X	X
ENGnetBASE	X	X	X
SAE Digital Library (or on CD)	X	X	X
Google Scholar	X	X	X
Applied Science Full Text	X	X	X
Proquest Research Library	X	X	X
Web of Science	X	X	X
PubMed	*	X	X
CSA Technology Research	*	X	X
ABI Inform	*	X	X
IHS Standards Database	*	X	X
SciFinder Scholar	*	X	X
ASM Handbooks Online	*	X	X
Proquest Newspapers	*	X	X
Proquest Dissertations	*	X	X
NTIS database	*	X	X
Energy Citations	*	X	X
Safari	*	X	X
NetLibrary	*	X	X
IEEExplore	*	X	X
RefWorks	X	X	X
An asterisk indicates being able to locate this resource, not how to use it.			



## Appendix C. Sample service competency

### Copiers and Scanners Competencies

#### *Basic*

1. Know where the scanners/copiers are located throughout the building
2. Be able to demonstrate how to use the scanners/copiers
3. Be able to demonstrate how to use the microfiche scanner/printer
  - How to load the machine
  - How to switch between fiche and film
  - How to create PDFs from fiche and film using Adobe
  - Be able to focus and zoom in
4. Know how to troubleshoot equipment problems
  - Know how to clear a paper jam
5. Know how to change toner
6. Know how to fill paper. Wendt copiers only have 8 ½ x 11.
7. Know how to make 2 sided scans.
  - Know how to print or email document.
  - Know how to tell patron to check their email for scanned document before leaving building.

#### *Intermediate*

1. Know if the light that illuminates the screen goes off on microfiche machine, that it is too hot and needs a break
2. Know how to scan negative microfiche if you are getting black pages
3. Know how to contact equipment support technicians (Canon, Xerox)
4. Know when it is appropriate to call for service on machines
  - Know to turn on/off machine if you get the error code U6-03, before calling for service

## Appendix D. Sample database competency

### WorldCat Competency

#### *Basic*

1. Know what it is and where to find it.
2. Know when to use it instead of MadCat or System Search (for books)
3. Know how to do a basic search
4. Understand that you can connect to MadCat or Library Express from WorldCat

#### *Intermediate* (In addition to Basic)

1. Know how to interpret results (tabs, editions, etc)
2. Be able to explain the information found in a record to a patron
3. Demonstrate how to initiate a request (if necessary)

#### *Advanced* (In addition to Intermediate)

1. Know how to do advanced searches (including limits)
2. Know how to sort results
3. Know when to ask the expert about serials records in WorldCat
4. Be able to explain the depth of information contained in the database and how to use it as a resource tool.

## References

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