Summer 8-21-2000

Making the Transition from Special to Academic Librarianship

Philip Barnett
CUNY City College

How does access to this work benefit you? Let us know!
Follow this and additional works at: http://academicworks.cuny.edu/cc_pubs
Part of the Library and Information Science Commons

Recommended Citation
Making the transition from special to academic librarianship


http://www.acscinf.org/content/220-technical-sessions

Earlier today two people spoke about two different kinds of careers in chemical information.

Patricia O'Neil gave a talk on what it is like to work in academic libraries, and Steve Boyle described working as a chemical information specialist in industry.

These talks brought back memories of when I made the transition from being a laboratory chemist to a chemical information specialist.

There is another kind of transition in chemical information, making the adjustment from working in a special library or information center, to becoming an academic librarian. This also is a transition I made. Today I will concentrate on describing this transition.

My talk is primarily aimed at people who are already working in some information capacity either as an information specialist or special librarian, and want to know how different it would be to work in an academic library. What I have to say is also appropriate for people who someday may make this transition.

I will point out the differences from working in a non-academic setting to working in a college or university library. I will focus on the adjustments you need to make, and any additional training you may need.

First let's look at the simplest and easiest transition, the one from working as an industrial chemical information specialist to becoming a librarian in a dedicated chemistry library.

If you are spending most of your time working with and serving the needs of research chemists, there isn't all that much difference if you switch to working in a dedicated chemistry library in a college or university. In both settings you are working mostly with chemists who speak your language. Most of the library's patrons have similar training and background to yours.

If you move from an industrial chemistry library to an academic chemistry library there are some adjustments you definitely do need to make. But these adjustments are ones that all people entering an academic library must make. I will talk about them later.

It would be nice if most academic jobs were like this, where nearly every college had a dedicated chemistry library. But don't count on this. Departmental chemistry libraries are the exception not the rule on college campuses.
In the larger colleges, fewer than 20% of campuses have dedicated chemistry libraries. I don't have current data on smaller colleges, but they are much less likely than larger colleges to have separate departmental libraries (Hurd, College & Research Libraries 57:145-160, March 96).

There is also a trend away from individual department libraries towards centralization of libraries, mostly for economic reasons.

Maintaining several libraries on a college campus is more expensive than a centralized library. And journals are often the single biggest cost of running a science library. On campuses having separate departmental libraries, someone has to decide which libraries get which journals. These days so much research is interdisciplinary. This means that it is not easy to decide which library should have which journal. For example, which library should get the Journal of Chemical Physics, the chemistry or the physics library? What about the journal of physical chemistry? Journals used to be inexpensive, and colleges could buy multiple copies for their different libraries. But now, journals are so expensive that nearly nobody can afford separate subscriptions.

The next step up from working in a stand-alone chemistry library, is working in a science library or in a science and engineering library. About half the colleges in this country have separate science and technology collections. This means you have about a 50:50 chance that you will be a science specialist. You may also deal with the engineering students and faculty if the college has an engineering department. Here is where life becomes more interesting and complicated compared to working in a chemistry department library.

You may be asking yourself, how can I help patrons in subjects outside of chemistry. This sounds hard because most likely you have taken few or no courses in other sciences or in engineering. Helping patrons in other subjects is not as difficult as you may imagine. If you think about it, chemistry is difficult. The concepts in chemistry are usually much harder than the concepts and theories of other fields.

As chemists we communicate with structures rather than words. In all other fields of science and engineering, words are enough. You don’t have to understand all the concepts. You just have to know the correct combination of words to help patrons find the information they seek. You just have to talk to them. They are the experts on what they need information on. They know the terminology of their field, so they can help you formulate the correct search.

Just to show how difficult chemistry really is, when I was primarily a pharmaceutical and medical librarian, I had no trouble in this role. Even though I had only one year of biology in college and I never took any medical courses, I would often have to read or scan many medical research papers. After reading these papers I sometimes would come across a paper in biochemistry, the field where I have a Ph.D. I would often find it harder to understand these biochemistry papers than most medical papers.

If you stop and think about it, can there possibly be anything harder than P-Chem? It prepares you for anything.

The next step from working in a science or science and engineering library is working in a single centralized campus library. Your duties here may be similar to your working in a separate science
library. Here also you may be the science specialist. However, you may also have to be a generalist who must serve all the college's patrons. This kind of role may sound uncomfortable, but here also keep in mind that it is much easier for a chemist to learn the social sciences and humanities than it is for someone with no science background to learn chemistry.

If you are ever considering a position in a single campus library, read the job description to see exactly what you duties will be. Can you be just a science specialist or will you have to serve in other areas as well. If you have any doubt about what your role will be, you can clarify the exact duties of the position at the job interview.

While I am talking about your role and exact duties, there is something else you must consider, the exact nature of the students you will be serving. This is directly related to the nature of the college.

At some universities, you may be serving only advanced undergraduate students and graduate students. These students will primarily be working on their research, and the questions they bring to you won't be much different from the kinds of research questions you deal with in the private sector.

At the other extreme there is the mainly undergraduate school with few or no graduate students and little faculty research. In this setting you may spending nearly all your time with undergraduate students. Most of them may be non-science majors who were given a science assignment. Many of these students may be novice library users. Working with patrons like these is very different from working in a special library or corporate information center. In this academic setting you must constantly be a patient teacher.

The bottom line is that each academic library job is different. The title, science librarian covers a big range of specific duties. At one extreme is the dedicated chemistry library where the patrons are chemistry faculty and their research students. At the other extreme is the small liberal arts college where nearly all the patrons are non-science undergraduate students. In reality, most academic library positions are somewhere in between these two extremes.

You have to decide what kind of academic environment you are comfortable working in. You must learn as much as possible about your specific duties before taking any academic job. As I already mentioned, read the job description carefully, and at the job interview you can clarify exactly what they expect from you. Don't put yourself in a position where you will be surprised after you have been hired.

As an academic librarian you are likely to have some duties you may not have in an industrial or special library. There are two points I want to focus on, one is collecting books for your library, and the other is the different kinds of teaching you may be doing.

If you are working in a special library or corporate information center, your book collection is usually quite specialized. It is often small. It usually covers only a few subjects. Sometimes it may only cover one subject. You usually know the subjects covered in your library quite well, and it is fairly easy to select new books.
A stand alone college chemistry library will look pretty much the same as an industrial chemistry library. But as I pointed out before, there are few stand alone chemistry libraries. In academia you will most likely be working in a combined science library or in a single campus library.

There are other sciences besides chemistry. The other major sciences are of course mathematics, physics, astronomy, geology or earth and atmospheric sciences as it is often called now. There is also computer science, biology and environmental science. There may be a medical book collection. And if your library is a combined science and engineering library, you will also be collecting books in the various engineering disciplines. I am not even considering the social sciences which are usually handled by the social science librarians.

What I am saying here is that there are more areas of science than there are science librarians on most campuses. This means you will probably be responsible for selecting books in subjects where you have little or no expertise.

You do have some help in selecting books. There is usually communication between the library and the faculty of the various science departments. The faculty are often very willing to give you suggestions. But the truth is, it is much easier to select books in the field you know well than it is to select books in other fields.

Another thing you probably have to do in a college library is teaching. These days all librarians teach to some extent, but the teaching you do in academia is different than the kind you do in a corporate or special library. Ten or twenty years ago librarians did little teaching. Nearly all information sources were printed, and a librarians main role was to point people to a book catalog or to a printed index. Electronic databases did exist, but the librarian or information specialist did most of the searching and they then handed the results to the patron.

Life is different now. Nearly every library has access to electronic sources, and these sources are often used directly by the patrons. These electronic databases can do so much more than many of the older printed sources, but they are harder to use than the older printed sources. People have to be taught how to use them.

In a corporate research center, many chemists do their own searching using databases such as one of the various electronic forms of Chemical Abstracts. In some companies, chemists search more specialized sources such as, Beilstein and Gmelin online. Here, the librarian is often the person who teaches the chemist how to search these sources. Instruction is done often informally or in small groups.

In colleges teaching tends to be more formal. These days all students, even new students, must learn how to use online catalogs and online sources that are now electronic but used to be only in printed form. Students start by learning magazine and newspaper indexes, and then later learn the more scholarly electronic databases.

This means that students must be taught starting from the time they are enter as freshman. New students are often given a scheduled library orientation with a class room like lesson. Are you comfortable teaching lower level students, many of whom have never used a library before?
Are you a patient person? Do you mind giving the same introductory lessons over and over again? Can you keep in mind that while this elementary material is easy and routine for you, it is new and challenging for students learning it the first time?

Another kind of teaching takes place in some advanced courses. Some instructors like to give their students a research assignment, where they must use a specialized or advanced electronic information source. These assignments can be in any science, and you may be the one to teach them. I don't want to scare you here. Developing a lesson in an area where you have no expertise is not as hard as it sounds because you are not working in a vacuum. Before you prepare such a lesson, you sit down with the instructor for that course and work out the details. Even so, you still have to ask yourself the question, are you comfortable working in areas outside of chemistry? Here also, you need to clarify exactly what your teaching responsibilities will be at the job interview.

There is another kind of teaching at colleges. This is in an area where you are an expert. In the United States, a little less than half of all colleges have a separate course in chemical information for their chemistry majors. Also, about half the colleges integrate chemical information instruction into some of their other chemistry courses. (Arleen N. Somerville, J. Chem. Inf. Comput. Sci., 38 (6), 1024 -1030, 1998). This teaching is done by both chemistry department faculty and by librarians. So you may be called upon to teach in colleges that already offer such instruction.

In colleges that don't offer instruction you definitely have the opportunity to either create a separate chemical information course or teach as part of a regular course. Many chemistry faculty members want to teach about chemical information sources but they don't have the time. You can help them out here. Remember that all chemistry students need basic instruction in use of both the printed chemistry literature and online sources. So at any college you may have the opportunity to develop either a separate course or some type of instruction within existing regularly scheduled courses. So if you like to teach, you will either be given the opportunity to teach or you can possibly create an opportunity for yourself.

A big difference between the private sector and academia is that most college and university librarians have faculty rank. Two thirds of the academic institutions in the United States give their librarians this benefit. Another 7% of colleges give their librarians academic status, which carries many of the characteristics of faculty rank.

This is generally a very attractive benefit. It means job security. You have the opportunity for both tenure and promotion. You are much more likely to have more vacation than you do in industry. Most colleges are members of the TIAA-CREF pension plan. This is a generous and portable pension plan. You are vested right from the beginning. Many colleges offer tuition reimbursement plans for both you and your family. They sometimes even pay tuition for your family at other colleges. Another positive thing is that colleges are not taking away this faculty status for librarians. In recent years some colleges have added this benefit.

But there is another side to having faculty rank. It does come with some prices. First of all, you generally need a Masters degree in Library Science to work at a college. About two out of every three colleges require this degree. (C.B. Lowry, College & Research Libraries, 54(March
1993):163-172). Only 28% of colleges will sometimes make an exception. And only 10% of colleges do not require a Masters degree in Library Science.

Fortunately, many people who are already employed full-time decide to go to library school, and you can usually get this degree going to school part-time. And even better for many people, you can now get this degree via distance learning. Some Library Schools give you the opportunity to earn a degree without having to go to their campuses. At this time, the University of Illinois at Urbana-Champaign offers such a program. Other library schools are also going in this direction.

Another price you may have to pay when working in an academic library is a financial one. On the average, academic librarians earn less than industrial librarians. Depending on exactly what survey you look at and exactly which groups of people are being compared, generally academic librarians earn between 10 and 30% less than their colleagues in industry.

Still another price you may have pay for having faculty rank, is that you may have to publish. Fortunately, the standards for publishing in library science are not as stringent as they are in chemistry. It's much easier to get a library science paper published.

There is an ironic side to publishing a library paper. You have to have a different mindset than you do in industry. In industry how often are you supposed to help your competitors? Probably never. But in colleges you do.

In some ways colleges are like private companies. Chemical companies compete for the same customers, while colleges compete for the best students and the best faculty they can get. Colleges often use their library as a recruitment aid. A good library makes a college more attractive. In private industry you would never try to make your competitors more attractive, but in the academic world you do. You have an obligation to publish papers that benefit other libraries and librarians at other institutions.

Another thing you may have to do in academia is service to the library community. In order to get tenure and promotion you may have to be active in library associations, where you may have to serve on committees or take on a leadership role. You may get release time for some of these activities. The same is true for your work on publications. In some academic positions you may be able to work on your publications during your normal work day, at other colleges you may have to do this in addition to your normal work day, or during your vacation.

At some colleges the administrators are aware that it is difficult to find time during your normal work day for these outside activities. For example, at the City University of New York, librarians can periodically apply for research reassignment leaves, where they get a few weeks off for these activities.

Before you take any academic library position, you are much better off if you know in advance what kind of outside commitments you must make, and how much time off the college will give you for these commitments.

Overall, working as a college librarian does have one very specific advantage over working in industry. In industry there are fewer opportunities for job security than in the past. Forty or fifty
years ago, private industry provided a kind of informal tenure. People often could look forward to spending their entire careers with one company. Obviously that is no longer true. Many companies look only at the short term. Companies often move and merge, and sometimes even go out of business. Colleges are more stable. They rarely close or merge with other colleges, and they don't move, except maybe during a really bad earthquake.

I want to close by saying something about the job market for academic science librarians. Recently I was speaking to Tony Stankus who is a science librarians from the College of the Holy Cross. He has much experience training prospective science librarians. He sees a persistent shortage for academic science librarians who know chemistry, especially for librarians with good communication skills.

There are always job openings being advertised. In a typical month you will see over a dozen openings for academic science reference librarians. If you are interested in seeing what's around, the best single place to look is in the weekly publication, the Chronicle of Higher Education. Three other periodicals also list many of the academic science librarian openings. These are; College & Research Libraries News, Library Journal, and American Libraries.

There are also various listserves that list academic science librarian opening. The main one is the Chemical Information Sources Discussion List. The ACS Chemical Information Division is one of the sponsors of this listserve. Also, both the American Library Association and Special Libraries Association have listserves that post some of these job openings.

I have been in this business many years and I know many chemists who have worked in academic libraries and industrial or special libraries. I think that most people can be happy in either setting.