Advice for a New Engineering Librarian

Question: "If any of you have any advice about listservs, resources, teaching tools, outreach (or anything at all, really) that would be helpful for an Engineering Librarian just beginning his/her career, please send it my way! I'm very curious as to how those of you who didn't have disciplinary knowledge under your belt figured things out."

Responses:

- Look at some of the literature guides to engineering, such as Using the Engineering Literature. 2nd ed., by Bonnie Osif (CRC Press, 2012, either in print or via CRCnetBase. This is quite vital to understanding the key sources in each area of engineering.
- The first step I would take is to familiarize yourself with your faculty's research whether it's conferences, journal articles, patents, etc. An easy way to do this is to use the various alert services that are available on a number of platforms. For example, I have author affiliation searches running on:
  Scifinder
  Web of Science
  Geobase
  Compendex
  The NSERC funding database is a good place to look at to see who is getting funding dollars at your institution.
- If you have time, try to attend some classes to get a sense of what the students might be looking for in the library.
- If there is a weekly symposium or lecture that's open to an entire department, attend that (and bring along some business cards). It will give you some context and vocabulary. I get borrowing statistics from interlibrary loan in a spreadsheet and sort them by department to see the kinds of things researchers are looking for. This also helps me manicure the collection.
  Also, I think there might be a Science Boot Camp brewing in the Great Lakes area-- check and see if any of the sessions would be helpful to you.
- I've found that even professors who are "not willing to give up a class period" for a presentation are usually willing to let me sit in (and even announce to the students who I am). I like to get in on the first class period when the professor is going through course requirements and assignments.
- See if you can attend a faculty meeting for the various departments and/or set up an appointment to meet with the department chairs. They likely will tell you what types of resources are important; if your library catalog tracks course reserves, you can see what is placed there.
- Getting to know the clients and the faculty culture are the most important to me.
- I agree that attending faculty or departmental meetings that help you understand what's going on for your clients (such as workload and politics), how they perceive co-curricular activities

(such as info lit). You will also get to see what sort of managers the dean and heads are, and that will help you figure out how you will work with them and the academic staff.

- If you have a designated time that you spend it in the faculty, I recommend knocking on doors when you first go over, and popping in on open doors after that (as many knocks down a corridor can get a bit much). I have colleagues who frown on this tactic but it's always worked well for me.
- Knocking on doors is great. Some people have library issues that they can't find time to deal with so you remind them and you're there on the spot to deal with things, some people will be interested in working with the library and so be keen to suss you out, some people will just enjoy a human interrupting them for a few minutes and a relationship will start to evolve nicely, some people will never be interested in the library but will start to feel a bit 'guilty' that they never have anything to discuss with you so your weekly visit becomes a mutual giggle with those people, some people will be wanting to talk to you and you'll develop strong relationships with these very quickly and some people just won't care no matter what you do.
- If you don't have a designated time in the faculty, get one and publicise it every week and do the door knocking. If you can get space in the faculty (perhaps the office that no-one ever wants - in my faculty it's called "the cave" or a hot desk with admin people). I love the cave but the academics don't like it as it has no window and is a little grotty. But, it's next to the printer and the tea room - no better spot for a librarian to be :) I imagine that space pressure will result in me losing it at some point but it's been invaluable the last two or three years that I've had it.
- Getting a handle on how your clients think about things is really important too. If your background is in the social sciences or humanities, it's particularly important. It took me a couple of years to figure out that my clients and I very often come to the same conclusion but the path we take to get there is often quite different. Just having contact with them and truly listening will help there a lot. Also, check out a database like Compendex - things like controlled terms and classification codes give you a great insight into what engineers think about and the kinds of questions they ask themselves.
- Some librarians spend a lot of time criticising academic clients because they won't do what librarians recommend. In my view, every time you do this, you take away a chance to understand your clients better and, as a result, you diminish opportunities to get them engaging with the library. Your clients are lifelong learners, just like you, and if you can think of them this way, you take away the need to criticise.
- Finally, think about what being a librarian means to you. We are practising in a quickly changing environment and knowing who you are as a librarian will help you decide where to spend your valuable time and resources - you will always have more work than you can do, so you need to maximise value to your clients now and for building future relationships and engagement.
- On the student front, be available to help students however they need it (while behaving ethically obviously). Remember that we all learn differently and we aren't all ready to learn at the same time and we all prioritise differently. So, respect every student as a learner and be prepared to give them the time, support and encouragement that they need. The thing that students tell me they most value about my service is the time that I take with them to ensure

that they have learnt whatever it is they came to me for. Reciprocal relationships with students are really important - treat their learning with respect and enjoy them as you would any human being and you'll be very surprised what they will do for you. And, you get another perspective on how your academic clients are functioning. And, most of all just enjoy working with your clients.

- In addition to librarian associations, become active in discipline organizations such as:
  * Canadian Association of Physicists<http://www.cap.ca/en/home/?set_language=en>
  * Canadian Engineering Education Association<https://ceea.ca/en/>
  * American Society for Engineering Education<http://www.asee.org/>
  * IEEE<http://www.ieee.org/index.html>
  Find out if there are active chapters on your campus and attend meetings.
- Read a few biographies of engineers and inventors, and anything by Henry Petroski. Some of my favourites, because information plays a role in the story, include:
  * Copies in seconds: how a lone inventor and an unknown company created the biggest communication breakthrough since Gutenberg : Chester Carlson and the birth of the Xerox machine<http://www.worldcat.org/oclc/55208206>
  * The tale of the scale : an odyssey of invention<http://www.worldcat.org/oclc/57136043>
  * The last lone inventor : a tale of genius, deceit, and the birth of television<http://www.worldcat.org/oclc/48449928>
  * Small things considered : why there is no perfect design<http://www.worldcat.org/oclc/51003992>
  * Invention by design : how engineers get from thought to thing<http://www.worldcat.org/oclc/34640793>
  * The toothpick : technology and culture<http://www.worldcat.org/oclc/87299584>
- Make a professional reading list of blogs, magazines, newsletters, etc. Set aside time each week to read. Find out what sources your faculty read. Forward articles of interest to faculty. Examples include:
  * IET Engineering and Technology<http://www.theiet.org/resources/magazines/index.cfm>
  * IEEE Spectrum<http://spectrum.ieee.org/>
  * MIT Technology Review<http://www.technologyreview.com/>
  * ASME Magazine<https://www.asme.org/about-asme/news-media/newsletters>
  * Design News<http://www.designnews.com/archives.asp?blogs=yes>
- Go on field trips to other engineering and science libraries. Most librarians love to meet new colleagues and talk shop.
- Develop a very very thick skin. You will meet faculty who do not care about libraries at all and will tell you so. As a good friend and librarian once told me - focus on the faculty and students who appreciate the library and do not spend a minute of your time trying to convince those faculty members who simply do not care or are not interested.
- Consider the intersection between information literacy standards (might be local, or those of ACRL or other national/international library associations) and the external accrediting body for your institution's programs. This, in conjunction with a review of curricula and individual course

syllabi in your departments can lead to targeting some opportunities to propose the most relevant library instruction collaborations for the most students at the most strategic times. Here's a fantastic recent book by a group of ELD folks that lays out that strategy along with other very useful bits of advice:
Title: *Lifelong learning for engineers and scientists in the information age* / Ashok Naimpally, Hema Ramachandran, Caroline Smith. Imprint: London; Waltham, MA: Elsevier, 2012.

- And definitely count on ELD-ers and this list as a lifeline; you won't go wrong doing that!