

**Redefining the Roles of Information Professionals
in Higher Education to Engage the Net Generation**
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Over the past several years a new phrase has crept its way into the vocabulary of higher education administrators and their funding bodies: “student-centered.” The reasons for this new student-centric approach appear to be the confluence of several factors, including a much more global and competitive post-secondary education marketplace and the demand for assessment and accountability of an educational system that is largely funded by public funds. Regardless of the reasons, the result is a stronger focus on the wants and needs of students that extends beyond the classroom to encompass all agents of the institution, including information professionals. While this paper will not attempt to articulate the necessary services, policies, and facilities to be provided by information professionals at a student-centric college or university, it will suggest some methods by which we can each begin to explore the issues at a very local level.

Net Generation

The majority of today’s college students are a part of generation that has many labels including the Net Generation (Oblinger and Oblinger 2004), Generation Y, Millennials (Howe and Strauss 2000), and Generation Me (Twenge 2006). Each generation is unique by “acquiring a shared history that lends its members a social and cultural center of gravity” (Strauss and Hoew 2006:20). For the Net Generation, it is digital technology that resides at the social and cultural center. Net Geners are the first to have spent their entire lives engaging digital technology. They have been referred to as “digital natives” because they are all “native speakers’ of the digital language of computers, video games and the Internet” (Prensky 2001). While the Internet and digital technologies have touched all of our lives in some way, most information professionals, particularly those with the greatest positional authority, are “digital immigrants.” “As Digital Immigrants learn... to adapt to their environment, they always retain, to some degree, their “accent” that is their foot in the past” (Prensky 2002). Consequently, no matter how fluent and comfortable we become with digital technology, we will always retain something of our “analog” background.

One consequence of being a digital native is that the Net Geners are starting to change the norms, assumptions, and practices of what had once been relatively stable activities. They communicate differently (e.g., text messaging and instant message). They use a different written language (e.g., lol, cya, l8r). They interact and socialize differently (e.g., via avatars in online games and Facebook). They have a different sense of authorship (e.g., Flickr and personal blogs). And most important to the context of academy, Net Geners’ “affinity for technology translates into new and different expectations about how to gather, work with, translate, and share information” (Rainie 2006:3)

These fundamental changes, which touch the very heart of the academic enterprise, make it impossible for those of us who are “digital immigrants” to rely on our college experiences as the basis for understanding the experiences of today’s students. The differences are simply too great and should make us suspicious of any sentence that begins “Well, when *I* was in college...” Consequently, in order for information professionals to be truly student-centric in our services, policies, and facilities, we must take the time and effort to better understand the academic and social practices of our Net Gen students.

Fortunately, we have organizations, such as EDUCAUSE, which are conducting surveys and environmental scans of college students and providing us with their findings in publications such as the recent ECAR *Study of Undergraduate Students and Information Technology* (Salaway, Kvavik, and Caruso 2006). It is from sources such as this that we can start to see some high level trends, including the growing student preference for laptops over desktops (Salaway, Kvavik, and Caruso 2006), the importance of social networking sites (Lenhart and Madden 2007), and the relegation of email as a means to communicate with “old people” (Lenhart, Madden, and Hitlin 2005). However, as useful as this information is, it must be remembered that these represent high level trends and the aggregation of data from many higher education institutions. The reality is that the student body of each higher education institution is unique, as it is a reflection of a variety of factors including socio-economic conditions, the ratio of residential to commuter students, local climate, and the robustness of the campus IT infrastructure, just to name a few. Consequently, in order to be truly student-centered, we must be cognizant of the high level student trends, but truly fluent in the local campus trends.

Local User Studies

Realizing the value and imperative of understanding our local users, the University of Rochester, River Campus Libraries (located in New York, U.S.A) developed an in-house user studies program. The program began in 2003 with a one-year study of faculty in different disciplines, with a focus on how we could better align our institutional repository with the existing work practices of faculty (Foster and Gibbons 2005). Leading us in that project was an anthropologist, Dr. Nancy Fried Foster. Borrowing and adapting methodologies from anthropology, we were able to gain invaluable insight into how our faculty conduct their research and use digital tools.

Following the success of the faculty study, we undertook to a two-year study (2004-2006) of our undergraduate students (and are now in the midst of a two-year study of graduate students). Again, we turned to the discipline of anthropology to help us try to create a holistic sense of the lives of our students. What follows are very brief descriptions of four of the many ethnographic methodologies we employed, followed some examples of the insights we have derived from them.

Mapping Diaries

Except for when the students crossed the threshold of one of our libraries, we did not have a strong sense of what they did all day long. In order to remedy this lack of information, we turned to mapping diaries. In exchange for \$10, fourteen students volunteered to participate in the exercise. Each was given a color 11” x 17” map of campus and asked to record on the map, in real time, their movements on an average weekday. The students recorded in simple

diaries the times they left one location and arrived in another and the sequence of those events. After the mapping diaries were completed, we interviewed the student in order to gather additional details about their activities. The interviews were videotaped and transcribed, as they are in almost all of our project exercises, following strict human subject guidelines.

Photo Elicitation

In an effort to begin to see the campus through the eyes of the students, we turned to a second methodology, photo elicitation, which is a form of cultural probing (Gaver, Dunne, and Pacenti 1999). Students were given disposable cameras and a list of pictures that we wanted them to take. The requested photos included “Something that you would call “high tech,” “Your favorite place to study,” and “The things you always carry with you.” Once the photos were developed, we invited each student back and interviewed him/her about the pictures. The interviews provided needed clarification as to what were the focal points of the picture, but also acted as a jumping off point for a myriad of conversations about student life on campus.

Retrospective Interviews

Another area of interest for us, as librarians, was to better understand the paper research and writing process. To this end, we recruited ten students who had just completed a major research paper and asked them to relive the process through an interview. Beginning with the moment that the professor assigned the research paper, the students walked us through each of the steps of their unique, individualized research and writing process. We also asked the students to record the process with simple drawings on a large poster board; an exercise that both stimulated their memory and provided us with a visual summary of the process.

Design Charettes

A fourth example of some of the many different techniques used in our study is design charrettes, which is a technique in which stakeholders help to draft solutions to a design problem. In this case, the stakeholders were our students and the design challenge was to create their ideal study space. Using poster board, markers, sticky notes, scissors, and glue, thirty students created fascinating, often incredibly detailed, renderings of their optimal study space.

As a result of these four exercises, along with many others, the project generated literally hundreds of pages of interview transcripts, as well as photos, drawings, maps, and videos. As we delve into the data, using various structured exercises, we began to see some interesting trends, as well as answers to some of our more perplexing questions. For example, EDUCAUSE surveys clearly indicate that a very high percentage of students are bringing laptop computers to campus. Our photo elicitation exercise helped to confirm the dominance of laptops on our campus as well. While many of us thought that this would result in a decrease in the number of public desktop computers needed around campus, the reality is that the demand for these public computers continues to increase. Why?

On our campus, we can contribute this paradox to a number of factors. First, our mapping diaries showed a clear pattern of students leaving their dorm rooms in the early morning and not returning until late afternoon or early evening. During this time, they crisscrossed campus from building to building, sometimes traveling as much as two to three miles, before

turning to their dorms. With such mobility in their schedules, personal laptops are simply too heavy to warrant our students adding them to their already fully-laden backpacks.

Our design charrettes can also shed light on our local barriers to laptop use. In several of the drawings, the students took the time and felt the need to draw electrical outlets into pictures. Our main library, as well as most of the buildings on the main part of campus, was built in an era of few electrical devices, and, consequently, the availability of electrical outlets is quite limited. So great is the problem, in fact, that the library circulation desks have started to loan extension cords to students so that they might have a better chance of getting power to their laptops.

In addition, some of the student drawings included lockers, which are also quite scarce on our campus. Without lockers, there is no way for the students to safely secure their valuables, such as laptop computers, anywhere other than in their dorm rooms. As a result of our project, we learned that on our campus it takes a lot more than a strong wireless signal to support a community of laptop users.

As we began the retrospective interviews in late 2004, we noticed a strange pattern. At some point in the paper research and writing process, the student contacted his/her parents for assistance. Sometimes mom or dad was asked for advice on a paper topic, to help identify relevant resources, or to read and edit a draft of the paper. This local phenomenon was later confirmed to be a national one when the concept of “helicopter parents” began to attract media attention in mid 2005: parents who appear to be hovering over their children, particularly when they are at educational institutions.

Our student interviews suggest that, in general, there is a close bond between college students and their parents; a bond much closer than many of us experienced. We were able to identify new communication devices to be a contributing factor. For many of us, communication with our parents while we were at college was limited to an occasional, costly and sometimes inconvenient call from the dorm phone, letters sent by “snail” mail, and infrequent trips home. Today, email, cell phones and instant messenger have made communication with one’s parents almost as easy as communicating with one’s college roommate.

Cell phones were rarely absent from the photos that students took of the “things they always carry with them.” The popular “family share plans” make cell phone calls between family members free, and consequently cost and convenience is no longer a barrier. We heard students explain how they emailed drafts of their papers to their parents to read and edit and how they use instant messaging in order to set up convenient times for phone calls home. One of our local responses to this helicopter parent phenomenon has been to host a breakfast for parents during freshmen orientation in order to make sure that parents understand the services and resources of the libraries, which they can then convey to their children when the call for help comes.

A final example of how we have been able to use our project data focuses on facilities. In the spring of 2006, we began the initial design process for a \$5 million renovation of our main library, which will be completed over this summer. The goal of the project is the conversion of 20,000 square feet of library staff space into a 24/7 student collaboration study area. Since neither we nor the architects really knew what the elements of a successful

student collaborative study area for our unique students would be, we turned to the results of the design charrettes for guidance. Instead of providing the architects with a traditional space program, which defines how the space will be used, the number and type of seats, and so on, we asked the architects to let the student drawings drive the design. We were able to combine the information from the drawings with student photos of their favorite places to study and popular spots in the mapping diaries to start to piece together a facility that we believe is grounded in the real, rather than perceived, social and academic needs of our students.

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