



RSR
38,1

10

Received 9 July 2009
Revised 14 October 2009
Accepted 9 November 2009

What net generation students really want

Determining library help-seeking preferences of undergraduates

Lizah Ismail

Marywood University Library, Scranton, Pennsylvania, USA

Abstract

Purpose – Many academic libraries are trying a variety of innovative services to meet net generation users “on their own turf” and “on their own terms”. This paper aims to address the need for academic libraries to determine the wants and preferences of their institution’s own net generation students before launching any new service that could be costly and ineffective, and to discuss a method for doing so.

Design/methodology/approach – An online survey of undergraduates was conducted at Marywood University to investigate if the net generation profile – being technologically savvy and desiring the quick and easy – applies to help-seeking preferences at the library. Students were asked to rate their preference for a variety of research assistance options such as e-mail, IM, Facebook and librarian assistance outside the library.

Findings – Results of the study run counter to expectations, and show that certain research assistance options, namely assistance via chat, Facebook, and course management software, are not a favorite among 18-22 year-olds at Marywood.

Research limitations/implications – Because of a low response rate of about 10 percent, the library recognizes that it is not possible to generalize these results to all undergraduates at Marywood. However, findings do show an interesting trend that goes against the net generation profile. Another survey is planned in conjunction with focus groups.

Originality/value – The Marywood Library has discovered, through a survey, that one size does not necessarily fit all when catering to the net generation. Time, effort, and expense could be saved if academic libraries conducted a similar study to determine the preferences of their net generation students.

Keywords Library users, Undergraduates, Reference services, User studies

Paper type Case study



Introduction

Reference service in academic libraries is experiencing a tumultuous time that is both exciting and challenging. The internet explosion and the introduction of Web 2.0 and other new technologies are seen as the main cause for the decline of traditional in-house reference statistics. And students of the net generation, those born between the years 1982-1991 (Oblinger and Oblinger, 2005), are thought to be perpetuating this decline.

The net generation (Net Gen) or millennials, particularly those aged 18-22, and who make up our undergraduate population of today, are characterized as technologically savvy and wanting results instantly and easily – products of growing up in a highly wired environment. Life, for this generation, would be incomplete without daily

interaction via IM, Google, and social networking on MySpace and Facebook (Lenhart, 2007; Oblinger and Oblinger, 2005; Sheesley, 2002).

Reference librarians, aware of the need to accommodate this new brand of users, are scrambling to meet them “on their own turf” (Nims, 1998) and “on their own terms” (Golderman and Connolly, 2007). A variety of delivery formats for providing research assistance that take advantage of current social networking and online tools, including “setting up shop where our patrons live” (Wagner and Tysick, 2007) have sprung up in practice and in library literature.

Several studies report on the success of such endeavors (Lee *et al.*, 2004; Hollister, 2008; Costello *et al.*, 2004; Cummings, 2007; Evans, 2006; Golderman and Connolly, 2007; Wagner and Tysick, 2007). These reports seem compelling enough to motivate any library to jump on the bandwagon. However, other studies, discussed below, warn of knowing who your Net Gen students are first and what they really want before launching a service that could be ineffective and costly. Such an investigation could lead to surprising findings that run counter to expectations.

Literature review

Shaundra Walker (2006) writes that if academic libraries want to remain “vital” and “useful” to Net Gen students, it is necessary for them to determine how students access and use information. Similarly the Online Computer Library Center (OCLC, 2002) argued that “academic librarians need to know more about the preferences and needs” of the current crop of college students (Walker, 2006).

Foster and Gibbons (2007) further underscores this point, noting that although they have been “innovative” in reaching out to their students, they still needed to know more about “today’s undergraduate students – their habits, the academic work they are required to do, and their library-related needs” if more outreach were to be carried out (p. v). Using an anthropological and ethnological approach, Foster and Gibbons gained significant insight into the undergraduate population at the University of Rochester. A particular salient discovery was that these students craved a “sort of universal service point, a physical Google” (p. 76). The authors concluded that user studies such as this are a “necessary component of any student-centered academic library” (p. vii).

Research has demonstrated that libraries too eager to latch on to a seemingly winning alternative to the traditional offering of reference service are paying the price of disappointment. This outcome is due to a lack of understanding and knowledge of what the specific wants of their Net Gen students are.

Oblinger and Oblinger (2005) conducted a student technology survey and found that a majority of respondents “preferred a moderate amount of IT in their classes”, and that “face-to-face” interactions were preferable to online options (p. 2.11). The authors continue to indicate, “the implication is that colleges and universities should not assume that more technology is necessarily better” (p. 2.11).

A study by the EDUCAUSE Center for Applied Research (ECAR) surveying over 4,000 students on the use, preference and skill level pertaining to information technologies further dispels the Net Gen profile (Kvavik, 2005). Over 95 percent of the students surveyed in this study were aged 25 or younger. The study unexpectedly revealed that respondents had a “moderate preference for technology” with regard to teaching and learning; that they had “mixed feelings” regarding the use of technology

in the classroom, and that many of the IT skills necessary for learning were acquired at college (p. 7.17).

Further de-bunking of the Net Gen myth was conducted by the University of London's Centre for Information Behavior and the Evaluation of Research (CIBER) research team. Their findings did not support widely held beliefs, notably – the notions that “all young people are interested in social networking” and that “young people are more competent with computers” (Anon., 2008, p. 4). Their findings also did not support the belief that “it is important to be where users are, in a social networking environment” (p. 4).

Specifically with regard to reference services, Johnson's (2004) survey of students and faculty of two university affiliates found a surprisingly “solid popularity of in person reference” (p. 241). A total 76.8 percent of undergraduates surveyed indicating the face-to-face reference was their first choice for reference help with a research project (p. 241). Only 4.8 percent of undergraduates surveyed chose online chat reference. Similarly, Granfield and Robertson's (2008) study of reference service preferences indicate that virtual reference is not a favorite way for undergraduates to get help off-campus, concluding that such a service is more likely to attract students who prefer to work outside the library such as graduate students.

Other published studies relate attempts at reaching out to these students with unexpected results. Naylor *et al.* (2008) discussed the disappointing lack of response to their consortial chat service. This led them to conduct focus group discussions on how their “users conduct research” and “what are their preferred ways of locating information” (p. 342). They reported that librarians cannot assume that “all students have a high level of experience” with technology (p. 351) and that they could have “saved substantial investments in both time and money” if they had had conducted a study of their users when they were planning their chat service (p. 353).

Horrowitz *et al.* (2005) assessed their live online reference service 15 months after “enthusiastically” implementing the service. This assessment was to determine if the service “was worthy of continuing,” as staff grappled with ongoing software problems and limited use (p. 241). They found that this service was popular with only a small group (p. 255).

A survey of undergraduates' use and attitude toward electronic books was the basis of a study by Gregory (2008). The study found that a majority of these students who belong to the Net Generation preferred using a “physical book” when given a choice, a finding that was not typical of this user group (p. 269).

Nims (1998) discussed her library's failed attempt at “meeting students on their own turf” by setting up reference hours at residence hall computer labs. Calling it a “bitter disappointment,” particularly after the effort put into undertaking such a service, Nims attributed the failure of this venture to her library's assumption that undergraduates preferred to do their research in the computer labs, not in the library, and that they also preferred to use email and the telephone for reference help (p. 87). Both these assumptions were proven wrong. When asked, undergraduates indicated, “if they wanted to do research, they went to the library” (p. 87).

Kuchi *et al.* (2004) describes a similar outreach effort. Rutgers University Libraries set up library “outposts” at campus centers where students and faculty members frequent in an attempt to reach out to non-library users. Their expectation that this venture would increase reference activity was not met. Although they cited that the

“newness” as well as the “lack of awareness” of such a service was an attributing factor in the outposts’ lack of success, they also stated that “it is necessary to gain further understanding and insight into user needs and expectations” before implementing such a service (pp. 316-317).

The most recent study on this topic was conducted by Char Booth (Booth, 2009) who sought to determine the “factors that motivate student interest in emerging technologies” (p. 1). Booth took on this study after obtaining “mixed results” from the new library services her library had implemented. She found that, contrary to common belief, “older respondents” were more receptive to library technologies (p. 102) while younger respondents, although more technologically inclined with mobile and social tools, were less likely to view these technologies in the “research context” (p. 102). Booth considers it “critical” that all libraries understand “student use, ownership, and/or familiarity” with the various technologies before “judging their potential scalability as library services” (p. 5).

The Marywood University Library experience

The Marywood University Library also has made initial attempts to reach our Net Generation users without prior informed knowledge of students’ actual wants and needs. Public services librarians initiated an online chat service via Meebo in 2006 as a way to keep up with anticipated expectations of undergraduates. However, due to lack of usage as well as to inadequate staffing, the service was temporarily shelved in 2007.

In Spring 2008, the Marywood University Library started the Ask Here Roadshow, taking reference service “on the road” to residence halls in an attempt to go where students live, since many students are not coming to the library to ask for research help. The author and the reference librarian at Marywood initiated this service and decided to set up dates and times to coincide with busy periods for students, particularly in preparation for mid-terms, final papers, and exams. The reference librarian was designated as the Roadshow librarian for that semester.

Publicity for this new service was through targeted emails, flyers, and free giveaways. Still, the students were not receptive. Fewer than five students asked for help from the Roadshow librarian in the three months that the service was made available in residence halls. The library was unable to continue with this service during the busy Fall 2008 semester due to inadequate staffing. However, the Roadshow was reinstated in Spring 2009 and made available at the student center and a popular building that is home to the education and psychology departments. Again, the response did not meet expectations. This lack of interest in the Roadshow suggests students’ almost total rejection of the service. However, upon closer examination, it may also be the result of a publicity campaign that eventually lost steam and energy.

While the Roadshow was on hiatus in Fall 2008, the author began a project that involved embedding a personal librarian in the Moodle course pages of two undergraduate courses. This idea arose from a similar premise that was used for the Roadshow – going where students are, in this case, the online environment created by teaching faculty for a specific course. Students go here to access their course syllabus and course assignments as well as to participate in discussions, and other course related activities. The author, in collaboration with the respective faculty member, created a library forum in the Moodle pages for each of the two participating courses. This forum allows students of the course access to their very own personal librarian, as

well as postings from the librarian that highlights library resources, services and search tips. Marywood University encourages faculty to use Moodle in their classes. However, at this time, the use of Moodle is purely optional though its popularity is increasing among teaching faculty. Feedback from students was encouraging and has resulted in the creation of the Library Forum in the Moodle pages of two other courses in Spring 2009.

The author realizes that a “hit and miss” approach to implementing services for Net Generation students is haphazard, to say the least. In view of the published literature that frowns on this practice, determining the preferences of this new user group would be the first step in understanding how we can better serve them. For example, after retrospection, the chat and Roadshow ventures were undertaken without any thought about the actual practical value to our Net Gen students.

Methodology

In order to obtain as many responses as possible from the undergraduate student population at Marywood University regarding their library habits and help-seeking preferences, an online survey was sent to a listserv created especially for this study. The listserv contained all 2,297 currently enrolled undergraduate students at Marywood and was created by the university’s management information systems (MIS) department.

The study employed the online tool, SurveyMonkey, to create the survey. Marywood University has a professional subscription to SurveyMonkey, which allows for an unlimited number of respondents. The professional subscription also allows for the analysis of results through a variety of filter options such as matching a specific question to a particular demographic, and computes averages for rating scales. Users are able to download results into an Excel worksheet or other formats. For the purposes of this study, results were downloaded into Excel, and rating averages for questions based on a rating scale were computed. A letter explaining the purpose of the study, instructions, and contact information accompanied the online surveys. Students have the option of not participating (see Appendix 1).

The survey instrument included multiple-choice questions and rating scale questions. The instrument and methodology were peer-reviewed by three other academic librarians and were also submitted to the university’s Institutional Review Board for approval. A main objective was to try and get as many students as possible to respond to the survey within a reasonable time frame. The survey was therefore sent to the undergraduate listserv four separate times in a span of six weeks. A brief message encouraging students to take the survey, if they have not already done so, accompanied each subsequent e-mail posting.

The survey questions were divided into two main sections (see Appendix 2). The first section sought demographic information for the student:

- Is the student a full-time on-campus/full-time commuter or part-time student?
- Is the student an incoming, returning student or transfer student?
- Is the student’s age between 18-22, 23-29, 30-39 or 40 and over?
- Has the student attended a library session or not?

(A “library session” at Marywood is not part of the undergraduate curriculum, and therefore, is only given to students at the request of faculty. Most of these sessions are one-shots and the content of each session is not consistent although all sessions include an introduction to library services and resources. If a student indicates that he/she did not attend a library session, it implies that his/her instructor did not request one for the class.)

The second section of the survey sought students’ help-seeking behavior and preferences at the library. The students were asked to indicate how strongly they agreed or disagreed with a list of statements, which were:

- I consistently visit the Marywood University library at least once a week.
- I consistently visit the web site of the Marywood University library at least once a week.
- I have asked Marywood University librarians for research help in the past.
- I would like librarians to establish regular research help hours in the student center.
- I would like librarians to establish regular research help hours in the residence halls.
- I would like the librarians to establish regular research help in McGowan and other buildings on campus.
- I prefer to seek research help in locations that are convenient to me as opposed to going to the library.
- I prefer to ask librarians for research help via e-mail.
- I prefer to ask librarians for research help via chat or IM/texting.
- I prefer to ask librarians for research help via my Moodle course page.
- I prefer to ask librarians for research help via Facebook or MySpace.
- I am confident in my ability to locate electronic and print material without librarian help.

This study is interested solely in responses from Net Gen students in the 18-22 age group. The reasoning for this specific focus is due to the fact that students in this age group make up the majority of undergraduate students at Marywood. Furthermore, the traditional age of undergraduates in general is between 18-22 years old. Demographic information pertaining to student status (whether the student is new, returning or a transfer) is also of particular interest and could help determine if the library should target specific groups.

Survey results

The survey was completed by 245 students, about 10 percent of all currently enrolled undergraduate students at Marywood at the time. Despite this relatively low response rate and the inability of this study to produce statistically significant results, a possible trend can be seen among Marywood’s Net Gen students regarding their library use, library help-seeking habits, and library help-seeking preferences. This “trend” provides an incentive to pursue a follow-up study that would be more definitive (overall results for all age groups can be found in Appendix 3).

Demographics

Just over 88 percent ($n = 216$), of respondents were in the 18-22 age group with 5.31 percent ($n = 13$) of respondents being between 23-29 years old (Figure 1). Those who were 40 and over made up almost 4 percent ($n = 9$) of respondents while the 30-39 year-olds made up almost 3 percent ($n = 7$).

Also from the results, a majority of respondents (67.1 percent) in the 18-22 age group were returning students (Figure 2), while the remaining students were roughly balanced between respondents who had attended a library instruction session (53.2 percent) and those who had not (46.8 percent) in that age group (Figure 3).

Library use and help-seeking habits

Respondents were asked to indicate how strongly they disagreed or agreed with statements relating to their library use and habits. Their responses were computed as averages on a scale of 1-5, where 1 meant strongly disagree and 5 meant strongly agree.

Overall, Marywood's Net Gen students reported that they visited the Marywood Library at least once a week (3.07) and had asked a librarian for research help in the past (3.13) (Table I). However, they were slightly more disinclined to visit the library

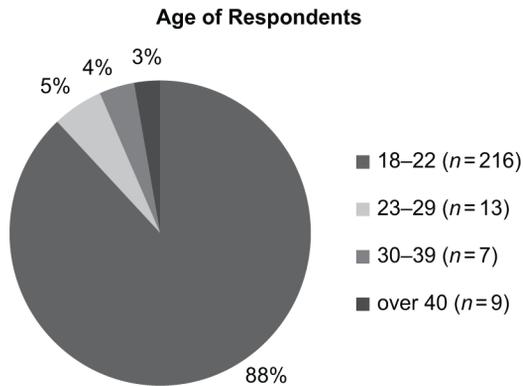


Figure 1.
Demographic breakdown
of respondents by age
group

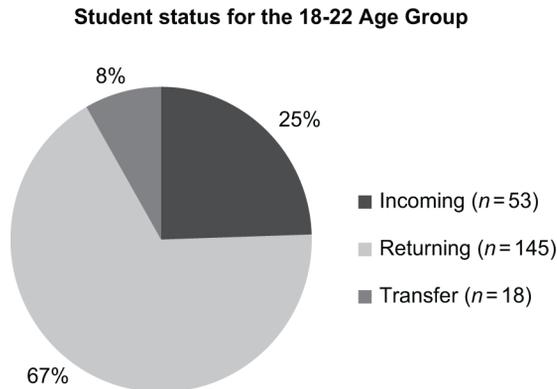


Figure 2.
Demographic breakdown
of 18-22 year-old
respondents by student
status

Library Instruction for the 18-22 Age Group

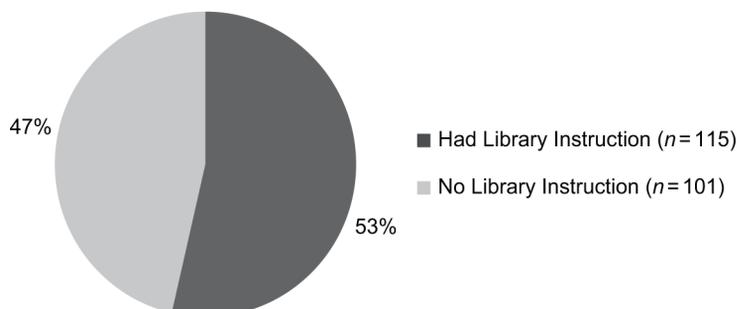


Figure 3. 18-22 year-old respondents with and without library instruction

	Overall (n = 216)	18-22 age group	
		Had library instruction (n = 115)	No library instruction (n = 101)
Library visits (at least once/wk)	3.07	3.05	3.08
Library web site visits (at least once/wk)	2.99	3.03	2.95
Asked for librarian help	3.13	3.13	3.13
Confident without help	3.44	3.59	3.27

Table I. Library use, help-seeking habits and library instruction

Notes: Averages on a scale of 1-5 where 1 = strongly disagree and 5 = strongly agree)

web site (2.99). A telling response was this group’s indication that they were confident in their ability to locate both electronic and print resources without a librarian’s help (3.44).

Since it is not possible for the results to convey any statistically significant findings, this study is not able to say, unequivocally, that library instruction sessions (LIS) had an impact. However, it is interesting to note that results here do suggest a possible connection, albeit slightly, between LIS and students’ use of the library web site (LIS = 3.03; No LIS = 2.95) and students’ confidence in locating resources without help (LIS = 3.59; No LIS = 3.27). There appears to be no such connection in terms of library visits and asking librarians for help (Table I).

A noteworthy finding here is the suggestion that a student’s status, whether the student is new (N), returning (R) or a transfer (T), does appear to have some influence on his/her library use and help-seeking habits (Table II). New or incoming students surveyed in this study were more likely to stay away from the library (2.34) and not use the library web site (2.58). They were also less inclined to ask a librarian for help (2.77). Conversely, returning students indicated that they do visit the library (3.29) and the library web site (3.19) at least once a week and that they have asked a librarian for help in the past (3.29).

Responses from transfer students tended to be in neither extremes. Although they reported visiting the library at least once a week (3.44), they did not visit the library web site as often (2.61) nor were they likely to have they asked a librarian for help in the past (2.89). What seems clear from this result is that all students in this age group,

whatever their status, indicated that they were confident in their ability to locate resources without librarian help – returning students agreeing with that statement most strongly (N = 3.19; R = 3.57; T = 3.11).

Location preference for research assistance

Respondents were asked to indicate how strongly they disagreed or agreed with statements relating to where they preferred to seek research assistance.

Generally, results indicate a relatively strong preference for seeking research assistance at a location other than the library (Table III). A majority of them indicated that they would like librarians to establish regular research help hours in the student center (3.48), followed by “in other campus buildings” (3.27) and in residence halls (3.10). Overall, students in this age group would like to seek research help in locations more convenient to them as opposed to seeking help at the library (3.27).

When student status was considered, the findings reflected the preferences above, with a notable discovery. New student respondents preferred to seek research help in locations more convenient to them as opposed to going to the library (3.75) while transfer students were less enthusiastic (2.72). It appears that although transfer students indicated that they would like librarians to establish regular help hours in different on-campus locations, this finding also suggests that they still valued going to the library for research assistance and that they did not consider the two options mutually exclusive.

Research assistance preference

Respondents were asked to indicate how strongly they disagreed or agreed with statements relating to preference for type of research assistance offered.

Table II.
Library use, help-seeking habits and student status

	18-22 age group		
	New (n = 53)	Returning (n = 145)	Transfer (n = 18)
Library visits (at least once/wk)	2.34	3.29	3.44
Library web site visits (at least once/wk)	2.58	3.19	2.61
Asked for librarian help	2.77	3.29	2.89
Confident without help	3.19	3.57	3.11

Note: Averages on a scale of 1-5 where 1 = strongly disagree and 5 = strongly agree)

Table III.
Location preference for research assistance and student status

	Overall (n = 216)	18-22 age group		
		New (n = 53)	Returning (n = 145)	Transfer (n = 18)
Student center	3.48	3.56	3.43	3.72
Residence halls	3.10	3.36	3.01	3.06
Other campus buildings	3.27	3.42	3.19	3.39
More convenient location instead of library	3.27	3.75	3.16	2.72

Notes: Averages on a scale of 1-5 where 1 = strongly disagree and 5 = strongly agree

Findings here are both surprising and illuminating. Counter to our expectations, and to the Net Generation profile, respondents preferred not to seek research assistance via chat/IM, their Moodle course pages or Facebook/MySpace (Table IV). Interestingly, their preference for using Facebook or MySpace as a means to seek research help was rated lowest (2.37) while their preference for research help via e-mail was rated highest (3.24).

When student status was taken into consideration, returning students responded most positively to seeking help via e-mail (R = 3.30; N = 3.15; T = 3.06) while transfer students responded most negatively to seeking help via Facebook or MySpace (T = 2.12; N = 2.37; R = 2.43). Transfer students were also most disagreeable to seeking help via chat/IM (T = 2.44; N = 2.71; R = 2.85) and via their Moodle course pages (T = 2.59; N = 2.77; R = 2.77).

Discussion

Library use and help-seeking habits

This section of the survey does reveal some interesting, though not unforeseen, findings pertaining to library use and help-seeking habits of Marywood’s Net Gen students. It appears that these students are not using the library web site as much as we would like them to. The findings also suggest that they are relatively self-assured in their ability to locate resources without asking for help from a librarian.

It is somewhat troubling, however, that the findings also hint at the possibility that library instruction sessions had little or no effect on these students’ responses. This seems to reinforce the notion that students of today, and Net Gen students in particular, resort to the internet and non-library sources for most if not all their academic needs. A finding that is not as surprising, but equally troubling, is the unfavorable response students gave regarding using the library web site. Once again, this suggests that these students are going elsewhere for their research – with the internet being the most likely choice.

A notable finding from this section of the survey is the influence student status might have on these responses. The inclination for incoming students surveyed in this study not to visit the library and the library web site as much as the other students is worrying. This speaks to the need for the Marywood Library to re-consider how we cater to our first-year students in terms of orientations and library instruction. Transfer students do not fare much better, and this finding opens up another topic the library needs to address. Returning students, as can be expected, appear most confident in their ability to locate resources without librarian help.

	Overall (n = 216)	18-22 age group		Transfer (n = 18)
		New (n = 53)	Returning (n = 145)	
E-mail	3.24	3.15	3.30	3.06
Chat/IM/texting	2.78	2.71	2.85	2.44
Moodle course page	2.77	2.77	2.78	2.59
Facebook/MySpace	2.37	2.30	2.43	2.12

Note: Averages on a scale of 1-5 where 1 = strongly disagree and 5 = strongly agree

Table IV.
Research assistance preference and student status

Location preference for research assistance

Net Gen students, we are told, prefer the quick, easy and convenient. The findings from this section of the survey definitely suggest a strong tendency for convenience when it comes to these students' location preference for research assistance. So it is predictable, as the findings suggest, that Marywood's Net Gen students are more likely to prefer seeking research help at a location more convenient to them as opposed to going to the library. What is less predictable and more significant is the suggestion from the results that incoming students are the ones who are most inclined to voice this preference. A bright spot in these findings is the implication that transfer students still preferred to go to the library to seek research help, although they did indicate a preference for establishing librarian help hours at other campus buildings as well.

Research assistance preference

It is this section of the survey that reveals the most striking results, suggesting that our Net Gen students, whatever their status may be, are most averse to using Facebook/MySpace as a means to seek research help. A similarly negative response to the use of chat/IM for research help was also indicated. These results were clearly not what we had anticipated when we carried out the survey. What was also not anticipated was the suggestion that these students preferred using e-mail for research help, more so than the other types of research help offered.

Conclusion

There are obvious limitations to the findings of this survey. Although the Net Gen student population that this study focuses upon, the 18-22 year-olds, represents a majority of total respondents (88.2 percent), the overall response rate was a disappointing low, at approximately 10 percent. It is therefore not possible to generalize the results from this study to all 18-22 year-old students at Marywood. However, as can be seen from the above discussion, there is suggestion of an interesting pattern that can be explored in further studies.

Although it is surprising that Marywood's Net Gen students reported preference for using e-mail over Facebook or IM as a means to seek research assistance, this finding does support previously published studies that warn of the need to establish local knowledge of your users before employing new library technologies "for their own sake" (Booth, 2009, p. 1) and to "understand how students actually interacted with libraries and technology, instead of how we assumed that they did" (p. 1).

Equally instructive were the findings suggesting that our library instruction sessions appear not have any effect on these students' library use and help-seeking habits and that Marywood's incoming Net Gen students particularly appear to view the library either unfavorably or indifferently or both. However, due to the inability to generalize these findings to Marywood's population of 18-22 year-olds, further studies need to be undertaken so that a more definitive result could be established and appropriate steps taken to address these concerns.

Further studies would involve the establishment of focus groups comprised of our 18-22 year-old students. A follow-up survey should be administered in conjunction with the focus group sessions. The survey should include additional demographic questions missing in the first survey, such as those pertaining to respondents' majors and their use and knowledge of various technologies. As Kvavik (2005) points out, a

student's major is "an important predictor of preferences for technology in the classroom" (p. 7.10). The focus groups would help us obtain a deeper understanding of our 18-22 year-olds while the second survey would reach a larger respondent pool. It is with the latter in mind that we may consider conducting both online and printed surveys in order to obtain the most return.

At this stage, it is uncertain if we are going to resume our IM reference service. Our decision might rest upon the results of our focus group sessions and the second survey. We will definitely look at Facebook and MySpace in a different light as to their use in reference service. Our second set of data will be particularly useful in that regard.

In the meantime, it is heartening to discover that our library's Ask Here Roadshow does have some relevance to Marywood's Net Gen students. This paradoxical finding to our actual experience suggests that other factors could have led to the Roadshow's past failures. Perhaps with the additional findings from the focus groups and the second survey, we will be able to determine exactly how the Roadshow could better cater to these students' needs, and just as importantly, how to promote it successfully.

The author will continue working with interested faculty in Moodle as this was met favorably by student users of this service, although the findings in this study suggest an opposite view. Evidently, users of this service are more able to judge the service's value as opposed to students who are presented with it in the abstract; however, the veracity of that assumption could also be better ascertained from the further studies we will be undertaking.

This study suggests that libraries certainly do need to investigate what their Net Gen students really want from the library, as "one size unfortunately does not fit all where library innovation is concerned" (Booth, 2009, p. 8). Thus, when catering to this new user group, the question that should be asked is not which new technologies and services should we implement at the library today but what new technologies and services, if any, will be most desired by our Net Gen users.

References

- Anon. (2008), "Online generational myths debunked", *Library and Information Update*, Vol. 7 Nos 1/2, p. 4.
- Booth, C. (2009), *Informing Innovation: Tracking Student Interest in Emerging Library Technologies at Ohio University*, Association of College and Research Libraries, Chicago, IL.
- Costello, B., Lenhold, R. and Stryker, J. (2004), "Using blackboard in library instruction: addressing the learning styles of generations X and Y", *Journal of Academic Librarianship*, Vol. 30 No. 6, pp. 452-60.
- Cummings, L.U. (2007), "Bursting out of the box: outreach to the millennial generation through student services programs", *Reference Services Review*, Vol. 35 No. 2, pp. 285-95.
- Evans, B. (2006), "Your space or MySpace?", *Library Journal netConnect*, available at: www.libraryjournal.com/article/CA6375465.html (accessed 18 November 2008).
- Foster, N.F. and Gibbons, S. (2007), *Studying Students: The Undergraduate Research Project at the University of Rochester*, Association of College and Research Libraries, Chicago, IL.
- Golderman, G.M. and Connolly, B. (2007), "Infiltrating NetGen cyberculture: strategies for engaging and educating students on their own terms", *Serials Librarian*, Vol. 53 No. 3, pp. 165-82.

- Granfield, D. and Robertson, M. (2008), "Preference for reference: new options and choices for academic library users", *Reference and User Services Quarterly*, Vol. 48 No. 1, pp. 44-53.
- Gregory, C.L. (2008), "But I want a real book: an investigation of undergraduates' usage and attitudes toward electronic books", *Reference and User Services Quarterly*, Vol. 47 No. 3, pp. 266-73.
- Hollister, C. (2008), "Meeting them where they are: library instruction for today's students in the World Civilizations course", *Public Services Quarterly*, Vol. 4 No. 1, pp. 15-27.
- Horrowitz, L.R., Flanagan, P.A. and Helman, D.L. (2005), "The viability of live online reference: an assessment", *Libraries and the Academy*, Vol. 5 No. 2, pp. 239-58.
- Johnson, C.M. (2004), "Online chat reference: survey results from affiliates of two universities", *Reference and User Services Quarterly*, Vol. 43 No. 3, pp. 237-47.
- Kuchi, T., Mullen, L.B. and Tama-Bartel, S. (2004), "Librarians without borders: reaching out to students at a campus center", *Reference and User Services Quarterly*, Vol. 43 No. 4, pp. 310-7.
- Kvavik, R.B. (2005), "Convenience, communications, and control: how students use technology", in Oblinger, D.G. and Oblinger, J.L. (Eds), *Educating the Net Generation*, EDUCAUSE, Washington, DC, pp. 7.1-7.20.
- Lee, J., Hayden, K.A. and Macmillan, D. (2004), "I wouldn't have asked for help if I had to go to the library' reference services on site", *Issues in Science and Technology Librarianship*, available at: www.istl.org/04-fall/article2.html (accessed 18 November 2008).
- Lenhart, A. (2007), "Social networking web sites and teens: an overview", available at: <http://pewresearch.org/pubs/118/social-networking-websites-and-teens> (accessed 18 November 2008).
- Naylor, S., Stoffel, B. and Van Der Laan, S. (2008), "Why isn't our chat reference used more? Finding of focus group discussions with undergraduate students", *Reference and User Services Quarterly*, Vol. 47 No. 4, pp. 342-54.
- Nims, J.K. (1998), "Meeting students on their own turf", *Research Strategies*, Vol. 16 No. 1, pp. 85-9.
- Oblinger, D. and Oblinger, J. (2005), "Is it age or IT: first steps toward understanding the Net Generation", in Oblinger, D. and Oblinger, J. (Eds), *Educating the Net Generation*, EDUCAUSE, Washington, DC, pp. 2.1-2.20.
- OCLC (2002), "OCLC White Paper on the information habits of college students: how academic librarians can influence students' web-based information choices", available at: www.oclc.org/research/announcements/2002-06-24.htm (accessed 18 November 2008).
- Sheesley, D. (2002), "The 'Net Generation: characteristics of traditional-aged college students and implications for academic information services", *College and Undergraduate Libraries*, Vol. 9 No. 2, pp. 25-42.
- Wagner, B. and Tysick, C. (2007), "Onsite reference and instruction services: setting up shop where our patrons live", *Reference and User Services Quarterly*, Vol. 46 No. 4, pp. 60-5.
- Walker, S. (2006), "Academic library services for the millennial generation", *Georgia Library Quarterly*, Vol. 43 No. 2, pp. 8-12.

Appendix 1. Letter to participants

Library usage among Marywood University undergraduate students

You are invited to take part in a Marywood University Library survey of all Marywood undergraduate students to determine their library and research needs. You were selected as a possible participant because of your status as an undergraduate Marywood student.

Background information

We are particularly interested in determining if you would welcome library and research help outside the library in more convenient locations such as the Nazareth Student Center, McGowan, and your Residence Halls. From the survey, we hope to improve and/or implement our library services to better serve your needs.

Procedures

You need to be 18 years of age or older to participate in this survey. The survey will take no more than 5 minutes of your time. If you agree to take this survey, please click the following link to complete the survey.

http://www.surveymonkey.com/s.aspx?sm = ysKakvi_2bND1S3HcduUvIhw_3d_3d

Also, you need to click the "I approve" button which states "I have read and agree to participate in the survey". Your participation is important to the success of the survey, which will be to your eventual benefit.

Risks and benefits of being in the study

There is no risk to this study. Benefit: determining your library needs and implementing and improving library services that will meet these needs will increase your ability to pursue your academic studies successfully.

Confidentiality

The records of this study will be kept private. In any sort of report we might publish, we will not include any information that will make it possible to identify a participant. Research records will be kept in a locked file; only the researchers will have access to the records. Records will be retained for a minimum of 3 years.

Voluntary nature of the study

Your decision whether or not to participate will not affect your current or future relations with the researcher, or Marywood University. Your participation is voluntary, and you may opt not to take this survey without affecting those relationships previously identified.

Contacts and questions

Please do not hesitate to contact the researchers conducting this study if you have any questions:

Lizah Ismail, Assistant Professor/Public Services Coordinator, Marywood University Library, Scranton, PA, 570-348-6264, lismail@marywood.edu

Jim Frutchey, Reference Librarian, Marywood University Library, Scranton, PA, 570-348-6211 ext. 2172, frutchey@marywood.edu

If you have any questions now, or later, related to the integrity of the research, (the rights of research subjects or research-related injuries, where applicable), you are encouraged to contact Dr Diane Keller at Marywood University, Assistant Vice-President for Research, at (570) 348-6211, extension 4778 or electronically at keller@marywood.edu

1. Library User Survey

Please take a take a minute to answer a few questions regarding your use or potential use of library services. Your honest input is important, so that we can better meet your needs. Thank you!

I have read and agree to participate in the survey

- a. I approve
- b. I do not approve

2. Demographics

- 1. I am:
 - a. A Full-Time on campus student
 - b. A Full-time commuter student
 - c. A Part-Time student

- 2. I am
 - a. A new/incoming student
 - b. A returning student
 - c. A transfer student

- 3. I am
 - a. 18-22 years old
 - b. B. 23-29 years old
 - c. 30-39 years old
 - d. 40 or over years old

- 4. I have
 - a. Attended a library instruction session before
 - b. Not attended a library instruction session before

3. User Survey

Please respond to the statements below:

- a. I consistently visit the Marywood University library at least once a week

Strongly Disagree Somewhat Disagree No opinion Somewhat Agree Strongly Agree

- b. I consistently visit the website of the Marywood University library at least once a week

Strongly Disagree Somewhat Disagree No opinion Somewhat Agree Strongly Agree

- c. I have asked Marywood University librarians for research help in the past

Strongly Disagree Somewhat Disagree No opinion Somewhat Agree Strongly Agree

Figure A1.
Undergraduate survey

(Continued)

-
- d. I would like librarians to establish regular research help hours in the student center
- Strongly Disagree Somewhat Disagree No opinion Somewhat Agree Strongly Agree
- e. I would like librarians to establish regular research help hours in the residence halls
- Strongly Disagree Somewhat Disagree No opinion Somewhat Agree Strongly Agree
- f. I would like the librarians to establish regular research help in McGowan and other buildings on campus
- Strongly Disagree Somewhat Disagree No opinion Somewhat Agree Strongly Agree
- g. I prefer to seek research help in locations that are convenient to me as opposed to going to the library
- Strongly Disagree Somewhat Disagree No opinion Somewhat Agree Strongly Agree
- h. I prefer to ask librarians for research help via e-mail
- Strongly Disagree Somewhat Disagree No opinion Somewhat Agree Strongly Agree
- i. I prefer to ask librarians for research help via chat or IM/texting
- Strongly Disagree Somewhat Disagree No opinion Somewhat Agree Strongly Agree
- j. I prefer to ask librarians for research help via my Moodle course page
- Strongly Disagree Somewhat Disagree No opinion Somewhat Agree Strongly Agree
- l. I prefer to ask librarians for research help via Facebook or MySpace
- Strongly Disagree Somewhat Disagree No opinion Somewhat Agree Strongly Agree
- m. I am confident in my ability to locate electronic and print material without librarian help
- Strongly Disagree Somewhat Disagree No opinion Somewhat Agree Strongly Agree

26

Table AI.
Demographics of total respondents

	Age group							
	18-22 (<i>n</i> = 216)		23-29 (<i>n</i> = 13)		30-39 (<i>n</i> = 7)		40 and over (<i>n</i> = 9)	
	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>
Library instruction	53.2	115	46.2	6	42.9	3	77.8	7
No library instruction	46.8	101	53.8	7	57.1	4	22.2	2
New student	24.54	53	0	0	0	0	0	0
Returning student	67.13	145	69.2	9	28.6	2	28.6	2
Transfer student	8.33	18	30.4	4	71.4	5	77.8	7

Table AII.
Location preference for research assistance and student status

	All age groups			
	18-22 (<i>n</i> = 216)	23-29 (<i>n</i> = 13)	30-39 (<i>n</i> = 7)	40 and over (<i>n</i> = 9)
Student center	3.48	3.23	4.0	3.89
Residence halls	3.10	2.92	2.57	2.89
Other campus buildings	3.27	3.62	3.86	2.78
More convenient location instead of library	3.27	3.62	3.71	2.56

Note: Averages on a scale of 1-5 where 1 = strongly disagree and 5 = strongly agree

Table AIII.
Research assistance preference and student status

	All age groups			
	18-22 (<i>n</i> = 216)	23-29 (<i>n</i> = 13)	30-39 (<i>n</i> = 7)	40 and over (<i>n</i> = 9)
E-mail	3.24	3.38	2.43	3.56
Chat/IM/texting	2.78	2.77	1.86	2.78
Moodle course page	2.77	2.77	2.14	3.11
Facebook/MySpace	2.37	2.0	1.86	2.0

Note: Averages on a scale of 1-5 where 1 = strongly disagree and 5 = strongly agree

Table AIV.
Library use, help-seeking habits and library instruction

	23-29 age group		
	Overall (<i>n</i> = 13)	Had library instruction (<i>n</i> = 6)	No library instruction (<i>n</i> = 5)
Library visits (at least once/wk)	2.54	2.33	2.71
Library web site visits (at least once/wk)	2.46	2.17	2.71
Asked for librarian help	2.62	2.33	2.86
Confident without help	3.54	3.33	3.71

Note: Averages on a scale of 1-5 where 1 = strongly disagree and 5 = strongly agree

	Overall (n = 7)	30-39 age group	
		Had library instruction (n = 3)	No library instruction (n = 4)
Library visits (at least once/wk)	3.43	4.0	4.0
Library web site visits (at least once/wk)	4.0	3.67	3.67
Asked for librarian help	3.29	3.0	3.0
Confident without help	2.71	2.71	2.33

Note: Averages on a scale of 1-5 where 1 = strongly disagree and 5 = strongly agree

Table AV.
Library use, help-seeking
habits and library
instruction

	Overall (n = 9)	40 and over age group	
		Had library instruction (n = 7)	No library instruction (n = 2)
Library visits (at least once/wk)	3.11	3.0	3.5
Library web site visits (at least once/wk)	3.67	3.43	4.5
Asked for librarian help	3.22	3.43	2.5
Confident without help	4.11	4.14	4.0

Note: Averages on a scale of 1-5 where 1 = strongly disagree and 5 = strongly agree

Table AVI.
Library use, help-seeking
habits and library
instruction

About the author

Lizah Ismail is Assistant Professor and Coordinator of Public Services at Marywood University Library in Scranton, PA. In her current position, she supervises circulation services and oversees reference services. She is also actively involved in teaching information literacy classes. Prior to coming to Marywood, Lizah was Head of Reference and Information Literacy at Misericordia University in Dallas, PA. She is a Board member of the Pennsylvania Library Association (PaLA) Northeast Chapter and an officer of the Library Instruction Roundtable of PaLA. She serves on the Membership Committee and the Distance Learning Committee of the ACRL College Libraries Division. She is also very much involved with the Northeast Pennsylvania Library Network. She received her MS in Library and Information Science from the University of Illinois, Urbana-Champaign, and her MA in Communications from the Annenberg School for Communication, University of Pennsylvania. Lizah Ismail can be contacted at: lismail@maryu.marywood.edu