Promoting
User Awareness of
Richard W. Bailey Library

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3D | **3D SOLUTIONS**
UNIVERSITY OF MICHIGAN STUDENT TEAM

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Executive Summary

The Richard W. Bailey Library at the Washtenaw Community College (WCC) has been serving as "the physical hub of a vibrant learning community, and as the portal of choice for access to knowledge resources" for its students and the community members since the establishment of the college in 1959 (Liu, 2016). The library offers Reference Services in person, over the phone, via email and 24/7 chat. It also staffs a User Access Services desk, which handles services such as library circulation, academic course reserves, shelving and stacking maintenance. Divided into two floors, the library also provides multiple seating options, study carrels, group study areas, conference rooms, class rooms, and a computer lab to address their users' various spatial needs.

Recently, the library staff have observed two concerning trends among student users: 1) poor user awareness of the roles of the User Services Desk and Research Help Desk, and 2) the proportionally low use of 24/7 virtual reference service compared to usage statistics from other local community colleges that participate in the same service. Puzzled by the discrepancy between these trends and the overall positive evaluations of the library from the annual student survey results and the rising number of gate counts in recent years, the library staff hopes to view a current service model to examine which areas need more improvements and to receive recommendations to solve those two problems above.

Through background research on the existing articles and statistical data about the community college libraries and their services, conducting contextual inquiry interviews of the library staff and a student user, building an affinity diagram from the interview interpretation notes, and brainstorming recommendations based on our findings, the six primary areas that we identified around the issues were: 1) Role Distribution & Workflow, 2) WCC Curriculum & Pedagogy, 3) Awareness and Quality of Library Services, 4) Overcoming Student Users' Self-Search Preferences, 5) Budgetary and Political Challenges, and 6) Facilities and Layout of the Library. After the close study of each theme, we concluded that the physical appearance of library service points, the students' perceived lack of need for research guides, and an increasing trend of self-search are the primary drivers of low usage of reference services offered both online or offline.

We have identified six core recommendation areas that, if implemented, could help the library adapt to the unique characteristics, changing needs and generational behaviors of their student users: 1) Faculty Collaboration, 2) Administrative Collaboration, 3) Design & Layout, 4) Information Literacy

Curriculum, 5) Virtual Reference Service, and 6) Social Media Outreach. Considering the paramount importance of ensuring that any proposed solutions acknowledge and strengthen the relationships between the key stakeholder groups of students, faculty, administrators, and library staff, we recommend various forms of interdepartmental collaboration in service of maximizing the efficiency and effectiveness of the library's efforts in promoting user awareness and satisfaction. Also, the library could implement internal changes by modifying the physical layout of the space and improving navigational tools to enhance users' experience as recipients of their services.

Introduction / Background information

According to statistics collected by the Association of Research Libraries (ARL), the median student use of reference services fell 35 percent between 1991 and 2004, while the use of in-house reference materials fell 47 percent during the same period (Martell, 2005). Concomitant to these troubling declines, however, has been a dramatic increase in use of digital library services as measured by events such as logins, queries and inter-library loan requests. Although the Bailey library has observed a steady rise in gate counts in recent years, the volume of reference queries and interactions has steadily declined during the same time period, which is consistent with the picture of use suggested by the ARL figures, but different in terms of the virtual library usage.

The academic literature on reference and user services in academic libraries reveal varied and sometimes conflicting student perspectives on the value and role of community colleges or libraries in their education. Many students enroll in community colleges as a bridge toward the further academic development of pursuing Bachelor's degrees, which they often could not enroll in directly due to financial burden or academic unpreparedness (Lendy, 2009). For others, a community college education is a springboard for gaining key skills before entering the workforce. Student perspectives of community college libraries can be organized into three broad categories: library as collections and services space, library as virtual space, and library as community space (Matthews, 2012). These findings reveal that many students are mostly concerned with meeting the requirements for graduation and may not consider the reference services offered at the library as not a relevant or meaningful resource in terms of accomplishing their goals.

Understanding student users is critical in analyzing what their reasons, motivations, use patterns, and preferences are with regard to library services. From a demographic perspective, 83% of the student

population of the undergraduate colleges in the U.S. belong to the Millennial generation, who were born in 1980s to early 2000s (NCES, 2014). In the Bailey library, the number is a staggering 99%. As the Millennial generation enters college, researchers argue that "if libraries want to continue to be vital parts of academic institutions they must change (Niles, 2011)." Some of the words that describe Millennial generation are "special, sheltered, confident, conventional, team-oriented, achieving, pressured, globally concerned, integrated, realistic, pragmatic, cyber-literate, media savvy and environmentally conscious (Niles, 2011). In terms of their library use patterns, millennials want quick, one-click access to the information, prefer communication methods of instant chat messages, texts, or emails, are open to collaborative and team-oriented tasks, and seek to know values and methods (Niles, 2011).

Another key element for librarians to contend with is the library anxiety of some students and the challenges involved in promoting their academic confidence. The findings from Roselle's study of community college library practices suggest that librarians who "proactively integrate basic library skills into developmental education and academic success courses, collaborate with developmental educators in designing library sessions and class assignments, interact with learning assistance and tutoring centers" seem to be successful at reducing library anxiety and boosting student confidence (Roselle, 2008). She also found that "creating positive student attitudes towards the library, adapting students to an academic library environment, and increasing student confidences in their library abilities" are effective ways to encourage students' successful library use (Roselle, 2008). In parallel with the findings, Small, Zakaria, and El-Figuigui summarized some successful strategies for motivating students in literacy skills classes: "help students retain knowledge and skills, make the library a comfortable and friendly environment (and thus a place to do research), promote different ways of learning (e.g., visual, hearing, tactile) to increase students' attention span, and make the librarian's job interesting, gratifying, and self-motivating," (Small, Zakaria, and El-Figuigui, 2004).

These interrelated trends and perspectives on contemporary library services in a community college context provide a useful landscape within which to situate the particular challenges of the Bailey library with regard to increasing awareness and use of their in-person and virtual reference services. Efforts to adapt library services so that they are better aligned with changing student needs, preferences and behaviors must be built on an awareness of the forces driving those changes and a creative approach to retooling certain aspects of service delivery and promotion.

Methodological Overview

To investigate the potential factors for the current low awareness of User Access Services and Reference Services, as well as the low usage of Virtual Reference Service at the Bailey library, we conducted a literature review on the related topics of community colleges and academic libraries, and a contextual inquiry, a human-centered design research method to collect and analyze the gathered data. The purpose is to have a foundation of understanding from the existing knowledge and to derive user-centered recommendations for the problems, so that they will satisfy both our client and its users. The four steps we took to accomplish these are: 1) Background research, 2) Interviews and observations, 3) Affinity diagram, and 4) Brainstorming recommendations.

Background Research

Before going into the field to conduct interviews and observations, we gathered some background data from our client and did research on the related topics in the academic literature. There were several types of documentation from the client, including WCC student responses to a survey measuring satisfaction with library services, virtual reference service statistics, and library gate count data. We also researched relevant information about our client and its challenges from diverse resources such as journals, articles and statistics. Following are the topics of our research: 1) Academic libraries strategies for adapting to changing information needs in 21st century, 2) Features of community college libraries that influence the user satisfaction, 3) the impact of the Bailey library on the local community, 4) Reference service in libraries and user satisfaction thereof.

Interviewing and Observing

First, we prepared Contextual Inquiry Interviews by designing a comprehensive interview protocol. This protocol was developed based on background research. After completing this, we conducted interviews and observed interviewees in the library work environment. Each interview was conducted by a pair of team members. One team member served as the main interviewer while the other took notes. Each interview took about 60 minutes. We conducted five interviews with various stakeholders including two reference service librarians, one user access service librarian, and two student users. During the library staff interviews, we paid close attention to key factors that influence the quality and frequency of reference service or user access service interactions with users, and sought to identify

possible recommendations to improve user awareness of those services. After conducting each interview, we observed workflow and work environment of librarians and their interaction with users. The focus of the student-user interviews, however, were a bit different. We tried to find the underlying factors that drive the need to use the reference services and to understand how library services might better address those needs. We made annotated notes for every interview and shared them along with the initial interview notes.

Interpreting and building affinity diagram

We conducted interpretation sessions for every interview. During these sessions, each main interviewer walked the rest of the team through the entire interview they had conducted so that other team members who did not participate the interview could hear details from and form insights about the interview content. To synthesize the data and findings from the interviews, we built an affinity diagram. We created 50 interpretation yellow notes for each interview. Then, we grouped those yellow notes into related clusters and labeled each cluster with a representative blue note. Blue notes contained higher level trends in our findings, while yellow notes contained interpretation level content, usually in the form of a quote or idea from an interview. In the same way, we categorized blue notes again into themed clusters and labeled each with a pink note. Clusters of pink notes were then categorized and labeled with single green notes. Going through this iterative grouping process allowed us to discover underlying problems of our client, which became the foundations of our recommendations.

Brainstorming recommendations

Through previous three steps, we obtained data and identified key findings and trends in order to develop useful recommendations. When we brainstormed potential recommendations, our guiding priorities were impact, feasibility, and costs of each recommendation. After agreeing on suggestions across several key problem areas, we developed details and outlined the rationale for each recommendation.

Figure 1. Affinity diagram

Findings

We were able to discover most of our findings in the process of building the affinity wall. The affinity wall not only allowed us to view the suggested problem from several perspectives, but it also allowed us to gain some unexpected insights that we were able to implement in brainstorming the recommendations. After going through the process of affinity wall building as mentioned in the Methodology section of this report, six main categories of findings emerged at the highest level. Described below are these six areas, with a few key affinity notes that illuminate important points from each area.

Role Distribution and Workflow

- User access and reference staff have distinct primary roles, but their minor roles often overlap
  "As librarians at Bailey, we share responsibilities across many areas including collection development, research instruction and information literacy."
  "Personnel changes have contributed to a less strict dichotomy between reference and access services"
- Students often get confused about the locations of and differences between the user access service and research help desk
  "Some students do not distinguish between the reference and user access services desk"

- Time of day and year significantly alter library's workflow
  "During the midterm, request for reference help increases"
  "The priority of the librarian's' duties shifts over the semester"

Just as the staff indicated during our preliminary meeting, we were able to see how minor roles of user access service librarians and reference librarians often overlap due to the fact that students sometimes do not distinguish between the two desks. Thus, the distinction between the two desks had become less strict while it used to be quite strictly defined. Since it is highly likely that the librarians' work efficiency decreases if they are often distracted from their primary job roles, countermeasures seemed necessary.

Moreover, the librarians' work load was susceptible to the academic calendar as well as daily class schedules. For example, the use of the library and reference service would increase right before and after classes or during exam periods. This indicated that staff schedules and priorities must be flexible enough to accommodate different volumes and types of user needs at different times.

WCC Curriculum and Pedagogy

- Instruction modules (either stand alone or with other departments) are useful for promoting student awareness
  "Student's satisfaction with the instruction classes makes them come to the library more often"
  "The class instructions are for students to learn how to do a research using library services"
  "ENG111 is one way students become more familiar with the library"
- Changes in the Information Literacy class have made it more convenient and popular
  "Students' main priority in course selection is meeting the degree requirements"
  "Students appreciate that the Information Literacy credit transfers to other institutions"

It was noticeable how class instructions given by the faculty plays an important role in the students' use of the library. The students were more likely to visit the library or use reference services when it was a requirement of their coursework. Also, our interview notes indicated that many students were satisfied with the Information Literacy course primarily in the sense that it meets their degree requirements and grants transferrable credit. This part of the affinity wall indicated the interactions between the students, faculty and library staff are important drivers of student use of library services. While understanding the needs of the students is important, they must be addressed in a context that also considers relationships between these three sets of stakeholders.

- The staff gather data to improve services
  "We collaborate with the IT department to track remote use statistics of library services"
- Librarians have undertaken many activities to increase students' awareness of library services
  "Bailey has adopted various social media platforms to reach more students"
- The staff's emphasis on high quality service is paying off
  "I was impressed and satisfied with my experience at the library"
  "The most rewarding experience for a reference librarian is to see students come back for other research helps"

The librarians at Bailey are engaged in an ongoing effort to improve the services they offer. The staff gather data to use as background information and employ a variety of different methods to promote their services. We also received positive responses from the student interviewees, expressing their satisfaction with their interactions with library staff. Even though the overall usage of certain library services may be low, the satisfaction of the students who do use those services is high.

Overcoming Student Users' Self-Search Preference

- The trends in students' preference for self-search results in under-usage of reference help
  "Students are sometimes hesitant to discuss the topic they are not confident about"
  "I try my best to solve any issues that arise, on my own before asking for help."
- When students take advantage of reference assistance, it leads to deeper understanding and positive education outcomes
  "Student users will succeed if they use library services"

This part of the wall revealed a key underlying problem of students' low usage of the library. Drawing on several notes, we were able to recognize that students prefer to search online rather than offline, and on their own rather than to ask for help. This finding agreed with our background research. Meanwhile, it seemed that the librarians at Bailey not only expected the students to reach out for help as early as possible, but also were confident about how they could be helpful. We found that it was important that such discrepancy be improved, by putting more consideration into how to work with and beyond millennial students' search behaviors and preferences.

Budgetary and Political Challenges

- Budgetary and political limitations pose challenges to the library staff
  "Only 10~11 out of 90 sections of ENG111 take advantage of the opportunity to partner with the library"
  "Even though Information Literacy is taught by a librarian, it is technically offered by another department"
  "Librarians are often aware of useful resources that the Bailey cannot afford to offer access to"
- Faculty are key stakeholders, both on their own and because they influence students
  "Some students discover the library at the urging of the faculty"
  "Faculty who are aware of the course reserves service use it often, but many are unaware"

Through the findings in this area of the wall, we gained insight from both a budgetary and political perspective. It was an interesting discovery that while the faculty plays an important role in getting the students to use the library, promoting interdepartmental collaboration between the library and the faculty is a difficult matter. Moreover, it seemed like the librarians at the Bailey were experiencing budgetary limitations that restricted them from offering access to some resources. We found that it was vital to consider the budgetary and political issues when considering possible recommendations.

Facilities and Layout of the Library

- Group study areas are in high demand
  "Study areas are the most crowded areas in the library"
- Library layout should integrate clearer spatial and directional guidelines
  "We have good directional signage, but still see many rerouting questions"
  "Students get confused where to go for certain services because there are parts of the library offering different services"
- Computers and printers are high-use resources at Bailey, but some students are still confused about use policies
  "About a quarter of my interactions at the reference desk involve rerouting students usually to Information Commons"
  "Some students have complained about how downstairs computers don't have access to Blackboard"

This part of the affinity wall demonstrated that a large number of the students perceive the library mostly as a great space to study or to get computer access in the Information Commons. We also noticed that a number of students were experiencing confusion or difficulty in navigating the library. It seemed important to raise awareness of the library as space that is more than just a study area, as well as to devise a way to assist students in finding their way around the library.

Recommendations

In light of these findings, as well as our background research on the current national landscape of academic library services and user trends, we are submitting recommendations in six key areas: Design & Layout, Administrative Collaboration, Faculty Collaboration, Information Literacy Curriculum, Virtual Reference and Social Media Outreach. These recommendations are primarily intended to drive more student awareness and use of reference and user services at the Bailey Library as opposed to driving substantive changes to the services themselves.

1) *Faculty Collaboration*

Teaching faculty are the most obvious, logical partners in influencing student use of library services. Each individual instructor who can be persuaded of the value of including a formal component of library use in their syllabi stands to impact dozens of students per year. This dynamic is already reflected in the Bailey staff's collaboration with the English 111 instructors. That said, staff interviewees expressed disappointment and concern over how few of the sections of English 111 actually take advantage of the library as a key curricular partner; one interviewee estimated that only 10 or 11 of the 90 sections of the most recent iteration of the course included a formal library component. While interviews with instructors were beyond the scope of our project, we can conjecture that the main reasons for this relatively low participation rate are related to a perception on the part of faculty that such collaboration would involve extra work and communication on their part, as well as an investment of class time that would then be unavailable for their own instruction. Any attempt to increase faculty-library collaboration, then, would likely have to address these barriers.

One approach to increasing faculty-driven use of library services could be for library staff to **develop assignments or added components to existing assignments** that would require students to visit the library and engage with library staff. Such assignments could be designed to dovetail with the

pedagogical aims of the instructor, and would require students to come to the Bailey on their own time, thus ameliorating instructors' potential concerns about devoting class time to a session of library instruction. If they were components of existing assignments, they would not constitute any 'extra work' for instructors either. Alternatively, library staff could grade the library instruction portion of the assignment on a simple pass/fail basis. In addition to reducing barriers to faculty participation, this approach would also generate many one-on-one--rather than one-to-many--interactions with library staff, thereby creating opportunities for relationship building and improving student awareness of the value of library services. It also opens possibilities for collaboration with introductory courses across many academic departments beyond English, which would reinforce for students that the library is a valuable resource in a multi-disciplinary context.

2) *Administrative Collaboration*

Staff interviewees mentioned that an optional library tour is a component of annual student orientation activities, but that its 'optional' status precludes high participation rates. Another recommendation is to seek administrator support in **making some kind of tour or other orientation element (such as an open house or brief talk by a librarian) a mandatory or structured component of new student activities**. Absent a close familiarity with the structure of WCC's student orientations, we believe that this is a weaker recommendation than the previous one regarding faculty collaboration. It seems less likely to gain the necessary political traction, and even if it did, the context of the introduction would be as part of a slew of other activities rather than a standalone experience contextualized within the educational goals of a course.

3) *Design & Layout*

Our interviews and observations affirmed that the Bailey staff have undertaken ongoing efforts to improve and clarify library signage to facilitate easy student navigation of spaces and services. That said, one interviewee estimated that 25% of all of their student interactions are directional in nature, requiring rerouting to another point of service. One model that other academic libraries have adopted in the interest of simplifying user navigation is to **consolidate discrete points of service into one go-to desk** (Flanagan and Horowitz, 2000). This is a possible course of action for the Bailey Library, but such a transition would demand careful consideration of several factors, including: revising query referral protocols, reorganizing the new single point of service for streamlined user and staff traffic, and reworking librarian and support staff schedules to ensure the appropriate balance of expertise at the desk. Interviewees

suggested that over recent years, what used to be a quite rigid divide between reference and user services has become a bit more malleable, though the expertise and qualifications of reference staff still make them the appropriate point people for reference queries. Adopting a consolidated point of service model would be a further step toward softening this distinction, but a clear query referral system would still ensure that queries would be fielded by qualified staff members.

Another recommendation related to design and layout of the library would be the addition of visual floor map signage to reinforce the clear text signage that already exists. This recommendation is primarily aimed at addressing student confusion about which desk to take a query to and student frustration about the differentiation between Research and Information Commons computer permissions. Adding a visual spatial component to the signage might catch the eyes of students who are not heeding the current textual signage, and might appeal more readily to users who are visual thinkers and learners. The intended result of this signage would be to further mitigate the numerous student-staff interactions that are primarily directional in nature.

4) *Information Literacy Curriculum*

Dedicated curriculum in information literacy is another way to increase student awareness and appreciation of library services, and since students often find out about library services from other students, reaching more students through such curriculum represents a way to create informal student ambassadors who might drive more use of library services. One interviewee indicated that the Information Literacy course--taught by a librarian but housed under another academic department--recently became an online, rather than an in-person, course. While this has had a positive impact on enrollment, it makes it less valuable as a tool for driving library awareness and traffic. Another of our recommendations is to **explore the potential for expanding the information literacy curriculum into a three-course certificate program**. As more students grapple with their place in the information age and information literacy becomes an increasingly critical area of competency in the workforce, such a credential might be a desirable way for students to set themselves apart either as potential employees or in their post-WCC academic trajectories. To be effective, at least some of this coursework would have to be hosted in the library itself, and incorporate its resources and services.

5) *Virtual Reference Service*

Another area we were requested to look into was the proportionally low student use of virtual reference service compared to students from other consortium partner institutions. Based on our exploration of the service and student feedback, we have two recommendations in this area. One is to **consider renaming the 'Ask an Expert' widget on the main page of the library website.** A student interviewee noted that they are self-conscious about seeking reference help until they feel they have conducted a fairly comprehensive search on their own. The framing of virtual reference as asking an expert could be perceived as an intimidating task, and even if not, it seems to reinforce the idea that virtual reference is a service that should be used only once an exhaustive self-guided search has been undertaken. We suggest adopting a title for the service that invites use early in the search process, as the guidance of a reference expert can be so valuable in framing an information search, and can help a student use their time much more productively. A title that might convey the sense of virtual reference not as an expert consultation to be appealed to late in the search process, but as an early step, could be something in the vein of 'Jump Start Your Search.' Another recommendation is to **explore the potential for elevating visibility of the virtual reference service by hosting the widget on a trial or temporary basis somewhere on the WCC main homepage at the beginning of the Fall 2017 semester.**

6) Social Media Outreach

The final area of recommendations is that of the Bailey's use of social media presence as an outreach tool. Interviewees noted that the library has made use of social media accounts to connect to students and to raise awareness of the library and its services. We recommend escalating those efforts in two ways. One is to **integrate a 'recent posts' feed or a similarly elevated presence of the Bailey's social media activity on its website** so that students who may not yet follow this activity are made aware of it when they browse the library site. Another is to **consider drafting a series of posts that introduce students who follow the library's social media accounts to the library staff via a picture and some human interest questions** similar to the series of posts that Eastern Michigan University's Halle Library did recently. This can make library staff more identifiable and approachable by building an association with face, name and role in students' minds.

Conclusion

Our findings suggest that the Bailey library is still highly appreciated and garners high satisfaction from student users. However, students' poor awareness and low usage of reference services suggest that different motivations and reasons other than information search direct them to the library, such as access to the space and equipment. To serve the core mission of the library by cultivating information search skills to promote lifelong learning and providing access to the comprehensive collection of library resources, it is important to understand that the users themselves have changed. Therefore, to address the underlying problem of the uniqueness of the student users' information search or library usage preferences, the library should collaborate with the faculty, the administration, and the students to meet their mutual goals of education through complementary roles and tasks. Also meriting consideration would be some changes to the physical layout and appearance of the library, such as designating a consolidated point of service that merges the User Service Desk and Research Help Desk, or adding color-coded, 3D maps to better guide users through the facility.

References

Flanagan, Pat and Lisa R. Horowitz. "Exploring new service models: can consolidating public service points improve response to customer needs?" *The Journal of Academic Librarianship* 26, no. 5 (2000): 329-338.

Kennedy, Bethany (Access Services Director) in initial client meeting, September 28, 2016.

Lendy, S. "Perceptions from students and the community about community colleges." Community and Junior College Libraries, 14(2). (2009): 91–117.

Liu, Victor. "About the Library," Washtenaw Community College. Accessed September 26, 2016. http://www.wccnet.edu/resources/library/aboutlibrary/.

Martell, Charles R. "The ubiquitous user: A reexamination of Carlson's deserted library." portal: Libraries and the Academy 5, no. 4 (2005): 441-453.

Matthews, Joseph R. "Assessing library contributions to university outcomes: the need for individual student level data." Library Management 33, no. 6/7 (2012): 389-402.

"Mission and Values," Washtenaw Community College, accessed October 2, 2016, http://wwwdev.wccnet.edu/aboutwcc/collegeinfo/mission/.

Niles, Phyllis "Meeting the Needs of the 21st Century Student." Community & Junior College Libraries 17.2 (2011): 47–51.

"Post Secondary and Beyond," U.S. Department of Education, National Center for Education Statistics. Digest of Education Statistics, 2014 (NCES 2016-006), Chapter 3.

Roselle, Ann. "Community College Library Practices in Developmental Education." Journal of Developmental Education (2008). Academic OneFile. Web. 22 Oct. 2016.

Small, R., Zakaria, N., & El-Figuigui, H. "Motivational aspects of information literacy skills instruction in community college libraries." College & Research Libraries, 65(2). (2004): 96–122.