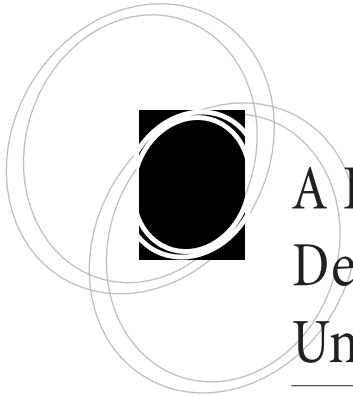




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A Process Approach to Defining Services for Undergraduates

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abstract: Today's undergraduates approach research with needs and expectations that challenge traditional library services. The foundation for leading an effective response is the ability to assess undergraduate needs and translate these needs into tangible strategic initiatives that contribute to student academic success. This paper describes the systematic process used at the University of Minnesota Libraries that resulted in large-scale undergraduate initiatives. The multiple step process included assessing, analyzing, scoping themes and problems, brainstorming, establishing evaluation criteria, gathering feedback, ranking and prioritizing key initiatives, and obtaining funding. Issues that arose during this process are also discussed.

Introduction

Most librarians and library staff today are from the baby boomer or "X" generations. They grew up during a time when libraries were hallowed halls of quiet, when one looked up books in huge card catalogs and found article citations from row after row of print indexes. Since then, much of the information world around us has changed. Most publishers are moving to electronic products. Universities and other research centers disseminate information digitally. A wealth of information, some authoritative and some questionable, has appeared on the Internet. With so much information accessible online and the increasing availability of technology, the world is very different for today's undergraduates.

Having grown up with computers, the Internet, laser surgery, and genetic engineering, technology is an integral part of the lives of the current generation of college students. In general, these tech-savvy students tend to live their lives at warp speed and are experienced multitaskers. They work, take classes, participate in sports and



extracurricular activities, and manage robust social lives.¹ They have high expectations for academic services, desire for customized experiences, comfort with technology, and experience with new communication tools.²

With so much information available online, this generation of undergraduates often does not use academic libraries for research. Studies indicate that the majority of teenage students use the Internet rather than library resources for their coursework, usually without the information literacy skills needed to utilize sources effectively.³ For those who do use library resources, they typically rely on a mix of computer-mediated resources and hands-on services while conducting research and have a need for personal and customized services.⁴

For academic libraries, the behaviors and needs of current undergraduates necessitate an effort to revamp traditional approaches and develop new library services that meet the students where they are, especially outside the library walls. As one undergraduate told us in an interview, we “need to do something to show that libraries are not obsolete in the face of the Internet.” In order to do this, we must develop an understanding of the research behaviors of undergraduates and identify, define, and implement programs and initiatives that will make a tangible difference in their lives.

This paper describes a systematic process used at the University of Minnesota Libraries that does just that. We outline a process that takes data and transforms it into specific and implementable services that lead to academic success for undergraduates. This process takes techniques used widely in Process Improvement (PI) and Total Quality Management (TQM) and adapts them for use in an academic library setting.⁵ Some of the strategies we describe challenge the traditional methods typically used by librarians and staff to identify and implement new library services. Although we highlight the successes of the project, we will also provide suggestions to alleviate possible roadblocks to an effective process. A process roadmap highlighting the key steps in the process is available in the appendix. Others can easily adapt and execute this process in their own libraries.

Literature Review

A review of the literature, in which we searched for a detailed, systematic approach to defining library services, including generating a full range of possible responses, ap-

Some of the strategies we describe challenge the traditional methods typically used by librarians and staff to identify and implement new library services.

plying careful criteria to those responses, obtaining user feedback on possibilities, and proposing a reasonable range of solutions, revealed little information. There is plentiful literature, however, on using various techniques such as interviews, focus groups, and surveys for collecting data on undergraduates.⁶ Some more innovative approaches have been documented recently as well. In *Studying Students: The Undergraduate*

Research Project at the University of Rochester, for example, librarians and an anthropologist used a variety of anthropological and ethnographic methods including a photo survey,



a mapping diary, and a dorm visit, along with various interviews and observations to examine the daily lives of students and the ways students complete their academic work.⁷ Similarly, researchers at MIT conducted a photo diary survey in which students documented their research process through pictures and corresponding notes.⁸ In both of these projects, researchers uncovered a wealth of data about their undergraduates and implemented new or improved library services in response to that data. Although multiple individual techniques for prioritizing services are mentioned, there is no description of a complete systematic process that was used to move from raw data to specific initiatives.

In addition to this body of work on specific research methodologies, there is also a discussion of strategies for obtaining funding for important library initiatives. For example, in *Studying Students: The Undergraduate Research Project at the University of Rochester*, Nancy Foster and Susan Gibbons describe how they used their findings to assist in the concurrent planning of a multi-million dollar library renovation project.⁹ Melissa Becher and Janice Flug also stress the importance of linking to library- or campus-wide planning cycles and discuss the need to share assessment data on a regular basis, both within the library and across campus.¹⁰

All of these strategies are necessary components of any large-scale initiative project. However, in order to ensure that the initiatives put forward are those that will have the greatest impact on a particular target group, attention must be given to the part of the process between the data analysis and the decision to implement specific initiatives. This article outlines a systematic process from beginning to end, designed to promote a cohesive set of initiatives for undergraduate students at the University of Minnesota.

The University of Minnesota Libraries' Undergraduate Initiatives Project

The University of Minnesota Libraries undertook this project during a time when the university had a renewed focus on the undergraduate experience. Given this climate, University Librarian Wendy Lougee named a council of 12 key library staff from across the university libraries system to address ways the libraries could make a substantive impact on the quality of undergraduate education and the university experience of undergraduates. Specifically, the Undergraduate Initiatives Coordinating Council was charged with addressing issues surrounding planning, coordination, resource development, and campus collaboration with respect to assessing and enhancing the undergraduate experience. Within the council, a five-member core group, in which both of the authors participated, facilitated project planning and organized the work of the council as a whole.

Assessment

The University of Minnesota–Twin Cities typically enrolls over 32,000 undergraduates per year, accounting for over 65 percent of the total enrollment. The average age of the undergraduate population is 21.5.¹¹ To begin assessing the needs of these students, the Undergraduate Initiatives Coordinating Council conducted a series of qualitative studies. Council members conducted three focus group interviews with undergraduate students,



four focus group interviews with faculty, 20 individual interviews with “key players” in administrative and staff positions across campus, and 12 individual interviews with university libraries staff. The key administration and staff members were identified from related undergraduate services and offices such as writing centers, information technology, and campus orientation.

All interview participants were asked to describe the greatest challenges for undergraduates and to identify key undergraduate needs that were not being addressed on campus. In this part of the process, questions were intentionally designed to gather feedback about the undergraduates’ experience outside of the libraries in order to identify campus issues more broadly. By expanding our scope, we hoped to gather new ideas for possible collaboration or connections with other undergraduate services on campus. All participants were asked what library services they found to be most useful and what the libraries could do to make the greatest impact on undergraduates. In addition, undergraduate participants were asked to describe their work on a recent research paper—what was difficult, what timeline they used to finish the assignment, and how they used or did not use the library. Faculty, instructors, administrators, and staff were asked to describe their best experiences with the libraries and what library-related work they require of their students. The university libraries staff members were asked to describe their best library experience as undergraduates and to describe their best experience working with undergraduates as library staff members/librarians.

As we expected, some of the most interesting thoughts came from students. In response to the question about what the libraries could do to make the greatest impact on undergraduates, students repeatedly described personalized 24/7 services. Some suggestions included a point-of-need 24/7 book delivery service, video rental between classes, personal tour guides, and, of course, longer library hours. Students also mentioned their desire for a comfortable space in which to eat, drink, and socialize; simple, easy to use full-text Web resources; secure space to store their belongings between classes; and more computers. In general, the libraries were confusing to students, both in terms of the multitude of buildings as well as the magnitude of print and online resources. One undergraduate suggested that we build “one giant library in the middle of the mall” to make things easier for students. Selected quotes from each of the groups are included in table 1.

To supplement the individual and focus group interview information, we also analyzed the results of a LibQUAL+™ survey administered by the university libraries in spring 2003. One hundred seventy-nine undergraduates participated in the survey that measures users’ desired, perceived, and minimum expectations of library service in four key areas: “access to information,” “affect of service,” “library as place,” and “personal control.” Responses to questions in the personal control category, which focuses on students’ experience with online library services and resources that they can access on their own, revealed an area not covered thoroughly by the interviews yet deemed important by undergraduate survey respondents. Students were asked to rate their perceived importance of “making electronic resources accessible from [their] home or office,” “modern equipment that lets [them] easily access the information [they] need,” “a library website enabling [them] to locate information on [their] own,” “easy-to-use access tools that allow [them] to find things on [their] own,” “making information easily



Table 1.
Significant Quotes from Interviews

Students	Faculty	Key Players*	Library Staff
<p>"I still don't know the library system. I use my own resources and the Internet."</p>	<p>"Students have unquestionable faith in what they pick up on the Web. It's easy to put in a word or two and find something to read, download it, and do a little copying and pasting into a paper or a lab report."</p>	<p>"Students think a Google search is research."</p>	<p>"Students aren't taking advantage of the library to help them do great work. Students don't know what they need."</p>
<p>"You can only find information out about the library <i>in</i> the library."</p>	<p>"Students are very easily frustrated and discouraged with the library. I have had students put a few minutes into identifying some books, but if they can't find them or they are checked out they come back to me saying, 'the library doesn't have anything on my topic.'"</p>	<p>"Most faculty don't have any idea what the library can do."</p>	<p>"In an ideal world library instruction to undergraduates would be valued."</p>
<p>"I don't do anything until after 9pm. When you can't find something, the info desk is not open after 8pm."</p>	<p>"I imagine there are many students who haven't set foot in the library."</p>	<p>"I can count the times on one hand that I have been over to Wilson [Library]. If it isn't online, I don't use it."</p>	<p>"Library research has to be convenient for [undergraduates]."</p>

Table 1., continued.

Students	Faculty	Key Players*	Library Staff
<p>“Every [academic] department wants to have things a different way and the professors aren’t consistent about what they want.”</p>	<p>“The librarians are not brought into the classroom. There’s a disconnect between what’s being taught here and the libraries.”</p>	<p>“Getting to faculty is the key to getting to students.”</p>	<p>“Instructors don’t know all of the ‘good’ resources that are available and as easy to use as Google. We need to educate [them] and market this.”</p>
<p>“My mouth is so dry; they won’t let you have anything to drink there.”</p>	<p>“[You need to make] the library seem more central to what’s going on in students’ lives.”</p>	<p>“The kind of space [students] need is not the type provided in most libraries.”</p>	<p>“It’s hard to feel like you have community here [at the university].”</p>
<p>“I am overwhelmed, burdened and challenged; money is hard.”</p>	<p>“Some students love learning; it gets tempered by the need to make a living and a life outside of school. They wonder what they’ll get out of this.”</p>	<p>“If there are no assignments related to the library, there will be no need to use it.”</p>	<p>“Students are doing so much they forget the priority of education.”</p>
<p>“You need to do something to show that libraries are not obsolete in the face of the Internet.”</p>	<p>“I feel that the information in the library is relatively old.”</p>	<p>“You guys need to demonstrate the importance of the library’s role. I honestly think the students think that Google is as good as your sources.”</p>	<p>“We’re not letting [undergraduates] know that we’re working hard to make things easier for them.”</p>

* Key administration and staff members were identified from related undergraduate services and offices such as writing centers, information technology, and campus orientation.



accessible for independent use,” and “convenient access to library collections.”¹² The most problematic areas for undergraduates in this category and ones that needed to be addressed by the council’s work were “easy to use access tools that allow [them] to find things on [their] own” and “convenient access to library collections.”

Analysis

The next step in the process was to compile and analyze raw data from the interviews. The core planning group coded each individual statement from the interview transcripts and grouped items to identify undergraduate challenges and needs as acknowledged within and across all groups. The top three undergraduate challenges acknowledged by all groups were:

1. Difficulty in balancing work/life/school (time management)
2. Lack of study space
3. Lack of awareness of services available to them

Other challenges mentioned frequently by all constituents included a disconnect between faculty expectations and the quality of student work, roadblocks for graduating in four years, difficulties with finding community, and unequal opportunities—especially for transfer students. These challenges served as an important backdrop that provided context to our work.

Next, the undergraduate needs expressed in the interviews were examined, along with LibQUAL+™ data that indicated the needs of students in the “personal control” category. Similar needs were grouped together and common themes that described them were looked for. For example, desires such as comfortable chairs, group study space, extended library hours, computer labs in each library, and coffee shops or other social spaces aligned to form the community/space theme.

Our resulting four themes were:

1. Awareness
2. Independent access
3. Curriculum connection
4. Community/space

Scoping Themes and Problems

“A Problem Well Stated is Half Solved” – John Dewey

After identifying key themes, there were more questions than answers. What does it mean, for example, that awareness or independent access is an issue? What specific initiatives might the libraries implement to respond to these issues effectively? Defining and articulating the problems to be solved in relation to each theme was the lion’s share of the work in this step of the process. Without a set of very specific problem statements, it would be unclear exactly what was to be accomplished. For example, what problem actually needed to be solved for the community/space theme? It is not enough to ask, “How do we create community and better space in the libraries?” Addressing that question could lead us down numerous pathways, possibly the wrong ones, and dissipate



our efforts. Instead, a process was embarked upon to articulate clear problem statements for each theme so that specific future solutions for each problem could be identified.

To help to begin to define the precise problem, the team used the 5Ws/H Technique, which is simply asking who, what, where, when, why, and how questions.¹³ The process began with the 5Ws, and the H (how) question was saved for later in the process.

Uncovering Assumptions

Frequently people limit and define their ideas for solutions based on unspoken assumptions about the group or the circumstances around a theme. It became apparent during this process that we, too, were operating under certain assumptions. Articulating, debating, and discussing these assumptions are important precursors to identifying possible solution ideas.

The group found it useful to discuss assumptions about both the library and undergraduate students. We tried to examine assumptions of librarians or library staff overall, rather than limiting the discussion to our individual assumptions. This discussion allowed the group to openly resolve any contradicting assumptions that were present among us and to move forward with the process.

Identifying Problem Statements

The conversations and the process described above helped to lay a strong, shared foundational understanding of what each theme did and did not entail. Next, the

Frequently people limit and define their ideas for solutions based on unspoken assumptions about the group or the circumstances around a theme.

council focused on creating a clear problem statement and question that would frame our solution developments for each of the themes and provide a succinct way to communicate to others the scope of our solutions. This question addressed the “how” portion of the 5Ws/H Technique. The group used a process that challenged us to dig deeply into many of the problems in search of the root or most critical problem. First, it was important

to ask, “Why do we want to create space and community?” An answer was settled on, and a problem statement was created by tacking onto the front of that answer, “In what ways might we” do x, y, or z? This was followed by another why question, followed by an answer, followed by the “In what ways might we...” problem statement redefinition, continuing several times until the group formed a problem statement that resonated with most with the members.

Due to the tendency to look for immediate ways to help patrons at the point of need, solutions easily crept into the discussion at this point in the process, which could lead to the solution defining the problem. At this stage, however, efforts were made not to settle on a question or statement that was derived from a possible resolution of the problem. Ultimately, the group settled on a problem statement for the community/space theme that asked, “In what ways might we integrate the libraries into students’



daily lives?" This became the defining, clearly stated problem for this theme that the council set out to address.

Another key component of this step in the process was articulating what the best possible outcome related to each theme would be for undergraduates. This step did not necessitate a certain technique or tool because the outcome had already emerged in previous discussions. For the community/space theme, the best possible outcome was simply, "The library is part of their daily lives and where they feel at home." This became a vision supported by data and analysis and was a great rallying point for the council. Table 2 outlines all of our scoping work on the community/space theme. This same process was repeated for all four theme areas.

Brainstorming Initiatives

At this point, the council understood the scope of each theme, our assumptions, and the main challenge or problem we needed to solve. We were finally ready to generate ideas for new initiatives. For this part of the process, the entire council left campus for a daylong retreat at one of the member's homes. With one of the core members acting as facilitator, the council used the nominal group technique for brainstorming, in which group members are asked to think individually of as many ways as possible to address each of the problem statements.¹⁴ In all, the council brainstormed over 200 possible initiatives or projects in response to the four problem statements.

Identifying Key Initiatives

Discussing each of the 200-plus ideas would have been impossible given the time constraints under which the council operated. It was obvious that the lists needed to be weeded and the most promising solution ideas brought to the top of the lists for further discussion.

To create manageable lists of ideas and to focus on key initiatives, the group used the multivoting technique.¹⁵ Council members were given a specific number of votes that they used to identify which ideas they felt would be most effective in responding to each problem statement.¹⁶ Shortly after the brainstorming session, each individual received a form with the number of votes allowed per theme, the ideas for each theme, and three boxes next to each idea:

1. A box for voting
2. A box to request further discussion of the item
3. A box to indicate if the idea were already in place somewhere in the library system

Items were arranged from highest to lowest number of votes for each theme area. Initiative ideas with three or more votes moved on to the next phase of the process.



Table 2.

Scoping of the Community/Space Theme and Problem Statement

<p>Who? <i>Who is the targeted user group?</i></p>	<ul style="list-style-type: none"> • Undergraduates • Faculty
<p>What? <i>What does this theme encompass?</i></p>	<ul style="list-style-type: none"> • Library is a part of their village • Comfort and coffee • Communication (caring response) • Group and individual study rooms • Production computer space • Welcoming environment • Teacher meeting / instruction space • In loco parentis
<p>Where? <i>Where do we want to provide this?</i></p>	<ul style="list-style-type: none"> • Create community space throughout the library system (including the still fictional coffee shops), not just in a library satellite, branch library, or particular major library
<p>When? <i>When do we want to make this happen?</i></p>	<ul style="list-style-type: none"> • 24/7 • Create a home away from home for undergraduates
<p>Why? <i>Why is this important?</i></p>	<ul style="list-style-type: none"> • Integrate libraries into their lives (into fabric/interwoven) • Be more welcoming, make people want to be in the library (non-intimidating) • Provide a place for students to connect • Provide a place for group work • Provide a place for classes to work together • Provide one place to work, start to finish; don't have this elsewhere on campus
<p>What are our professional assumptions about the library which may be limiting our thinking?</p>	<ul style="list-style-type: none"> • If we had instruction space more faculty would use it for library instruction • Library isn't for chit-chat • Library is a serious service and resource • The libraries can be "all this," they'll want us to be all this

Table 2., continued.

What are our professional assumptions about undergraduates?	<ul style="list-style-type: none"> • Would use group study space • Would come to library over other alternatives (if we build it, they will come) • If they're here, they'll take advantage of other stuff we offer and may become donors after graduation • Need to escape somewhere • Need and want face time • Want to hook up • See library as impersonal and anonymous • Wouldn't come to special events • Need incentives to come here and use us • Don't have time to go to library
What is the best possible outcome for this theme?	The library is part of undergraduates' daily lives and where they feel at home
How? <i>What is the problem statement for this theme?</i>	In what ways might we integrate the Libraries into students' daily lives?

Determining and Applying Evaluation Criteria

Overall Drivers and Impeders

At this point in the process, many of the group members were excited and anxious to choose some of the best-sounding initiatives and run with them, whereas a smaller number of members were highly invested in the process that was unfolding. It became clear that we needed to re-group, look again at our charge, and continue with an approach that was within everyone's comfort level. To identify the positive and negative forces that were affecting the overall process, we used a tool called "force field analysis," labeling our positive forces "drivers" and our negative forces "impeders."¹⁷ Through brainstorming and group discussion, it was determined that our overall drivers were:

- The undergraduates
- The fact that we had an Undergraduate Initiatives Coordinating Council, endorsed by the university librarian
- The potential to fulfill some campus and library goals

In opposition to these factors were the overall impeders:

- Our various opinions about what is good
- The culture and personality of our profession—not necessarily risk-taking, not drumming up business, not much flexibility/nimbleness or innovation, perfectionism



- The lack of small, quick-strike project teams
- Our tendency to be reactive, not proactive
- The idea that if it is not a new thing and if you are just maintaining something, it does not really count in terms of job performance

By identifying the forces supporting and inhibiting the planning process, we were able to realize why some people were uncomfortable and frustrated. At the same time, the exercise allowed us to refocus on our drivers, in particular the undergraduates, and to continue with the process.

Drivers and Impeders for Each Initiative

The next step was to identify what drivers could push us toward a successful initiative and what impeders might get in the way. The group brainstormed and discussed factors that affected each solution idea, both positively and negatively. As shown in table 3, the force field analysis technique provided a visual description that helped weigh the drivers and impeders affecting each solution idea. The technique also helped to pinpoint the challenges that would need to be overcome if a particular initiative were implemented.

Strategic Value and Ease/Impact

After the main drivers and impeders were considered for each remaining solution idea, the council identified the evaluation criteria to apply to each solution idea. These consisted of the

- Strategic value the item had for the libraries
- Was it a politically viable idea? Did it align with other university and university libraries goals and help move them forward?
- Ease of execution the item had for the libraries
- What resource needs (staff and funding) and technical support would be required?
- Impact the solution idea would have on undergraduates
- What would be the number of people affected, and what would be the extent to which it would affect the status quo?

The council used the evaluation criteria above to assign points to each remaining initiative. The strategic value of each idea was rated on a scale of one to four, in which one

The force field analysis technique provided a visual description that helped weigh the drivers and impeders affecting each solution idea.

indicated high strategic value and four indicated low strategic value. We used the remaining criteria (ease of execution and impact) to create an ease/impact matrix that helped to rank the initiatives based on their ease of implementation and potential impact on undergraduates.¹⁸ Using a four-point scale, solution ideas that had a high

level of potential impact and that would be easy to implement scored one point, and

Table 3.
Drivers and Impeders for the Information Commons Idea

Drivers	Impeders
Students want it and need it	Staff buy-in because of concern about the breadth of training and knowledge they might have or not have
Students expect to be able to work on their papers here	Space
Students can't believe they can't do this now!	Staffing
Bring more people into the library	Less access per person (more time on a computer per person)
Make us look cutting edge	Computer software and equipment keeps changing (cost and learning curves)
Other libraries have done it successfully	Big vision – maybe start smaller
It's smart and politically correct; it builds campus relationships	Division between campus-wide Academic and Distributed Computing Services and the University Libraries
Integrated services are the wave of the future	Word processing might crowd out everything else

ideas that were both low impact and difficult to do scored four points. This technique helped to identify and to focus first on the lower-scoring, more viable initiatives.

At the same time, the group reminded itself how many votes had been given to each particular initiative during the multi-voting exercise. This number reflected the group's perceived value for each item and gave weight to our expertise and experience in addition to that of the interviewees. Including our votes here reminded us of the value of our ideas and supported the cultural process with which we were already familiar.

Both the ease/impact rating and the number of council votes helped us to rank initiatives for each theme area. The most important initiatives for the community/space theme were an information commons; coffee shops; comfortable space; group space; and integrated space where food, drinks, and talking were acceptable. Table 4 shows these initiatives along with their rankings.



Table 4.

Applying Evaluation Criteria to Community/Space Initiatives

In what ways might we integrate the libraries into students' daily lives?

Overall Ranking	Initiative	Strategic Value	Ease/Impact Rating	Council Votes
1 (tie)	Information Commons	1	2	9
1 (tie)	Coffee Shop	2	1	9
3	Comfortable Space	2	2	11
4	Group Study Space	2	2	8
5	Integrated Space (where food, drinks, and talking are ok)	3	3	9

Gathering Feedback on the Top Initiatives

The discussion and debate that developed as a result of applying these criteria to the initiative ideas helped the council to narrow the list to a mere 12 items. These items were translated into a short survey that was administered in person by council members to undergraduates around campus. Students were asked to select the five initiatives that they thought would be the most important that the libraries could do for them.

One hundred twenty-five undergraduate students took the survey. Ultimately, the last two items were combined to read simply, "Require students to learn about library research." The top three initiatives, chosen by 81–99 percent of all students surveyed as one of their top five, were comfortable chairs and areas to study (99 percent), a single search engine for all library resources (85 percent), and a single place to research and write papers (81 percent). The middle tier of initiatives (chosen by 40–80 percent of all students surveyed) included coffee shops (61 percent), a requirement to learn about library research either when they enter or by the time they leave the university (52 percent), books and other materials geared toward undergraduates (51 percent), and a library Web site just for undergraduates (44 percent). The bottom tier of initiatives (selected by 15–35 percent of all students surveyed) included help on all floors of the library (33 percent), information kiosks around campus (32 percent), library satellites around campus (27 percent), and e-mail and flyers highlighting library information (16 percent).

Reevaluating the Initiatives

As the council compiled the results from the undergraduate survey with the results of the application of the evaluation criteria, as well as discussions with colleagues in the



Table 5.

Undergraduate Survey

What do YOU think the Libraries should do? What would really make a difference? The U. Libraries are looking for your feedback. (Check your TOP 5)	
	Get comfortable chairs and areas for you to study in and work together with other students
	Send e-mails and flyers about library-related info that would be helpful to you
	Open up information kiosks around campus stocked with materials on how to do library research
	Get more books, journals, and other library materials geared toward undergrads
	Open up library satellites around campus staffed with librarians to help you one-on-one with your research
	Have one place where you can research and write your papers with librarians, writing tutors, and computer assistants all there
	Get coffee shops put in the libraries
	Build a library Web site just for undergrads – easy to use and navigate
	Have one search engine for everything the library has
	Get help in the library on all floors
	Require you to learn about library research <i>when you first get to the U</i>
	Require you to learn about library research <i>by the time you leave the U</i>

libraries and on campus, some adjustments were made to the final list of initiatives. For example, it became apparent that it would be necessary to combine the library Web site just for undergraduates with the single search engine for all library resources. These two ideas blended well together to form the Undergraduate Virtual Library Initiative. In addition, the council acknowledged the need for ongoing assessment and evaluation of the initiatives and the undergraduate project as a whole. Even though undergraduates were not likely to select assessment as a top priority for the libraries, the council added it to the list of initiatives. Based on student feedback, strategic value, and ease / impact, the final list of recommended initiatives was divided into three categories: critical to do, important to do, and good to do.



What Undergraduates Want

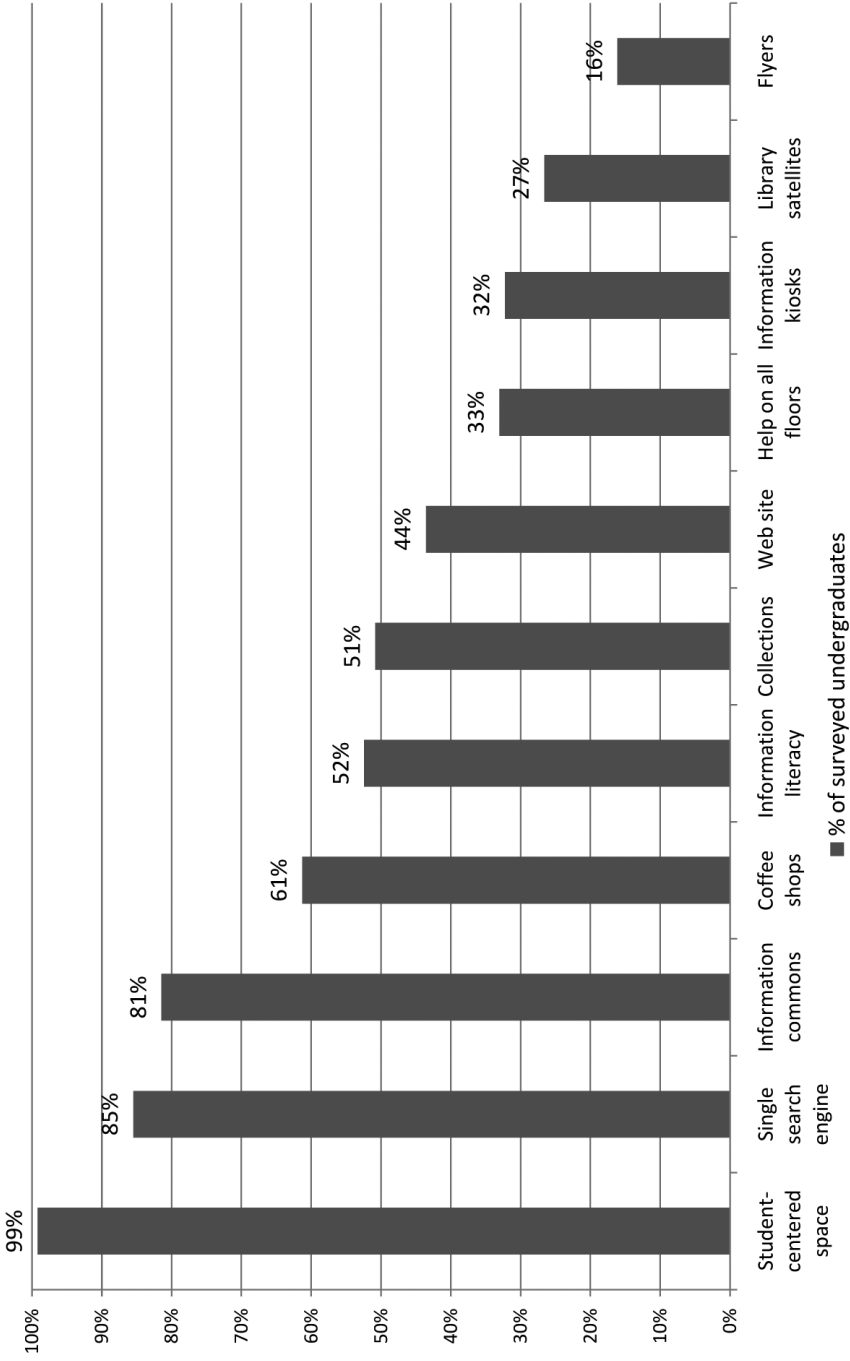


Chart 1.

Table 6.

Recommended Initiatives

Critical To Do

Student-Centered Space

Almost all of the undergraduates surveyed cited the importance of comfortable places to study and work together with other students. We are proposing upgrades and renovations to our many campus libraries to provide improved furnishings with more flexible study, group, and instructional spaces.

Information Commons

Students expressed frustration over the multiple sites required for assistance with course projects (e.g., help on finding information, analyzing information, writing and creating media projects). This often leads them to libraries for research needs, computer labs for computer help, and writing centers for writing help. An integrated “commons” area would bring together these services and experts in one area with ready access to staff, computers, and information resources.

Marketing/Advertising/Branding

The libraries are competing for our students’ attention against marketing and branding messages from the likes of Google, Barnes & Noble, and other “information” services. In order to effectively compete, the libraries need to establish an identifiable, clear, and appealing brand and marketing messages, and to develop professional advertising materials.

Undergraduate Virtual Library

This proposal is an exciting research and development opportunity for the University Libraries that challenges us to create an online space designed for undergraduates. An Undergraduate Virtual Library would include a search interface that allows searching of multiple undergraduate databases at one time, a more simplified and Amazon.com-like version of the library catalog (MNCAT), and a space for community building and discourse across campus through use of blogs.

Important To Do

Coffee Shops

An increasing number of libraries include a place for students and library users to take a beverage break. We are evaluating the feasibility of adding coffee shops or carts to our facilities.



Table 6., continued.

Information Literacy Competency Program

Over half of the 125 students we surveyed for this project said that one of the most important things the libraries could do was require (yes, require!) them to learn about the library and information resources. We are proposing an expansion of the libraries' existing information literacy program directed toward students beginning their academic careers in the general non-disciplinary undergraduate curriculum.

Undergraduate Collections

With over six million books and materials and over 14 locations to choose from, undergraduates have to dig hard to find core materials for their course research needs. What students really would like is a more manageable library for their needs. This proposal would designate focused librarian time to evaluate and identify core resources for student use (e.g., methods to extract a more manageable online catalog of core resources or focused collecting on electronic resources for undergraduates).

Good To Do

Help Pilot Projects

The larger libraries on campus are daunting – many stories and huge floors full of materials. We are proposing three different pilot projects that would provide our users with help on the non-staffed floors of Wilson and Magrath Libraries.

Satellite Services

Library staff need to get out where the students are – where they are studying and where they are writing their papers. We are exploring a satellite location at Coffman Student Union staffed with a librarian and another at the Super Block residence halls staffed with a student peer counselor.

Ongoing Assessment

If we are going to make a substantive impact on undergraduate education we need to create ongoing mechanisms to check in with our undergraduates to learn more about them, to find out if what we're doing is making a difference, and to get feedback and guidance on our initiatives. We are proposing a series of bi-annual surveys and annual focus groups.



Requesting Funds for New Initiatives

Because the Undergraduate Initiatives Coordinating Council was not provided a budget, the next step was to identify the various levels of investment for the libraries and university for each initiative. In order to do this, the council focused on three levels of investments that, given the University of Minnesota's school colors, were called the Gold Plan, the Maroon Plan, and the Gray Plan. The Gold Plan would reflect the ideal situation. If we were truly to invest in the initiative, the Gold Plan would be what it would take to ensure success. The Maroon Plan reflected a moderate level of support, whereas the Gray Plan would allow the libraries to do something in the area but with only a conservative amount of funds and resources.

How did this play out for the "information commons" initiative? The Gold Plan envisioned two sites, one at the St. Paul Campus and one at the Minneapolis Campus, which would share 150 workstations and two FTE librarians. The price tag on this was almost a half million dollars. The Maroon Plan, however, would entail a pilot in just one of the libraries and the hiring of only two FTE students. The Gray Plan, costing just under \$2,000, would include the installation of Microsoft Office on selected workstations in the library and a limited laptop rental program. Levels of investment put forward by the council (according to 2003 dollars) are included in table 7.

The council had been reporting frequently to library administration during the course of its work. By this point, administration was well aware of the possible initiatives and was awaiting budget estimates and a request. The council's report and presentation to library administration served as the catalyst to identify funding within the libraries as well as through a campus-wide request process for special initiatives.

Implemented Initiatives

Between 2003 and 2008, nearly all of the council's requests were funded to various degrees.

1. Student-Centered Space (Gray Plan initially, but a 2008 renovation was substantial)

Several spaces across the libraries were remodeled for better student access and comfort. A room in the most heavily used library was made available for faculty bookings. Group study rooms were expanded and better equipped. In 2008, a large facility in one of the major libraries was designed explicitly as student-centered space and included group study rooms, a classroom/group study room, and a state-of-the-art media viewing room.

2. Information Commons (Hybrid of Gold and Maroon Plans)

The libraries and university invested immediately in the creation of a commons in the most heavily used library in the system. This investment was followed within the next few years by greater investments in other libraries. During the summer of 2008, the largest and most extensive commons opened in a third location in the libraries. A .5 FTE librarian, 1 FTE library assistant, and many student hours have been allocated exclusively for these services. Many other existing staff have played key roles in the various aspects of the design, development, and operations of the three sites.



Table 7.
Levels of Investment for Top Initiatives

Initiative	Gold Plan	Maroon Plan	Gray Plan
Student-Centered Space: Comfortable places to study in and work together with other students.	\$871,000 Remodel spaces in all libraries to include group study space Create a lecture room for faculty equipped for library instruction Create an instruction lab for librarians teaching information literacy skills	\$374,000 Update and remodel the main St. Paul library and branch libraries to include group study space Create a lecture room for faculty equipped for library instruction Create an instruction lab for librarians teaching information literacy skills	\$229,000 Update and remodel the main St. Paul library and branch libraries to include group study space
Information Commons: One place where students can research and write their papers and create media projects with librarians, writing tutors, computer support and media production consultants.	\$473,000 (150 workstations) + 2 FTE Librarians Two sites (St. Paul campus and Minneapolis campus)	Tied to Space (Gold/Maroon plans) + 2 FTE Student help Pilot in existing room in the social sciences/ humanities library (used heavily by undergraduates)	\$1,400 minimum Install Microsoft Office on selected workstations in the libraries Create a limited laptop rental program

Table 7., continued.

Initiative	Gold Plan	Maroon Plan	Gray Plan
Marketing/Advertising/ Branding: Hire an expert to help us create a brand identity and marketing plan to reach undergraduates.	\$10,000	\$5,000	\$3,000
	.25 New FTE	.25 New FTE	.25 Reassigned
	.25 Reassigned staff	.25 Reassigned staff	staff
	Work with the Libraries' Communications Director to create a marketing plan, budget, and brand identity	Work with the Libraries' Communications Director to create a marketing plan, budget, and brand identity	Wider distribution of the marketing materials we already have
	Visual designer	Visual designer	
	Undergraduate marketing coordinator	Undergraduate marketing coordinator	Undergraduate marketing coordinator for existing marketing efforts to undergraduates
	Materials budget	Materials budget	Materials budget (minimal)
Undergraduate Virtual Library: An easy to use Web page that allows students to search multiple undergraduate databases at one time, a more simplified and Amazon.com-like version of the University Libraries' catalog, and an online space for community building and discourse across campus.	\$301,225 - \$551,225 + .75 FTE IT Staff	\$55,375 – \$145,375 + .5 FTE IT Staff	\$10,000 + .25 FTE IT Staff
	Build an undergraduate virtual library Web interface and test in usability lab	Build an undergraduate virtual library Web interface	Build an undergraduate virtual library Web interface
	Buy and implement a search engine product	Build a search engine tool ourselves using already purchased technology, using open source tools, or through campus partnerships	Create a Database Advisor tool (a cross-database search tool that only uses Z39.50)



Table 7., continued.

Initiative	Gold Plan	Maroon Plan	Gray Plan
	Create a new version of the catalog for undergraduates (possibly using a commercial product)	Create a new undergraduate-friendly interface to the catalog	Improve the catalog's user interface
	Host blogs to build community across departmental divisions	Host blogs to build community across departmental divisions	
	Build tools to draw students into site to discuss and interact with librarians and collections	Explore data-mining of blogs	
Coffee shops: Build coffee shops in campus libraries.	Costs to be determined		
Information Literacy Competency Program: Implement programs for students to learn about library research in the general non-disciplinary undergraduate curriculum.	3 FTE Librarians	2 FTE Librarians	
Undergraduate Collections: Select and coordinate materials for the general non-disciplinary undergraduate needs.	Cost TBD + .5 FTE librarian	Cost TBD	
Help Pilot Projects: Staff rovers or place help phones on every floor of each campus library.	\$100 + \$75/month (\$1,000/yr)		

Table 7., continued.

Initiative	Gold Plan	Maroon Plan	Gray Plan
Satellite Pilot Projects: Librarian pilot at Coffman (student union), peer tutor pilot at the Super Block residence halls.	\$2,520		
Ongoing Assessment Mechanisms: Regular scheduling and funding for undergraduate surveys and focus groups with faculty and undergraduates.	\$9,120/yr Dues for national library survey (LibQUAL+™ fees working with campus assessment office and providing incentives for participation)	\$3,360/yr Less extensive and frequent assessment	\$360/yr Incentives for participation in library- created assessments

3. Marketing/Branding (A substantial investment was made; however, there was no specific implementation with an undergraduate focus.)

The libraries invested in a Communications Office, which launched a libraries-wide branding initiative. This office also worked with the council on an undergraduate marketing survey in order to better understand how to target outreach efforts to this group (http://staff.lib.umn.edu/communications/marketing_to_undergrads/).

4. Undergraduate Virtual Library (Hybrid of the Gold and Maroon Plans)

Immediately following the council's report, the libraries created a new design group that built a one-of-a-kind virtual library designed for undergraduates (<http://www.lib.umn.edu/undergrad/>). This site has subsequently been replicated at many other libraries around the country. At the same time, we invested in a federated search product that allowed for more Google-like access to a subset of library resources. A library-built blog system called UThink has become the most highly used academic blog in higher education and is integrated into the Undergraduate Virtual Library. In addition, a MyLibrary site was recently launched for personalized discovery and management of library resources.

5. Coffee Shops (Gold Plan)

The libraries opened extremely popular coffee shops in two of the most visited libraries.



6. Information Literacy Competency Program (Gray Plan)

An information literacy librarian position was created and staffed. The libraries also invested in e-learning software and an instructional designer to support librarians building e-learning for their departments and courses.

7. Undergraduate Collections (Gray Plan)

Part of a librarian's time was set aside to coordinate an undergraduate textbook collection and two leisure reading collections.

8. Help Pilot Projects (Gold Plan)

Student shelveers were trained to respond to basic questions encountered in the stacks. They labeled their trucks, "Need help? Ask us," and wore similar signs around their necks. Red emergency phones were installed on the stacks floors for students to be able to call down to a service desk for help locating materials. A peer research consultant program was recently launched in the commons spaces, allowing for students to meet one-on-one for individual library research assistance.

9. Satellite Pilot Projects (Gold Plan)

The libraries experimented with satellite locations but subsequently ended this service due to low use.

10. Ongoing Assessment Mechanism (Not funded)

This was the only initiative that received no funding. Instead, assessments are administered on an as-needed basis to meet specific needs.

What We Learned

As librarians and library staff, many of us have not been trained at planning and executing a lengthy process for program development such as this paper outlines. We may have some training in project management and some in meeting facilitation; but, when it comes to developing a major program such as this one for undergraduates, we often lack the tools, skills, and understanding of a process. This makes it easy to jump to solutions and initiatives with minimal data and analysis.

Comfort with a quick fix approach led some council members and others in the libraries to bring a degree of skepticism and reticence to the Undergraduate Initiatives Project. Lingering feelings that perhaps we were wasting our time and that we could have reached some of the same conclusions with less process may have worked against the project. For those who may be leading such a process at their own institutions, acknowledge that no process is perfect and that occasional disconnects and dead-ends are an acceptable part of the experience. To alleviate some of the time demands, try pulling together a core group of members to attend to the tasks and preparatory work necessary for committee-wide analysis. Also, identify a champion for the group, someone for whom success is tightly connected to job performance and expectations. Creating a core group with specific responsibility for the council's success also was helpful, but make sure you find a way to utilize everyone's skills. These types of groups need a facilitator,



someone who knows meeting effectiveness processes and techniques. Everyone—core group member or council member—needs to have a voice in the process. Finally, try to tie the charge of the group to an important strategic direction of the campus to increase the urgency and commitment of members and community to the success of the project.

In addition to these words of advice, watch for another downside of the program development process—lack of skills transfer to other library projects. In the Undergraduate Initiatives Project, in spite of concluding with well-funded

projects and a high level of execution of these projects, there was little or no transfer of this process or the skills inherent in leading such a process to other library initiatives in which council members participated or led. The authors of this article surmise that council members either did not feel sufficiently confident in their ability to lead other groups in this way or did not feel the process would be useful in other contexts. As a result, we were not able to change the planning culture at the University of Minnesota Libraries. If part of the intention is to change the culture of the institution, expectations of members should be made explicit, and attention needs to be given to learning a process, not just fulfilling a charge.

For those who may be leading such a process at their own institutions, acknowledge that no process is perfect and that occasional disconnects and dead-ends are an acceptable part of the experience.

Conclusion

Despite the pitfalls described above, what worked well with this comprehensive process was that it was transparent, well communicated at the highest levels in the libraries, and allowed for input and questions. Shopping this around the library and campus during the process created a buzz and established a foundation upon which we could build our final recommendations. The completeness of the process and its transparency increased the council's and library administration's confidence that we were choosing the initiatives that would make the greatest impact on undergraduates. It also provided the council with a credible process to discuss with campus administrators at numerous campus forums and meetings. It was clear to all that the libraries were choosing to invest in, and ask for campus investment in, projects that were worthwhile and would make a difference to undergraduates.

Subsequently, nearly every single recommendation has been funded and executed—and undergraduates are responding positively to these initiatives. For example, the information commons has evolved into a highly successful campus-wide partnership called the SMART Learning Commons with a much broader mission and scope (see <http://smart.umn.edu/>). The Undergraduate Virtual Library received over 35,000 hits in the two-month period following its launch. The coffee shops are consistently among the most popular on campus. Over 4,000 students participate in our foundational information literacy program each year. This anecdotal evidence, along with increased student activity in the libraries, suggests that we are reaching a greater number of undergraduates than we did before the initiatives were implemented.



There are, however, many unanswered questions with which we still grapple. In such a rapidly changing landscape, what should be the life cycle of this kind of sweeping planning initiative—three years, five years, eight years? Should the libraries systematically work through all of its primary clientele (faculty, graduate students, and undergraduates) on a rotating basis? Should there be one group or one individual charged with leading these planning initiatives or should responsibility rotate across the libraries?

What is certain to the authors of this article is that by following such a rigorous, comprehensive, and user-centered process as outlined here, libraries can have a positive impact on their clientele. We can identify the needs that matter, prioritize solutions, and strategically choose to request funding that can make the biggest difference on our campuses.

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*Indicates core group membership during the 2002–03 planning intensive year.

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Appendix

Process Roadmap

- Step 1.** *Assessing:* Interview key players on campus and administrators, conduct focus groups with undergraduates and faculty who teach undergraduates, interview library staff.
- Step 2.** *Analyzing Data:* Analyze data and group into high-level themes.
- Step 3.** *Scoping Themes:* Scope each of the theme areas identified in the needs assessment stage by asking who, what, where, when, why, and how.
- Step 4.** *Scoping Problems:* Identify the problem statement for each of the theme areas.
- Step 5.** *Brainstorming Initiatives:* Use the Nominal Group Technique to brainstorm possible initiatives or projects in response to each of the problem statements.
- Step 6.** *Identifying Key Initiatives:* Use the multivoting technique where each member individually identifies *key* projects for each theme (through a point allocation of the total number of items for each theme divided by six).



- Step 7.** *Applying Evaluation Criteria:* Choose and apply evaluation criteria to the high-vote items or items in the key initiatives list that received three or more votes.
- Step 8.** *Gathering Feedback:* Choose the top items and check your rankings by surveying students and conducting internal discussions to get feedback on which of the initiatives are most important.
- Step 9.** *Ranking Initiatives:* Separate items on the list into four categories: Critical-to-do, Need-to-do, Good-to-do, Nice-to-do, based on Step 8.
- Step 10.** *Reevaluating Initiatives:* Reorder or re-rank initiatives based on your feedback.
- Step 11.** *Requesting Funds:* Group initiatives into three levels – high level funding, medium level funding, and low level funding – and present them to your administration.
- Step 12.** *Implementing Initiatives:* Create implementation groups or identify initiative leaders.

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