Spanning the Straits of Business Information: Kresge Library's Embedded Librarian Program for MAP (Multidisciplinary Action Program)

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ABSTRACT

Embedded librarian programs have successfully been used to bridge the divide between libraries and distance learners, teaching faculty and lab researchers. The Kresge Business Administration Library (Stephen M. Ross School of Business at the University of Michigan) has created a unique approach to the embedded librarian model by having librarians work directly with in-residence student teams charged with solving 'real world' problems through Michigan's signature action-based learning program, MAP (Multidisciplinary Action Program). With MAP, corporate and nonprofit organizations work with teams of 4-6 students charged with solving a problem or providing recommendations on very specific aspects of the sponsor's work. This paper will describe the Kresge Library's support of MAP and other action-based learning programs at the Ross School of Business. Topics will include how we work and communicate with MAP teams, examples of research and reference requests from the students, an assessment of our services, and how this changes the librarian relationships with students in their second year of study. This unique program offers exciting challenge to Kresge librarians, building bridges between the Kresge Library and the students and faculty participating in MAP, as well as between the overwhelming amount of business data, statistics and research available and the world of business practice.

INTRODUCTION

About four hours north of Ann Arbor, sits one of the architectural and engineering masterpieces of the Midwestern United States. The Mackinac Bridge is the third largest suspension bridge in the world and connects Michigan's Upper and Lower Peninsulas. Still the longest suspension bridge in the Western Hemisphere, this 26,372 feet span covers nearly 5 miles above the waters. To help drivers who are uncomfortable with the experience, the Mackinac Bridge Authority created the "Drivers Assistance Program." This program arranges, either by phone or with the toll collector, to have their cars driven

to the other end. According to the Mackinac Bridge Authority, there is no additional fee for this service.¹

What this service, and the bridge, has to do with libraries might be a stretch. But in most regards, our work as academic business librarians is very similar to the work of the Bridge Authority and, more importantly, the staff members who assist the drivers in getting their cars across the five mile bridge. Our work is to provide a means for people to pass easily from one location to another. The previous means of crossing, on a ferry, was far more labor intensive and slow. But secondly, we as librarians operate very much as the staff of the "Drivers Assistance Program." For the people who approach the bridge without the confidence to cross on their own, help is needed to successfully get to the Upper Peninsula (if you are coming from the south). And while these people might be utilizing the service from a lack of confidence, the real factor might simply be familiarity. Few of us have ever driven 5 miles over the water and it can be unnerving.

For some of the same reasons that a driver might utilize this service, students working on very complex and narrow research topics will seek out help from the library. We work very closely with students at the Kresge Library when their work requires them to 'cross a span greater than they have been asked to cross before.' The MBA curriculum at the Ross School of Business at the University of Michigan has its traditional elements, but the keystone program involves the students, working in teams, and exploring subjects to the depth that they have never studied before. This program, called MAP (Multidisciplinary Action Program), is often the first instance in an MBA student's time at Michigan where they need a guide to help them span the 'dark waters of information.' And to facilitate this process, the Kresge Library has developed a program that connects librarians with these student groups to help them gather information for their projects.

The result has been a very creative 'embedded librarian' program that has developed over the past six to eight years. Embedded librarian programs have traditionally bridged the divide between libraries and distance learners, teaching faculty and lab researchers. The Kresge Business Administration Library's approach is fairly unique and connects the librarian with the in-residence student teams that are charged with solving 'real world' problems. The librarian's task varies greatly from team to team, but almost always involves supporting research both within Kresge Library resources and beyond. The clear and stated goal from the library is to ensure that each team can find the information that they need, with a team member who has been helping all along.

This paper will describe the Kresge Library's support of MAP and other action-based learning programs at the Ross School of Business. Topics will include how we work and communicate with MAP teams, examples of research and reference requests from the students, an assessment of our services, and how this changes the librarian relationships with students in their second year of study. This unique program offers an exciting challenge to Kresge librarians, building bridges between the Kresge Library and the

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¹ For more information on the Mackinac Bridge, please visit Hunt's Guide to Michigan's Upper Peninsula (http://hunts-upguide.com/st_ignace_mackinac_bridge.html), accessed May 6, 2008 or the Mackinac Bridge Authority (http://www.mackinacbridge.org/), accessed May 6, 2008.

students and faculty participating in MAP, as well as between the overwhelming amount of business data, statistics and research available and the world of business practice.

ABOUT THE KRESGE BUSINESS ADMINISTRATION LIBRARY

The Kresge Business Administration Library is an independent library at the University of Michigan. Instead of reporting to the University Libraries, the Kresge Library reports to and receives funding from the Ross School of Business, mirroring the reporting structure of most law libraries. A leading business school, Ross appears near the top of some of the most prestigious rankings, including number 5 in Business Week, number 7 in the Wall Street Journal, number 12 in both the Economist and U.S. News and World Report². In addition, the school has done very well with specialized rankings, including number 2 in the Beyond Grey Pinstripes' ranking that explores "innovative full-time MBA programs leading the way in the integration of issues concerning social and environmental stewardship in to the curriculum."

Despite being at one of the largest universities in the United States, the population of students, faculty and staff at the Ross School of Business is relatively small. As of Fall 2007, there are approximately 3100 students at the Ross School (BBAs, MBAs, Evening MBAs, Global MBAs, Executive MBAs, Ph.Ds, and Masters of Accounting Students) and an additional 500 faculty and staff. This population of 3600 is far less than the comparable population of the University's main campus (approximately 39,000 plus faculty and staff) or the system-wide count (approximately 49,000 plus faculty and staff). By virtue of having a relatively small number of students, we are able to provide more support.

To support the business curriculum at the Ross School, the Kresge Library has acquired and licensed an extensive collection of print and electronic resources. Since we are an independent library and the school maintains a separate Information Technology Department, we are able to purchase specialized resources just for the students, faculty and staff at the Ross School of Business. This allows us to create a body of resources that few schools can offer. But in most ways, it is during MAP season when we rely most heavily on the resources made available through the University Library at the University of Michigan. This is especially true when people are working in developing countries, seeking specific information about new engineering technology, discovering the implications and practicality about a new form of renewable energy, and need to understand the science and medical applications behind the drug discovery that they are hoping to support. During the MAP projects, students will find needs in every corner of the information universe at Michigan, and that will most certainly be unchartered territory.

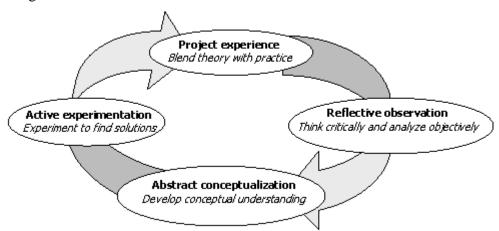
MAP PROGRAM & ACTION BASED LEARNING

² For more information on the school, please visit: http://www.bus.umich.edu/NewsRoom/FastFacts.htm (accessed May 6, 2008)

http://www.beyondgreypinstripes.org/about/index.cfm (April 28, 2008)

The Ross School of Business has adopted the "Action Based Learning (ABL) approach to its curriculum. This is sometimes listed as experience-based learning or work-based learning. This is an alternative to the case approach that is adopted at many schools including Harvard, Virginia, etc. The case method is a far more common structure of the business curriculum in the United States and it allows the professor to present the students with teaching tools that document an issue or a process and provides the students with a good deal of information to participate in the discussion of that issue. Columbia in fact has adopted a method that is a modification of the case approach - where the students are presented with much of the information, but not all.⁴

The Action Based Learning approach assumes a different tack. "Action Learning is based on the premise that there is no learning without action and no sober and deliberate action without learning." This instructional method has its origins and greatest adoption among European Business Schools. Action Based Learning has been adopted by some schools in certain programs, but few have placed it on the mantle like Ross. While this method is not incorporated into every class (Ross faculty still use many cases in their courses), the method is being used in more and more classes. This program is being expanded to include undergraduate business majors (BBAs) and evening MBA students, who before did not have an opportunity to participate with MAP. But for the school, and in turn the library, the pinnacle Action Based Experience for the MBA students happens at the end of their first year. This graphic showcases how the school conceptualizes Action Based Learning:



Michigan's signature action-based learning program is MAP (Multidisciplinary Action Program). With MAP, corporate and nonprofit organizations (such as Microsoft, Ford Motor Company, and Habitat for Humanity) work with teams of 4-6 students charged with solving a problem or providing recommendations on very specific aspects of the sponsor's work. To support these students, they are assigned a faculty advisor, a

⁴ Gloecker, Geoff "The Case Against Case Studies: How Columbia's B-School is teaching MBAs to make decisions based on incomplete data", *Business Week* 4069 (February 4, 2008), p. 66

⁵ Stephen M. Ross School of Business website, http://www.bus.umich.edu/MAP/ABL.htm (accessed May 6, 2008).

⁶ Antunes, Don and Howard Thomas "The Competitive (Dis)Advantages of European Business Schools", Long Range Planning (June 2007), p. 382.

communications coach and a librarian. The role of the librarian is to guide students through resources available at Kresge Library, the University of Michigan, and also those available elsewhere. This role is crucial to the students' success and is supported by the school because the areas of exploration are often narrow and in emerging fields, where information is harder to find. Since 1992, Ross students have undertaken over 1200 MAP projects.

WORKING WITH THE LIBRARY

The Kresge Library embedded librarian program was fairly slow to evolve, developing quite naturally over four to five years. At its core, this program started life as an instruction endeavor to train MBA students on how to find resources that would help with their project. The primary issue was that the students, who have been working with fairly consistently packaged classes (textbooks, course packs, cases), had difficulty finding resources in these very narrow subject areas. While the sponsoring agency or company might provide some reports and data to the students, they are often asked to seek out new directions for the company or organization and may be working in an area where there is no clear understanding from the company; there are no packaged reports to obtain. As this became a bigger and bigger issue for the students, it became clear that creating a formal relationship was a critical way to proceed.

As the initial impetus for the relationship between the MAP teams and the library was to provide instruction on how to use library resources, the original coordinator and sole participate was the Library's instruction coordinator, Sally Ziph. She established a program to provide library instruction to these students as they tackled large research projects. While the program had a dedicated librarian, the sheer size of the student body (over 400 MBA students participating) did not meet the needs of the students. Additionally, it was determined that these needs could not be met with conventional reference services. So the Kresge Library adapted and changed their participation from a classroom instruction focus to a presentation during the MAP orientation for all MBAs. The notion was that we could create specialized training to help the students find the research materials that would support their study. But as the program continued to expand, it became clear that this was more than an instruction opportunity. In fact, the instruction librarian who presented the instruction materials was approached personally by all of the teams requiring research assistance.

Following the presentation in 2002, the reference desk was swamped by all of the additional work required by the MAP teams. Tomalee Doan, the library director at the time, decided that each student team would work with a specific librarian to assist with their information needs during the projects. This connection would allow the library to provide instruction, but, more importantly, it would allow a single person to have a far better understanding of each team's research needs. Not only would that person be able to understand the project, but would supply the students with resources and suggestions on an ongoing basis, without requiring the students to repeatedly explain what they were doing. In this regard, the librarian became the information specialist on the team, allowing for more efficient interaction with the library. Originally, participation as a

MAP librarian was limited to the four reference and instruction librarians. By 2006, it was expanded to include all of the librarians at Kresge, making this an important core activity. By 2007, in the last major change to the program, the library director participated in MAP as a team librarian for a number of student teams.

LIBRARY MANAGEMENT OF TEAMS

Librarian assignments to MAP Teams are an important undertaking that provides for an excellent launch of our participation in the program. From a library administrative point of view, the process of assigning MAP teams had long been established before the article's authors arrived at the Kresge Library. The system is fundamentally the same as it has been over the course of the past few years, with some minor tweaks and more participation from the library director. What is critical, from an administrative point of view, is that all eight librarians have a common understanding of what is expected of them and how the process will evolve over the course of the term. We have developed and adapted the process to fit other action-based learning programs that are not as large as MAP (80 teams), such as Global MAP (5-8 teams during the spring/summer terms), Executive MBA MAP (8-12 teams during the spring/summer and fall terms), and Finance 629 (16 teams focused on smaller projects during the fall term). As the school develops more group action-based learning projects in the curriculum, we are adapting the MAP mechanism to ensure that these groups are supported. The one class where we are not doing this work is Strategy 659 (commonly known as MAP2). It is an action based learning class that is similar to MAP that students take in their second year. Students are not assigned librarians, but will work (typically) with librarians that they worked well with the previous year. In many ways, it is a badge of honor to be reunited with the students for their MAP2 project.

While originally, this program was split between the three primary reference librarians and the instruction librarian, it has been expanded to include all eight librarians. This count includes the library director who is also assigned to MAP teams. While all librarians participate, the number of teams that they get depends on the additional workload that they have during the term. So in the past year as an example, the reference and instruction librarians each had 14 teams, the digital services librarian had 10, the head of technical services and collection development librarian had 8 and the library director had 6 teams. As we expect to be at full staffing for MAP 2009, we expect these numbers to be tweaked a bit, but with the same basic parameters.

WORKLOAD BALANCING

Critical to the success of this embedded librarian program is the ability to ensure that the reference load does not overwhelm the librarian's schedule. And while MAP is (to use the phrase) "Job One," we need to ensure that other tasks of the library are kept up. The reference and instruction librarians (Laura Berdish, Nancy Karp, Barb Pietraszewski & Sally Ziph) take the lion's share of MAP teams. The librarians with less than the average number of teams all have important administrative needs that cannot be ignored for seven weeks while we are working with the student teams. The digital services librarian

(Jennifer Lammers Zimmer) works on ensuring that electronic resources continue to operate for all students, on campus and off, as well as making available new interfaces, and content via the Kresge Blog. The head of technical services (John Sterbenz) works to ensure that the library server continues to run and that new items are being processed as they come into the collection. Additionally, he plays a key role in the payment for library resources, something that cannot be delayed for two months while he is working with the teams. The library director (Corey Seeman) has administrative issues that arise during the project and needs to be able to balance the needs of the students vs. the other pressing issues of running a library for the entire school.

Of all the workloads to balance, the most difficult is that of the collection development librarian. This work involves the evaluation of resources, acquisition of new resources, preparing of license agreements, and securing payment for these resources. This work has no real gap during the year and is critical for making sure that we do not lose access to resources at any time. And while this work is critical, our collection development librarian (Nathan Rupp) provides a key function to support the entire program. As part of our support of MAP teams, we have set aside money from our budget to cover the acquisition of specialized reports to support MAP teams. The total is approximately \$20,000 (around 1.5% of our total materials budget), but it allows us to fill in gaps where our existing databases and resources do not provide the information that is required by the team. We are not able to purchase everything that is requested and try to negotiate favorable pricing, to allow us to stretch the budget further. Additionally, before we can purchase a new report, we undertake a process that ensures that we are not buying information that is not needed or can be found elsewhere. While we often receive the request in the form of a report we should buy, we work with the team to see what question they are trying to answer, what resources they have previously explored and if there are sections of a report that will be sufficient. Using these questions, we have often been able to fulfill the teams' information needs with available resources, or further stretch our budget by purchasing just one section of a report.

By knowing when MAP 'season' is, we are able to preemptively curtail our project activity during the time periods when we are busiest with the students. While we cannot completely cut off our 'regular' work, we can ensure that we take on few big projects during the time when our reference demand is the greatest. Occasionally, there are factors that are beyond our control, such as when we needed to move our off-campus storage collection (some 100,000 monographs, government documents, and bound periodicals). In that year during the move, the head of technical services had a much smaller group of MAP teams that would allow him to focus on the moving project without the pressure of numerous teams. Additionally, during MAP season, we alleviate some of the demands that would normally fall onto the librarians, by scheduling fewer library instruction classes, not promoting the Faculty Research Services, and by having most of the main-line reference queries, and desk time, done by part-time staff. This all allows librarians to focus on meeting the needs of the MAP teams.

Fundamentally, the MAP program support is one of the core functions of the librarians at Kresge Library. Central among these core responsibilities is engagement with the community. This manifests itself in many fashions:

- Reference services (each librarian will work one or two shifts at the library's reference desk and serve as a backup for questions that come in before the desk opens)
- MAP assignments (each librarian will work with a proportional number of teams for MAP and other team-based projects)
- Liaison relationships with academic departments and Ross School of Business institutes and centers
- Participate in the selection of library resources (primarily associated with the liaison responsibilities). However, all librarians participate in selection activities for electronic resources
- Instruction (classroom or staff focused)

Since each librarian knows that these issues are the core responsibilities and central to our mission to support the Ross School of Business, it is very easy to get buy-in on the importance of these tasks. Additionally, this is true of the library director who participates, in a meaningful way, in all of these undertakings.

THE PROCESS OF WORKING WITH THE STUDENTS

MAP teams are chosen by the MBA class via a bidding process which involves each student choosing five teams from the list of over 80 sponsors and projects. There is an attempt to assign each student to a team that is among their top choices, with each team having 5-8 members. A similar process is used for other action-based learning programs for Executive, Evening and Global MBAs.

The Kresge Library librarian responsible for MAP coordination then receives the list of available projects, including the sponsor, the team members and a project description. Kresge librarians choose the teams that they would prefer from this list, usually in a reference meeting, each librarian choosing one team and continuing until all the teams have been assigned. The process, over the past few years, has been a great team building exercise with trading of teams and numerous attempted 'power grabs' such as the director attempting to choose all his teams before others could select! This has been a great opportunity for the librarians to 'let their hair down' and relax before the impending storm. For the 2008 MAP season, reference staff was teamed with 16 teams, with the other librarians working with 6-10 groups each.

Once the Kresge librarians have chosen their MAP teams, most librarians choose to reach out to each team. This usually takes the form of an introductory email, including contact information, and some information about the use of Kresge database resources for MAP reports to sponsoring companies. Some librarians also include some information on how they would like to work with the teams or a picture of how the work will proceed throughout the course of the MAP project work. We work with students in many different ways; the MAP projects reflect the range of work styles and workload balancing efforts that exist among the librarians in the Kresge library.

Some librarians may choose to do some preliminary reference legwork on some or all of the MAP company sponsors and industries. This can be particularly useful when dealing with areas that are unfamiliar. Others prefer to let the inquiries guide the work, and will wait until the requests come in to do any reading or preparation. The success of the MAP team approach relies on a good deal of flexibility from the librarians, which needs to be reflected in the general management of the projects from a Kresge perspective.

Librarians find that each group may be very different in terms of the types of information that they need, how much involvement they may request from the librarian at various stages of the project, or even how much they will rely on the librarian for their research and information needs. We see a wide range of both research needs and information skill levels throughout the MBA class; the amount of direction needed and type of assistance required varies accordingly.

Many groups will request an initial meeting with the team librarian, to get some help background research on their company, industry, competitive landscape and market environment. This is a great opportunity for the librarian as well, to meet the team, get some clarification on the project goals and generally open the lines of communication for the duration of the project. This meeting tends to be more fruitful if the groups have already had the first meeting with the company sponsors; some librarians actually request that the teams do that meeting before sitting down with the team librarian. Often the stated project goals or boundaries change dramatically from the sponsors' project proposals, and some librarians consider these meetings to be a waste of time if that meeting has not yet taken place. Additionally, the research issue that the student team might require might have nothing to do with the industry that they are exploring. A computer software firm might be looking at new opportunities in a different field altogether; an airline might be looking at more efficient workflow; and an automotive company might be looking at means to engage the workforce. Additionally, many nonprofit organizations and NGOs might want to replicate business models (especially franchising) to help extend their reach to broader communities. So in looking at the project from a company or organization name and brief description, it is not always clear what resources would be useful to support the team.

MAP teams that are scheduled for travel to sponsor sites or project-based geographies may want help preparing for travel. Sponsor company profile information, product or service offerings or examples of current customers and projects can be helpful for these meetings, both in providing a source of confidence for the team and in showing the sponsor how smart the teams are about their business and market. Teams travelling overseas can be well-armed with information about the country they will be visiting, as well as business culture and customs, and basic information on the weather, time zones, etc. While this does not have a direct connection to their research subject, librarians will often point out resources that can help the students better learn a geographic location, especially when it is in the developing world.

The wealth of Kresge resources creates an excellent environment in which the MAP teams can work; it also creates a need for some initial guidance from the Kresge team librarians, so that the teams are not feeling completely overwhelmed at the start of their project research. A good practice for the team is an overview of the 100+ databases and other reference and research resources in the Kresge library, as they relate to individual project plans. A "resource mapping" exercise is extremely useful and almost necessary at the outset – the librarian needs to point the team to those resources that are most useful to the project, and help them ignore those resources that won't yield relevant information. To this end, it is critical that the librarian provide a subjective evaluation of library resources to better direct the students. If we have six different reports on a certain topic, the students are definitely hoping to tap our expertise and understanding of the resources to find the ones that have been well received over time.

The librarian's role as the information tour guide also needs to include some guidance as to what the group will likely be able to find, as well as what they most likely won't be able to get from the Kresge resources. This might take the form of a discussion of the difficulty in obtaining information about private companies or start-ups; a guide to other University of Michigan libraries or departments (i.e. how to work with the medical library and librarians, databases available from the University library); or a conversation about the process and guidelines for requesting research reports or other materials that Kresge does not currently own.

The physical location of the MAP teams will often dictate communication with the team librarian. Some teams may be at a remote location for the duration of the 7 weeks, in areas where database access is not always reliable, or where time zones increase the difficulty of actual conversations. Others may be working with sponsors that are located in or near Ann Arbor, and may want to meet with their MAP librarian several times throughout the project. Most teams are away for at least some part of the first weeks of the project, and reappear at the end with research needs related to completing the final recommendations or plans to present to their sponsors. Some librarians like to attempt to put some parameters around the nature of communication with their team – and request that inquiries be passed to them via email if at all possible, for example, or that the team designate a librarian liaison to communicate research requests to avoid the problems of multiple, identical requests from the team members – with the knowledge that they need to remain flexible when dealing with the groups at the different points of their projects.

Sharing research reports and other resources can be a problem when dealing with the MAP teams. Kresge librarians report several issues with team members asking the same questions, or for the same research materials, with no knowledge of what the other team members have been researching or what others may have requested from their team librarian. It is one of the more difficult aspects of the team librarian function, and can be particularly frustrating when dealing with 15 or 16 MAP teams.

The University's collaborative work tool, CTools⁷, is used to help alleviate some of the difficulties sharing research and information, as well as a way to make sure that all of the

⁷ https://ctools.umich.edu/portal (accessed May 6, 2008)

team members have access to any research that the librarian provides. CTools is a web-based system for coursework and collaboration that was developed at the University of Michigan with other members of the Sakai project, a multi-university community source collaboration and learning environment (CLE). Students are familiar with the tool for coursework, project work and other business school-related activities; it is particularly useful for the MAP projects as it allows a one-stop place for posting resources and messages that need to be accessed by the entire team.

PROJECT EXAMPLES AND RESEARCH NEEDS

The MAP program sponsors represent a wide variety of industries and companies. Companies in the global automotive, construction, information technology, medical devices, and pharmaceuticals markets, as well as nonprofits participate in the program. Project goals include assistance with marketing plans and strategic planning, recommendations for new markets and geographies, and evaluation of current company processes and practices. Students are immersed in an intensive, real world business environment that requires that they quickly learn about and understand their industry's market, competitive players and products or services; within seven weeks, they are required to deliver the very aggressive project plans to their sponsors.

Kresge librarians field a wide variety of reference and research questions to assist with this learning process. Most groups will require a substantial amount of general information on their market and the industry; as the teams work through their projects, requests will become more specific (and challenging!):

- "We need to know ad spending in local markets for a variety of industries"
- "Can you help us find Peruvian government bond rates?"
- "I'm having a hard time finding German lung cancer/lung biopsy data to size the market"
- "We are looking to learn anything recent on what companies are doing to engage customers when they register for baby showers"
- "We've heard that there are regulations in India that require only trained, certified clinicians can administer eye drops, but we haven't been able to verify this"
- "Please help us find information on the waterfall software development method general information, best practices and alternatives"
- "I am looking for influential figures to young people in Ghana"
- "I need to find the uses and size of the Passion Fruit pulp market in the United States."

Invariably, the questions that we receive during MAP season are some of the most complicated ones we receive all year. While we are able to get answers to a great many questions, there are some that are truly too difficult or narrow to answer. Furthermore, some of the questions that the teams pose have no real answer, and the way that we communicate this to the team can sometimes lead to dissatisfaction.

ASSESSMENT OF THE KRESGE LIBRARY MAP PROGRAM

The Kresge Library has recently begun the first formal assessment of the Kresge MAP program, with a short, online poll offered to second year MBAs. The notion behind asking this cohort, who underwent MAP the previous year and were preparing to graduate, was to assess what working with a librarian might have meant for MAP and for their second year of study. We had 8% of the MBA students reply to the survey. Ninety-one percent of the respondents report that they did contact their team librarian during the MAP project. Initial results show an overall satisfaction with the team librarian approach; 60% of respondents rated their experience positively, while only 3% reported a negative overall experience.

The poll also showed that teams used a variety of ways to make requests throughout the project, with 57% of the respondents saying that they met with their librarian, either in person or with the entire group. Not surprisingly, over 90% also contacted their librarian via email, a logical outcome given the travel schedules and geographic distribution of the teams, as well as the intensive, 7 week deadlines for project completion.

Our purpose in beginning a formal evaluation comes from a desire to bridge the gap between our own perceptions of the usefulness of the embedded librarian concept as it pertains to the action-based learning environment. What we uncovered in this first attempt also revealed a potentially significant gap between our MAP team users' expectations and our view of our own significance, and our perceived level of service.

We received some interesting comments on the survey, including some that gave us some pause. Allowing for the fact that those who choose to respond to the open-ended comment questions are more likely to be those who have a complaint, we found that the comments tended to fall into a few definable categories. One quarter of the responses were highly complimentary about the librarian assigned to their MAP team. A typical response addressed the working relationship, as well as the quickness of the responses to research queries:

"very responsive, helpful, knowledgeable, timely. Can't say enough good things"

The separate individual feedback received by some of the librarians from their teams also falls into this category. Some teams specifically addressed the information that their team librarian was able to find for them: "We were able to use many of the reports you posted to CTools for us, and this information was a huge asset to our team." Others made a direct connection between the librarian, the relationship of the librarian to the team and the level of service provided; some have also included their librarian in their final reports, in a formal thank-you, and even in one case as a footnoted interviewee providing information used in the report. One of the most eloquent teams seemed to comment on the entire process, and the inclusion of a librarian on the team:

"Your guidance and assistance throughout the process enabled us to achieve our goals and to grow and develop academically, professionally and individually. You were an invaluable asset to our team."

Negative responses represented three main themes: the lack of availability of data for the particular project, the lack of response from the team librarian and the nature of the assistance offered by the librarian. For some projects, there was a perception that there was a lack of information available, regardless of the level of service from the librarian. "I had an international project and the librarians were of no use for that project" is an example of this type of comment. Other negative comments requiring some additional thought included those that indicate a frustration with the response or lack of response from the team librarian: "Librarian was not helpful. Librarian did not respond in a time(ly) manner" or simply "Not helpful". The unique nature of the MAP projects can also be seen in some of the responses, which deal with the geographic location of the team with regards to the use of the library and library materials:

"We were in India for our project...we did not have physical access to the library. For example, she provided suggestions on books the library has, but there was obviously no way we could use them while in India."

The bulk of the comments addressed a continuing issue in the academic library setting – the question of giving the student the information, vs. suggesting where the information might be found. As librarians, most in the academic arena favor the latter – teaching the student to fish rather than giving them the broiled salmon entree. In the academic business library these issues are always present, with most of us digging in our heels on the side of teaching; the result of this attitude can be seen quite clearly in our survey comments:

"Librarians wouldn't actually get me the information that I requested...Instead they would tell me which resources to look to for the information I want. Not very helpful in my opinion."

The librarian should "see the MBAs as clients, rather than students to instruct. When their clients needed information, they would perform the search and return the results. Trying to get MBAs to spend hours doing research is an extremely poor use of our time, when we should be working on how to synthesize and analyze the data gathered...that is what we will do when we graduate."

The Kresge librarians also express dissatisfaction with this issue and the team librarian approach, and the expectations from the student teams. One member of our library staff expressed frustration that the students on the team didn't understand that the librarian is not there to "give them stuff", but rather to help them find the best resources for their research.

Other embedded librarians draw a distinction between the work with an action-based learning project team and the work done while working on the reference desk, answering library emails or instant messages, helping students with assignments and papers. The aggressive deadlines, constant travel and learning curve for new industries and products create another level of difficulty for the student, who is already dealing with the 100+

databases and numerous other resources available at Kresge. And the "team" aspect of the embedded librarian role also suggests a different way of looking at the work of the research librarian, making it more acceptable and desirable to do a certain amount of feeding, rather than handing the group a fishing pole and setting them to work on 30 databases where they might find what they need, each requiring different search strategies, search syntax and language.

Library literature has often addressed the issue of this gap between student perception of the library and its role in their studies and project work. Some have noted the correlation between the reference librarian's attitude and interest in the information needs of the user. "Reference service providers should concentrate on both showing sincere interest in solving user problems and staff willingness to help users." (Nitecki, p. 187)⁸ Reference literature indicates not only greater user satisfaction, but also more *accurate* reference response, and a greater likelihood that a student will return to the library for future information needs, as a result of a positive experience with an engaged and enthusiastic reference librarian (Cullen, 2001)⁹.

In general Kresge librarians are highly enthusiastic about their role in the MAP projects, and its direct relationship to one of the stated goals and major initiatives for the Ross School of Business. Most actually report having fun while doing the work and in their interaction with the teams; there is a deep sense of satisfaction knowing that there is a direct link between the research assistance and the completion of a successful final MAP project. The librarians involvement with the teams was varied, with some participating in each step of the project, checking the collaborative work tools sites for weekly reports and updates to make sure that they were aware of changes in the project goals and needs, creating feedback loops by checking back to make sure that the teams' needs were met by research provided. Others approached the research in a more passive, traditional academic library manner, waiting for the requests to be made and responding with suggestions and instruction before getting into any in-depth research themselves.

The level of work required by being dedicated to several MAP teams was also noted by librarians; even the most enthusiastic noted the fact that they are extremely busy during MAP season. One stated that she "never felt free the whole 7 weeks"! Others discussed the necessity of setting some boundaries, particularly the hours when they were available to work, the type of work the group was asking from the librarian and the deadlines suggested for completion of the research.

EFFECT OF THE MAP PROCESS ON THE WORK OF THE KRESGE LIBRARY

Working with MAP teams not only involves the Kresge librarians in a highly visible, challenging and interesting process with the Ross School of Business; it also provides

⁸ Nitecki, Danuta A. "Changing the Concept and Measure of Service Quality in Academic Libraries", *The Journal of Academic Librarianship* 22 (May 1996), p. 183

⁹ Cullen, Rowena "Perspectives on User Satisfaction Surveys" *Library Trends* 49 (Spring 2001) p. 665

guidance on a wide variety of Kresge Library functions. From suggestions for how to catalog previous MAP project reports as examples for future MAP teams, to how to staff the reference desk during the MAP season, to additional budget for specific market research reports, MAP influences every department and most every employee at Kresge.

Collection development is perhaps the most influenced by our work with the MAP teams. Every year we are asked for more information, industry-specific market research resources and potential new sources and information providers. We also begin to notice patterns in the project assignments, and the markets in which our project sponsors participate. New sources of information for ecommerce and internet-related research, demographic data for creating marketing plans, interest in medical devices and markets, and more information on emerging markets – all of these needs will translate into database trials, new reference materials, and future purchase considerations.

Library instruction may also be tweaked to better reflect the unique needs of MAP team participants. Market and industry resource instruction, new podcasts on using Kresge materials specifically for MAP and new instruction handouts with information on how to cite our contracted database information within the MAP reports have all been the result of our continuing support of the MAP program.

Reference services are also positively affected by the work we do with the MAP teams. As the teams move on to the second year of their MBA program, they are much more aware of the role that the library and the library staff can play in their studies; most of us have experienced the instances of "repeat customers" and can name a new group of "library ambassadors" – not only returning when they need research assistance for coursework, internships and project work, but also advising their fellow students and even some faculty that they need to come to Kresge to take advantage of the library resources and staff.

In evaluating this program, we clearly have come a long way, but have further yet to go. We clearly have communication issues or breakdowns that happen during the term and issues when information is not available or easily available. Additionally, we need to be more sympathetic to their current geographic location by finding and identifying electronic resources or converting print chapters and reports into digital versions so they can use them. For the most part, we feel that we have done a great job of connecting with the students and showcase our skills and abilities as a guide for their information needs. And to this end we are not only serving to bridge the students with the information that they require, but also spanning another divide. In many regards, with this particular program, we are bridging the gap between academic and corporate library models. In many instances, we are following the academic library model in providing students with instruction on how to use the resources. In many instances, we are following the corporate library model in providing students with the actual information and reports through introductory and advanced searching. The happy medium, as we are discovering, is somewhere in between these two types of library models. But clearly, what is most important, from our library's perspective, is that we provide a means to connect the students with the information that they require. And as we continue to tweak

this program, we have to ensure that we guide the students to the information that they require, even if it is five miles over water.