Envisioning Reference at MIT

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Abstract. In the past few years, the MIT Libraries has been focused on how to turn declining reference statistics, new modes of technology, users' increasing needs and expectations, and constrained staff resources into a robust and valued reference service. A 5-year strategic plan written in 1999 spurred staff to develop a new service based on chat technology, but once the service was established, it was unclear how it fit into the future of reference at MIT. This article describes how library staff worked together to envision a future of reference at MIT that would incorporate the values of reference, the needs of the users, and the infrastructure of the Libraries. The final product was the Reference Vision, which now guides all of our new reference services.

Keywords. Reference, vision, service assessment, reference values, service models

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INTRODUCTION

Many changes in recent years have had significant impact on reference service. Experiences are varied: Fewer patrons are coming to desks; patrons are further along in their research before they request help; distance education, home computing, and wireless connectivity cause patrons to be mobile and off-site; self-service resources like web guides, tutorials, and web-based collections help patrons in ways that are hard to document. Last but not least, new modes of interacting with patrons have emerged in the forms of email and live online help. How these and other factors will fit together with traditional reference services to meet future research needs is a question MIT posed in the form of a 2002 Reference Vision Project.

The MIT Libraries,[1] a system of five divisional libraries and several branches, is among the institutions that have pioneered both email and live online forms of digital reference.[2] The MIT Libraries' five-year strategic plan,[3] effective November of 1999, included three strategic directions:

1. Excel at providing rapid, easy, and precise access to high quality information for education and research at MIT
2. Ensure that library spaces and operations facilitate intellectual life on campus
3. Be a leader among academic research institutions in the use of applied library technology

Reference librarians, having just emerged from an extensive public services re-engineering process in 1999, were eager to move forward with new initiatives. This was also the period following implementation of a proxy server to permit off-campus access to electronic collections. Responding to that, and using the new strategic plan for guidance, members of the Reference Committee[4] put forward a proposal to implement a real-time online reference pilot project. The committee saw synchronous online help as a natural complement to online collections, responsive and available from anywhere. It also saw digital reference as an opportunity to meet strategic directions one and three, above. MIT's "Ask Us! — Live" service became among the first live digital reference services. The pilot expanded to an implementation, including additional service hours and staffers.

PROJECT BACKGROUND

A year and a half after initiating "Ask Us! — Live", staff hoped to expand the service even further. However, overhead to keep the service going seemed higher than warranted for the level of traffic the service received. The ability to grow the service required clarity about how it fit within the framework of an overall suite of future reference services and the associated allocation of resources. Gaining this framework required looking at many possible futures: the fate of reference desks; the role and mode of instruction; self-help guidance through surrogates like subject guides; changes in patron needs and expectations, and in the tools they use; the scope of help services to be provided centrally, rather than unit by unit; and the delineation and effective coordination of help provided by various staff groups: reference, circulation, technical support, licensing, specialized collections, etc.

The Reference Committee found achieving such a vision beyond the scope of its own work, and requested that the Public Services Management Group (PSMG)[5] of the Libraries consider what should be done. PSMG agreed that the components of the desired vision were bigger than reference alone and needed broad staff participation and user input. It approved a six-month vision project that would "re-examine the broad picture of what reference service could and should look like in the future... [and] …create a vision for a reference service package for three to five years in the future, which includes a plan for how to implement and support it."[6] It was hoped that the product of this project would facilitate better day-to-day decision making and a clearer path to reaching overall service objectives, chief among which comes from the MIT Libraries' Mission Statement: to be "…the place people in the MIT community think of first when they need information." A Reference Vision Task Force (RVTF) of five was formed including three reference

librarians (each a member of the Reference Committee), the head of a divisional library, and a circulation supervisor. Care was taken to ensure each of the five divisional libraries was represented. The RVTF began its work in late November and with a charge to complete its work by June 2002.

Initially the RVTF focused its efforts on three key issues:

- Clarification — it was important for the members of the group to develop a shared understanding of the project.
- Communication — how to ensure effective communication out from the RVTF and into the RVTF.
- Timeline — a large project with a tight timeline required good project management skills.

To achieve mutual understanding among the RVTF, early meetings were focused on brainstorming ideas and developing a working list of underlying assumptions. This proved useful in developing consensus within the RVTF and as a tool for engaging comment from other staff.

Communication was considered a critical component for success. As soon as the RVTF was formed and membership finalized the chair of the group sent out a message to the entire library staff announcing the RVTF, detailing its mission, indicating that relevant documents about the project would be posted on the staff web, promising many opportunities for input, and advertising the group email address for the RVTF.

Creating a timeline for the project was another important and essential step for meeting the deadline. Considerable time was spent in early meetings (December and January) identifying key elements of the process. These included:

- Developing a working definition of reference
- Mining existing data
- Investigating other reference models
- Planning for user focus groups
- Determining other user input processes
- Determining appropriate staff input processes
- Analyzing and filtering existing information

Due to the enormity of work involved, two additional task groups were formed, one to focus on collecting input from staff, the other from users. February and March were targeted for getting input, April for drafting the vision and sharing this initial vision with the community, May for finalizing the vision and drafting an implementation plan, and June for seeking final approval.

Staff Input Process

The Staff Input Group planned and held meetings with a number of library staff groups, including all divisional libraries, the Institute Archives, the Library Systems Office, and a number of committees. Individual meetings were also held with each of the members of the Libraries Steering Committee (Library Director plus four Associate Directors), the Digital Acquisitions Librarian, and the Web Manager. Because meetings were designed to be one hour in length (although occasionally they lasted longer) it was important to provide staff with adequate background information ahead of time. Prior to each meeting a packet was distributed to those attending, including an agenda, the RVTF working definition of reference and underlying assumptions documents, and suggested background reading. The suggested readings were chosen to provide a solid framework for thinking about the future of reference service at MIT. Chosen were the MIT Libraries Five Year Strategic Plan which was developed in 1999, the MIT

President's Report for Academic Year 2001-2002,[7] and "What Is the Best Model for Reference Service?" a useful review article written by David A. Tyckoson.[8]

The agenda was structured around four themes:
1. Defining reference
2. Characteristics of a reference vision
3. Effect of the vision on job and workplace
4. Implementing a vision

Anonymous feedback from staff was solicited as well via the web. Transcripts of these meetings and the anonymous feedback were shared with the staff on a password protected website. The group then developed a final synthesis of staff input[9] that was derived from the transcripts of all the meetings, postings on the anonymous web form, and email sent directly to the reference vision staff input subgroup.

Summary of Staff Input

MIT Libraries staff value reference and believe it to be an active service. Assisting patrons to frame a question, negotiate sources, retrieve information and analyze their results are seen as vital elements of reference, often merging into instruction. Self-help and online reference assistance are important; however, the value of synchronous online help needs further analysis. Staff greatly value (and enjoy) the ability to interact face-to-face with a person, and believe face-to-face interactions to be the most effective means of serving patrons when possible. Staff recognize the advantages inherent in a distributed system as well as the disadvantages, and believe that if a central service is created, it must include effective and efficient mechanisms for directing patrons to more specific resources. Reference services and the collections on which reference depends are fundamental to a library; they need to be carefully designed and nurtured.

There were many points of agreement across the MIT Libraries staff:

- Instruction is an intrinsic part of reference service, and includes the development of self-help tools.

- Reference is a part of many jobs that are not associated with the reference desk or traditional reference services.

- The definition of reference should include quality.

- We serve a variety of patrons whose needs differ and change over time (sometimes needing face-to-face interaction, sometimes preferring self-help, etc.).

- The focus of providing reference service should be on the people who need and who provide the service.

- The people providing reference are what makes the service unique and of high quality.

- Staff value highly person-to-person interaction and the "human touch."

- It is important to clearly define the community we serve and keep in close contact with our patrons, particularly faculty.

- Marketing the Libraries is crucial to the success of our services and our visibility on campus.

Other key points made were:

- The current organizational structure and culture should be examined and new possibilities explored.

- There is a need to prioritize efforts and decide what will and will not be done — and for whom. The use of technology needs to be reviewed, and indeed all services should be assessed on an ongoing basis.

- Positions need to be defined realistically, with clear expectations, to ensure job satisfaction.

The staff felt that if sufficient training and compensation are provided, public services staff are generally willing to take on more responsibility. Some sort of centralization is seen as a possibility to reduce staffing requirements, as is a move towards tiered reference — but only if there is good training, ease and comfort with referrals, and quick response to referrals.

User Input Process

At the same time library staff input was gathered, the User Input Group was devising mechanisms for soliciting input from students, faculty, and non-library staff. They decided to hold a number of focus groups as well as solicit input with a survey. The key research help concepts explored both within the focus groups and by the survey were:

- Human vs. self-help: Do people prefer to use web or print tools to find answers, or do they really want to talk to a human intermediary?

- Mode of assistance (in person, virtual, phone, etc.): Why do people choose to come to the reference desk rather send an email? What factors into the decision to use one mode of assistance versus another?

- Times of service offerings: When do people need help? Which mode of assistance do they prefer at which times of day?

- Turnaround/Response time: How quickly do users expect to get a response when they ask a reference question, especially with asynchronous modes of service? How quickly do they expect to get a complete answer?

- Attitudes towards referral: How do users feel about referrals? Are they likely to act on them?

Eight focus groups were organized in February and March. The participants comprised a variety of faculty, staff and students from all parts of the campus, as seen in Table 1.

Table 1

	Administrative Staff	Faculty	Graduate Students	Undergraduate Students	Total
Architecture & Planning	2	1	4	0	7
Engineering	1	0	4	4	9
HASS*	1	1	0	0	2
Science	2	1	1	1	5
Management	2	5	0	0	7
Freshman [undeclared]	0	0	0	1	1
Total	8	8	9	6	31

* Humanities, Arts, and Social Science

The User Input Group worked closely with an Organizational Development Consultant from MIT's Human Resources in developing the structural framework for each focus group. He then facilitated each focus group, which was attended by two other staff members. A detailed transcript was created for each session and posted on a password-protected section of the staff web site.

In addition to the focus groups, a survey was devised and administered[10] using Zoomerang.[11] Although primarily intended as an online instrument, paper copies were also provided inside library locations. The survey was spotlighted on the web over a two-week period. A total of 993 responses were received. The respondents included a wide range of students, staff and faculty across the five schools at MIT, as seen in Tables 2 and 3.

Table 2

Graduate students	606	61.1%
Undergraduates	203	20.5%
Non-library staff	97	9.8%
Faculty	60	6.0%
Other	25	2.5%
Unknown	1	.1%

Table 3

Architecture	72	7.3%
Engineering	450	45.4%
Humanities, Arts, & Social Sciences	114	11.5%
Management	102	10.3%
Science	215	21.7%
Administrative Services	23	2.3%
Unknown	16	1.6%

Summary of User Input[12]

The user input gave guidance in all the areas investigated. The most obvious finding from the user input was the clear preference for in-person help over self-help. Human help is critical to users. Relationships with library staff are highly valued.

However, at the same time, people use the most efficient methods available to them to get to the information that they need. If users are in the library, they want human help face-to-face. If users are remote, they go online first, but with varying levels of skill and knowledge. If going online does not work, they use a variety of modes of assistance to get their answer, depending on their question and their time frame. These other modes include talking to colleagues, and/or contacting the library via phone, email, and to a much lesser degree, chat. If they know that their question is very complex, faculty and some graduate students are most likely to work directly with their subject specialist, whether by appointment, e-mail, or phone.

For users, it is critical that there is trust that the mode of assistance will actually be successful, and this affects the users' choice of method. Reliability is considered vital to service satisfaction.

In terms of preferred times for service, students are most likely to need research help in the afternoons and evenings, not just during regular business hours. This was not a surprising finding. On the other hand, faculty and staff were more likely to want times during business hours.

The User Input Group also tried to gauge expected response times for queries. Forty percent of users expect one hour or less turnaround time for simple e-mail questions, and 10 hours or less for complex. However, 58% expect 24 hours or more turnaround time for complex e-mail questions. Users also expressed desire for some sort of acknowledgement that the e-mail has been received, and who will be responding by when.

Referrals are a critical piece of any tiered or, in MIT's case, central service model. The User Input Group asked about referrals in several ways to determine users' expectations. Desired turnaround for responses to a referred question vary by research need. When asked, survey participants were split in their expectations, with 43% expecting the referral to be resolved in 4 hours or less, and 48% expecting a 24-hour turnaround or more.

Referrals need to be so seamless that they impose neither additional work nor any barriers on the part of the user. Sixty-one percent responded to the user survey that they would only pursue referrals if *they* decided that they needed more help, or they would not use referral at all. The focus group results corroborated the significance of a seamless referral. Thirty-eight percent of

users did want to take advantage of a referral. Timeliness of that referral is critical, depending on the user's current research need.

Creating the Vision

Once the Staff Input Group and the User Input Group completed their work and issued their findings, the RVTF began to develop its preliminary vision. A retreat for the members of the RVTF and the additional members of the two Input Groups was held. An additional, trained staff member was brought in to facilitate. This full-day retreat was immediately followed by a half-day retreat for just the RVTF members. A draft was created and shared with staff via email. Two open meetings were held to solicit staff comment. Each meeting was attended by all members of the RVTF and consisted of a short presentation of the vision followed by questions and comments. Based on feedback from these meetings, email responses, and further discussion with interested staff, the RVTF revised its draft and presented it to PSMG in early June. Due to time considerations and feedback received during the entire process, the RVTF decided not to create an implementation plan. The vision itself needed more discussion and understanding before a successful implementation plan could be developed. The vision was adopted with minor revision by PSMG, and the final version was distributed to staff on June 7, 2002.

ENVISIONING REFERENCE AT MIT

> The MIT Libraries will provide a reference environment that enables user self-sufficiency and easy access to information staff. Library space, both physical and virtual, will be intuitive. It will facilitate independent discovery and provide quick connectivity to appropriate experts when needed. The availability of real-time assistance will be extended to better meet community needs. Staff will be well trained in customer service, library policies and procedures, and a core set of information tools and resources. A robust referral system will provide the timely linkage of users to subject and technical experts, and ensure necessary follow-up and assessment.[13]

So begins the vision created for reference by the RVTF. The vision goes on to detail three primary goals:

- Simplify access to libraries' materials, services, and staff expertise.
- Foster flexibility and experimentation for library staff and services.
- Successfully market services, internally and externally.

To better illustrate each of these goals a "Program 2007" was outlined, imagining four types of "help" services the library would provide in 2007. These included:

1. All Hours: Self-Help — The number of questions users need to bring to a staff member is reduced through optimal organization/integration of resources and ability of users to tailor information access to their own needs.
2. Extended Virtual General Help Service (e.g., 10 am-10 pm) — This centralized service is staffed by librarians acting as generalists and expert staff from other service areas within the Libraries, working in teams to answer or track answers to questions received through phone, email, chat, or other modes. It acts as a resource both to the community and to library staff.
3. During All Open Library Hours: Help Desks — A single service desk exists in each unit, which provides information assistance from trained staff and referral to subject and technical expertise as needed.
4. Various Times: Proactive Research Help and Instruction — Specialists work individually and/or in groups to market and provide services to their constituencies and to respond to research needs.

The vision was developed within the context of a number of supporting documents that are critical components of the vision itself and crucial to its understanding. These include a listing of reference vision values, a listing of support factors needed to move the vision forward, and an updated working definition of reference service. Each of these documents is important. Without a well-defined list of values that staff and users can understand it would be difficult to move forward. Acknowledging the support factors needed to move forward is important to develop buy-in by staff. Finally, how one defines reference service is an essential step for understanding how to improve. In the MIT Libraries it was acknowledged that reference service is broadly defined as both connecting people to the information and skills they need, and building awareness of services that support research and learning.

IMPLEMENTATION

After the Reference Vision was approved, many library staff were still unsure how the vision would affect them. The conceptual aspect of the vision was not terribly meaningful to many of them, and they were looking for concrete changes that might take place. All units and departments were encouraged to use the vision to guide future projects. As implementation of the vision proceeded, staff would be able to see its impact.

The members of the Reference Committee knew that immediate implementation plans would help make the vision more concrete. After reviewing the vision, the committee identified two items to tackle first. The top priority was to try to ensure a certain level of information-assistance competency for all staff working at service desks, in keeping with item three of Program 2007. The second was to broaden the "Ask Us! — Live" service as a first step toward an Extended Virtual General Help service (item two of Program 2007).

Well-Trained Staff

For some time the Reference Committee had been planning a centralized training program in which basic information skills that were normally taught in each local unit could be taught in a single session, or through a single set of training materials. The training was originally intended for circulation staff, to give them the foundation to handle a certain level of queries received at their desks. At the time, existing training of circulation staff varied quite widely from unit to unit, with the result that some staff were well trained in information service, while others had received no formal training.

After the Reference Vision was written, it was decided that information assistance training would actually benefit any support staff working at any public service desk. By the fall of 2002, information assistance training "modules" had been conceptualized. Any support staff who were interested or who were encouraged by their supervisors could take part in various training options, including database searching, the reference interview and referrals, the online catalog, and working with equipment. One module is now offered every other month.

This training has been the first step in reaching a consistent level of information-assistance competency among support staff. This has raised a number of issues such as ensuring that job descriptions are appropriately written to include information-level assistance. But it has also enforced the idea that expectations about change must be managed: Staff need to understand that they are being trained so they can provide better answers to those questions that they are already answering, not that they are expected to become reference experts. Referrals and quick connections to the appropriate experts still provide the best service for the user. Well-trained information staff, who know what they can answer and what the libraries have to offer, will be better able to lead users to the assistance that they need.

Central Help Service

The second priority for the Reference Committee was to move forward with expanding and formalizing the centralized service begun as "Ask Us! — Live". In the fall of 2002, a service was proposed that would combine the already existing "Ask Us! — Live" and "Ask Us! — by email" services, and would additionally incorporate a new central phone help number. Initially it would be open from 10 am to 9 pm Monday through Thursday, and 10 am to 5 pm on Friday. The "Ask Us! — Live" model would be used — there would be no physical location, and the service would be staffed by reference librarians from all public service units. The new phone number would respond to users' need for a single easy-to-remember way to get help. At the time, although each reference desk and circulation desk had its own telephone number, these numbers were affiliated with each unit. Users who were not familiar with their own unit would thus find a "central" phone number easier to use. The extended hours would offer more reference help to users and could also support circulation staff working in the evenings, after their own local reference desks were closed.

Implementing this proposal was complicated by the technical problems and high staff costs associated with the "Ask Us! — Live" system. At the same time, in order to implement a centrally supported e-mail service, an e-mail management software product was needed, along with a clear procedure for staffing and answering questions centrally. The prior e-mail system involved procedures specific to each subject-based unit, and at any time, five librarians were responding to Ask Us! questions. In the new service, a single librarian, rather than one from each unit, would "screen" — review, respond and/or forward — every e-mail question that came to the Ask Us! service.

In December 2002, the plan for the Central Help Service was revised to resolve these difficulties. "Ask Us! — Live" was temporarily suspended, to concentrate resources on moving to a new e-mail management system. The Central Help Service would consist of a centrally administered e-mail service, and a phone number. At first, reference librarians would staff the service, with the idea that eventually a team of experts would staff it, including circulation assistance and technical help. To the user, the changes would be very seamless: They would receive reference e-mail and phone help in the evenings, and response rates to Ask Us! e-mails would improve. At the same time, because only one person would need to staff the Central Help Service, staff time might be gained, which could then be used to put more pieces of the Reference Vision in place.

Once the Reference Committee defined the scope of the service, they could investigate email and phone technologies and discuss staffing options among broad groups of staff. They would also need to begin building the arrangements that would support referrals to and from circulation staff, as well as other departments. A newly defined position, coordinator of central reference services, was created to manage the implementation of the new service. Implementation of the new plan was complicated, and the service launch was delayed until Fall 2003. Paradoxically, because of this delay, staff acceptance and support for this new service grew as plans were discussed, and concerns were aired and handled. Circulation staff were brought more fully into the process, and they raised issues that reference librarians had not anticipated. For example, without an actual physical service point, circulation staff do not have a place to direct users who come in person. Reference Committee staff began to work more in tandem with circulation supervisors, and then with evening circulation staff, in order to discover ways to resolve issues such as this.

Having an open process and such a long time frame for implementation was critical to making this piece of the Reference Vision concrete to library staff. The new coordinator began regular communication with staff about the progress of the service, along with continual reassurance that many of the details were still unplanned, and input was still needed to make the Central Help Service successful. She also emphasized in communications that the Central Help Service was not a final implementation of the Reference Vision, but merely an intermediary step to begin the

move toward that vision. As details were finalized that integrated solutions resulting from staff members' concerns, staff became more comfortable with the impending changes.

Other Implementations

The Reference Vision includes two more elements: self-help, and proactive research help and instruction. In recent years, self-help for users has become more and more available, as the Libraries' web design has changed and as library staff work on self-help solutions for users. A web page dedicated to research help now includes separate listings for help from a person and self-help (http://libraries.mit.edu/ask). At the Dewey Library of Management and Social Sciences, a business database advisor was created, offering business students self-help in determining the best databases to use (http://libraries.mit.edu/guides/subjects/business-databases/). The Libraries' Instruction Committee created another self-help guide for the web called the Information Navigator (http://libraries.mit.edu/tutorials/general/index.html), intended to help students find the information they need. The Libraries' purchase of SFX, an article citation linker, was implemented as well, giving users another exciting new self-help tool.

The instruction program of the Libraries has also been expanded significantly, in part because of the Reference Vision. Activity in 2002 increased 66% in the number of sessions offered and 54% in the number of participants. In 2003 Dewey Library initiated a new kind of instruction class specifically targeting graduate students, a proactive instruction method that proved very successful and that other divisional libraries are looking at as a possible model for their communities. This is building on more traditional course-integrated instruction that has proven successful like those offered for Introduction to Psychology and Product Engineering Process.[14]

CONCLUSION

The Central Help Service was developed within the existing reference infrastructure. In order to move toward the Reference Vision, each phase of progress must be measured for success. The assessment process has just begun at the time of this writing. The process for determining how to measure success began with a list of success criteria: What needs to be true to consider that piece of the service successful? Then how to measure those criteria can be determined. To assess the Central Help Service, the procedures for using the new email management system, the software, the hours, and the staffing, will be evaluated through both qualitative and quantitative means.   Assessment of the other vision components, e.g., better self-help, staff training, and instruction, will require careful monitoring of user activity and satisfaction as well as the staff's ability to sustain these new initiatives.

Changing user behavior has made it imperative for libraries to examine how to extend traditional services in the networked environment and to consider the broader set of user needs to be addressed in systems of user support.[15] The MIT Libraries Reference Vision Project is an attempt to do just that. By articulating a vision for reference services informed by user and staff input, the MIT Libraries have provided an important framework for current and future planning.

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